Reconfiguration of Acute Hospital Services, Cork and Kerry

A roadmap to develop an integrated university hospital network

Bantry General Hospital
Cork University Hospital
Kerry General Hospital
Mallow General Hospital
Mercy University Hospital
South Infirmary - Victoria University Hospital

Reconfiguration of Acute Hospital Services
Cork and Kerry Region

Report of the Director of Reconfiguration
Professor John. R. Higgins

'A roadmap to create an integrated university hospital network'

FOREWARD

The HSE Reconfiguration Programme is a key part of the Health Service Executive's national change agenda, the Transformation Programme. The HSE at national level have commenced a programme of reconfiguration of acute hospital services principally to ensure that high quality and safe services can be delivered into the future within resources available to us. Over the next period, the HSE will have to meet new regulations and licensing requirements including HIQA standards and EU Directives, especially the European Working Time Directive which limits the working commitment of NCHDs in our hospitals. It is important to recognise that the reconfiguration programme is a proactive process being undertaken by the HSE, to enable the organisation to reshape the roles of our acute hospital system to ensure we can meet these challenges and deliver the type and quality of services required to meet the needs of the local communities we serve, in line with international best practice. This becomes even more important with the current financial challenges faced by our country and our health system.

I am delighted to present to you the Reconfiguration Roadmap for the acute hospitals in Cork and Kerry which seeks to develop an integrated university hospital network for the acute hospitals. The Roadmap outlines a clear and vital role for each acute hospital in Cork and Kerry. The role of each hospital will be unique and not a duplication of services in other hospitals. While the remit of this Roadmap is the services delivered in acute hospitals the increasing importance of General Practice and Primary Care Teams is highlighted. Emphasis is placed on improving the interface between hospitals and Primary Care Teams and on delivery of increased services in primary care settings.

On my behalf and on behalf of the HSE South Regional Management Team I wish to acknowledge the leadership role of Prof. John Higgins and to thank him for the energy, commitment and vision that he has brought to this project. I also wish to acknowledge and thank the Reconfiguration Team for their ongoing work on this project.

In addition I wish to thank the Voluntary Hospitals and UCC for the important contribution they have made to date. A key element of the implementation of the Reconfiguration Roadmap will be that we continue the collaborative partnership involving the Voluntary Hospitals and Third Level Institutions to develop a world class health service for the local communities that we serve.

As the reconfiguration of acute hospitals is a high priority for the HSE and the health system, a national coordination process has been put in place under Mr. Brian Gilroy, Director of Integrated Services Directorate. This programme management approach ensures that reconfiguration projects across the country make progress within tight deadlines and using a consistent approach. I would like to acknowledge the work of the national leads, Mr. Brian Gilroy, Director of Integrated Services Directorate, and Dr. Barry White, National Director of Quality, Clinical Care Directorate and the National Programme Leads. The programme management approach being taken by them has been incorporated in this Reconfiguration Roadmap and HSE South continues to engage with the National Reconfiguration Steering Group.

Prof. John Higgins and his team undertook a comprehensive consultative process involving over 40 groups of clinicians across hospitals and communities and engaging with Health Service Executive South staff, the Mercy University Hospital and the South Infirmary Victoria University Hospital staff, management and boards of directors, the Sisters of Mercy,

university academics, political representatives, patient advocates and other stakeholders and this has brought the Reconfiguration Roadmap to where it is today, putting us at an excellent starting position to begin the change. I want to acknowledge the staff and service users who were involved in the consultation process and who will be key to the implementation of the Reconfiguration Roadmap.

I note the key leadership role played by Clinicians in the work of the reconfiguration subgroups. Developing and strengthening clinical leadership continues to be a feature of the evolution of the HSE. Clinical Directors now play a vital role in the day to day management of hospitals. The roles will be further developed in 2011 with the appointment of Regional Clinical Directors in line with forthcoming national guidelines.

An important feature in preparing this Roadmap has been the connection back to the local communities and it is critical to the effective delivery of health services, that we serve our communities, developing a health service which is efficient and cost effective but which also is responsive to the needs of communities.

The priority now is for everyone who works in acute hospital systems to play their part in implementing these programmes of change. It is vital that reconfiguration is seen by everyone as part of their role and not the sole responsibility of any one group.

Work has already commenced and a variety of initiatives are underway and it is important that we acknowledge the work that is underway and the staff at all levels that involved in it.

This Reconfiguration Roadmap for the acute hospitals in Cork and Kerry is both challenging and exciting and will involve comprehensive change to health care delivery in this region. I fully acknowledge that the change will be challenging for those involved in delivering healthcare services and for our service users as we go through the process, however, I do believe that if we all strive to implement this Reconfiguration Roadmap it will create a better health care system for Cork and Kerry.

The implementation of Reconfiguration Roadmap for the acute hospitals in Cork and Kerry will make a highly significant contribution to the design and delivery of health services in the region and will mark a significant landmark in the history of our service.

PAT HEALY
REGIONAL DIRECTOR OF OPERATIONS
HSE SOUTH

PREFACE

This report is the HSE's response to the Horwath and Teamwork Review of acute services in Cork and Kerry[1]. That review called for "*a fundamental reconfiguration of the acute care system and processes, together with redeployment of existing resources, in order to optimise care in terms of effectiveness, quality, sustainability and affordability*". So this document proposes far reaching change for the HSE in Cork and Kerry: it is about where, what, when and how the acute hospitals can do their work more efficiently and more effectively; about genuinely advancing the interests of patients. It is also about harnessing the enormous potential of research and innovation to create new therapies, new medical devices and future economic growth for this region. Why is this also important? It is important because our healthcare system in Cork and Kerry must not only follow the future; it must shape the future. If it builds a dynamic partnership with its third level institutions and with the pharma and medical devices industries in the Cork region – the largest concentration of such industries in Europe – it can actually do that: it can become an international player in healthcare delivery and healthcare innovation.

The overarching strategic goal of reconfiguration is that the people of Cork and Kerry benefit from having a unified integrated acute healthcare system, integrated with all other elements of the health service, that:

a. achieves the best possible health outcomes for the people it serves,
b. realises for the people of the region the economic and other benefits that flow from leading edge health research, technology and innovation,
c. delivers value for money.

This means an integrated system that provides the best possible care for patients within available resources judged on three quality outcomes: patient safety, effectiveness of care and patient experience, and that we harness the power of research and innovation for the economic and health benefit of our people.

Our recommendations are informed by extensive consultation across a broad spectrum of expert opinion - clinical professionals and managers, academics, general practitioners and patient advocates. It sets a vision that is in line with the emergent vision of Horwath and Teamwork – a vision of a credible, internationally benchmarked, integrated health system for Cork and Kerry in which learning and research are key drivers.

It is a high level roadmap to a destination that is constantly changing. We should not be dismayed by this. It is the nature of our global world. The twin aims I have expressed above are not absolutes: they represent a state of mind that says we will continually strive for the best for our people and we will design and manage our system only with the best in mind. There are specific actions we can all take to do this, specific targets we can set which we then measure and audit to see if we are reaching them. When we do, we look at them again and see that "the best" has now moved on so we reset our targets to higher levels. It is about achieving but it is also about striving for what will never be completely achieved.

The following pages contain a series of small and large changes that taken together will create a more integrated and joined up health system in the medium term future. Each change will be

[1] *Securing clinically safe and sustainable acute hospital services: A review of acute services in HSE South and a five year action plan for Cork and Kerry, Horwath and Teamwork, 2008. Available on HSE website.*

subject to careful implementation planning, robust resource analysis and good communication with our staff, our citizens and their representatives. If we don't do this, we will risk losing the immense benefits that will certainly accrue in future years. There are a number of key enablers – adaptive infrastructure; ICT and reliable image transfer; safe and efficient diagnostics; standardised referral forms; effective corporate governance and proactive corporate management; robust communication; readily accessible education and training. Fortunately many of these enablers are already the subject of national policies and programmes. National backing will give kinetic energy to implementation. Implementation planning needs to ensure that before we move a service, the necessary supports are in place to ensure that it is safe to move, that our systems are in gear with national systems and insofar as humanly possible, that we have thought of everything.

The fact that such a major effort in holistic planning comes at a time of unprecedented economic crisis for Ireland only adds urgency to our task and realism to our approach. The aim of reconfiguration is not to save money *per se* but to do more with the money we have. The Irish people, through the political system, will decide how much they are willing to spend on their health service. However much or however little this may be, it behoves all who work in it to see that we do so as efficiently, as effectively and as equitably as we can. It is not an exaggeration to say that if we lose this opportunity, we will have surrendered the field for another generation to cynicism, frustration, disappointment and waste. That must not happen.

I have said publicly and privately on more than one occasion – 'don't judge us by what we say, judge us by what we do'. We have already demonstrated some successes and we will continue to work to achieve others along the way. In that sense, let this be an unfolding narrative. I have also said on many occasions that our health service is part of what we are; it is intimately part of the warp and weft of our lives and our communities. We all have a stake in seeing it working to the best of its ability, in giving us a service that is equitable in terms of access, accountable in terms of quality of care and value for money and committed to a positive patient experience.

This roadmap represents the fruit of an immense amount of hard work by many people over the past year and a half. I would like to acknowledge the work of the reconfiguration team, members of the reconfiguration forum, the HSE's regional management team, the non-executive advisory board, and particularly of the hundreds of members of the subgroups for the seriousness and commitment with which almost all undertook their work. Thanks are due to each and every person.

The document sets goals that we can all strive to achieve over the next five years. There are now about 400,000 Irish people over the age of 65. Twenty five years from now, that figure will have tripled to 1.2 million. This is the real driver of reconfiguration. The time for fundamental reform is now.

PROFESSOR JOHN HIGGINS
DIRECTOR
RECONFIGURATION OF ACUTE HOSPITAL SERVICES
CORK AND KERRY REGION

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1. EXECUTIVE SUMMARY

1.1 Introduction

This roadmap is designed to convert the external review of acute services in Cork and Kerry carried out by Horwath and Teamwork into a practical guide through which the HSE can achieve the benefits of reconfiguration as set out in that review. It states that these benefits will derive from:

- Concentrating consultant resources into regional specialty teams;
- Concentrating complex care in the regional centre;
- Delivering as much care locally as possible.

Reconfiguration in Cork and Kerry is part of the ongoing national transformation programme of the HSE, a programme that includes structural reform, reconfiguration of services in selected areas, and a wide range of national programmes of care being led by the Quality and Clinical Care Directorate. The recommendations in this roadmap are framed within this national corporate context. They also relate regionally to education, research, industry and innovation. Cork and Kerry have excellent third level institutions that provide education and research in many areas of health (UCC was recently placed in the top 200 universities in the world). Cork has the highest concentration of pharma companies in Europe. This provides reconfiguration in Cork and Kerry with a unique opportunity to realise the primary goal signalled by Horwath and Teamwork – "to build upon the progress made to date and develop a **fully integrated, world class service**" (H&Ts emphasis).

The scope of this roadmap is set out in Chapter 5 on page 69. It includes the six acute hospitals in Cork and Kerry and those points at which the acute hospitals relate to primary and community services. It does not include those services that operate mainly within the community. Transformation of primary and community care services is occurring within the Primary Care strategy and ultimately will link up with acute reconfiguration within the new Integrated Services Areas (Chapter 8). What is absolutely necessary to the success of the overall transformation of services in HSE South is that communication between health service professionals with respect to those in their care, and communication with and between those who manage their services, is constant and regular, that it exists both formally and informally and is informed by an understanding of each others' roles and responsibilities.

Ireland is currently facing unprecedented financial pressures that will influence health service transformation in the years ahead. This roadmap is about changing the configuration of our services and the organisational structures that deliver those services in a fundamental way so that we may get the best possible value for the resources we can afford. There is no responsible alternative. If we can create a regional integrated health system for Cork and Kerry, appropriately linked to education and research, we will have the best platform for working over and through the coming years to develop a fully integrated world class service.

In facing those financial pressures, this roadmap must help HSE South to develop its service plans within a decreasing budget. It is not within the scope of the roadmap to quantify exactly what savings can be made but it does identify where they may be sought and how they may be realised. If this roadmap is pursued vigorously, we are confident that it will eliminate many wasteful practices that have grown up over the years and will, over the duration of the reconfiguration project, enable HSE South demonstrably to do more with less. This is the central message of this report.

1.2 Strategic goals of Reconfiguration

This section states the strategic goals of reconfiguration in Cork and Kerry. They are based on the goals of Horwath and Teamwork but also go beyond them by specifically including the economic benefits of leading edge research, technology and innovation.

The overarching strategic goal of reconfiguration is that the people of Cork and Kerry benefit from having a university hospital network integrated with all other elements of the health service that:

1. achieves the best possible health outcomes for the people it serves,
2. realises for the people of the region the economic and other benefits that flow from strong education and training and leading edge health research, technology and innovation, and
3. delivers value for money.

"The best possible health outcomes for the people it serves" will require optimal configuration of clinical services *and* integrated governance and management structures. This is why emphasis is placed on "a unified integrated acute healthcare system".

Realising "the economic and other benefits that flow from strong education and training and leading edge health research, technology and innovation" requires us to address the relationships between the healthcare industry, the higher education/research institutions and the clinical service. If we can do this successfully, we have created a regional partnership of potential international significance.

The roadmap accepts the current economic realities. The cost of the health service is a critical factor in the health of the Irish economy and is likely to remain so no matter how the economy fares in the future. Therefore, value for money must be an overarching goal for the reconfiguration project.

1.3 Global Objectives

This section sets out ten global objectives for reconfiguration. These are the fundamental changes that will drive reconfiguration, deliver its goals and give the integrated hospital network its defining characteristics. Each contains its own recommendations and measurable outcomes.

Table 1-1: Global objective 1

Global Obj. 1	**AN INTEGRATED UNIVERSITY HOSPITAL NETWORK FOR CORK AND KERRY**
Develop a long term shared vision between the HSE, the voluntary hospitals and the higher education institutions for the development of an integrated university hospital network for Cork and Kerry.	
Recommendations	**Outcomes**
▪ A Memorandum of Understanding setting out the framework for a formal collaborative partnership between the HSE statutory hospitals, the voluntary hospitals and the university should be completed and signed within six months. This framework will be produced in the context of the discussions taking place nationally around the development of Academic Health Care centres.	▪ A single acute hospital network for Cork and Kerry ▪ A strategic joined up approach to healthcare delivery, education, training, research and innovation. ▪ Strong regional clinical governance ▪ Better patient outcomes ▪ Improved strategic direction ▪ Increased international recognition
H&T Review comments: "The HSE agenda will need to deliver a new integrated governance structure for both corporate and clinical affairs to match the concept of integrated clinical care, able to manage the organizational complexities and all the statutory, voluntary, academic and private providers." The Report recommends "the HSE consults promptly with the UCC, voluntary providers and the private sector. This is with a view to agreeing an integrated clinical and academic approach to delivering service change and a common, robust, transparent governance structure that administers to all the "centres of excellence".	

Table 1-2: Global objective 2

Global Obj. 2	21st CENTURY INFRASTRUCTURE FOR OUTPATIENTS AND ELECTIVE PATIENTS	
Develop a vision for a new hospital for Cork designed for outpatients, ambulatory care and elective inpatient and day patient procedures that will enable Cork and Kerry to be at the forefront in developing new forms of ambulatory and acute care. A realistic timeframe should be from ten to fifteen years.		
	Recommendations	**Outcomes**
▪	Conduct options appraisal for appropriate specification and location for a new hospital that optimises accessibility for patients.	▪ A modern purpose-built elective, ambulatory, outpatient and diagnostic facility that maximises accessibility for patients ▪ A one-stop-shop outpatient facility for the city ▪ Reduced outpatient visits ▪ No unnecessary duplication ▪ Enhanced scope for new minimally invasive techniques within a purpose built facility.
▪	Develop a master plan that will enable graduated modular development of the new hospital over time as resources become available.	
H&T Review recommends *"fully functioning local centres of excellence providing day surgery, Urgent Care Centres, ambulatory care, rehabilitation and an extensive range of clinical diagnostics and endoscopy."* HSE Quality and Clinical Care Directorate 6 Outpatient treatment programmes and 8 Chronic diseases programmes – in progress.		

Table 1-3: Global objective 3

Global Obj. 3	DEVELOP A PATIENT-CENTRED SERVICE	
Develop a patient-centred service founded on honesty, trust and respect that puts the service user at the centre of healthcare delivery and organisational development.		
	Recommendations	**Outcomes**
▪	Develop an overarching service user involvement strategy.	▪ Better patient experience measured by regular surveys ▪ Improved patient-centred services ▪ Reduction in costs arising from litigation ▪ Raised awareness among all hospital staff of patient experience as a corporate priority.
▪	Provide training to enable service users and patient advocates to contribute to reconfiguration in the region.	
▪	Develop patient reported outcome measures (PROMS) into audit and review.	
▪	Involve service users in the education of health professionals and in their professional formation.	
Quality and Fairness Health Strategy (2001); Building a Culture of Patient Safety: Report on the Commission on Patient Safety and Quality Assurance, DoHC, Dublin 2008.		

Table 1-4: Global objective 4

Global Obj. 4	IMPROVE CLINICAL GOVERNANCE	
Introduce a system of regional clinical governance exercised by regional clinical directors with regional specialty consultant teams organised into four directorates – Diagnostics, Medicine, Perioperative care and Women and Children's care.		
	Recommendations	**Outcomes**
▪	Introduce regional clinical directorates in Diagnostics, Medicine, Perioperative care, and Women and Childrens' care, appointed as per Consultant Contract 2008.	▪ Common regional protocols modelled on international best practice for all specialties. ▪ Clear responsibility for the quality and safety of clinical services. ▪ More equitable services across the region. ▪ Clinical input to regional management. ▪ Clinical governance complies with HSE Quality and Risk Management Standard.
▪	A clinical director for dental services should be appointed for a three year period to rationalise the provision of primary and secondary dental services across the region.	
▪	Each clinical specialty should have a named clinical lead who would report to the relevant Clinical Director.	
▪	Each specialty is responsible for provision of its clinical services on a regional basis to a common standard.	
▪	Clinical directors should participate in new regional management structures.	
▪	Clinical and corporate management should ensure new regional hospital network operates according to the HSE Quality and Risk Management Framework./Standard	
1. H&T Review comments: *"There is no standard code of governance that applies uniformly and consistently across all the hospitals in Cork and Kerry, nor are there standardised measures for such issues as improving quality, enhancement of collaborative working, maintenance of effective accountability or active participation by clinicians in decision-making and budget holding. Overall we regard governance as being under-developed and in need of significant reform."* 2. HSE Quality and Clinical Care Directorate: National Clinical Leadership Programme – in progress.		

Table 1-5: Global objective 5

Global Obj. 5	IMPROVE CONNECTIONS WITH PRIMARY CARE	
Develop more effective communications between GPs, Primary Care Teams, Social Care Networks and the acute hospital network.		
	Recommendations	**Outcomes**
▪	Introduce common technology platform to facilitate communication between all six hospitals and between hospitals and community based services	▪ Reduced multiple referrals ▪ More timely outpatient appointments ▪ Reduced average length of stay ▪ Reduced readmissions ▪ Improved discharge planning ▪ Improved GP support for reconfiguration ▪ Enhanced education of health science students in community based healthcare
▪	Introduce user friendly electronic GP referral/discharge systems into and out of acute hospitals.	
▪	Insist that every patient discharged from an acute hospital inpatient bed has a formal discharge letter.	
▪	Conduct major review of discharge planning under the auspices of the regional geriatric medicine team within a regional Medicine Directorate.	
▪	Establish robust communication structures between GPs and acute hospitals and between Primary Care Teams/Social Care Networks and acute hospitals.	
▪	Give geriatric medicine consultants a clearer clinical governance role in community hospitals.	
▪	Make greater use of primary care centres and primary care teams in the education of health profession students	
Primary Care: A New Direction; Quality and Fairness – A Health System for You, Health Strategy, DoHC, 2001. The HSE's national implementation strategy is putting in place 500 multidisciplinary primary care teams nationwide (PCTs) operating within 132 Primary and Social Care Networks (PSCNs). HSE Quality and Clinical Care Directorate National Primary Care Programme – in progress.		

Table 1-6: Global objective 6

Global Obj. 6	COMMUNICATE IN A TIMELY WAY		
Communicate forthcoming change to staff, patients, members of the public and representative groups using a variety of different initiatives.			
	Recommendations		**Outcomes**
▪	Develop a communications and engagement plan for explaining proposed changes to the public and to health service staff.		▪ greater public support for reconfiguration ▪ lower levels of anxiety among staff over the consequences of change
▪	Insist on timely delivery of change projects in accordance with commitments given.		
HSE Reconfiguration of Cork and Kerry: Strategic Communications and Engagement Plan			

Table 1-7: Global objective 7

Global Obj. 7	IMPROVE EDUCATION AND TRAINING		
Align health education and training in the context of the Memorandum of Understanding setting out the framework for a formal collaborative partnership between the HSE statutory hospitals, the voluntary hospitals and the university.			
	Recommendations		**Outcomes**
▪	Health education and service providers should come together within the context of the proposed MoU to address a broad agenda of health education and training that will support reconfiguration and lay the basis for a structured partnership in the future.		▪ More effective use of education and training budgets. ▪ More health education programmes for patients and public (health awareness, health promotion, health and safety etc.) ▪ More staff entering and completing relevant education and training programmes ▪ Greater use of learning resources by health service staff. ▪ Greater awareness of their own health among the general public ▪ Increased bottom up reform of work practices. ▪ Improved provision of pastoral care in the region.
▪	An electronic health library should be created that brings together HSE Libraries Online and the health library of UCC to provide an on-line health learning resource for students, staff, patients and the public.		
▪	Develop Lean training.		
▪	Recognise the contribution of pastoral care to the multi-disciplinary team and provide a regional structure for pastoral care education.		
The Commission on Patient Safety and Quality Assurance (2008) "strongly supports the prioritization of education, training and research on patient safety." The HSE Medical Education, Training and Research Strategy (2007) comments: *" the HSE needs to develop real and collaborative relationships with its educational partners to ensure the reform process in medical education and training is delivered."* Education, Training and Research (ETR): Principles and Recommendations, HSE (2009) recommends: *"Regional ETR groups should be convened by the Regional Directors of Operations and include representation from local clinical directors, service providers, Higher Education Institutions, Human Resources and training programmes"*			

Table 1-8: Global objective 8

Global Obj. 8	IMPROVE RESEARCH AND INNOVATION	
Reconfigure research and innovation to achieve improved synergies between research and the development of clinical services and to support innovative start-ups in the areas of novel therapeutics and medical devices.		
	Recommendations	**Outcomes**
▪	Establish a high level steering committee to develop a Health Technology and Innovation Campus at CUH linking UCC, CIT, HSE and other appropriate state agencies.	▪ More clinical trials ▪ More patent applications ▪ More health innovating company start-ups
Building Ireland's Smart Economy – A Framework for Sustainable Economic Renewal (2008) commits *"Higher Education institutions will be supported in pursuing new organizational mergers and alliances that can advance performance through more effective concentration of expertise and investment"*. The Health Research Board in its Action Plan for Health Research (2009) comments that health research *"is not only crucial to improving patient outcomes and developing quality health services, but that it also has a broader economic role to play through generating efficiencies in the health service and creating a stimulus for the healthcare industry in Ireland"*.		

Table 1-9: Global objective 9

Global Obj. 9	INVEST IN KEY ENABLING TECHNOLOGIES AND PROCESSES	
Investment in robust ICT systems has been advocated in many reports and is long overdue. It is essential if our acute hospitals are to operate within a single integrated system and realise the benefits of reconfiguration.		
	Recommendations	**Outcomes**
▪	All Hospitals must be enabled to use a common technological and software platform by extending the Integrated Patient Management System (IPMS) to MUH and SIVUH and the completing the necessary inter-hospital data links.	▪ Information sharing between acute hospitals will enable development of an integrated hospital network. ▪ Information sharing between hospitals and GPs will reduce double referring and shorten waiting lists.
▪	All six hospitals should have Picture Archiving Computer System (PACS) and be able to transmit and receive PACS images from each other through the National Integrated Medical Imaging System (NIMIS).	▪ Image transfer will enable a single radiology roster in Cork city to serve all hospitals in the region. ▪ Image transfer will improve communication between rural hospitals and the tertiary centre in emergency/trauma medicine, speeding up clinical decisions.
▪	All six acute hospitals should develop a single patient numbering system in preparation for a national Unique Patient Identifier and electronic single patient chart	▪ A single patient number will reduce error and delay in relation to patient information. ▪ A single patient number is the first step to an electronic patient chart. This will improve the quality and timeliness of clinical decision making and discharge planning.
▪	Comprehensive telemedicine links should be introduced between CUH and BGH/MGH.	
▪	A standards-based ICT framework for sharing information regionally between acute and community based health professionals should be introduced.	▪ Reform of theatre schedules and practices will increase throughput of patients.
▪	A major rescheduling exercise to maximise theatre throughput and efficiency should be undertaken.	
▪	Theatre logbooks should adopt digitised and standardised information gathering and recording.	
National Health Information Strategy, DoHC (2004) Building a Culture of Patient Safety: Report of the Commission on Patient Safety and Quality Assurance, DoHC (2008) Recommendations for a Unique Health Identifier for Individuals in Ireland, HIQA (2009)		

Table 1-10: Global objective 10

Global Obj.10	ALIGN RESOURCE ALLOCATION IN A WAY THAT SUPPORTS THE EFFICIENT ACHIEVEMENT OF RECONFIGURATION	
Resource allocation is currently based on each individual hospital delivering its clinical care targets within budget. Resource allocation needs to promote (within hospitals and regionally) the reconfiguration changes that will deliver long term efficiencies.		
	Recommendations	**Outcomes**
▪	National and regional resource allocation models should promote and reward reconfiguration change.	▪ Aligning financial resource allocation with change leadership will help deliver reconfiguration changes. ▪ Hospitals will identify staffing resources to support reconfiguration change. ▪ Consultants and NCHDs will develop more flexible working arrangements. ▪ Specialty teams will improve efficiency and effectiveness with better skill mix. ▪ New emphasis on supporting and improving performance will improve quality and efficiency throughout the system.
▪	A proportion of savings achieved through reconfiguration should be re-invested in the reconfiguration of services within the region.	
▪	Hospitals should review their staffing models in order to facilitate the implementation of reconfiguration.	
▪	Each new or replacement consultant post description should include flexible working arrangements to facilitate the creation of a regional service.	
▪	There should be a formal review of all NCHD posts across the region, having regard to service demands, training requirements and the need to increase the ratio of consultants to NCHDs nationally.	
▪	Each NCHD should be appointed to a regional clinical team and a regional specialty department.	
▪	Each implementation project group should examine skill mix to ensure all disciplines within their compass work to their full potential.	
▪	Develop a performance management culture throughout the new regional system supported by monitoring and evaluation.	
National Health Information Strategy, DoHC (2004) Building a Culture of Patient Safety: Report of the Commission on Patient Safety and Quality Assurance, DoHC (2008) Recommendations for a Unique Health Identifier for Individuals in Ireland, HIQA (2009)		

1.4 Reconfiguration of Clinical Services

This section summarises the detailed recommendations for the reconfiguration of clinical services presented in seven tables arranged in a directorate model – Diagnostics, Medicine, Mental Health, Perioperative Care, Women and Children's Care – but beginning with a section on Pre-hospital Care and ending with a table on Hospital Exits to mark the importance of linking the acute hospitals with community and continuing care. Relevant national clinical care programmes are referenced in the left hand column indicating that recommendations must deliver these programmes effectively.

Pre Hospital Care

Table 1-11: Pre Hospital Care

9.2	Service:		Recommendations	Page
	PRE-HOSPITAL CARE			93
.1	**Ambulance Service**	.1	24/7 Advanced Paramedic (AP) teams for west Cork and north Cork should be operational by the second half of 2011. Audit and review should determine the further roll out of AP teams in Cork city and Kerry.	
		.2	Intermediate Care Vehicles (ICVs) should be commissioned in west Cork and north Cork by the second half of 2011.	
		.3	New AP teams should pilot new communication protocols with hospitals, individual GPs and Southdoc.	
		.4	The GP role in provision of emergency care should be recognised, supported and developed.	
.2	**Primary Care communication and referral pathways** [Refer: National Primary Care Programme]	.1	An Electronic GP Referral System should be developed - co-ordinated with national policy - as a fundamental enabler to reconfiguration of acute services in Cork and Kerry.	
		.2	A GP liaison group to promote liaison with the acute hospital network should be established, to include representation from the GP training unit, the academic department of general practice at UCC, the IMO, ICGP and Southdoc.	

Diagnostics Directorate

- There should be a single regional clinical directorate for diagnostics (imaging and laboratory medicine) led by a regional clinical director.

Table 1-12: Diagnostics Directorate

9.3	Service		Recommendations	Page
.1	**DIAGNOSTICS DIRECTORATE**			96
.2	**Laboratory Medicine** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of laboratory medicine with a named clinical lead	
		.2	Laboratory medicine should be consolidated in CUH thus providing the option for a competitive bid for cold laboratory services.	
		.3	A blood transfusion service for Munster should be built on a suitable site at CUH.	
		.4	Laboratory infrastructure at MUH should be adapted to provide a regional specialist laboratory service.	
		.5	Consolidation of the new regional laboratory service should be fully accredited and benchmarked against international best practice protocols and work practices.	
		.6	Laboratory services in each hospital, including the option of POCT, should be tailored to the clinical demands of that particular hospital	
		.7	KGH should retain laboratory services required to support its acute services	
		.8	All histopathology services in Cork city and county should be consolidated in CUH by Quarter 2, 2011.	
		.9	Co-operation between KGH and BSH Tralee should be encouraged in the interests of delivering the best possible service to the people of Kerry based on a Service Level Agreement (SLA).	
		.10	Priority of specimen reporting must be based solely on clear clinical criteria that are regionally consistent.	96
.3	**Infection Control** [Refer: National Strategy on Infection Control]	.1	Infection control referenced and harmonised to national targets should be a matter of corporate policy across all hospitals in Cork and Kerry.	
		.2	The single health system should ensure that HCAI[2] targets are adopted as performance indicators of reconfiguration change. Implementation work-streams should review their applicability to host hospital(s).	97
.4	**Radiology** [Refer: National Radiology Programme and National Integrated Medical Imaging System (NIMIS) roll out]	.1	There should be a single regional department of radiology with a named clinical lead.	
		.2	A Picture Archiving Computer System (PACS) should be installed at all acute hospitals in the region and all should be linked by a digital transfer system.	
		.3	Access to radiological imaging for GPs should be substantially increased.	
		.4	Out of hours radiology in BGH and MGH should be supported by the on-call radiology reporting roster in Cork city.	99

[2] *Health Care Associated Infection*

Medicine Directorate

- There should be a single clinical directorate for medicine incorporating all medical specialties, subspecialties and services led by a regional clinical director[3].
- As an intermediate step towards developing regional clinical services, every consultant in Cork and Kerry should have admitting rights to all acute hospitals in the region.

Table 1-13: Medicine Directorate

9.4	Service		Recommendations	Page
.1	**MEDICINE DIRECTORATE**			101
.2	**Regional Department of Acute Medicine**	.1	There should be a single regional department of acute medicine with a named clinical lead to manage acute medical units and their interface with specialist hospital medicine.	101
.3	**Acute Medicine Units** [Refer: National Acute Medicine Programme]	.1	Develop acute medical units in BGH, CUH, KGH, MGH and MUH operated to agreed regional protocols drawn up by the Department of Acute Medicine.	
		.2	In Cork city there should be acute medicine on-call rotas at CUH and MUH. SIVUH physicians should contribute to the MUH rota.	
		.3	Consultants must be protected from all sub-specialty commitments, including rooms and outpatients, and must provide a continual presence while on duty in each AMU in Cork and Kerry	
		.4	Cork city AMU rosters need to provide out of hours medical cover for SIVUH	102
.4	**Cardiology** [Refer: National Acute Coronary Syndrome Programme] [Refer: National Heart Failure Programme]	.1	There should be a single regional department of cardiology with a named clinical lead.	
		.2	Complex cardiology services will be consolidated in the cardiac renal centre at CUH.	
		.3	Cardiac MRI must be provided in the cardiac renal centre.	
		.4	Formally defined service arrangements for acute cardiology should be established at all acute hospitals in Cork and Kerry.	
		.5	The cardiology team will provide a structured liaison service at MUH and SIVUH (Appendix IV)	
		.5	There is a particular need to enhance cardiology services at KGH.	
		.6	A comprehensive education and training programme should be put in place to facilitate provision of as much care locally as possible.	103
.5 .6 .7	▪ **Clinical Haematology** ▪ **Medical Oncology** ▪ **Radiation Oncology**	.1	There should be a single regional department of clinical haematology, medical oncology and radiation oncology with a named clinical lead.	105

[3] *This grouping excludes mental health which will be organised in a separate clinical directorate.*

Table 1-13 continued

9.4	Service		Recommendations	Page
	Clinical Haematology Medical Oncology Radiation Oncology Continued [Refer: National Cancer Control Programme]	.2	All clinical haematology (malignant and non-malignant), medical oncology and radiation oncology services should be consolidated at CUH.	
		.3	Ambulatory care facilities incorporating a 24 hour walk-in centre should be expanded at CUH so patients can bypass the ED	
		.4	All hospital based warfarin clinics in Cork city should be moved to a location that optimises accessibility for patients.	
		.5	Web based consult services should be provided to BGH, KGH, MGH and PCCC	105
.8	**Dermatology** [Refer: National Dermatology Programme]	.1	There should be a single regional department of dermatology with a named clinical lead.	
		.2	The department should be consolidated at a regional dermatology centre at SIVUH with an additional phototherapy unit.	
		.3	Inpatient and paediatric work, including the melanoma service, should be carried out at CUH	
		.4	A paediatric/dermatology OPD should be developed at CUH with a monthly pulse-dye laser clinic.	
		.5	There should be one dermatology outreach clinic at KGH each week (enabled by reconfiguration of upcoming consultant vacancy)	
		.6	Dermatology outreach at BGH should be augmented by development of a CNS role shared with rheumatology to provide an infusion service for west Cork.	
		.7	The next dermatology consultant appointment should have structured sessions at MGH.	106
.9	**Emergency Medicine** [Refer: National Emergency Medicine Programme]	.1	There should be a single regional department of emergency medicine with a named clinical lead.	
		.2	Continue the 24/7 ED at CUH and KGH, (with new build at KGH). Maintain 12/7 emergency department at MUH.	
		.3	Develop inter-hospital transfer and co-ordinated bed management in Cork City.	
		.4	Develop Urgent Care Centres (UCCs) at BGH, CUH, KGH, MGH and MUH.	
		.5	Introduce a rigorous, and regional, “no trolleys” policy following the introduction of AMUs and UCCs.	
		.6	A consultant in Emergency Medicine with a special interest in Paediatrics should be appointed at CUH	107

Table 1-13 continued

9.4	Service		Recommendations	Page
.10	**Endocrinology** [Refer: National Diabetes Programme]	.1	There should be a single regional department of endocrinology with a named clinical lead.	
		.2	Diabetic day care services, ambulatory and outpatient endocrinology should be consolidated at SIVUH.	
		.3	Diabetic services required for inpatients should continue at CUH.	
		.4	Priority should be given to the appointment of an additional consultant endocrinologist with specific responsibility for the co-ordination of diabetic services in primary care and the community. This consultant should work closely with the Diabetic Interest Group to develop services in a structured manner.	
		.5	Endocrinology consultants should participate in AMU acute medicine on-call rotas at CUH, KGH and MUH	
		.6	Endocrinology consultants participating in the AMU on call roster in MUH will admit their specialist patients to MUH	109
.11	**Gastroenterology**	.1	There should be a single regional department of gastroenterology with a named clinical lead.	
		.2	A regional diagnostic centre for outpatients and ambulatory gastroenterology patients should be established under MUH governance and should include the colorectal screening programme.	
		.3	In the medium term, the gastroenterology regional department should provide endoscopy services to a targeted number of primary care centres.	
		.4	There is a particular need to enhance gastroenterology services in KGH, including colonoscopy screening..	
		.5	Gastroenterology consultants should participate in AMU acute medicine on-call rotas at CUH and MUH	
		.6	Hepatology/hepatitis C services should remain at CUH	110
.12	**Infectious Diseases Medicine**	.1	There should be a single regional department of infectious diseases medicine with a named clinical lead.	
		.2	Infectious diseases services should be provided at CUH and MUH with the sexually transmitted diseases unit remaining at SIVUH.	
		.3	Infectious diseases medicine consultants should participate in AMU acute medicine on-call rotas at CUH and MUH	
		.4	Regional outreach clinics should continue to be developed, in collaboration with PCCC, targeted at vulnerable groups, with strong educational and health promotion input.	112

Table 1-13 continued

9.4	Service		Recommendations	Page
		.5	The soon to be appointed second consultant should take on a regional antibiotic stewardship responsibility	112
.13	**Geriatric Medicine** [Refer: National Care of the Elderly Programme]	.1	There should be a single regional department of geriatric medicine with a named clinical lead.	
		.2	Ambulatory care units for the elderly should the established in Cork city, Mallow, KGH and BGH	
		.3	Outpatient services and rehabilitation services for elderly patients in Cork city should be concentrated on the St. Finbarr's Hospital campus.	
		.4	Geriatric medicine consultants should participate in AMU acute medicine on-call rotas at BGH, CUH, KGH, MGH and MUH.	
		.5	An ortho-geriatrician appointment should be prioritised.	
		.6	The consultant team should exercise formal clinical governance over the community hospitals and provide support for medical and nursing teams through regular visits.	
		.7	The newly appointed academic consultants at UCC should provide academic leadership for development of the specialty through the establishment of an Institute for Ageing and Health.	
		.8	Jointly agreed clinical care pathway should be developed between orthopaedics and geriatric medicine	113
.14	**Neurosciences** (Neurology, Neurosurgery, Neuropathology, Neurophysiology, Neuroradiology, Neuro-rehabilitation Paediatric Neurology, Neuro-ENT, Clinical Neuropsycology) [Refer: National Epilepsy Programme]	.1	There should be a single regional department of neurosciences with a named clinical lead.	
		.2	The regional department should prioritise discussions with UCC to formally establish an academic chair of neurosciences with the specific task of developing a clinical institute of neurosciences.	
		.3	Inpatient neurology services should be consolidated at CUH but outpatient neurology in Cork city should be provided at a location that optimises accessibility for patients.	
		.4	There should be a regional epilepsy service developed in line with the Quality and Clinical Care national programme for this condition.	
		.5	Formally defined service arrangements for acute neurology should be established at all acute hospitals in Cork and Kerry. This is particularly important for the AMU at MUH.	114

Table 1-13 continued

9.4	Service		Recommendations	Page
.14	**Neurosciences /continued.** [Refer: National Neurology Outpatients Programme]	.6	Outreach clinics should be developed at BGH, KGH and MGH for minor neurological conditions and initial assessment of patients with more serious conditions.	
		.7	Nurse/therapist led community clinics should be developed for chronic disease management under clinical governance of the regional centre.	114
	Acute Stroke [Refer: National Stroke Programme]	.8	A regional acute stroke unit should be developed at CUH.	
		.9	There should be a named lead clinician responsible for regional clinical governance of stroke care including the implementation of national standards.	
		.10	Regional protocols must be developed and agreed with BGH, KGH and MGH for the future management of stroke patients.	114
.15	**Palliative Care** [Refer: National Palliative Care Programme]	.1	There should be a single regional department of palliative care with a named clinical lead.	
		.2	Within the next six months, there should be a comprehensive review – in the context of the implementation of this roadmap – of palliative care services in Cork and Kerry by St Patrick's Hospital/Marymount Hospice and the HSE that would include issues of location, management, funding mechanisms, clinical governance and service level agreements.	
		.3	The resources currently being utilised for palliative care in KGH should be reconfigured to staff a new palliative care inpatient facility (for which there is philanthropic funding available).	
		.4	Educational programmes to raise awareness and increase appropriate referrals should continue to be developed.	
		.5	The specialty should be included in IT patient information systems upgrades	116
.16	**Rehabilitation Medicine** [Refer: National Rehabilitation Strategy (work in progress)]	.1	A consultant in rehabilitation medicine, shared between HSE South and the National Rehabilitation Hospital (NRH), should be appointed.	
		.2	There should be a new regional rehabilitation medicine service, with formal links to the NRH and a named clinical lead.	
		.3	A regional rehabilitation unit should be established at MUH.	
		.4	A regional amputee rehabilitation centre should be developed at MUH.	
		.5	The new services should provide education and advice on rehabilitation to other specialty services and members of the general public.	118

Table 1-13 continued

9.4	Service		Recommendations	Page
.17	**Renal Medicine**	.1	There should be a single regional department of renal medicine with a named clinical lead.	
		.2	The renal service should be consolidated at the cardiac renal centre at CUH in line with existing policy.	
		.3	The regional department should prioritise discussion with UCC to formally establish an academic post in renal medicine.	
		.4	Renal medicine consultants should participate in the AMU acute medicine on-call rota at CUH.	
		.5	Health promotion programmes should be developed in collaboration with UCC and PCCC.	121
.18	**Respiratory Medicine** [Refer: National COPD and Asthma Programmes]	.1	There should be a single regional department of respiratory medicine with a named clinical lead.	
		.2	Respiratory services in Cork city should be further developed on two sites, CUH and MUH.	
		.3	Respiratory consultants should participate in AMU acute medicine on-call rotas at CUH and MUH.	
		.4	Outreach support should be provided for respiratory services in BGH, KGH and MGH and these patients should have ready access to CUH/MUH as required.	
		.5	Discussions should take place with BSH Tralee on provision of shared specialist respiratory service on the basis of a Service Level Agreement.	122
.19	**Rheumatology** [Refer: National Rheumatology Programme]	.1	There should be a single regional department of rheumatology with a named clinical lead.	
		.2	Diagnostic, ambulatory, infusion and outpatient rheumatology services should be consolidated on the SIVUH site.	
		.3	Rheumatology consultants should participate in AMU acute medicine on-call rotas at CUH and MUH.	
		.4	Rheumatology consultants participating in the AMU on call roster in MUH will admit their specialist patients to MUH.	
		.5	Outreach clinics should be provided at BGH and MGH.	
		.6	Rheumatology outreach at BGH should be augmented by development of a CNS role shared with dermatology to provide an infusion service for west Cork.	123

Mental Health Directorates

All mental health services in Cork and Kerry will be led by two Executive Clinical Directors each responsible for their respective catchment areas.

Table 1-14: Mental Health Directorate

9.5	Service		Recommendations	Page
.1	**MENTAL HEALTH DIRECTORATES**			125
.2	**Mental Health** [Refer: National Mental Health Programme / *Vision for Change*]	.1	Executive clinical directors should take responsibility for: a. co-ordinating mental health services in both counties, b. integrating mental health with acute clinical networks and care pathways, c. co-ordinating mental health with primary care, d. delivering mental health promotion initiatives, and e. implementing *Vision for Change*	
		.2	Liaison Psychiatry services should be strengthened in all hospitals, and in the context of regional consolidation of emergency care.	
		.3	Focused centres for specific mental health issues should be developed, e.g. eating disorders, perinatal mental health.	
		.4	All subspecialty services should be strengthened and developed regionally within the context of implementing *Vision for Change.*	
		.5	An examination should take place, in the context of the implementation of reconfiguration in Cork and Kerry, of present patterns and outputs of service delivery in Mental Health and future patterns/outputs anticipated under *Vision for Change*	

Perioperative Care Directorate

- There should be a single regional clinical directorate for perioperative care incorporating all anaesthetics and surgical specialties and subspecialties led by a regional clinical director.
- Detailed analysis to define thresholds of complexity will need to be carried out by each specialty.
- Pre-admission clinics should be introduced as best practice for all surgical services. Day of surgery admission and day surgery should be the norm for all surgical services.
- As an intermediate step towards regional clinical services, every consultant in Cork and Kerry should have admitting rights to all acute hospitals in the region.

Table 1-15: Perioperative Care Directorate

9.6	Service		Recommendations	Page
.1	**PERIOPERATIVE CARE DIRECTORATE**			127
.2	**General Anaesthetics**	.1	There should be a single regional department of anaesthetics with a named clinical lead.	
		.2	Anaesthetics must be involved in planning of all surgical services.	
		.3	Each operating theatre in the region should be the particular responsibility of a named anaesthetics consultant who with the appropriate nurse manager will be tasked to drive theatre efficiency.	
		.4	The regional department must support the development of outreach surgery in the smaller hospitals.	127
.3	**Critical Care**[4] [Refer: National Critical Care Programme]	.1	There should be a single regional department of critical care with a named clinical lead.	
		.2	Level III and level II critical care are required in CUH, MUH and KGH.	
		.3	Level II critical care is required in SIVUH, with appropriate transfer protocols and access priorities to MUH/CUH.	
		.4	Level I critical care is required at BGH[5] and MGH with a "no refusals" policy for transfer to MUH/CUH.	
		.5	As an immediate first step, the current level III facility at CUH needs to be extended to include the space being vacated by the transfer of the cardio-thoracic. This expanded facility will combine level II and level III critical care.	
		.6	A paediatric retrieval service should be developed with the new national paediatric hospital in Dublin with support for acute assessment, treatment and stabilisation at CUH.	128
.4	**Pain Medicine**	.1	There should be a single regional department of pain medicine with a named clinical lead.	
		.2	A regional pain management centre should be developed at SIVUH.	
		.3	Outreach should be developed at BGH, KGH and MGH.	130

[4] *Level III critical care: advanced respiratory support or monitoring/support of two or more organ systems. Level II critical care: monitoring/support of one organ system or the combination of basic respiratory support and cardiovascular support. Level I critical care: resuscitate, stabilize and transfer*

[5] *Arrangements suitable for remote rural hospitals to be agreed with National Critical Care Programme*

Table 1-15 continued

9.6	Service		Recommendations	Page
.5	**General Surgery** [Refer: National Surgery Programme] [Refer: National Cancer Control Programme]	.1	There should be a single regional department of general surgery with a named clinical lead.	
		.2	There should be a single on-call emergency rota in general surgery for Cork based at CUH. The on-call consultant surgeon will be protected from all other commitments (including outpatients, rooms, elective surgery).	
		.3	General surgery will have access to a surgical emergency ward and an emergency theatre at CUH.	
		.4	Emergency general surgery services will continue at KGH.	
		.5	In keeping with the NCCP, cancer surgery will be concentrated at CUH. Upper GI and hepatobiliary and pancreatic cancer surgery will remain in this region and be provided at CUH.	
		.6	Elective general surgery should be carried out at MUH.	
		.7	The integrity of the general surgery rota must be retained by ensuring that consultants with sub-specialty interests in vascular, upper GI, hepatobiliary, colorectal, breast and endocrine surgery all continue to participate in this rota.	
		.8	BGH and MGH should evolve into day surgery hospitals.	
		.9	To ensure the surgical expertise in colorectal currently in KGH is fully used, referral patterns for colon cancer in Cork & Kerry, should be reviewed to increase their referral base.	
		.10	A regional paediatric surgery service is required, particularly for children under one year of age and neonates. This excludes complex paediatric surgery which will be performed in the national paediatric hospital.	131
.6	**Cardio-thoracic Surgery**	.1	There should be a single regional department of cardio-thoracic surgery with a named clinical lead.	
		.2	The development of cardiothoracic critical care in the cardiac renal centre at CUH should be organised initially around a ten bed dedicated critical care facility (combining Level III and Level II critical care). This facility should be ring fenced for cardio-thoracic surgery.	134

Table 1-15 continued

9.6	Service		Recommendations	Page
	Cardio-thoracic Surgery - continued	.3	Regional electronic referral systems, protocols and care pathways should be developed to ensure timely referral of patients with cardiac and/or lung disease regardless of their place of residence.	
		.4	All cardiac and thoracic surgery should be performed in the new cardiac renal centre	134
.7	**Otorhinolaryngology (ENT Surgery and Audiology)** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of otorhinolaryngology with a named clinical lead.	
		.2	The regional centre should continue to be located at SIVUH.	
		.3	In keeping with the NCCP, complex head and neck cancer surgery should be carried out at CUH.	
		.4	During the day emergency service will be provided at SIVUH. Out of hours emergencies will be seen at CUH ED.	
		.5	SIVUH and PCCC should collaborate to provide an enhanced regional audiology service under SIVUH clinical governance - to include neonatal screening at CUMH.	
		.6	KGH should be developed as an ENT/audiology satellite. The speciality needs to be supplemented by another consultant and additional clinical sessions at KGH and SIVUH.	
		.7	In the context of the implementation of this roadmap, the regional department should address the issue of the emergency service at KGH, consulting with SIVUH, KGH and BSH Tralee.	
		.8	Outreach and day surgery should be developed at MGH.	137
.8	**Maxillofacial surgery and Oral Health**	.1	A regional clinical director should be appointed for three years to reorganise specialist dental and maxillofacial services more effectively. Thereafter, there should be a regional clinical lead.	
		.2	Maxillofacial surgery should be located at SIVUH. The dental outpatient theatre at CUH should be moved to SIVUH.	
		.3	Adults and children with special needs should continue to be treated at CUH	
		.4	An option appraisal should be conducted to assess the feasibility of moving the Cork Dental School and Hospital to SIVUH from CUH.	
		.5	The new regional director for dental services should develop a new sustainable funding model for dental services, in consultation with the HSE and UCC, by December 2011.	140

Table 1-15 continued

9.6	Service		Recommendations	Page
.9	**Ophthalmology**	.1	There should be a single regional department of ophthalmology with a named clinical lead.	
		.2	Ophthalmology services should be consolidated at a new regional ophthalmology centre at SIVUH.	
		.3	During the day emergency service will be provided at SIVUH. Out of hours emergencies will be seen at CUH ED.	
		.4	The next ophthalmology consultant appointment (new or replacement) should have a special interest in vitro-retinal surgery to bring the consultant numbers in this subspecialty to three.	
		.5	Priority should be given to the appointment of additional community ophthalmologists under the clinical governance of the regional department.	
		.6	Digital image transfer technology should be developed between KGH and SIVUH.	143
.10	**Orthopaedics**	.1	There should be a single regional department of orthopaedics with a named clinical lead.	
		.2	All elective orthopaedics in Cork city should be consolidated at SIVUH and trauma orthopaedics should continue at CUH.	
		.3	Elective and trauma orthopaedics should continue at KGH but additional elective capacity for specialist joint work should be made available at SIVUH for KGH orthopaedic consultants.	
		.4	There should be a second orthopaedic trauma theatre at CUH as almost half the current trauma work is out of hours	
		.5	The next two orthopaedic surgeon consultant appointments in Cork should have a subspecialty interest in paediatric orthopaedics.	
		.6	Protocols should be developed covering stabilisation and transfer of trauma patients from KGH to CUH within 24 hours where this is deemed clinically necessary.	
		.7	Jointly agreed clinical care pathway should be developed between orthopaedics and geriatric medicine	
		.8	Nurse/therapist led outreach services should be developed for back pain, fracture clinics and rehabilitation.	145

Table 1-15 continued

9.6	Service		Recommendations	Page
.11	**Plastic Surgery** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of plastic surgery with a named clinical lead.	
		.2	Trauma work should be carried out in the dedicated emergency theatre at CUH	
		.3	In keeping with the NCCP, complex cancer-related surgery should be carried out at CUH.	
		.4	All other plastic surgery should transfer to SIVUH, with as much as possible on a day surgery basis.	
		.5	Outreach should be developed at BGH, KGH and MGH.	
		.6	The regional department should prioritise discussions with UCC for an academic post in plastic surgery.	148
.12	**Urology** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of urology with a named clinical lead.	
		.2	In keeping with the NCCP, urological cancer surgery and paediatric urological surgery should be located at CUH.	
		.3	Diagnostic, outpatients, ambulatory and elective urological surgery should be carried out at MUH.	
		.4	Outreach should be developed at BGH, KGH and MGH.	151
.13	**Vascular Surgery**	.1	There should be a single regional department of vascular surgery with a named clinical lead.	
		.2	Diagnostics, including a new non-invasive vascular laboratory and outpatients service (including a new venous laser facility), should be provided at a location that optimises accessibility for patients.	
		.3	Emergency and cancer surgery should be carried out at CUH. Elective surgery should be carried out at MUH.	
		.4	A new endovascular laboratory should be developed in the new cardiac renal centre at CUH.	
		.5	Outreach should be developed at BGH, KGH and MGH.	
		.6	Research and development of novel vascular devices should be developed in association with UCC and CIT	152

Women's and Children's Health Directorate

- There should be a single regional clinical directorate for women's and children's health led by a regional clinical director.

Table 1-16: Women and Children's Health Directorate

9.7	Service		Recommendations	Page
.1	**WOMEN'S AND CHILDREN'S HEALTH DIRECTORATE**			155
.2 .3	**Maternity Services (Obstetrics, Gynaecology, Neonatology, Midwifery)** [Refer: National Cancer Control Programme] [Refer: National Obstetrics and Gynaecology Programme]	.1	There should be single regional maternity service with a named clinical lead which should encompass regional departments of: – Obstetrics, Midwifery and Gynaecology, – Neonatology.	
		.2	Emergency gynaecology and gynae-oncology should be concentrated at CUMH/CUH.	
		.3	Elective gynaecological day surgery should transfer to SIVUH.	
		.4	Day surgery, diagnostics (including colposcopy, hysteroscopy, cystoscopy/urodynamics and ultrasound) and gynaecology outpatients should be concentrated at SIVUH, establishing a gynaecological "one-stop shop".	
		.5	Midwifery provided care should be developed within an integrated regional maternity service.	
		.6	The maternity unit at KGH should continue to be an obstetrics led service.	155
.4	**Paediatrics** [Refer: National Paediatric Strategy and National Model of Care for Paediatric Healthcare in Ireland]	.1	There should be a single regional department of paediatrics with a named clinical lead.	
		.2	Paediatric hospital services in Cork city should be concentrated in CUH as soon as possible.	
		.3	The medium-term goal should be the construction of a new regional paediatric hospital, within the framework of the national paediatric strategy, to be built on the CUH site to cater for all paediatric medicine and surgery and non-complex rehabilitation.	
		.4	A regional paediatric surgery service is required for children, including neonates. This excludes complex paediatric surgery which will all be performed in the national paediatric hospital.	
		.5	Formal paediatric consult arrangements should be available to paediatric surgical services at SIVUH.	
		.6	An ambulatory care unit should be built at CUH where a direct access emergency care service for children could be provided.	158

Table 1-17: Hospital Exit

9.8	Service		Recommendations	Page
	HOSPITAL EXIT			159
	Hospital Exit (see also Geriatric Medicine, Mental Health, Rehabilitation Services)	.1	The regional department of geriatric medicine, working with related services, should develop comprehensive discharge planning pathways as a major implement-ation workstream of reconfiguration.	
		.2	Community hospitals in Cork and Kerry should come under the clinical governance umbrella of the department of geriatric medicine.	
		.3	The capacity of rehabilitation services for both older and younger patients needs to be enhanced.	
		.4	Patients awaiting long term care should not remain in the acute hospital longer than 10 days.	

1.5 Reconfigured Acute Hospitals

This section presents tables summarising the clinical services in each acute hospital after reconfiguration has taken place. Each table is cross referenced to the page in the main report where further detail on existing services and rationale for proposed changes is given.

Table 1-18: Bantry General Hospital (reconfigured) [p 163.]

Bantry General Hospital – A remote rural hospital, providing for routine local needs and medical admissions with capacity for rapid transfer to the tertiary centre, when required, according to regional protocols. Remote rural classification will require particular definitions of selected acute medicine and particular critical care arrangements to be agreed with the national Acute Medicine Programme. Outreach services provided by specialist teams. A teaching hospital of UCC

Diagnostics	**Medical Services**	**Perioperative Services**	**Women's and Children's services**
More acute lab work Less cold lab work	Selected acute medicine**	Day surgery in: • General surgery • Gynaecology • Plastics	Gynaecology outreach
	Geriatric medicine incl. ambulatory care		Obstetrics outreach
	Gastroenterology – endoscopy		
Radiology	Medical Assessment Unit open 12/7*	Critical Care** (transfer protocols for remote rural hospital)	**Mental Health Services**
	Urgent care centre open 12/7	Dental	Mental Health
	Rehabilitation medicine	Urology	
	Outreach – other medical specialties	Outreach – other surgical specialties	

** Direct admission to wards outside these hours*
*** Arrangements suitable for remote rural hospital to be agreed with National Acute Medicine and Critical Care Programmes.*

Table 1-19: Cork University Hospital (reconfigured) [p. 164]

Cork University Hospital – main regional centre for complex medical and surgical care, 24/7 level 1 trauma, regional cancer centre, regional maternity hospital, regional paediatric hospital, blood transfusion service for Munster. Major teaching hospital of UCC.			
Diagnostics	**Medical Services**	**Perioperative Services**	**Women and Children's services**
Laboratory Medicine Cl. Biochemistry Cl. Microbiology Haematology Histopathology Immunology	Cardiology (regional centre)	Regional cancer centre	Gynaecology – emergency and cancer
	Dermatology	Emergency general surgery	Obstetrics Midwifery Neonatology
	Emergency Dept open 24/7 level 1 trauma	Cardio thoracic surgery	
	Urgent care centre open 12/7	Critical care – levels II and III	
	Endocrine/Diabetes inpatients	Maxillo Facial – trauma & cancer	Paediatrics
	Gastroenterology – emergency endoscopy service	Neurosurgery	**Mental Health Services**
	Acute Medicine Unit and Short stay unit open 24/7	Otorhinolaryngology - cancer	Mental health and liaison psychiatry
	Clinical Haematology Medical Oncology Radiation Oncology	Orthopaedics – trauma	
		Plastics – trauma & cancer	
	Infectious diseases	Vascular surgery - emergency and inpatient elective endovascular lab.	
Radiology	Geriatric medicine		
Munster Blood Transfusion Service	Neuroscience/Neurology		
	Acute stroke unit		
	Palliative care		
	Renal medicine		
	Respiratory medicine		
	Rheumatology inpatients		

Table 1-20: Kerry General Hospital (reconfigured) [p. 165]

Kerry General Hospital – serves a remote, rural, population; must continue to provide the bulk of routine hospital care for the population of Kerry, including 24/7 ED. Stronger links should be developed with Bon Secours Tralee. Consultants should be part of regional teams. Options for enhanced midwifery provided care should be explored. A teaching hospital of UCC.

Diagnostics	Medical Services	Perioperative Services	Women and Children's services
Laboratory Medicine Cl. Biochemistry Cl. Microbiology Haematology Core Histopathology	Cardiology* – linked to regional hub and BSH Tralee	General surgery – emergency and elective	Maternity Services – ▪ Obstetrics ▪ Gynaecology Paediatrics
	Endocrinology		
	Palliative care		
	Geriatric medicine incl. ambulatory care	Otorhinolaryngology (ENT)	
	Gastroenterology *	Orthopaedics	
	Acute Medicine Unit open 12/7. Out of hours medical to KGH ED (medical team)	Critical care level II/III	
Radiology	Respiratory Medicine*	Outreach – other surgical specialties	**Mental Health Services**
	Emergency Dept open 24/7 Level 2 Trauma		Mental health acute inpatient services
	Urgent Care Centre open 12/7		
	Rehabilitation Medicine		
	Rheumatology*		
	Outreach – other medical specialties		

** Priority for development*

Table 1-21: Mallow General Hospital (reconfigured) [p. 167]

Mallow General Hospital – rural, providing for routine local needs and selected medical admissions with capacity for rapid transfer to the tertiary centre for the effective management of emergencies according to regional protocols. Outreach services provided by specialist teams. A teaching hospital of UCC

Diagnostics	Medical Services	Perioperative Services	Women and Children's services
POCT	Selected acute medicine	Day surgery in: • General surgery • Plastics • Dental • Urology	Gynaecology outreach Obstetrics outreach
Radiology	Geriatric medicine incl. ambulatory care		
	Gastroenterology – endoscopy		
	Medical Assessment Unit open 12/7*	Critical Care Level 1	
	Urgent care centre open 12/7	Outreach – other surgical specialties	
	Rehabilitation medicine		
	Outreach – other medical specialties		

** Direct admissions to wards outside these hours*

Table 1-22: Mercy University Hospital (reconfigured) [p. 169]

Mercy University Hospital – A wide range of specialist services and regional centres. Regional diagnostic centre for gastroenterology patients under MUH governance. Regional centre for elective general surgery. Regional centre for new Rehabilitation Medicine service. Regional centre for certain specialist laboratory services. Level II/III critical care. 12/7 emergency department will pioneer deferred emergency care in close collaboration with CUH ED; Acute Medical Assessment Unit with consultant roster appropriate to a model 3 hospital. Major teaching hospital of UCC.

Diagnostics	Medical Services	Perioperative Services	Women and Children's services
Regional specialist laboratory service	ED open 12/7, incl. urgent care	General surgery – elective, day surgery, outpatients	Gynaecology consult service
	Acute unselected medicine*	Urology – non cancer	**Mental Health services**
	Acute Medical Assessment Unit**	Vascular surgery – elective	Mental health
	Endocrinology***	Level II/III critical care	
Radiology	Geriatric medicine		
	Gastroenterology regional diagnostic centre		
	Rehabilitation medicine regional centre		
	Regional amputee service		
	Respiratory medicine		
	Rheumatology***		
	Cardiology on site consult service (Appendix IV)		
	Infectious diseases		

**priority site for new acute medicine consultant appointments*
***Opening hours to be finalised with regional lead of Acute Medicine Programme*
**** Specialist cover to be provided by regional team*

Table 1-23: South Infirmary and Victoria University Hospital (reconfigured) [p.170]

South Infirmary and Victoria University Hospital – A specialist day surgery and elective surgery hospital. Ambulatory day care centre for medical specialties with a high proportion of day cases such as rheumatology and endocrinology; same for surgical specialties such as ophthalmology, ENT, maxillofacial, orthopaedics and plastics. Trauma rehabilitation. Level II Critical Care. SIVUH medical consultants will participate in MUH AMU and Cork city medical rosters will provide out of hours medical cover for SIVUH. Major teaching hospital of UCC.

Diagnostics	Medical Services	Perioperative Services	Women and Children's services
POCT	Cardiology on site consult service	Maxillo-Facial - elective	Gynaecology and uro-gynaecology day services, diagnostics and outpatients
	Dermatology regional centre	Orthopaedics – elective and paediatric	
	Endocrinology ambulatory care and day care centre	Ophthalmology regional centre	
	(Will contribute to AMU in MUH)	Otorhinolaryngology regional centre	**Mental Health Services**
	Geriatric medicine consult services	Plastics - elective	Mental health consult services
Radiology	Sexually Transmitted Diseases unit	Pain medicine regional centre	
	Rheumatology regional diagnostics and ambulatory centre	Trauma rehabilitation	
		Level II critical care	

2. CONTEXT

2.1 The population challenge

Population trends and their significance for health have recently been treated comprehensively in the Department of Health and Children (DoHC) publication "Health in Ireland: Key Trends 2009"[6]. This report demonstrates that challenges to the Irish health service as an organisation will grow and not diminish in the years ahead as more of our population survive into older age. In 1999 Irish life expectancy was one year below the EU average; in 2006, it was almost one year above. A large proportion of the extended life expectancy can be attributed to lower mortality from heart and circulatory system diseases. The fact that we are living longer will increase the pressure on the health service to respond to our increasing health needs (Figure 2-1).

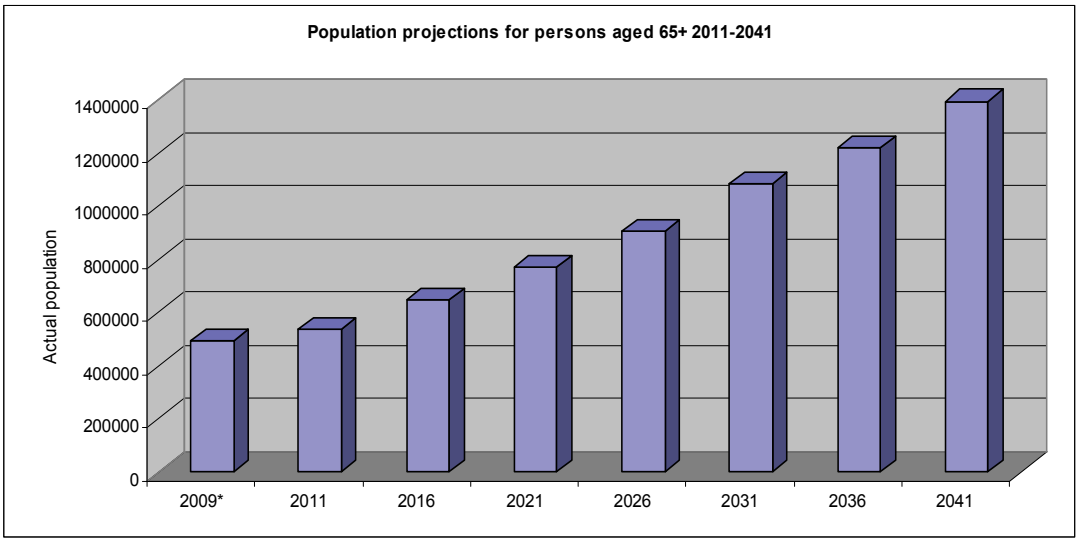

Figure 2-1 Projected growth in the over 65s to the year 2041

The Irish economic recession means it will not be possible to expand the public health services to meet this increasing demand. In the words of the Health in Ireland report "Ireland is now in the midst of a severe economic downturn, the effects of which are expected to last a number of years. This will bring pressures to bear on both health services and on the health of the population. While it is too early to measure specific health consequences arising from the recession, the objective and the challenge is to consolidate the gains achieved over the past decade with a focus on effectiveness, efficiency and equity.[1]" Achieving greater effectiveness, efficiency and equity is the primary focus of this report.

[6] Health in Ireland: Key Trends 2009 published by the Department of Health and Children, December, 2009. Available on DoHC website.

2.2 Policy framework

Much has been written and much done in recent times about reform of the Irish health service. Dr Yvonne O'Shea's recently published "Clinical Directorates in the Irish Health Services" provides a concise overview[7] of the reform process in the Irish Health Services from the publication of *Shaping a Healthier Future (1994)* through *Quality and Fairness (2001)* to a series of policy reports (Hanly, Brennan, Prospectus and others) that led ultimately to the creation of the Health Service Executive in 2004 and the Health Information and Quality Authority in 2007. Both of these new institutions represent hugely significant structural change that will determine the delivery and quality of Irish healthcare for many years to come. Six developments have a particular bearing on the national context for this roadmap and on its formation.

2.3 Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) was established under the Health Act (2007) to drive continuous improvement in Ireland's health and social care services. Reporting directly to the Minister for Health and Children, the Authority has statutory responsibility for:

- Setting standards for health and social services
- Monitoring healthcare quality
- Health technology assessment
- Health information
- Social services inspectorate

HIQA determines what constitutes safe and appropriate healthcare in the acute hospital network. It has investigative powers which it calls upon when specific questions arise about standards of safe care in hospitals and it also carries out an annual review of national hygiene standards in healthcare institutions. HIQA reports thus are building up case-based evidence of practice in Irish hospitals and other healthcare settings and recommendations for improvement arising therefrom. Two reports of particular relevance to reconfiguration in Cork and Kerry are the 'Ennis report[8]' and the 'O'Malley report[9]', the first because it defines standards of acute care for smaller hospitals and the second because it defines standards for histopathology practice in our larger hospitals. The reconfiguration of acute services in Cork and Kerry must take cognisance of this growing body of work in its approach to transformational change, ensuring that each element of an integrated hospital network is supported by the other elements of the system in concrete, demonstrable ways, and does not undertake work outside its level of competence as defined by HIQA investigations. Additionally, any corporate governance of an integrated system is obliged to ensure as far as it can that standards of care, hygiene and clinical governance throughout the system are as high as they can be and to take decisive action to mitigate any lapses. It is likely that in the future, HIQA will formalise a system of hospital licencing for this country.

2.4 The HSE Transformation Programme 2007-2010 (December 2006)

This set out the HSE's high level approach to reform and identified the basic principles to be followed. The HSE Transformation Programme spells out the necessity for change and

[7] Clinical Directorates in the Irish Health Services – Managing Resources and Patient Safety by Yvonne O'Shea, Blackhall Publishing 2009, Chapter 4.

[8] Report of the investigation into the quality and safety of services and supporting arrangements provided by the Health Service Executive at the Mid-Western Regional Hospital, Ennis, HIQA (2009)

[9] Report of the investigation into the circumstances surrounding the provision of care to Rebecca O'Malley, in relation to her symptomatic breast disease, the Pathology Services at Cork University Hospital and Symptomatic Breast Disease Services at the Mid Western Regional Hospital, Limerick, HIQA (2008)

provides the policy context for this latest attempt to reorganise acute services in HSE South. The vision was stated by the Chief Executive Officer, Professor Drumm, when he said "I think everyone wants to build a health and social care system that is sustainable and capable of delivering nationally consistent high quality services, with the limited resources available" with the fundamental purpose "to enable people live healthier and more fulfilled lives". The six priorities of the programme are:

1. To develop integrated services across all stages of the care journey
2. To configure Primary, Community and Continuing Care services so that they deliver optimal and cost effective results.
3. To configure hospital services to deliver optimal and cost effective results.
4. To implement a model for the prevention and management of chronic illness.
5. To implement standards based on performance measurement and management throughout the HSE.
6. To ensure all staff engage in transforming health and social care in Ireland.

The HSE Transformation Programme commits the organisation to transformational change. In the words of the Chief Executive, transformational change is concerned with changing "almost every aspect of our work; the way we work; the way we relate to each other, our culture and our ambitions". This reconfiguration roadmap seeks to give concrete form to this vision for Cork and Kerry.

2.5 Establishment of the Directorate of Quality and Clinical Care in the HSE (2009)

This is the HSE's response to a new regulatory environment heralded by the establishment of the Mental Health Commission (2002), the Health Information and Quality Authority (HIQA - 2007), and the Commission on Patient Safety and Quality Assurance (2007)[10]. The Quality and Clinical Care Directorate is charged with delivering the strategic objective in the HSE's Corporate Plan (2008-2011) to establish a robust quality, safety and risk management programme for the organisation.

Clinical directorates

The establishment of clinical directorates within and between the acute hospitals is a key element in this programme and a key necessity for successful reconfiguration. The Quality and Clinical Care (QCC) Directorate has established a national committee to oversee the roll out of clinical directorates. The first cohort of clinical directors was appointed in January 2009 for a two year term. QCC is sponsoring national discussions that will lead to a new cadre of clinical directors with new roles and responsibilities.

Clinical care programmes

QCC is pursuing an ambitious quality agenda that includes ten programmes of national priority that embrace general and specific areas of care, technology development and leadership, most of which are of critical importance to the success of reconfiguration:

- Primary Care – overarching programme
- Diagnostics – " "
- Care of the Elderly – " "
- Palliative Care – " "
- Chronic Diseases (8 programmes)
- Outpatient treatment (6 programmes)
- Emergency Management (4 programmes)
- Enabling projects (2 programmes)

[10] Building a Culture of Patient Safety: Report of the Commission on Patient Safety and Quality Assurance, DoHC, 2008.

- Institute of Health Care initiatives
- Clinical Leadership - establishment of clinical directorates

These national clinical care programmes will be delivered by the appropriate specialty clinical lead reporting to his/her regional clinical director.

Accountability framework

The QCC accountability framework will have to be incorporated in any new governance arrangements. The framework stresses that accountability must be clear, concise and cohesive. The overall accountability for any patient's care is a combination of:

a. professional accountability of the clinician providing the care;
b. clinical and managerial accountability for ensuring that the systems and processes, and the environment within which care is provided are effective and robust;
c. policy makers accountability for ensuring that the future development of care is evidence based and meets the needs of the population.

Medication Safety

The Madden report[4] quotes Irish research (Grimes et al 2008) into discrepancies at discharge from hospitals which found that 65.5% of patients had an unintended discrepancy in their prescription, 20.9% of which were due to drug omission. Medication reconciliation protects patients from these errors when they move from one care setting to another. It is a formal process of obtaining a complete and accurate list of each patient's current medications from all available sources at all points of contact and verifying and reconciling medications to reduce medication errors. An integrated health system would have to insist on formal medication reconciliation systems at all necessary points within an integrated healthcare system. The UCC School of Pharmacy has the necessary academic and clinical expertise to advise, research and implement a wide range of clinical pharmacy issues relating to drug safety, drug prescribing, handling and processing.

2.6 HSE Quality and Risk Framework

The HSE's quality standards are set out in its Quality and Risk Management Standard[11]. This provides the current framework for quality measurement, monitoring and improvement and the management of risk. This standard will provide the quality and risk framework both for the implementation of specific reconfiguration projects and the operation of a single integrated hospital network.

The success of a single hospital network will be judged by the extent to which quality improvement and risk reduction go hand in hand. The HSE's quality and risk framework is designed to ensure that these two fundamental measures of effectiveness are kept to the forefront of each hospital's management agenda. The creation of a single hospital network must successfully translate this standard into a policy that embraces all facets of the regional system. The management standard may be summarised as follows.

Healthcare quality and risk are effectively managed through implementation of an integrated quality and risk management system that ensures continuous quality improvement. (Statement of Standard).

The risk management aspects conform to the requirements of the Australian/New Zealand risk management standard AS/NZS 4360:2004. Under the proposed integrated university hospital network for Cork and Kerry, management would be responsible to the RDO for implementation of this standard throughout the hospital network and all partners would be

[11] Quality and Risk Management Standard, HSE, (November 2007)

bound by this standard. The standard encompasses 22 criteria on which effectiveness of quality improvement and risk management measures will be judged:

1. Communication and consultation
2. Accountability
3. Standardised policies, procedures and guidelines
4. Participation in standards-based quality assurance programmes
5. Clinical and healthcare audit
6. Continual professional development
7. Patient and public participation
8. Use of quality improvement tools
9. Proactive risk management process
10. Patient and service user safety programme
11. Occupational health, safety and welfare programme
12. Environmental and fire safety programme
13. Incident management
14. Complaints management
15. Claims management
16. Learning and sharing good practice
17. Leadership for quality and risk management
18. Resources for quality and risk management
19. Staff information, instruction and training
20. Outcomes and key performance measures
21. Monitoring and review arrangements
22. Independent assurance.

These criteria are designed to

- Involve all stakeholders
- Provide accountability in depth
- Assure organisational capability
- Guarantee independent assurance
- Embed a system of monitoring, reviewing, learning and improving quality and risk management at all levels of the organisation.

The reconfiguration team has used various elements of this standard in its approach to the development of this roadmap and the testing of various initiatives and pilot studies along the way. Open engagement, reliable data, use of formal documentation, encouragement of learning and leadership, involvement of services users, audit and review have all been used as fundamental supports for guiding what is a significant change project. Examples would include [numbers in square brackets refer to the numbered criteria above]:

- Timely engagement of the public and public representatives in the review of emergency services and the implementation of its recommendations. [1 & 7] (Refer Emergency Services Review)

- Regular reports to the Regional Health Forum and the national reconfiguration forum by the Director of Reconfiguration and the Regional Director of Operations and presentation to the Oireachtas Committee on Health by the Director of Reconfiguration. [2]

- Development of formal implementation pack for each implementation workstream**.** Cross referencing of recommendations to national programmes [3]

- Audit of Haemochromatosis pilot and the Advanced Paramedic service in west Cork. [5]

- Service user involvement in subgroup process and recommendations for service user involvement in the ongoing implementation of reconfiguration. [7] (Refer Chapter 4)

- Experience in developing, testing and implementing change lies at the heart of successful reconfiguration and is one of the hallmarks of successful quality improvement. Carrying out of background studies – Theatre utilisation, bed capacity analysis, options appraisals of 'main moves' e.g. Orthopaedics, Gastroenterology, theatre scheduling study, Advanced Paramedic pilot in west Cork – to ensure organisational capability and robust data.

- Embedding of Risk Assessment in implementation workstreams. [9] (Refer Chapter 13)

- Use of Lean Sigma as a learning and improvement tool across all our acute hospitals e.g. Lean ward project [16]

- Establishment of regional reconfiguration forum to involve regional decision makers – managers and clinical directors and university deans – in addressing common issues and exercising informed leadership of the reconfiguration project. [17]

- Proposals to institute a project to develop robust outcome measures in an Irish context. [20] (Refer Chapter 15)

- External review of Reconfiguration and proposed external review of interim regional governance arrangements to provide independent assurance. [21 & 22] (Refer Chapter 15)

All future partners to a regional system must follow this standard.

2.7 Report of the Top Level Steering Group on Acute Hospital Services in Cork (July 2001)[12] and the Acute Hospitals' Planning Forum

This report first identified the need to address systematically the fragmentation of acute services in Cork city and in many ways was a forerunner to the current reconfiguration roadmap. It established the Acute Hospitals' Planning Forum tasked with developing a strategic plan for acute hospitals in Cork city. These included Cork University Hospital (CUH), St Finbarr's Hospital, the Erinville Maternity Hospital, St Mary's Orthopaedic Hospital, the Mercy Hospital and The South Infirmary Victoria Hospital. Its main recommendations were:

New Working Arrangements

- Adoption of common practices and protocols for the management of emergency and elective admissions and discharges;
- Development of a medical assessment service;
- Development of medical admissions units;
- Designation of core specialty beds and shared, flexible/on demand medical beds;
- Development of a single shared rota for General Internal Medicine between the Mercy and South Infirmary-Victoria hospitals as a prelude to the development of a city-wide GIM rota;
- Development of city-wide rotas for specific specialties, including cardiac and geriatric medicine;
- Development of greater flexibility in the provision of services e.g. working hours and skill mix;
- Building of clinical education infrastructure, e.g. hospital education centres;
- Development of joint appointments between hospitals and health science programmes at UCC;
- Development of a shared quality framework;

[12] Report of the Top Level Steering Group on Acute Hospital Services in Cork, DoHC, July 2001. Available on DoHC website.

- Development of better planning processes involving key service groups early on;
- Proactive development of radiology and pathology services;
- Establishment of a health information "help desk" for health professionals in the region; and
- Implementation of a unique patient identifier for the Southern Health Board area.

Additional staff
- Consultants in 1-3 years: +60

- Consultants in 4-10 years: +60 (total +120)
- Clinical support staff: +139
- Nursing and Midwifery: +368.5

Improved hospital facilities
- Detailed proposals for improved hospital facilities and infrastructure in two phases, years 1-3 and years 4-10.

Additional inpatient bed capacity
- +665 beds

Future location of specialties within city hospitals
The plan presented detailed recommendations for allocating new consultant appointments across the whole range of medical and surgical specialties in a manner compatible with a coordinated city-wide service.

The AHPF plan was a serious step forward in integrated planning that involved extensive consultation across a broad canvass. As such it foreshadows much of what will be found in this plan. However, much was contingent on resources. While resources did increase and some major developments took place – city consultant numbers are now 222 rather than the 285 called for, 2 new A&E departments were built, a new Cardiac Renal centre is about to open at CUH, maternity services moved to a new single site maternity hospital, new health education programmes were established at UCC – the fundamental aim of an integrated city-wide service was not achieved.

2.8 Horwath and Teamwork Review of Acute Services in HSE South[13].

This provided the immediate stimulus to the process of reconfiguration in HSE South (Cork and Kerry). Consultants Horwath and Teamwork were engaged to report on how to develop integrated health services in three geographically separate regions, the North East, the Mid West and the South. Each region had its own distinct challenges but principles followed in all three reports were the same:

1. Put the patient at the centre of the healthcare system
2. Concentrate complex care in one regional tertiary centre of excellence
3. Create a regional system by facilitating consultants to work together in regional teams
4. Deliver as much non-complex care locally through local centres of excellence
5. Improve integration between primary, secondary and tertiary care.

Reconfiguration in Cork and Kerry gets its immediate mandate from the adoption by the HSE of this report. The report reiterates the six priorities of the Transformation Programme (pp10, 11) and comments: " In summary, these national transformation priorities are setting a

[13] Securing clinically safe and sustainable acute hospital services: A review of acute services in HSE South and a five year action plan for Cork and Kerry, Horwath and Teamwork, 15 May, 2008. Available on HSE website.

direction of travel in which more care is provided at home or as close as home as possible, and that when patients do need acute hospital services, they will receive high quality care that is integrated with local services."

The report proposes its "optimum configuration of hospital based services for HSE South, in accordance with HSE's strategies, transformation priorities and international trends in healthcare delivery" and also, extending its remit beyond the Acute Hospitals Planning Forum, "the impact of the new configuration on the interface and relationship between the acute hospitals and the primary, community and continuing care (PCCC) service."

The solution to the many problems identified was seen as "a fundamental reconfiguration of the acute care system and processes, together with a redeployment of existing resources in order to optimise care in terms of effectiveness, quality, sustainability and affordability." It broke new ground in addressing the link between the acute services and community based primary and secondary care (Transformation principle 1) and it broke new ground in specifically addressing the link between the health service and the third level education and research sector (Transformation principles 5 & 6), what it calls the academic/clinical alliance. It called for more detailed consideration of the Academic Medical /Health Sciences Centre concept (pp62,63) and in a further allusion to Transformation principle 6, it recommended "integrating the clinical and academic dimensions of service change, with all staff and students able to access state of the art undergraduate and postgraduate teaching programmes, facilities and research opportunities from any site in the network"(p19).

The formal launch of the Horwath and Teamwork review for HSE South took place on Tuesday 9th June 2009. On that occasion, the Director of Reconfiguration for Cork and Kerry, Professor John Higgins, elaborated on the key principles as follows:

A Single Hospital network

- A single service network with integrated management of its component parts. Management will involve close collaboration between professional clinicians (e.g. clinical directors, directors of nursing, directors of primary care centres) and professional managers.
- A new regional governance arrangement with university participation will ensure open and inclusive governance.
- Regional and local linking of healthcare provision with education, training and research will develop a culture of forward looking and internationally benchmarked clinical practice throughout the region.

Concentration of complex care

- Complex care to be delivered by consultant teams on a 24/7 basis. All consultants within a given specialty or sub-specialty with work together within their respective teams
- These consultant teams will deliver outreach services in local centres and in some instances, (e.g. paediatrics) directly into the community in collaboration with general practitioners.
- Care pathways will ensure that the different elements of the system are integrated together to give the best possible clinical outcomes.
- Cork, as the regional centre, will have a clinical research facility that will be part of a broadly based health and technology institute linked to UCC and CIT.

Local Development and Accessibility

- Local centres will have fit for purpose facilities for all routine medical and surgical diagnostics.
- Local centres will have appropriate systems for dealing with emergencies including minor injuries clinics, acute medical units and referral protocols for more serious illnesses or injury.
- There will be a single GP referral system and a single patient record system.

- Local centres will have education centres linked to the university and technology institutes.
- UCC health profession students will receive clinical education in local centres and the local community.
- Particular efforts will be made to improve the linkages between PCCC services and the hospital network.

The Horwath and Teamwork Review places reconfiguration in an international context. The concentration of complex care, the keeping local of all that can safely be kept local, the organization of consultants in regional teams – all this has been shown to work in other countries. In this roadmap, the recommendations of the Review have been adapted to the realities of population needs in Cork and Kerry.

2.9 Mercy University Hospital Strategic Plan 2010-2014

The MUH strategic plan charts a future for the hospital based on the continuing development of high quality acute and non-acute care within an integrated regional model, continuing the ethos of the Mercy order of putting the patient first, valuing interpersonal relationships and adopting a flexible, pragmatic approach to development within a larger regional system. The hospital and its board, while retaining its voluntary status and its status as a major university teaching hospital, are willing to consider participation in wider governance mechanisms which will improve integrated service delivery across the region. Clinical services will develop in a focused range of elective and referred medical and surgical acute and non-acute services, a reconfigured emergency service and a comprehensive range of clinical support services. Particular attention will be given to developing a new Ambulatory Care service that will include a rapid diagnostic centre, enhanced outpatient clinics, scoping and other day care procedures plus outreach to the community with strong links to the new Primary Care Teams. Clinical development will complement and support other city services and certain complex subspecialist services in CUH. There will remain a strong commitment to education and training. The hospital's strategic plan demonstrates a firm intention to engage with the reconfiguration of services in the city and region as an active contributor to an integrated system. It has commissioned external analysis of its case-mix which supports its strategic plan.

2.10 HSE's Primary Care Strategy

The HSE has embarked on fundamental reform of its primary, community and continuing care services through its primary care strategy[14] which groups community based health professionals in Primary Care Teams (PCTs) serving populations of 7,000-10,000 grouped into a smaller number of Health and Social Care Networks (HSCNs) serving populations of 35,000-50,000. Specialist teams will operate at network level, providing additional expertise in particular categories and specific disabilities, e.g. autism, neurological rehabilitation, paediatric disabilities etc.

The objectives of the strategy are to:
- Improve access to services by providing more professionals working extended hours;
- Improve quality of service;
- Extend the range of services available in the community, including several services currently restricted to acute hospitals;
- Improve integration with acute services;
- Increase local involvement in the planning of services; and
- Increase prevention and rehabilitation.

[14] Integrated Primary, Community and Continuing Care, Leading the Transformation of Ireland's Primary, Community and Continuing Care Services, 2007-2010, HSE 2007.

Horwath and Teamwork reported that there would be 139 PCTs grouped within 35 HSCNs in the whole of HSE South and that there were 63 teams in development (2007). Roll out of the strategy has been challenging and is not anticipated to be completed before 2012. Recent caps on budgets and whole time equivalents have added greatly to these challenges. On the other hand the Croke Park Agreement may in time assist in redeployment and extension of the working day. Completing the rollout of PCTs and their development to a position of strength is crucial to the success of reconfiguration and the development of successful working relationships between the acute and community services. The majority of healthcare needs should be met at home and in the community. Acute hospital settings should only be used where clinically necessary. Hospital consultants and their teams should extend their outreach services into smaller hospitals and community settings. Diagnostic systems should be designed to support this outreach.

Reconfiguration worked through 37 clinical service subgroups and each of these subgroups had a representative of PCCC and a GP included in its membership. This helped set a shared agenda though much work remains. Initiatives are needed to bring about greater shared understanding of the challenges of delivering high quality joined up acute care and the equal challenges of delivering high quality and joined up community care. Hospital consultants, registrars, SHOs, nurses and hospital based therapists need to understand the challenges facing their colleague health professionals working in the community and vice versa.

In Cork and Kerry, an integrated model of care for older people is being developed which will provide appropriate care in appropriate settings along a continuum from home and community services through acute intervention to long term residential care with older persons needs being central. Community based services are being developed by reconfiguration of current core services. These include Home Helps, Home Care Packages, day care, respite, meals on wheels and sheltered housing. At Health and Social Care Network level, the older person can, on referral, access specialist services including geriatrician and therapist help. Integrated care at community level often depends on good collaboration with voluntary and community groups who provide many vital services to older people.

2.11 Health Promotion

An integrated health system for Cork and Kerry should strive to achieve a balance between acute care intervention and health promotion initiatives that enable people of all ages and all social categories to live healthier lifestyles. Health promotion, as defined in the Ottawa Charter (1986) is "*the process of enabling people to increase control over, and to improve their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and realise aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the object of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being*." Health promotion provides a number of benefits to those who use, fund and deliver a health service. It increases the health status of a population and therefore mitigates the demands on the health service; it provides a necessary counterbalance to focusing overly on the reduction of disease; it promotes healthy living and working which benefits communities and society at large; it gives individuals greater control over their lives and empowers them to make difficult changes.

There is potential for greater collaborative working between the health service in Cork and Kerry and the Department of Epidemiology and Public Health at UCC. The department runs a four year degree programme in public health and health promotion and the HSE should provide placement opportunities for these students in its many outreach public health

programmes. In return, the academic department can provide specific training, guidance and critical appraisal of health promotion initiatives before the investment of large sums of public money.

2.12 Health Research and Innovation

The second fundamental endpoint of reconfiguration is to exploit the potential of research and innovation in the healthcare industry *for this particular region*. Cork has a tertiary healthcare system, a university, an institute of technology and one of the greatest concentrations of healthcare industry in the world. During the years when health service reform was taking hold, the Celtic tiger was developing rapidly in Ireland. Multinationals were setting up manufacturing plants in Ireland and employing young and talented graduates. The pharma and medical devices sectors were major players in this development. In parallel, government set up Science Foundation Ireland (SFI) and considerably increased its funding of health research through the Health Research Board (HRB). The HRB placed major emphasis on developing translational research to bring the benefits of biomedical research into clinical practice. Irish medical schools began to explore ways of developing structured partnerships with the health service by linking health, education and research into academic health centres. In Cork, UCC obtained HRB/HSE funding for a clinical research facility that will enable clinical researchers to translate basic biomedical research supported by SFI into new drug therapies, new gene therapies and new medical devices. Cork Institute of Technology has significant strength in medical devices research.

2.13 Managing Risk

Dr John Carver, a former clinician and the world's leading authority on the governance of non-profit and public organisations, argues that the fundamental requirement for any endeavour is that the Ends are clearly enunciated[15]. Carver uses the term Ends to define 'the benefits, for whom and at what level of cost efficiency.' Ends can also be thought of as 'strategic goals.' Proper definition of the ends gives clarity to purpose, or what is required to be achieved by the endeavour.

Carver states that anything that is not an End (i.e. that doesn't specifically relate to benefits, to whom and at what level of cost efficiency) is a means. Thus, for example, a public hospital's Ends might be couched in terms of the people served by the hospital achieving the best possible health outcomes in a cost-effective manner. Anything that a hospital does to ensure this would be a means. The hospital might, for example, implement a new corporate governance structure; or put in place a system of clinical governance; or provide training for its doctors and other staff; or implement a new patient safety incident reporting and learning system; or introduce new clinical guidelines to be followed by clinicians; or apply lean techniques to improve efficiency. These are all means that might contribute to achievement of Ends.

Strategic goals

The overarching "Ends" of reconfiguration are that the people of Cork and Kerry benefit from having a unified acute healthcare system integrated with all other elements of the health service that:

1. achieves the best possible health outcomes for the people it serves,
2. realises for the people of the region the economic and other benefits that flow from leading edge health research, technology and innovation,
3. delivers value for money.

[15] Carver, J. (2006). Boards That Make a Difference. Jossey-Bass.

These can only be achieved through clear commitment to, and planning for, implementation

Risks to the achievement of strategic objectives

The international standard ISO 31000:2009 *Risk management - Principles and guidelines* defines 'risk' as the 'effect of uncertainty on objectives' and states that risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence.' Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of an event, its consequence, or likelihood. There are many uncertainties relating to achievement of strategic objectives for the reconfiguration project. Appendix IV identifies the significant risks issues together with suggestions for mitigating those risks. Many of the risks facing the reconfiguration project can be mitigated by having clear, well thought out strategies and plans backed by good communication and consultation with key stakeholders together with, where appropriate, robust data.

Assessing detailed project and operational risks

Detailed project and operational risks can only be fully assessed in light of production of a detailed project plan containing proposals/options for acute hospitals reconfiguration. Operational risks are the 'day to day' risks currently and potentially (following reconfiguration) faced by the hospitals. Detailed assessment of current operational risks can inform the development of proposals/options for reconfiguration.

Conceptually, risk assessment follows a process whereby front line staff and management identify risks in relation to objectives at front line and hospital level as reconfiguration proceeds and these risks are fully described, along with options for mitigating (or 'treating') the risks, in a risk register monitored by the Reconfiguration Forum.

Risk management and detailed implementation

The HSE has published detailed guidance on risk management and the development and maintenance of risk registers and this should be used, in addition to the new ISO 31000:2009 risk management standard, to define a clear process for implementation planning groups to follow in providing a risk assessment of each project plan. Appropriate training and facilitation should be provided to ensure optimal outcomes from risk assessment.

3. CULTURE

3.1 Fundamental change, Values and Culture

The vision for the future of the health service in Cork and Kerry is a unified health system linked formally to higher education and research that would be patient focused and outward looking – a listening and learning organisation dedicated to providing the best possible health outcomes for the people it serves.

An objective reading of this report demonstrates the size of the task if this vision is to be realised. Throughout the report, and in the Horwath and Teamwork review, the phrase *fundamental change* is used. What does this phrase mean and why might it be challenging? What it means is that we need a culture change, not just a series of practical moves to get us to a different place, but a change in how we see and perform our different functions, how we exercise and relate to management, how we collaborate with colleagues, how we listen to and engage with our patients and their families. We need to find a place in our systems, our clinical practice, our routines, a place in our disagreements, in our turf wars and our truces, for a deeper vocabulary where words and concepts such as trust and respect, listening and learning, speaking the truth and forgiving, are given the power to change our processes and behaviour and move us from a culture of silos, self interest, and historic fragmentation to a newly integrated organisation where the problems of one are solved by the efforts of many.

The theoretical construct for translating vision into reality is:

1. An organisation defines its mission and its values;
2. it formulates these in a vision that is consistent with them;
3. it places that vision in the internal and external context in which it operates;
4. it identifies its strategic objectives consistent with its vision and its context;
5. it converts these into practical targets;
6. it formulates these targets into practical tasks that are measurable year by year.

The vision of reconfiguration is "a unified integrated acute healthcare system, integrated with all other elements of the health service that achieves the best possible health outcomes for the people it serves". This vision is not resource dependent; it is people dependent.

Those who own and lead the various elements of the existing healthcare system in Cork and Kerry need to agree on this broader vision and then agree on the values that will support a culture that enables and uses change to achieve better services and better outcomes (see Chapter 12 p.178). A starting point might be to focus on the values we place on patients and staff.

3.2 Valuing Patients

The phrase "a patient-centred service" is frequently used – and often abused – in the Irish health service. It is honoured in public rhetoric and dishonoured in private battles in defence of self interest. The reconfiguration project has found engagement with patients and patient advocates and their contributions to subgroup deliberations to have been wholly positive. Subgroup chairs and project managers will attest to this. Other health services that have seriously engaged with patients have found the same. (Some of the positive effects of patient advocacy are alluded to in section 3.2.2 p.51.) The HSE's Office of Consumer Affairs is

committed to a deeper engagement with patients and the following proposal is based largely on the input of this office. Before outlining the proposal itself, there is one important point to make. Individual patients can be just as self-interested as any health service employee, more so perhaps as their own health can be at stake. Advocacy groups can be similarly preoccupied with their own advocacy interest. However it is also true that the deeper we engage with actual patient experience, the closer we get to the truth.

3.2.1 The ISQSH Project

The Irish Society for Quality and Safety in Healthcare (ISQSH), in association with the University of Ulster, the Health Research Board and the Health Service Executive are planning a postal survey of a proportionate sample of health service users. This will build on previous work[16] which identified a set of eight key indicators of patient perception and satisfaction. These included, for example, indicators of

- Patient involvement
- Communication
- Core providers competencies
- Business goals, and
- Overall satisfaction

The new survey will include questions on the main reason for their hospital stay, length of stay, health status and where they have travelled from, thus allowing us to relate experience to home location. All the acute hospitals of Cork and Kerry should participate in this survey under the reconfiguration umbrella. Not only will the outcomes be interesting in themselves, but from this structured engagement with a broad, region wide patient cohort, a potential group of patient representatives can be identified to participate in further qualitative research and in implementation planning itself.

In addition to this survey, a local citizen survey may also prove beneficial. This will provide important baseline information on the views of the general public. One of the key reasons for undertaking this would be to examine where gaps exist between those actually using the health services and those observing from the safe distance of their homes and communities.

It is the wish of the Office of Consumer Affairs, a wish supported by the Reconfiguration Team for Cork and Kerry that service users should engage with the implementation and evaluation of reconfiguration at a collective level through consultative fora held throughout the region as implementation progresses. The HSE will provide training to facilitate this involvement and the Office of Consumer Affairs will triangulate the outcomes of surveys and consultations so they can be used effectively to inform ongoing implementation.

Such engagement is a mechanism for making the eventual outcome of reconfiguration a patient-centred outcome in fact as well as in name. All acute hospitals in Cork and Kerry should take part in this project.

3.2.2 Patient Advocacy

Involvement of citizens 'beyond narrowly defined customer service initiatives to all aspects of the work of the public service' has been recommended by the OECD and developed in the very recent report of the Health and Social Care Regulatory Forum "Framework for Public and Service User Involvement in Health and Social Care Regulation in Ireland. (2010)" This report notes that the best health services have very high levels of citizen empowerment. The Commission on Patient Safety and Quality Assurance recommends that "robust and validated patient and public involvement should be a requirement for all health care oversight".

[16] *ISQSH Inpatient survey (2004); Health Service Executive Emergency Departments. Patient Profiles, Experiences and Perceptions. Report of a National Survey among people who attended during 2006. HSE Insight 07 survey.*

Consumer engagement can also assist in managing healthcare demand: "By encouraging their members to make better choices, payors can prevent or control many chronic diseases, ensure that health care resources are used more wisely, and—in many cases—reduce costs. Recognising this, a growing number of payors have made consumer engagement a priority, employing strategies with different degrees of effectiveness"[17]. The HSE's Consumer Affairs Office has been established to enhance customer services and consumer participation.

The contribution of patient advocates on reconfiguration subgroups was invaluable in grounding our discussions firmly in patient experience. That experience was wholly positive and suggested powerfully that the contribution of patient experience should be recognised, supported, developed and included in the implementation planning phase that lies ahead.

3.3 Valuing Staff

If a patient-centred service is to be central to health service culture, then maintaining a motivated staff who work to their full potential and who feel pride in the organisation they work for is equally important. There has been constant change in the delivery of health services in recent decades as new services, standards, education requirements, regulation and reorganisation have been introduced. Replacement of the health boards by the HSE was an enormous organisational change. Throughout all this change, services continue to be delivered and standards generally have improved. All these changes have their effect on the workplace. Future changes will see enhanced opportunities for clinical leadership, for educational development and for expanding professional boundaries. There will also be sustained financial pressure on the organisation. The new environment will need committed and responsible leadership at all levels, as well as a positive response to that leadership. A positive response is more than obeying the line manager; it is being informed by the reasons for change, understanding them and working with one's colleagues in a supportive and collaborative way to make them as seamless and safe for patients as possible.

3.3.1 Staff Motivation

Fundamental to a culture of care is how health service professionals, clinical and administrative, view the patients they serve. Patients, in times of illness and anxiety, place their trust in professionals trained to provide help and succour. Increasingly this results in returning patients to active and meaningful life – but not always. The old relationship that pre-existed the age of high tech healing is still the same – the provision of help and succour to fellow human beings in time of distress. We fall back on this relationship when medical science can do no more, a circumstance that health professionals encounter regularly throughout their working lives. The response to trust should be respect; respect reinforces trust while lack of respect undermines it. We all have experience of vulnerability at different times in our lives. As we work day in and day out, we need to internalise this so that it shapes our attitudes to patients and their families.

3.3.2 Professional Staff Development

Service improvement will require clinical and managerial development of professional staff within a coherent framework for professional and personal development. Our higher education institutions have a role in providing a coherent framework of education and training in which professional development and academic development can be brought together into a range of education and learning opportunities that will help staff to realize their potential.

[17] *Engaging consumers to manage health care demand • Sundiatu Dixon-Fyle, PhD; and Thomas Kowallik, PhD McKinsey Quarterly JANUARY 2010*

There is an immense educational resource within our universities and institutes of technology, not just expert teachers but also experts at handling information in our libraries, and an international network of contacts that can access international best practice in evidence-based health care by a phone call or email. While supporting the achievement of a better health service may not be the primary mission of higher education, it is nevertheless an important social project and a major opportunity for our higher education institutions to contribute towards the wellbeing of the people of Cork and Kerry.

3.4 Integrating Values with Policy and Management

Achieving a culture that values staff and patients (or customers) is an achievable goal. It has been done before in many large organisations. To succeed, it has to be real: lip service and rhetoric will not answer. By combining strong motivation of staff and active patient engagement with regular measurement of carefully selected outcome measures (see p.173), and referencing policy formulation and management processes to these values, we can move a long way towards changing our culture to one of hope and optimism that will carry forward fundamental change.

4. RESOURCE ALLOCATION

4.1 Finance allocation

HSE South's 2010 Revenue Income and Expenditure Allocation (Budget) amounts to €2,079,716,701.

Table 4-1 Cork and Kerry (Network 2) acute hospitals allocation 2010

Budget head	Allocation 2009	Allocation 2010
Cork University Hospital group (incl. CUMH, and SMOH)	€310,200,256	€261,487,673
Mallow General Hospital	€18,790,982	€15,389,835
Kerry General Hospital	€83,711,813	€70,778,033
Bantry General Hospital	€20,373,152	€17,833,945
Mercy University Hospital	€70,021,415	€59,967,770
South Infirmary Victoria University Hospital	€52,307,627	€45,704,627
Reconfiguration	€4,200,000	€3,000,000
Network Manager's Office	€3,821,669	€5,467,815
Nurse Training	€684,245	€602,420
Acute Support Services	€3,214,795	€2,984,794
TOTAL	***€567,325,954***	***€483,216,912***

The budget holder with overall responsibility for the HSE South's budget is the Regional Director of Operations. Responsibility for the budgets of individual hospitals and community services are delegated to hospital and PCCC managers.

Currently CUH have the facility to allocate budgets to individual specialities, e.g. cardiac, cancer etc., which enhances financial management.

The DoHC is currently exploring resource allocation models as a means of furthering strategic objectives and exercising tighter cost controls. Resource allocation is a key instrument in incentivising efficiency and encouraging the identification and elimination of waste. Financial regulations in relation to the allocation, distribution and transfer of resources between budget holders are currently in preparation. In the current economic environment,

and until such time as unsustainable borrowing is brought under control, resource allocation should be focused on three goals:

- Improving clinical services for patients;
- Improving corporate and institutional efficiency by which those services are delivered; and

- Investing in education as a means of securing gains made and laying the ground for further gains in the future.

4.2 Employment allocation

Employment ceilings for Cork and Kerry Hospitals are outlined in table 10.2.1. All employment is regulated by the Government's employment control framework.

Table 4-2 Employment levels in Cork and Kerry acute hospitals*

Cork and Kerry Hospitals	Dec 09-Out Turn WTEs	Adjustments WTEs	National Cut 2010 WTEs	2010 Ceiling End WTEs
Cork University Hospital	3,281.84	26.41	(48.40)	3,259.85
Mallow General Hospital	241.91	0.67	(3.52)	239.06
St Mary's Orthopaedic Hospital	223.29	0.00	(3.25)	220.04
Kerry General Hospital	996.36	4.07	(13.96)	986.47
Bantry General Hospital	250.97	(0.38)	(3.72)	246.87
Network Manager	7.00	0.00	(0.10)	6.90
Other	11.54	0.00	(0.18)	11.36
Statutory Hospitals	**5,012.91**	**30.77**	**(73.13)**	**4,970.55**
Mercy University Hospital	966.26	(2.50)	(14.12)	949.64
South Infirmary Victoria Hospital	759.54	1.00	(10.84)	749.70
Voluntary Hospitals	**1,725.80**	**(1.50)**	**(24.96)**	**1,699.34**
Total for Cork and Kerry (Network 2)	**6,738.71**	**29.27**	**(98.09)**	**6,669.89**

** All numbers are in Whole Time Equivalents.*

Adjusted for:

- Impact of Student Nurses
- Offsetting reduction to RGN on 2:1
- Specific appointments in NRS/PAS Dec09 (excluding those with Primary Notification in 2009)
- Other timing issues

Employment Control Framework 2010

The 2009 Government Moratorium on Recruitment and Promotions in the Public Service remains in place in 2010 and is set to continue through to 2012 with a total target reduction in Health Service numbers of 6,000 over 4 years.

Nationally the HSE has a target of 1,520 WTEs to reduce by the end of 2010. HSE South's indicative portion of this is 344 WTEs, of which Cork and Kerry Hospital Group - Network 2 - has 98 (see below).

The Dept. of Finance decision to change the basis of the previous employment ceilings and recast to the levels employed at the end of 2009 is reflected in the indicative ceilings in Table 4-2. This effectively means only vacant posts that arise in 2010 forwards will be regarded as vacancies and that all existing vacancies as at the end of 2009 will be wiped from the system.

Development or other priority appointments can only progress with an offsetting reduction on the ground, while also achieving the national cut. Specific examples of this would be 79 priority appointments for the National Cancer Control Programme, 100 psychiatric nursing appointments for Vision for Change and 380 therapy appointments (Physiotherapy, Speech and Language Therapy and Occupational Therapy). National priorities will reduce the room for local decision making. Nevertheless, while the moratorium remains in place, the Draft Employment Control Circular gives each RDO discretion to recruit Derogated and Non Derogated appointments, subject to remaining within ceiling.

4.3 Voluntary Redundancy and Early Retirement Scheme

These are two schemes introduced to give effect to a Government decision aimed at reducing numbers in the HSE. Both schemes are only for management, administrative and general support staff. The first is for any employee under 50 years of age with at least two years employment with the public health service. The second is for staff over 50 years of age with at least two years employment with the public health service. It includes HSE and voluntary hospitals.

4.4 Better use of clinical human resources

Consultants

This review has identified many services in need of additional consultant resources. In the current economic climate, and within the current employment control framework, it is not going to be possible to create additional appointments based solely on clinical need. Solutions have to be found by making better use of existing staff complements and providing more outreach services from Cork city. Each new or replacement HSE consultant contract job description should include a specific reference to the changes underway through reconfiguration with respect to the locations and manner of working, expressed as follows:

> *All duties and responsibilities to be undertaken and the location/s specified, may be subject to revision in the future having regard to the following principles of the reconfiguration of services presently underway in HSE South:*
> - *Complex care, including cancer and trauma, will be delivered in the regional centre*
> - *Non-complex care will be delivered as close as possible to people's homes*
> - *Consultants will work in regional teams*
> - *Reconfiguration of existing services must be carried out within existing resources*
> - *Reconfiguration is an opportunity to enhance patient care*
> - *New governance structures with higher education institutions in the region to be implemented to formally link service, education and research*

Specific measures need to be taken, in collaboration with regional managers and clinical directors, to address particular staffing shortages in BGH, KGH and MGH in those services identified by reconfiguration as having a long term future in these hospitals. At the same time, these hospitals should review their medical staffing models and bring forward innovative solutions on how to provide the clinical services recommended in this roadmap without increasing overall staff costs. Such conversations as take place should do so solely on the basis of the need to provide safe and effective care equitably within their catchment area.

Nursing, Midwifery and Health and Social Care Professional Staff

There is an immense pool of skill and experience within nursing, midwifery and the health and social care professions. Quality of care and public satisfaction are often related to these services. Current challenges brought about by changing services and economic pressures immediately affect these front line health professionals. In responding to the transformation programme of the HSE (p.), of which reconfiguration is a part, the challenge is to ensure an integrated level of service across all stages of care so that the patient journey is as seamless as possible. This underscores the need for individuals with the right mix of skills and competencies to achieve reconfiguration goals. However, clinical demarcations, management hierarchies and traditional attitudes can sometimes limit scope for personal initiative. The answer lies in greater use of teamwork to allow talent to be nurtured and utilised within the discipline of the team and greater use of new developmental and extended scope roles. Many initiatives are already taking place at the front line of the delivery of clinical care which provide models for new ways of delivering clinical services. The following are illustrative examples:

Nursing and Midwifery

- **Advanced Midwife/Nurse Practitioners –** AMP/ANPs are experienced and competent practioners with a masters level qualification who can practice autonomously and can be responsible for advanced levels of decision-making, initiating and implementing change and demonstrating expert practical and theoretical knowledge and critical thinking skills. They are already leading change and practicing clinically at an advanced level in a variety of clinical areas and situations, Examples include:

  ANP Gastroenterology; **CUH and St James's Hospital**
  The ANP performs routine upper and lower endoscope procedures on adults and assists in the coordination of follow up care. This supports an early detection cancer screening programme.

  ANP - Pain Management;
  The role of the AMP/ANP is to triage referral letters to the pain clinic, fast-tracking patients with terminal illnesses or urgent conditions. The ANP can also order blood tests and X-rays prior to the initial consultation, enabling the consultant to make a diagnosis and treatment plan on the day of the consult.

  ANP – Neonatology;
  The ANP in Neonatology provides emergency care to the ill neonate, support for parents during a very traumatic period and education and support for nursing and medical colleagues.

  ANP – Emergency;
  The ANP in Emergency is competent to assess, diagnose, treat and discharge patients who present with minor trauma to the upper limb/lower limb, minor head injury, facial injuries, ear, nose, eye and throat and all wounds, superficial and deep.

- **Clinical Nurse/Midwife Specialists** – the CNS/CMS role includes a strong clinical focus, advocacy, education and training, audit and research and consultation. It incorporates the assessment, planning, delivery and evaluation of care to patients and their families in situations involving collaboration with other healthcare professionals. Key functions include consultations across sites and services. The role also includes the provision of educational support to nursing/midwifery colleagues and the wider multidisciplinary team and participation in audit and research. Examples include:

Clinical Nurse Specialist - Palliative Care;
The CNS provides specialist palliative nursing care to patients whose disease is no longer curative, where control of pain and other symptoms including psychological and spiritual distress is paramount .

Clinical Nurse Specialist - Stroke Care;
The autonomy of the CNS role enables the specialist to have one to one contact with patients and their families.

Clinical Nurse Specialist - Epilepsy;
CNSs at Beaumont Hospital, the national centre for epilepsy surgery, have, with other members of the MDT, fostered a greater understanding of epilepsy among patients and staff.

Clinical Nurse Specialist - Wound Care (CUH and MUH);
The CNS tends to approach wound care from a holistic viewpoint with patient need central. The work is varied and its effectiveness is demonstrated on a daily basis.

Clinical Nurse Specialist - Haemovigilance (CUMH);
This work includes overseeing the blood transfusion surveillance service and the usage of blood components, ensuring best practice in all aspects of transfusion including patient advocacy**.**

Clinical Midwife Specialist - Diabetes; (Limerick)
The role of the CNS in Diabetes is to enhance the service for women with diabetes in pregnancy. The AMP's caseload includes all pregnant women with pre-existing Type 1 or Type 2 diabetes mellitus and those who develop gestational diabetes during pregnancy. The detection rate of gestational diabetes at Mid Western Regional Maternity Hospital in Limerick has increased by 360% since the introduction of a CMS in Diabetes in 2002**.**

Clinical Midwife Specialist – Drug Liaison;
The role of the CMS in Drug Liaison includes a caseload of pregnant women who have a history of or are currently misusing drugs. These midwives practice between the obstetric hospitals and community clinics ensuring that the women are followed comprehensively in both services receiving optimum antenatal acre, drug treatment, counselling, support and education regarding their drug use during pregnancy.

Clinical Midwife Specialist – Ultrasound and Foetal Assessment;
The CMS in Ultrasound and Foetal Assessment provides midwifery care and support for a caseload of high-risk pregnant women on an outpatient basis combining midwifery skills with specialist monitoring using ultrasound technology. The role includes follow-up counselling and support to women attending the Foetal Assessment Clinics when obstetric complications or foetal anomalies have been identified.

Clinical Midwife Specialist – DOMINO/Early Discharge Team;
The CMS in DOMINO/Early Discharge Team provides community and hospital based midwifery care to a caseload of low risk pregnant women. The CMS is responsible for assessing, planning, implementing, co-ordinating and evaluating care programmes specific to pregnancy and childbirth in partnership with the woman and in conjunction with other members of the multidisciplinary team taking cognisance of her family support, living arrangements and previous health problems.

Clinical Midwife Specialist – Infection Control
The role of a CMS in Infection Control ranges from routine hand hygiene education and audits to co-ordinating the containment of an infectious disease outbreak. The role of the CMS in Infection Control is a catalyst for improving infection prevention and control standards in the hospital.

- **Nurses and midwives** who have not progressed to specialist or advanced specialist levels have also undertaken extended roles in areas such as High Dependency Unit care, bereavement and loss, uro-gynaecology, community midwifery, neonatology, peri-operative care, infertility diagnosis and treatment, infection control, nurse/midwife prescribing and pain management.

Health and Social Care Professionals

- **Clinical Specialist Health and Social Care Professionals –** over the past decade, the evolution of post-graduate education programmes has provided Health and Social Care Professions the opportunity to express their specialist knowledge, with the development of clinical specialist posts in nutrition and dietetics, occupational therapy, physiotherapy, radiography, radiation therapy and speech and language therapy. These clinical specialists work at an advanced clinical level within a specific clinical field. Their practice is underpinned by advanced clinical reasoning. These specialist roles encompass key elements such as clinical expertise, clinical teaching at both undergraduate and postgraduate level to the wider multidisciplinary team, evaluation through research and audit, and contribution to practice/service development.

- **Extended Scope Health and Social Care Professional Roles –** in more recent times, some Health and Social Care Professionals have developed their role as extended scope practitioners. Working at a high level of expertise, these practitioners have extended their role and undertake skills and tasks that may previously have been carried out by the medical profession. Mentoring, training and supervision of such activities tends to be given to the health and social care professional by another registered professional, usually a doctor.

- **Examples of Clinical Specialist and Extended Scope Roles among Health and Social Care Professionals include:**

  Physiotherapy Clinical Specialist
  The role includes review of patients attending orthopaedic fracture clinics. It commenced in CUH in 2010 following a successful six month pilot in 2006. There is further potential in extending the role to encompass orthopaedic and rheumatology waiting list triage and back pain screening
  .
  Clinical Specialist Radiographers
  CSPs currently run services in C.T. scan units, nuclear medicine, vascular/interventional, cathode labs, ultrasound, P.A.C.S., trauma radiography and mammography.

  Speech and Language Therapists (SLTs)
  SLTs lead and deliver a FEES service in CUH. This is another objective method of evaluating swallow breakdown.

  SLT/Radiographer Videofluorscopy service
  SLTs and Radiographers could jointly provide a service for the objective assessment of patients with oropharyngeal dysphagia. Currently this requires a radiologist to be present.

Tracheostomy care (Multidisciplinary team)
Health and Social Care Professionals of the multidisciplinary team already provide this service at CUH and other city hospitals.

Therapy led clinics for plastics patients recovering from tendon surgery, digital nerve repairs, finger amputations etc. Already successfully introduced in Manchester and St James's Hospital Dublin where it has been found that 50% of such patients do not require further medical assessment, show reduced post-operative complications and express higher levels of satisfaction.

Occupational therapy, physiotherapy and social worker posts in the Emergency Department
These professionals working as a dedicated discharge team have been shown in other hospitals (St. James's hospital, St. Vincent's hospital, AMNCH) to prevent unnecessary hospital admissions through rapid patient assessments over an extended working day.

Enhanced dietician roles in acute care
Diabetic and renal clinical specialist dieticians are leading the planning and upskilling of colleagues to implement fully integrated care of these patient groups across acute and community services. An extended role for dieticians in neurosciences is being developed involving the placing of gastrostomy tubes which will relieve pressure on the endoscopy service.

- **Nursing and Therapist involvement in Urgent Care Centres** – potential new service. Many patients will present with soft tissue injuries and non complex spinal pain, minor hand injuries, wound care and prescribing needs that can be met by new standards for nurse prescribing. The establishment of urgent care centres in Cork and Kerry provide potential opportunities for expansion of roles. Roll out of urgent care centres should be used as a learning opportunity whose lessons can be applied in other settings. To gain maximum benefit, inputs should be carefully measured and analysed and patients surveyed to assess health and satisfaction outcomes.

- **Some multidisciplinary teams** successfully utilise the expertise of all team members regardless of discipline, e.g. the MDT model of care currently in place for patients with tracheostomies in Cork hospitals. This model should be extended. As implementation of wider reconfiguration proceeds, each implementation group should examine the skill mix (core skills, generic skills, specialised skills and complex specialised skills) required to deliver an optimum clinical service and think innovatively of how teamwork and deployment of new roles can be utilised to create maximum added value.

Non-consultant Hospital Doctors (NCHDs)

Reconfiguration should provide a regional clinical service that will deliver the same standard of care to the people of Cork and Kerry regardless of their home location. It is essential that the balance of NCHD posts to consultant posts is optimal and that the training needs of NCHDs are fully compliant with training body requirements. Ideally, if there is to be a truly regional service, then training schemes need to be regionally based, encompassing the delivery of care in rural and urban settings through a combination of outreach and residency. There is an urgent need for a formal review of NCHD posts involving all specialties across the region. This will require engagement with training bodies and all speciality teams. The review should ensure an equitable distribution of posts across the different specialities within a reconfigured service, the training requirements of NCHDs, and the overall need to improve the ratio of consultants to NCHDs through appropriate prioritising of post conversions.

4.5 Physical Bed Capacity Analysis

The aim of this analysis was to determine if the changes proposed in the reconfiguration roadmap could be physically accommodated within the existing hospital infrastructure. 2008 data were analysed to model the impact of the movement of services proposed by reconfiguration and estimate the average inpatient and day-bed requirement in each hospital.

Data were sourced directly from each hospital HIPE office. HIPE reports were run by Consultant and classified as Elective or Emergency. Specialty was assigned on the basis of "Discharge Consultant" for medical, surgical and subspecialty analysis.

A senior consultant general surgeon reviewed all procedures elective surgical discharges under general and vascular surgeons for 2008. Discharges were classified by complexity, high, medium and low. Further anatomical classification allowed the identification of Breast, Upper GI, Rectal procedures etc.

The analyses were then validated by Bed Managers/senior staff in CUH/MUH and SIVUH[18].

There are a number of assumptions and caveats which ought to be considered before conclusions are drawn from the analysis.

- The analysis excludes Medical Paediatrics and Radiation Oncology
- HIPE inpatient data doesn't differentiate between five and seven day beds.
- There have been a number of bed closures and bed re-designations since 2008
- There have been a number of service developments since 2008, e.g. transfer of breast cancer surgery from SIVUH to CUH, increased BreastCheck screening etc.
- The pre reconfiguration data is the actual bed usage; not the allocated bed stock, the true level of occupancy varies both between and within hospitals.
- The post-reconfiguration inpatient bed requirement, for simplicity, is presented at 100%, seven day occupancy. This is not the desired level of occupancy, particularly for emergency services, but the figures can be adjusted to reflect the preferred level of occupancy and whether it is intended to run services on a seven or five day basis
- The model assumes that work practice, as it existed in 2008, were to continue. The efficiencies inherent in the reconfiguration roadmap would reduce the inpatient bed requirement; e.g. development of Acute Medical Assessment Units, increased day case activity, reduced inpatient ALOS etc.
- The 2008 figures quoted only represent the average daily requirement and that bed usage, particularly for emergency admissions, fluctuates. Further analysis of 2009 emergency discharges was undertaken to demonstrate the full range of bed usage, seasonal and inter-hospital variation.
- Day bed analysis assumed that day beds were occupied by one patient per day; true usage exceeds this; but varies between services and between hospitals. It is not possible to determine day-bed turnover from HIPE data.

[18] The analysis was not validated in KGH or MGH as the impact on capacity in KGH in this phase of reconfiguration is minimal. Analysis of MGH data was also straightforward it involved only one set of data: inpatient surgery.

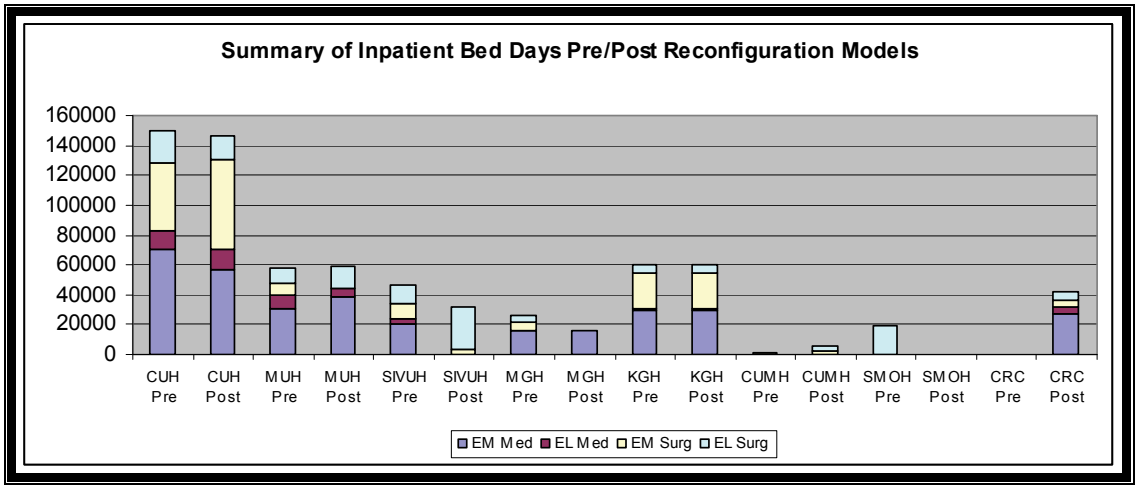

Figure 4-1: Summary of inpatient beds pre/post reconfiguration

Table 4-3: Net change to 7 day inpatient beds at 100% occupancy

	Em Med	El Med	Em Surg	El Surg	All Specialties
CUH	39 Free	4 Needed	40 Needed	14 Free	8 Free
MUH	20 Needed	9 Free	22 Free	14 Needed	2 Needed
SIVUH	56 Free	9 Free	17 Free	65 Needed[19]	18 Free[20]
MGH			15 Free	11 Free	26 Free
KGH				3 Free	3 Free
CUMH			4 Needed	8 Needed	12 Needed
SMOH				71 Free[21]	71 Free
CRC	75 Needed	13 Needed	11 Needed	17 Needed	116 Needed

The net overall change in daybed requirement is shown in Table 4-3. This may be an overestimate of requirements as it assumes that one patient is seen per daybed per day.

Conclusion

The analysis strongly suggests that the changes proposed in the reconfiguration roadmap, including the closure of SMOH and the development of elective orthopaedic services in SIVUH, could be accommodated within the existing hospital infrastructure if the cardiac renal centre were fully commissioned (Figure 4-1 and Table 4-3). Efficiencies will be required – and can be expected when reconfiguration takes place - to bring normal operating capacity in our hospitals from the current figure of 100% to a more sustainable figure of 85%.

[19] Adjustment to bed allocation for orthopaedics to accommodate the transfer of paediatric orthopaedics from Dublin and the transfer of elective orthopaedics from KGH, and the appointment of additional Orthopaedic Surgeons

[20] The true free bed capacity will only be evident post refurbishment of the hospital required for the transfer of orthopaedics

[21] The full hospital bed designation, as opposed to the activity based figure for 2008 is quoted, as elective surgery is to cease in SMOH.

Table 4-4 Resources

Ch: 4	Recommendations on		
.1	**Finance allocation**	.1	National and regional resource allocation models should promote and reward reconfiguration change.
		.2	A proportion of savings achieved through reconfiguration should be re-invested in the reconfiguration of services within the region.
.2	**Employment allocation**	.1	Hospitals should review their staffing models in order to facilitate the implementation of reconfiguration.
.3	**Better use of clinical resources**	.1	Each new or replacement consultant post description should include flexible working arrangements to facilitate the creation of a regional service.
		.2	There should be a formal review of all NCHD posts across the region, having regard to service demands, training requirements and the need to increase the ratio of consultants to NCHDs nationally.
		.3	Each NCHD should be appointed to a regional clinical team and a regional specialty department.
		.4	Each implementation project group should examine skill mix to ensure all disciplines within their compass work to their full potential.
		.5	A performance management culture should be developed throughout the new regional system.

5. METHODS, SCOPE AND TIMEFRAME

5.1 Appointment of Director of Reconfiguration

Three months prior to the publication of Horwath and Teamwork, Professor John Higgins, Professor of Obstetrics and Gynaecology, was appointed Director of Reconfiguration of Acute Services for Cork and Kerry and given the task of publishing the Horwath and Teamwork report and developing a reconfiguration roadmap for Cork and Kerry based on its recommendations. He was assisted in this task by Mr Gerry O'Dwyer, Hospital Network Manager for HSE Southern Hospitals Group, who provided funding for a small support team, led by Ms Margo Topham, General Manager and backfill clinical support.

5.2 Reconfiguration Team

The Reconfiguration Team comprises a number of people who provide full or part time support as follows:

Ms Nora Geary, Executive Lead (1.0 WTE)
Mr Michael Hanna, University representative (0.8WTE)
Ms Norma Deasy, Communications representative (0.5WTE)
Ms Geraldine Keohane, Nursing and Midwifery representative (0.5WTE)
Ms Sinead Glennon, Health and Social Care Professions representative (0.5WTE)
Ms Laura Cullinane, Clerical support (1.0WTE)
Ms Margaret Murphy, Clerical support (0.5WTE)
Ms Katie McAuliffe (to February 2010), } Personal assistant to Professor Higgins (1.0WTE)
Ms Leanne O'Connor (from March 2010) } (0.5WTE)
Dr Jennifer Carroll, Consultant in Acute Medicine, HSE South (Acute Medicine Units)
Dr Orla Healy, Specialist in Public Health Medicine, HSE South (Theatre Utilisation et. al.)

Special Projects

Dr Andrew Hanrahan, consultant in rehabilitation medicine, on secondment from National Rehabilitation Hospital, Dublin. (Rehabilitation Medicine service)

5.3 Reconfiguration Forum

The Reconfiguration Forum brought key decision makers together from all acute hospitals in Cork and Kerry to provide oversight of the process. It meets fortnightly from 7.15am to 9.00am on a Monday morning. Since it commenced its meetings, its membership has been supplemented and now comprises the following members:

1. Professor J. R. Higgins, Director of Reconfiguration and Chair
2. Professor Finbarr Allen, Dean of Dentistry, UCC
3. Ms Gretta Crowley, Local Health Manager (LHO), South Lee & West Cork Community Services
4. Ms Ann Doherty, NCCP Cancer Network Manager, HSE South
5. Mr Michael Fitzgerald, A/Local Health Manager, Kerry Community Services
6. Ms Nora Geary, Executive Lead, Reconfiguration Team

7. Ms Sinead Glennon, Health & Social Care Professions Representative, Reconfiguration Team
8. Professor Richard Greene, Clinical Director, CUH
9. Mr Michael Hanna, University member of Reconfiguration Team
10. Mr P.J. Hartnett, Acting General Manager, Kerry General Hospital
11. Mr Pat Healy, Regional Director of Operations, HSE South
12. Dr Colm Henry, Clinical Director (MUH)
13. Dr Denis Kelly, Acting Clinical Director, Radiology, CUH
14. Ms Geraldine Keohane, Nursing and Midwifery member of Reconfiguration Team
15. Dr Richard Liston, Clinical Director, KGH
16. Dr Andrew Lyne, General Practitioner
17. Mr Tony McNamara, Chief Executive Officer, CUH Group
18. Mr Pat Madden, Chief Executive Officer, MUH
19. Mr Eamonn Moloney, Clinical Director, GF Unit, CUH
20. Mr Barry O'Brien, Assistant National Director of Human Resources, HSE South
21. Mr Ger O'Callaghan, Chief Executive Officer, SIVUH
22. Dr Michael O'Connor, Consultant Geriatrician, CUH
23. Dr John O'Mullane, Consultant Biochemist, Laboratory Services, CUH
24. Ms Raymonde O'Sullivan, Assistant National Director of Finance, HSE South
25. Mr Ger Reaney, Interim Hospital Network Manager, Southern Hospitals Group
26. Prof. Paul Redmond, Professor of Surgery, Cork University Hospital
27. Mr Denis Richardson, Clinical Director (SIVUH)
28. Ms Deirdre Scully, Local Health Manager, North Lee / North Cork Community Services
29. Professor George Shorten, Dean, UCC Medical School
30. Dr Jennifer Carroll, Consultant in Acute medicine, HSE South
31. Dr Orla Healy, Specialist in Public Health Medicine, HSE South

Past members of the Reconfiguration Forum

Mr Jason Kenny, A/General Manager, KGH (deputising for Ms Margie Lynch)
Ms Margie Lynch, General Manager, KGH
Prof David Kerins, Dean, UCC Medical School
Mr Tony Long, National Cancer Control Programme – HSE South
Mr Gerry O'Dwyer, Hospital Network Manager, HSE South
Ms Margo Topham, General Manager, Reconfiguration Team

5.4 Non Executive Advisory Board

The Non Executive Advisory Board is a group of senior figures from business, finance and the public service who provide external advice and support in their free time. Meetings take place approximately every two months. Its members are:

Mr Michael O'Flynn, Chairman of the O'Flynn Group (Chair)
Mr Pat Healy, Regional Director of Operations, HSE South
Mr Paul Breen, Chairman, Athlone Institute of Technology governing body
Dr Paddy Crowley, General Practitioner
Mr Michael Hall, Chairman, South Infirmary/Victoria University Hospital Board of Directors
Mr Donal Horgan, Managing Director, Musgrave Group PLC
Mr Kevin Kenny, Tax Partner, Ernst & Young
Mr Pat Lyons, Chief Executive Officer, Bon Secours Hospital, Cork.
Prof. Geraldine McCarthy, Head of the School of Nursing and Midwifery, UCC
Mr Des Murphy, Chairman, Mercy University Hospital Board of Directors
Mr Brendan Tuohy, former Secretary General of the Department of Communications.
Prof. Cillian Twomey, retired Consultant Physician in Geriatric medicine, Cork University Hospital/St. Finbarr's Hospital & UCC.

Mr Sean O'Driscoll, Chief Executive, Glen Dimplex, PLC
Professor Gerard O'Sullivan, Director of the Cork Cancer Research Centre
Dr Michael Murphy, President, University College Cork
Mr Aidan O'Brien, Horse trainer, Coolmore, Co. Tipperary
An tUas Padraig O'Riordain, Arthur Cox Solicitors

Terms of Reference

1. To act as a "sounding board" for the Director of Reconfiguration and the HSE management on key reconfiguration issues.
2. To provide business advice and guidance on the reconfiguration programme.
3. To enable the Director of Reconfiguration test –drive options for reconfiguration prior to decision and implementation.
4. To provide support for the reconfiguration programme.

5.5 Planning Subgroups

Planning subgroups were established to examine each specialty service. A number of functional subgroups were established to look at broader issues such as GP referral, Education and Training, Single Patient Chart, Theatre Utilisation and Communications.

Table 5-1 Diagnostic Subgroups

Subgroup	*Chair*	*Base*	*PM*	*Base*
Histopathology	N Parfrey	CUH	T Hurley	CUH
Laboratory diagnostics	J O'Mullane	CUH	T Hurley & C Finn	CUH
Haemochromatosis	J O'Mullane	CUH	M Topham & C Joyce	CUH
Radiology	M Maher	CUH	S Renardson	KGH

Table 5-2 Medicine Subgroups

Subgroup	*Chair*	*Base*	*PM*	*Base*
Cardiology	P Kearney	CUH	M Delaney	CUH
Cl Haematology	M Madden	MUH	D McGovern	CUH
Dermatology	J Bourke	SIVUH	A Kelly	KGH
Emergency Services	S Cusack	CUH	M Hanna M Topham	UCC SIVUH
Endocrinology	M Murphy	MUH	C Martin	SIVUH
Gastroenterology	M Buckley	MUH	D Walsh	MUH
G I Medicine	M O'Connor	CUH	E O'Mahony	Network Manager's office
AMUs	J Carroll	Cork	M Owens	MGH
Infectious Diseases	M Horgan	CUH	D Quealey	SIVUH
Med Elderly	R Liston	KGH	H O'Donovan E McAuliffe	SIVUH KGH
Mental Health	T Dinan	CUH	B Cahill	PCCC
Neurosciences	B McNamara	CUH	M J McCarthy	CUH
Onc & Rad Onc	E Moylan	CUH	D McGovern	CUH
Paediatrics	J Hourihane	CUH	M Nelson	UCC
Palliative Care	A O'Brien	SPH	K O'Dwyer	SPH
Rehabilitation	A Hanrahan	Cork	N Quirke T O'Donovan	CUMH PCCC
Renal Medicine	L Plant	CUH	M O'Mahony	CUH
Respiratory	T O'Connor	MUH	M McCarthy	CUH
Rheumatology	M Phelan	SIVUH	S Glennon	CUH

Table 5-3 Perioperative Subgroups

Subgroup	Chair	Base	PM	Base
Anaesthetics	K Walsh	CUH	M Goggin	SIVUH
Critical Care	R Plant	CUH	M Deasy	MUH
Pain	J Browne	CUH	C Reddington	MUH
Cardiothoracic	A O'Donnell	CUH	B Hickey	CUH
ENT	G O'Leary	SIVUH	M Walsh	SIVUH
General Surgery	P Redmond	CUH	G Barry Murphy	CUH
Gynaecology	R Greene	CUMH	M Topham	SIVUH
Max Fax & Primary Dental	F Allen	CDSH	S Maguire A Kennelly	CDSH PCCC
Ophthalmology	T Cullinane	CUH	M Topham	SIVUH
Orthopaedics	M Dolan	CUH	M Hanna M A Murphy	UCC SMOH
Plastics	S T O'Sullivan	CUH	E Buttimer	SIVUH
Urology[21]	E Keily	CUH	M O'Keeffe	CUH
Vascular	G Fulton	CUH	B O'Sullivan	MUH

Table 5-4 Functional Subgroups

Subgroup	Chair	Base	PM	Base
Finance[21]	J Higgins	CUMH	R O'Sullivan	Aras Slainte
Education and Training	G McCarthy	UCC	M Hanna	UCC
HR[21]	B O'Brien	Aras Slainte	C Power	Aras Slainte
Communications[21]	N Deasy	Aras Slainte	tba	tba
ICT[22]	R Greene	CUMH	M O'Regan	CUH
GP Referral	T O'Callaghan	GP	M McCarthy	CUH
Single Patient Chart	C Twomey	CUH	J Corbett	MUH
Theatre Utilisation	D Richardson	SIVUH	G Flynn	CUH
Medical Resources Utilisation	R Greene	CUMH	M Topham	SIVUH

The main tranche of subgroups was established in September and most reported back in December. Chairs and Project Managers were appointed by invitation. An attempt was made to ensure that they represented the full range of acute hospitals and PCCC. Each was provided with a template for reporting data, a template for reporting their conclusions and a membership template. Each was asked to include at least one patient advocate, at least one nursing representative, at least one representative of UCC, at least one representative of PCCC, at least one GP. Health and social care professionals were on many groups through their involvement with different clinical services. This was thought to be the best solution as it would not have been feasible to have every health profession represented on every subgroup and it would have been unsatisfactory to have a nominated health and social care professional (HSCP) on every subgroup, even when they had little involvement in the service; in the end, some groups had more than one HSCP (e.g. Orthopaedics had an Occupational Therapist and a Physiotherapist) and others had none (e.g. ophthalmology). Each subgroup was asked to invite a representative of each acute hospital in both counties. When a hospital or individual expressed an interest in being involved, in general, this request was accepted. Thus some groups were larger than others. In total, over five hundred individuals took part. Most subgroups met after the working day and all those who took part did so without remuneration

[22] *These subgroups will commence their work in the implementation phase of reconfiguration.*

and without backfilling. Every subgroup was urged to include a patient advocate where possible. All contributed significantly to the deliberations of their subgroup. The Reconfiguration Team is of the view that patient advocacy has an important contribution to make to the reform of acute services in Cork and Kerry and needs to be strengthened and empowered to make that contribution in the months and years ahead. On submission of their final report, each subgroup was offered a feedback session with the Director of Reconfiguration and members of his team. These sessions provided an opportunity to tease out the areas of the reports most critical to reconfiguration and gave the team a living sense of the critical issues.

5.6 Quick Wins

Two subgroups were established before the summer of 2009 – the Haemochromatosis subgroup and the Emergency Services subgroup. These both held the potential for creating early "quick wins" that would help motivate the other subgroups. The Haemochromatosis subgroup conducted a three month audit of a new protocol for in-house screening and testing of this inherited condition and presented this audit to the Reconfiguration Forum on January 4th 2010. It has been positively received by General Practitioners (who were represented on the subgroup) and has indicated significant annualised savings. More importantly, GPs judge it more effective and easier to engage with than the outsourcing scheme it replaces.

The Emergency Services Review contained a range of recommendations that together will create a co-ordinated regional approach to emergency care. One recommendation was the introduction of Advanced Paramedic (AP) teams to improve the quality of "at scene" emergency care. It was decided to pilot the new service in West Cork and base it at Bantry Hospital. Prior to introducing the West Cork AP service, the AP team toured the region, speaking to public meetings, visiting schools and holding meetings wherever large groups of people were congregating. The team spokesperson made a presentation to the Health Forum in November 2009. The conclusion of this process was a simulated emergency incident conducted at Bantry Airfield on the afternoon of the formal launch of the new service at Bantry Hospital. The incident was favourably reported in the news media and a video clip was placed on You Tube. The initiative had a number of beneficial effects: it helped to explain what we were trying to do and why we believed it would enhance the emergency service; it introduced the members of the team to the population they would serve, not just as emergency professionals but as people who take pride in their work, and it provided opportunities for the general public to question and discuss with the Director of Reconfiguration and Reconfiguration Team members those issues of most concern to them. Following commencement of the service, discussions took place at Bantry Hospital involving Cork based Emergency Medicine doctors, BGH doctors, ambulance personnel, local GPs and members of the Reconfiguration Team on devising protocols for the new service which will prove beneficial as it is rolled out in other areas.

5.7 Communication and Engagement

In any change programme, an enormous amount of energy must be put into communicating what is being done, why it is being done and seeking engagement from those that are affected by the change. Following his appointment in April 2009, the Director of Reconfiguration embarked on an intense series of meetings with a wide variety of interested parties. These meetings continued after the launch of the report on 9th June, 2009. In April 2009, he identified the need to develop a systematic and effective approach to communicating and engaging with staff and external partners. He sought the support of the Communications Department, HSE South and invited a member of that staff to act as the communications lead on the Reconfiguration Team. He oversaw the development of a comprehensive Strategic

Communication/Engagement Plan which was presented to the Reconfiguration Forum and the Non Executive Advisory Board in the Autumn of 2009. The Plan includes:

- **aim and objectives** aligned to the objectives of the reconfiguration programme giving direction to the communication process;
- **identified stakeholders** who need to be engaged and communicated with throughout the reconfiguration process;
- a list of **key messages** on the reconfiguration programme;
- a set of **communications tools and activities** including face-to-face presentations, newsletters, road shows and web tools which will help achieve the objectives and ensure consistency of approach in reaching the identified partners;
- an **action plan** which accompanies the Strategic Communication/Engagement Plan and details each tool individually, assigning roles and time-lines;
- **resources** necessary to complete the Strategic Communication/Engagement Plan;
- an **evaluation plan** to measure the effectiveness of the communication tools employed.

To date, the process has clearly demonstrated that face-to-face communication is the preferred option of the stakeholders and much effort has been concentrated on this area. Continual presentations to both staff and external stakeholders have been provided on topical reconfiguration issues. A web based news bulletin, Reconfiguration Times, is published regularly. News releases and media interviews are helping get the message to the public and e-mails and updates from the Director of Reconfiguration to staff and external stakeholders are regularly issued.

As new information is made available and new challenges are encountered, the plan is reviewed and updated. To date, separate communication plans have been developed for the:

- deployment of advanced paramedics to West Cork, October 2009;
- amalgamation of symptomatic breast cancer services to Cork University Hospital Cancer Centre, December 2009;
- announcement of the transfer of elective orthopaedics from St Mary's Orthopaedic Hospital (SMOH) to South Infirmary/Victoria University Hospital (SIVUH), May 2010;
- establishment of acute medicine units in the hospitals, October 2010; and
- transfer of elective orthopaedics from SMOH to SIVUH, October 2010.

5.8 Scope of Reconfiguration

The scope of reconfiguration embraces all acute elective and emergency work in the following six public acute hospitals in Cork and Kerry and St Mary's Orthopaedic Hospital in Cork city, namely:

- Bantry General Hospital (BGH)
- Cork University Hospital (CUH)
- Kerry General Hospital (KGH)
- Mallow General Hospital (MGH)
- Mercy University Hospital (MUH)
- South Infirmary and Victoria University Hospital (SIVUH)

It has engaged with the Bon Secours hospital group in relation to subgroup participation where there are clear service linkages.

Reconfiguration includes the points at which these hospitals connect with primary care and elements of the Primary, Continuing and Community Care services of HSE South i.e.:

- GP liaison,
- Pre-hospital emergency care,

- Step-down facilities for the frail older person,
- Post-acute rehabilitation services,
- Outreach medical and surgical services,
- Oral health and its public community dental service,
- Mental health links to the acute hospital sector, especially liaison psychiatry,
- Outpatient services including pre- and post-operative assessments.

It does not include those elements of PCCC that are delivered mainly or exclusively in the community such as, for example, disability services, social care, community nursing, community based occupational therapy, speech and language therapy and physiotherapy services. Transformation of these services is happening through the Primary Care Strategy. In practice, these divisions will ultimately will be subsumed within an integrated care model and care pathways. What is absolutely necessary to the success of the overall transformation of services in HSE South is that communication between health service professionals with respect to those in their care, and communication with and between those who manage their services, is constant and regular, that it exists both formally and informally and is informed by an understanding of each others' roles and responsibilities.

5.9 Timeframe for Reconfiguration

The timeframe provided by Horwath and Teamwork is five years for Cork followed in year six by the reconfiguration of services in KGH. This roadmap includes Kerry in phase 1 because it makes no sense to exclude Kerry from the benefits of reconfiguration when consultants are already working in specialist teams that include Kerry-based consultants. Because of the current financial crisis, there is an urgency to implement the reconfiguration plan in a shorter timeframe. This must be balanced against the need to prepare the ground properly for fundamental reorganisation. Each element of reconfiguration will have its own plan and its own timeline. Taken together, many of the benefits of reconfiguration should begin to be realised by the end of 2012.

6. KEY ENABLERS

6.1 Information and Communications Technology (ICT)

ICT represents a fundamental resource in building an integrated healthcare system delivering effective patient care in an equitable way throughout the region of Cork and Kerry. A range of national projects are underway but these are not specifically or necessarily targeted on improving regional ICT networks. Historically, voluntary hospitals have not necessarily been included in national procurement programmes so there is unhelpful diversity within the current system. There are a wide range of healthcare information systems in current use operating at different levels as well as a range of ~~upgrading~~ projects at various stages of roll out. Some examples follow.

The National Integrated Medical Imaging System (NIMIS) focuses on the handling of radiology images and radiology reporting and it includes Picture Archiving and Communicating Systems (PACS) and Radiology Information Systems (RIS) which together allow a radiology image to be transferred electronically from hospital A to be reported by a radiologist in hospital B. This is critical if radiology is to provide an effective regional 24/7 service without the need for a team of radiology consultants in every hospital. MUH and SIVUH currently have different PACS systems from CUH, and from each other - with no system in place in KGH, MGH and BGH. Even when the transfer of images is possible, there is a prior need for a single numeric patient identifier so that the integrity of confidential patient information is preserved, and that patient activity across different locations is linked. Thirdly, there must be a system for requesting and acknowledging radiology reports so that actions arising from an adverse finding can be tracked. NIMIS incorporates all of these elements and its roll out to all six hospitals in Cork and Kerry is a key enabler of reconfiguration.

Systems are also required for handling Endoscopy reports. Currently a national framework contract that includes nine hospitals is underway, three of which are BGH, KGH and CUH. However other hospitals are not in the framework and are currently working with different systems. This is important if MUH is to develop a regional diagnostic gastroenterology centre where it will have to be able to communicate with other hospitals and health centres and with other specialists within the MUH itself.

A further area is the deployment of a single integrated Patient Management System/ Clinical Management system (iPMS/iCM) that will link with the diagnostic services systems including the cessation of paper based systems and their replacement by electronic systems covering requesting, reporting and archiving of pathology and laboratory samples from inpatients and outpatients. This is a key enabling technology if CUH is to become a regional pathology and laboratory medicine centre.

The new cardiac renal centre is due to open in CUH this year. It will become truly a regional centre, handling not only complex cardiology and cardiac-thoracic surgery cases referred to it but also providing a range of clinical governance measures regionally that cover the full range of cardiac conditions for all patients. This will require the most up to date Cardiovascular Information Systems (CVIS) that can handle cardiac catheterisation laboratory images and non-invasive cardiology images such as echocardiograms and their reporting, and can reliably transfer information between all acute hospitals in the region.

Critical care is another national priority area which is already the subject of a national review. Funding has been provided for an Intensive Care Data Management System at CUH and a system has been selected for implementation there. Delivery of this project and its ability to link with other hospitals, to send and retrieve patient information that will inform clinical decision making, is vital to the reconfiguration of surgical services.

All these projects are dependent on a single patient electronic identifier. This too is a national HSE priority following the publication in March 2009 of "Recommendations for a Unique Health Identifier for Individuals in Ireland" by the Health Information and Quality Authority.

Table 6-1: Information and Communications Technology

6.1	Recommendations on:		
	Information and Communications Technology	.1	All Hospitals must be enabled to use a common technological and software platform by extending the Patient Information Management System (iPMS) to MUH and SIVUH and the completion of the necessary inter-hospital data links.
		.2	Comprehensive telemedicine should be developed between CUH and BGH/MGH.
		.3	Sharing of systems and associated patient information between healthcare professionals in acute hospitals and those in primary and community care must be progressed.
		.4	A regional standards based data governance system should be established which permits sharing of information within the framework of data protection legislation.
		.5	Future ICT projects should be approached from a regional rather than a purely institutional perspective.

6.2 Single Patient Chart/Single Patient Identifier for Cork and Kerry

This subgroup analysed the current system and found wastage of various kinds: on the use and storage of hard copy records in commercial locations and long term storage on HSE, voluntary hospitals and agency[23] sites; the use of inefficient, non-standardised and stand alone computer and hard copy systems; loss of staff time in searching for and maintaining records; and lastly and most importantly, the personal, service quality, confidentiality and financial costs and risks arising from delayed or inappropriate patient care. The subgroup concluded that a substantial project needs to be undertaken over the next 1-5 years to develop a single electronic patient identifier and patient record. While this project will have a cost, a great deal can be achieved by utilising and adapting existing systems and redirecting resources from tasks and processes which will become obsolete or will need to be spent anyway in upgrading existing technology. The need for a Single Patient Chart and Single Patient Identifier is a core enabler to successful reconfiguration.

The ultimate objective should be to establish *a common system of electronic record creation and storage for all patient events from whatever point the patient accesses the system*. At all contact points the totality of the patient record should be available to health professionals who are authorised to access it. It should also be available to the patient. The system should

[23] 'Agency' means GP Practices and Health Centres and other institutions or organizations providing services under a contract or agreement with the HSE.

provide administrative and data collection tools with high grade protection against improper use. In summary:

1 All Hospitals should use a common technological and software platform by extension of the IPMS system to MUH and SIVUH and the completion of the necessary inter-hospital data links. KGH's existing IPMS should be upgraded to enable it to be incorporated into the resulting common patient database.

2 A Southern Health Identifier (SHI) should be created as a top level unique healthcare identifier to which all other patient numbers should be referable.

3 The SHI must cater for existing patients and record systems with minimal adjustment.

4 The SHI must be of a unique structure to prevent duplication with other system numbers.

5 Given the large number of 'old' patient records in the system the SHI should be introduced on a patient by patient basis from a chosen date as patients present.

6 The SHI should comply with all 'fundamental' HIQA standards. A standard patient consent formula should be adopted for retention and use of patient data throughout the region.

7 The subgroup does not recommend the creation of a single physical chart as it would quickly become obsolete. Rather, it recommends capture of data currently being recorded electronically, e.g. discharge summaries, operation notes, endoscopy reports, laboratory data, radiology reports, and making this available to clinicians in all acute hospitals.

8 In the interim all hospitals should adopt the National Healthcare Chart of the Unified Healthcare Record. This chart should incorporate the notes of the health and social care professions. Physical elements of the 'current record' should be kept in physical form for 6 months after patient discharge within or near the location of last attendance.

9 Prior to the advent of a national electronic patient record system all physical records created after a date to be determined should be scanned into a digital format for storage and retrieval.

10 The technology for using mobile and hand held interfaces to create and use digital records should be incorporated in future plans.

11 The region should decide that once digital storage is achieved all healthcare records will be retained indefinitely.

Table 6-2 Single Patient Chart/Single Patient Identifier

6.2	Recommendations on:		
	Single Patient Chart/Single Patient Identifier	.1	Having first eradicated duplicate information, all six acute hospitals in Cork and Kerry should develop a single patient numbering system for the region, thus allowing the later introduction of a Unique Healthcare Identifier in accord with national policy.
		.2	This single patient numbering system must be used for all processes within hospital (including laboratory and radiology) and all communication between hospitals and other healthcare providers.
		.3	Data currently being recorded electronically, e.g. discharge summaries, operation notes, endoscopy reports, laboratory data, radiology reports, should be made available to clinicians in all acute hospitals in the region as the first stage in an electronic patient record
		.4	All work in this section (6.2) should be consistent with the creation of an electronic patient chart.

RATIONALE
The subgroup that developed proposals for a single patient identifier should become the nucleus of an implementation group that will develop a broad ICT development plan to underpin subsequent reconfiguration moves.

6.3 Theatre Utilisation

The Theatre Utilisation Subgroup was established to review operating theatre utilisation across all acute hospitals in Cork and Kerry. It commissioned two significant studies from the Department of Public Health, HSE South to inform its deliberations – one was a quantitative study of patterns of activity in each theatre during 2008 and the other was a qualitative study of the views and opinions of theatre staff about the work they do. As a result of these studies, the subgroup recommended a major overhaul of theatre schedules, operating lists and theatre organisation.

6.3.1 Quantitative Theatre Utilisation Study

This study was undertaken by the Department of Public Health in HSE South in October 2009. The objectives were:

- To document the number of procedures carried out in each theatre in the region in 2008
- To describe activity, in each theatre, by day of week and time of day (including in and out of hours activity) in 2008
- To describe theatre activity by specialty, consultant, and ICD 10 coded procedure
- To describe theatre activity by Elective/ Emergency procedures and also Day /Inpatient procedures
- To document the number and type of procedures carried out on children in the region in 2008

- To determine the view of front-line service providers on how surgical services could be altered to improve efficiency and effectiveness, in the context of reconfiguration.

The most reliable source of information, and the source used for this study, is the theatre logbook that records each procedure, the surgeon undertaking it, the time of commencement and the time of completion. A logbook for each theatre must be kept for evidential reasons. However, the information in these logbooks also provides primary management data. Information is recorded manually in ledgers by theatre staff so the first task was to copy it into electronic form so that it could be analysed. The project was carried out using health profession students of UCC under the direction of CHAIR nurses and was done with full ethics committee approval. Data from 2008 from each theatre in the six acute hospitals in the region plus St Mary's Orthopaedic Hospital and Cork University Maternity Hospital, as recorded in their theatre logbooks was used for the study.

Conclusions

- Data collection systems are inadequate and outdated.
- Access to theatre for general emergency procedures is haphazard and inadequate.
- There is considerable inappropriate use of theatres for non-surgical procedures, e.g. endoscopies.
- High volume activity and wide range of specialties at CUH which maintains 11 full operating theatres, a dental theatre and a day procedures unit (DPU)
- Single specialty theatres are generally more efficient than multi-user theatres
- High percentage of time lost for a variety of reasons (see Qualitative study below)
- Day and inpatient lists are mixed
- Preoperative assessment/preparation – surgical, medical, anaesthetic, administrative – is lacking
- There is unused theatre capacity in BGH, MGH, MUH and SIVUH
- Surgical subspecialties are fragmented.

Recommendations

1. Computerised log books should be used in all theatres
2. General surgery should have access to an emergency theatre at CUH
3. Only surgical procedures should be carried out in theatre
4. There is scope for an increase in day case procedures using dedicated day case lists
5. Specialty surgical services should be confined to a maximum of two primary sites plus outreach
6. Rationalise the range of specialties operating in individual theatres in CUH
7. Develop elective surgery services in MUH, SIVUH, MGH, BGH and concentrate emergency procedures in CUH.

6.3.2 Qualitative Theatre Utilisation Study

This study was conducted by the Department of Public Health in HSE South in November 2009 using a multidisciplinary focus group from each of five hospitals and an extended Clinical Nurse Manager interview from the sixth hospital. Hospitals included were CUH; CUMH; KGH;MGH; SIVUH; SMOH. Interviews were recorded and analysed for thematic content. Two examples illustrate the kind of information that emerged from the study:

Example 1: an opinion illustrating the importance of pre-assessment
"The day cases that we have at the moment coming into the Main Theatre are coming from the Day Medical Unit and they're not pre-assessed; even if they're not cancelled, there's a delay for reasons like bloods, chest x-rays, ECGs, just pre-assessment… It throws off the whole list"

Example 2: a view on the need for better communication with consultants:

"and the list then, there's no communication between the consultants and there could be 5 procedures on a day and we only have capacity for 4 in the recovery unit, which means one of them would have to be brought out onto the ward which means more night duty staff as well"

Conclusions

- More communication
- Greater preparation
- Huge experience pool that can be extracted and used for the improvement of processes and efficiency.

Recommendations

1. Pre-assessment facilities should be extended and become the norm
2. More dedicated day procedure units are needed.
3. A dedicated emergency theatre is required.
4. Initiatives are needed to ameliorate the effects of the recruitment moratorium – extended hours, second emergency team, extend out of hours and anaesthetic cover.
5. Ease the recruitment moratorium in key areas – Theatre; ICU; A&E
6. Improve business processes, e.g. better information to patients & families, better information on where patients are located.
7. Provide improved advanced notice of theatre lists
8. Theatre lists should be discuss in advance by theatre staff and surgeons
9. Improve admissions and discharge planning
10. Extend computerised patient records to all areas
11. Provide a Central Sterile Services Department (CSSD) in all hospitals
12. Improve clerical support to provide more timely information
13. Provide additional portering staff to transport patients from wards and minimise patient delays
14. Instigate building modifications where necessary
15. Provide training, support and simple thanks

Table 6-3 Theatre Utilisation

6.3	Recommendations on:		
.1	**Theatre Utilisation (Quantitative study)**	.1	The organisation of operating theatres in Cork and Kerry should be fundamentally overhauled.
		.2	A major rescheduling exercise to maximise throughput and efficiency should to be undertaken.
		.3	Theatre logbooks should all adopt digitised and standardised information gathering and recording.
		.4	There should be a dedicated emergency theatre in CUH
		.5	There should be increased use of single specialty theatres and avoidance of theatres being used for non-surgical procedures.
		.6	Ambitious targets for increased day procedure cases should be set.
		.7	Elective surgery should be concentrated at MUH and SIVUH.
.2	**Theatre Utilisation (Qualitative study)**	.8	Measures should be introduced to improve communication between surgical consultants and theatre staff, and between hospitals and patients, prior to and following surgery.
		.9	There should be greater preparation for theatre lists between consultants, clerical staff and theatre staff.
		.10	Admission and discharge processes need to be improved.

RATIONALE

The organisation of operating theatres is in need of fundamental overhaul. It is almost impossible to achieve meaningful reform in a piecemeal way because of the knock on effects caused by one list upon another. Also, work patterns become work habits so that as new surgeons are appointed, their lists have to be fitted in around existing ones. The result is that operating schedules cease to have a rational basis. For example, it is not an efficient use of resources to admit a patient on a Thursday or a Friday for a procedure that will place that patient in critical care over the weekend; or why admit a patient the night before an operation when the same procedure could be done on the day of admission with proper pre-assessment and efficient day surgery procedures? This practice is widespread.

The creation of dedicated emergency theatres and the separation of elective from emergency surgery would greatly improve work flow and cut down waiting lists. While this might appear to cut across the principle of concentrating complex work on a single site, this would be a simplistic conclusion. For CUH to operate as an efficient tertiary centre, as much elective work as possible should be moved to other hospitals. Work should be segregated into major lists early in the week; short stay moderate/minor lists should be scheduled in the latter half of the week. If attention and imagination are focused on improving communications – physical, digital and human – and if the proper management structures are put in place, the hospitals in Cork city have the potential to operate increasingly as a single hospital network.

The challenge of implementing these changes should not be underestimated but the benefit in terms of patient outcomes and improved quality in the workplace would be immense.

7. HEALTH EDUCATION, TRAINING, RESEARCH AND INNOVATION

7.1 Health Education and Training

Health education and training in Cork and Kerry is provided by a number of different agencies. It ranges from professional degree programmes to in-service training and is both accredited and non-accredited. These agencies include University College Cork, Cork Institute of Technology, hospital based Centres for Nurse/Midwife Education, The Nursing and Midwifery Planning and Development Unit (NMPDU), the Performance and Development Unit (HSE South), the Centre for the Advancement of Inter-professional Education (CAIPE) which has its Irish base in the Institute of Technology Tralee. There is also a large amount of in-service education bought commercially from UK and Irish providers.

Education providers specialise in niche markets. There is a strong market for skills courses from private providers. The HSE has invested heavily in nursing and midwifery education. The universities provide degree programmes for many different health professionals. The ITs provide courses for medical scientists and technicians in different areas. UCC and CIT run a number of programmes conjointly.

In recent years, a pilot project was conducted to link HSE Libraries Online with UCC Library to create an expanded online library service for health academics and professionals. Agreement was reached to use the HSE Libraries Online portal and on 100 electronic journals/journal bundles that would cover the main areas of interest. Funding for the project was provided by the hospitals in Cork city but it was not proceeded with because of the ongoing cost.

Table 7-1 Health Education and Training

7.1	Recommendations on:		
	Health Education and Training	.1	Health education and service providers should come together within the context of the proposed MoU to address a broad agenda of health education and training that will support reconfiguration and lay the basis for a structured partnership in the future.
		.2	An electronic health library should be created that brings together HSE Libraries Online and the health library of UCC to provide an on-line health learning resource for students, staff, patients and the public.

RATIONALE

Health education and training should be essential drivers of health service reform and higher education institutions should open minds to a future focused healthcare system via research and critical appraisal of new ideas. A health service that does not invest in a co-ordinated strategy of education and training will not be able to respond to technical and professional advances. The HSE has acknowledged this in establishing the Education, Training and Research Unit (ETR) and the HSE Libraries Online project but there is a need to develop a more strategic approach to health education and training regionally that will provide a framework for the HSE to develop as a learning organisation. What is proposed is the creation of a broadly based agreement between the regional health and education providers

within the context of the proposed Memorandum of Understanding. This agreement would deliver strategically on a reconfiguration-linked education agenda for health service staff in all professions and in administration and management. An agreed agenda might address such issues as:

a. the role of students in a reconfigured health service in Cork and Kerry
b. mechanisms to enhance flexibility of access to existing and new modules and programmes in regional HE institutions that would support HSE staff to adapt to change.
c. Mechanisms of costing and resource sharing that would create a platform for greater use of education resources by health service personnel
d. Discussions with PCCC to identify education needs at community level, including programmes in health promotion and chronic disease management.
e. Novel use of local education centres for delivery of education and training locally – to include rural hospitals and primary care centres.
f. Greater use of ICT for education and training purposes.
g. Greater use of shared academic and service appointments across all professions – to provide clinical teaching to students and education and training to staff.
h. Robust quality assurance mechanisms that could translate lessons learnt from actual patient experience into continuous quality improvement of systems.

Underpinning the successful prosecution of education and training is the issue of access to quality information and to the raw data and critical appraisal of research. The correct handling of information is a core requirement of any learning organisation. There is a need to raise the levels of information access and usage about health in Cork and Kerry. This need exists among students, health professionals, managers, and among our citizens who are increasingly motivated to take greater responsibility for their own health. Expertise resides in our libraries. Investment in electronic information systems and in information literacy training will yield rich rewards in the longer term. The pilot electronic library project between HSE Libraries Online and UCC should proceed This initiative would provide a health learning resource for staff, patients and the public that will support health promotion, health education, health practice and health research throughout the region of Cork and Kerry and in so doing, would help to kick start the new integrated health system as a genuine learning organisation. A "top ten" of needs likely to emerge in the process of reconfiguration might include:

1. Expansion in the role of the General Practitioners as they take on the challenge of large Primary Care Centres with wider clinical scope, larger infrastructure and more numerous staff, requiring strong management and robust processes;
2. New roles for nurses and midwives in reconfigured hospitals and in the community;
3. New roles for midwives in midwifery provided care;
4. Upgrading of emergency care training for paramedics and ambulance personnel;
5. ICT personnel to design and deliver robust systems for efficient communication between health professionals and between different levels of the service. These systems will be built around a single, electronic patient record;
6. Better links between primary care teams and pharmacists and an increased role for hospital pharmacists.
7. An enhanced role for occupational therapy in relation to mental health and rehabilitation within the community.
8. A much greater ability on the part of all health professionals to access and handle new information.
9. Audit of newly reconfigured services. Reforms in health service delivery need to be monitored by public health/health service management personnel who can comment on the development of the system as a whole and the response of the public to changes as they roll out.

10. Health promotion strategies for combating a range of chronic diseases and involving different health professionals.

Education and training should be available to support the change in roles that will occur. Individuals will have different needs and show different responses. Some will want to go on to acquire higher levels of learning while others will not. There needs to be an ability to step on and off a learning continuum from short CPD courses to postgraduate degrees. Delivery too needs to be flexible and sensitive to those with families to run, jobs to hold down, rostering commitments to fulfill.

There should be a "one stop shop" that would provide convenient access to a wide variety of education and training. This would have access to the different sources of education and training and would maintain good relations with human resources departments so that information on education provision, study leave, fees support, etc. would be available from the same place.

7.2 LEAN Sigma – Motivator and improver of the working environment

During the development of the roadmap, members of the Reconfiguration Forum were offered Lean training from the Centre for Advanced Manufacturing and Management Systems (CAMMS) in Cork Institute of Technology. Lean Sigma is a technique used in manufacturing and service industries to gain advantages of effectiveness and efficiency through respect for people inside and outside the organisation. The focus of Lean Sigma events is to encourage staff to operate in an environment of continuous improvement, use their own knowledge to identify problems and work in teams to identify and implement solutions.

The key tenet of Lean Sigma can be summed up in idea of "Elimination of Waste" alongside "Respect for Staff" while focused on the "Customer" or patient in the Healthcare model. It is thus a staff motivator, an improvement ideal and a system that delivers bottom line results. Lean Sigma applied to healthcare projects worldwide have yielded improvements in patient experience, significant cost savings, more effective time savings and significantly improved staff moral.

In order to demonstrate Lean in the acute hospital environment, a project was designed to educate and enable participants to be capable of carrying out Lean events in the hospital environment. The project used the Lean Sigma in Healthcare approach to conduct an analysis on a ward in each acute hospital. A project team was established involving all the staff associated with the chosen wards in BGH, CUH, CUMH, KGH, MGH, MUH and SIVUH. Participants competed seven full days training and thereafter contributed additional days planning (2) and onsite support of the events (2-5 days each) in each hospital. The group became highly motivated during the course of the project which is still ongoing. On completion, each participant will be in the position to aid further improvement activity in their work areas and help with the education of other staff to multiply the benefits of the Lean approach throughout the acute hospital network. This has been shown in other healthcare settings to be a safe and effective way of creating a bottom up reform of processes.

Table 7-2 Lean Sigma

7.2	Recommendations on:		
	Lean Sigma	.1	Lean sigma projects should be used throughout the region to improve motivation, efficiency and the working environment.

7.3 Pastoral Care Education

A summary of existing pastoral care posts is set out below.

Hospital	Ordained[24]	Religious	Lay	Total
BGH	1 (job-share)			1.0
Bon Secours Cork	1	0.5	3.5	5.0
CUH	4	0.6		4.6
CUMH		1 vacant post[25]		1.0
MUH	2	1	1 (job-share)	4.0
SIVUH		1		1.0
SIVUH and SFH	2			2.0
KGH	3			3.0
MGH[26]	0			
TOTAL	**13**	**4.1**	**4.5**	**21.6**

The concept of pastoral care is wider than the provision of sacramental ministry in a hospital or hospice setting. As Irish society becomes more diverse culturally and religiously and as traditional religious practice and belief declines, the exercise of pastoral care towards the sick and dying can become complex – social, generational, religious, cultural and racial differences creating different understandings of illness and death, often within the same family.

Chaplaincy and pastoral care in Ireland still operates more or less along denominational lines even though both chaplains and pastoral care workers may be priests, religious or lay persons. Qualification requires completion of a nine month (400 hours) Clinical Pastoral Education (CPE) programme consisting of theory, counselling and reflective practice in a clinical setting that enables students to assess emotional, spiritual and religious needs of patients and their families and responding appropriately. The programme is recognised internationally. Historically programmes were delivered in CUH and KGH but the post of Director of Pastoral Education in KGH is currently vacant so the sole programme for the region is in CUH. This is provided by the Director for Pastoral Education with the assistance of guest lecturers.

Expansion of the CPE programme and incorporating the KGH post would create a regional programme that would enable placement of students in hospitals, nursing homes, hospice, and other centres. It could provide training for voluntary groups to develop skills to meet the pastoral needs of those with chronic illness in the community and reflective practice for parish based voluntary organisations, enhancing church and community support.

Table 7-3: Pastoral Care Education

7.3	Recommendations on:		
	Pastoral Care	.1	The contribution of pastoral care to the multidisciplinary team in a variety of care pathways needs to be recognised and facilitated.
		.2	Placing pastoral education on a regional footing would improve training and open up new fields of practice.

[24] *Includes different denominations*
[25] *CUMH needs are now covered by the CUH team.*
[26] *Patients' needs are met by local clergy on a visiting basis*

7.4 Research and Innovation

The pharmaceutical industry has been one of the principal contributors to the growth of the Irish economy in recent years. In 2008, pharmaceutical net exports exceeded €14 billion making Ireland the second largest net exporter of pharmaceuticals in the world. This should be set against the fact that exports are more important for the Irish economy than for any other EU country (90% of our GDP[27]). One hundred and twenty companies have operations in Ireland, including 13 of the top 15 worldwide. The pharmaceutical industry is the largest contributor to corporation tax and total tax receipts from it amount to approximately €3 billion annually. In employment terms the sector provided 24,000 jobs directly in 2009 and a further 24,000 in the provision of services[28]. However, Irish based pharma research and innovation must compete with countries that already have indigenous pharmaceutical industries with well developed infrastructure (e.g. the UK and Switzerland). This represents a challenge for our universities and our health service that will require vigorous and co-ordinated action.

The medical technology industry includes over 140 leading medical technology companies exporting €6.3bn annually and employing another 24,000 people. 15 of the top 20 companies are located in Ireland and more than 60 of the 140 companies are Irish owned. Ireland is now the second largest exporter of medical devices in the EU. The industry represent nearly 10% of Ireland's total exports. Unlike the pharmaceutical industry, the medical devices industry is fully integrated from research through to selling and represents a major opportunity for innovation and job creation.

Venture capital is vital to successful innovation in these sectors. Irish technology firms have raised €100 million in funding this year. The Irish Venture Capital Association estimates there will be €800 million available or investment in the coming years by Irish venture capital funds and this will leverage international investment that will double or triple that number[29]. Furthermore, the proportion of venture capital funds supporting innovation in the medical and life sciences has grown from 5% to 30% of all venture capital funding in the last five years.

UCC attracted total research funding of €123m in 2008/09, of which €21m or 17% was attributable directly to departments in the College of Medicine and Health (this does not include the contribution of members of that College to interdisciplinary research centres). Universities are ranked internationally under various ranking systems; the QS 2010 world university ranking[30] places UCC number 184 overall and 115 in the Life Sciences and Medicine category. It has risen from 286 to 184 in three years. Much of its research is focused on interdisciplinary research centres of which the Alimentary Pharmabiotic Centre is a relevant medical example. This explores the relationship between food and alimentary health, employs over 120 researchers with backgrounds in pharmacy, medicine, the biological sciences, interacts with the general public and occupies a large part of the Biosciences research building on the campus of UCC. The Cork Cancer Research Centre is located at the Mercy University Hospital and also enjoys an international reputation. Recently the College of Medicine and Health secured Health Research Board/HSE funding for a clinical research facility that will enable Stage 2 clinical trials. This will be situated in MUH and will put in place a key element of national and UCC research strategy to stimulate translational research, often called "bench to bedside" research.

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[27] CSO Measuring Ireland's Progress 2009.

[28] *Figures in this paragraph taken from Irish Pharmaceutical Healthcare Association website*

[29] Interview with Peter Sandys, Chairman of the Irish Venture Capital Association reported in The Irish Times, 17.09.10.

[30] *Based on a weighted basket of measures: http://www.topuniversities.com/university-rankings/world-university-rankings/2010/results*

Since 2004, researchers at Cork Institute of Technology (CIT) have been awarded over €53m in funding. Current funded programmes at CIT include a Programme for Research in Third Level Institutions (PRTLI) Cycle 4- funded research centre in adaptive wireless systems, a PRTLI cycle 4- funded programme in photonics; three Enterprise Ireland (EI) funded Applied Research Enhancement (ARE) Centres, a Science Foundation Ireland (SFI) Principal Investigator Award and four HEA Technological Sector Research (TSR) Strand III projects.

MEDIC is an Enterprise Ireland funded Applied Research Enhancement Centre based in CIT. The centre is focussed on the development of medical device technology across three main research strands – Biomaterials, Assistive Rehabilitation and SMART devices.
In addition to applied research in the main research strands, MEDIC also engages in concept and product development activities and commercialisation activities for medical device technologies that are nearer the market place. The MEDIC team is primarily technical, but it has built up a considerable network in areas such as legal, regulatory and business development such that MEDIC now has the capability to bring medical technologies from basic concept through to commercialisation. MEDIC is already engaging with clinicians in CUH on product concept and technology development, filing two patents in 2009. Projects include the following:

- Development of novel Bone graft and nerve graft biomaterials
- Orthopaedic Intra-medullary nailing product development
- Research into foot biomechanics for diabetic patients.
- Motion analysis and electromyography assessment of spina-bifida patients
- Motion analysis of cerebral palsy children
- Carbon dioxide detection system & scrubber redesign for close circuit re-breather kits.

While Cork has national and international strength in certain areas, there is still much to be done in building research capacity, increasing numbers of research students and developing strategic alliances if it is to prosper in a highly competitive environment.

It is of critical importance to higher education and research in this region, to the HSE and, downstream, to the people of Ireland, that world class biomedical research being initiated in Irish universities is translated into new treatment modalities and new therapeutic products. To do this, both UCC and CIT need access to the best practicing clinicians, to the HSE's clinical facilities and systems and to patients. They also need a clear and focused interface with the healthcare industry where the research institutions and the clinical health system can work to a common agenda with appropriate protection for patient safety, ethical integrity, intellectual property and academic autonomy.

Currently many of the global pharma and medical devices companies choose to develop their most advanced products in Ireland, yet their R&D work is generally based elsewhere. There are a number of reasons for this but one is the difficulty they experience in relating effectively to the health service and to the universities. This issue can only be addressed by joint action on behalf of health and education agencies to bring about more effective structures for relating to industry and promoting innovation. The UK government have recently sought bids from British universities for four Academic Health Centres that will bring together four of the top British universities with their partner Health Trusts to develop international strength and pulling power in health research and innovation. We can compete, but we must reform our structures first. If we do not, we will begin to see major companies relocating to the UK and Europe. For Cork and Kerry, as well as for Ireland, that would be a catastrophic failure of imagination, intelligence and leadership.

Table 7-4 Health Technology and Innovation

7.4	Recommendations on:		
	Research and Innovation	.1	A high level steering committee should be established with a strong mandate to develop a Health Technology, Research and Innovation Campus on a hospital site in Cork city linking UCC, CIT, the HSE and other appropriate state agencies.

RATIONALE

It is a strong recommendation of this roadmap that a high level steering group should be established with a strong mandate to develop a Health Technology, Research and Innovation Campus on a hospital site in Cork city with links to UCC and CIT, supported and advised by national policy as expressed by Enterprise Ireland, IDA, HRB, HSE (ETR) and other relevant agencies. It would include research laboratories, a one-stop-shop for business advice and guidance and a number of incubation units for new company start-ups. This will bring together science, medical and bioengineering research, innovation and commercial expertise to provide the necessary focus within which a new relationship can be forged that will "realise for the people of the region, the economic and other benefits that flow from strong education and training, and leading edge health, research, technology and innovation."

8. RECONFIGURATION OF GOVERNANCE AND MANAGEMENT

8.1 Horwath and Teamwork on integrated governance

H&T Review comments: "*The HSE agenda will need to deliver a new integrated governance structure for both corporate and clinical affairs to match the concept of integrated clinical care, able to manage the organizational complexities and all the statutory, voluntary, academic and private providers.*" The Report recommends *"the HSE consults promptly with the UCC, voluntary providers and the private sector. This is with a view to agreeing an integrated clinical and academic approach to delivering service change and a common, robust, transparent governance structure that administers to all the "centres of excellence".*

Corporate and Clinical Governance

Corporate governance is at the heart of modern organisational life, ensuring executives and managers are accountable for discharging their statutory duties and managing the risks that may adversely impact upon the organisation. It is through the transparency of these corporate governance arrangements that investors, shareholders and the public gain confidence in a particular organisation.

Clinical governance recognises the particular complexities that exist within healthcare and the need for clear accountability to the public who need the services of healthcare organisations. Clinical governance has been defined as:

"A framework through which organisations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish[31]."

Clinical governance brings together in one framework previously disparate activities within hospitals including:

- Patient and public involvement
- Risk management
- Clinical audit
- Staffing and staff management
- Education, training and continuous professional development
- Clinical effectiveness
- Use of information to support clinical governance and healthcare delivery.

The HSE's Quality and Risk Framework (p. 41) provides the framework for ensuring and developing robust clinical governance.

8.2 Current Hospital System

The Horwath and Teamwork words above were written in 2007 when the health system service delivery arm was divided into two directorates – the National Hospitals Office, responsible for all acute hospitals, and a Primary, Community and Continuing Care

[31] Clinical governance and the drive for quality improvement in the new NHS in England. G Scally and L Donaldson. BMJ pp61-65 (1998)

directorate that ran community based services. Acute services in Cork and Kerry are organised as follows:

CUH Group

Cork University Hospital – large tertiary centre in Cork city wholly owned by HSE and run by a chief executive officer reporting to the acting Hospital Network Manager. An Executive Management Board functions in an advisory capacity to the Chief Executive who is the accounting officer.

> *St Mary's Orthopaedic Hospital* – a member of the CUH group wholly owned by the HSE and managed by the chief executive officer of CUH reporting to the acting Hospital Network Manager.
>
> *Mallow General Hospital* – a member of the CUH group wholly owned by the HSE and managed by the chief executive officer of CUH reporting to the acting Hospital Network Manager.

Mercy University Hospital: tertiary hospital owned by the Sisters of Mercy, Southern Province and governed by a board and managed by a chief executive officer appointed by the board.

South Infirmary and Victoria University Hospital: tertiary hospital derived from amalgamation of Victoria Hospital and South Infirmary Hospital owned by an independent hospital trust, governed by a board and managed by a chief executive officer appointed by the board.

Bantry General Hospital: wholly owned by the HSE, run by general manager reporting to the acting Hospital Network Manager. Has an Executive Management Board that functions in an advisory capacity to the manager.

Kerry General Hospital: wholly owned by the HSE and run by a general manager reporting to the acting Hospital Network Manager. An Executive Management Board functions in an advisory capacity to the General Manager.

Interim Clinical Directors: A number of fixed term Clinical Directors have been appointed by the HSE with responsibility for (a) the CUH group, (b) Kerry General Hospital, (c) the Mercy University Hospital and (d) the South Infirmary and Victoria University Hospital. Additional acting clinical directors have been appointed in CUH in relation to Medicine, Radiology, Surgery and Diagnostics. All are coming to the end of two year terms.

University College Cork: provides professional training for nurses, midwives, doctors, occupational therapists, speech and language therapists, dentists and pharmacists. It's Dental School and Hospital is situated on the CUH site but is wholly owned by the university and provides public dental services on a service level agreement basis and some private dental services on a fee per item basis. It provides jointly delivered programmes with Cork Institute of Technology for medical laboratory scientists at undergraduate and postgraduate degree levels and as continuing professional education.

Bon Secours Hospitals: provide elective acute medicine and surgery in Tralee and Cork. They are part of the Bon Secours Health System, a not for profit private healthcare provider with hospitals in Cork, Tralee, Galway and Dublin.

St Finbarr's Hospital: provides a range of secondary services to the surrounding community. It too is wholly owned by the HSE. Its general manager reports through the PCCC system.

Community Hospitals: throughout both counties 20 community hospitals provide step down facilities for long term care, respite care and local care under supervision of a general practitioner. They are managed by PCCC

Mental Health: Mental Health is managed separately from the acute hospital system, according to different community catchment areas and management networks. Two Executive Clinical Directors manage the services for Cork and Kerry.

8.3 HSE Integrated Services Programme

The Integrated Services Programme (ISP) represents a major change of approach to service delivery and in HSE management structures to effect that change. The principal objective is to remove barriers to integrated care within units of reasonable population size and adjust the balance of activity towards prevention and community based care and away from hospital based care. This is in line with the HSE's transformation programme and follows the Horwath and Teamwork recommendation of enhancing general practice, primary care and community services as one of the fundamental planks of an integrated health system. This is a fundamental change from the centralised "twin pillars" of the National Hospitals Office and Primary, Community and Continuing Care and will take some time to implement on a country-wide basis. The current draft document (dated ??) setting out the detail of the programme is included as Appendix II.

The following elements are already in place:

- The National Hospitals Office and Primary, Community and Continuing Care have been amalgamated into the Integrated Services Directorate within which acute and continuing care services (acute and community hospitals) and primary and community care services (primary care teams and health and social care networks) are managed as a single entity

- A Directorate of Quality and Clinical Care has been established to deliver a robust quality, safety and risk management programme for the organisation and prepare it to operate in a regulated health and personal social service environment (see section 2.5)

- The country has been divided into four regions – HSE Dublin North East; HSE Dublin Mid Leinster, HSE West and HSE South. Each is led by a Regional Director of Operations (RDO) who carries overall responsibility for the management, delivery and integration of services within the region. See Fig below

The new HSE corporate management structure is set out in Figure 8-1.

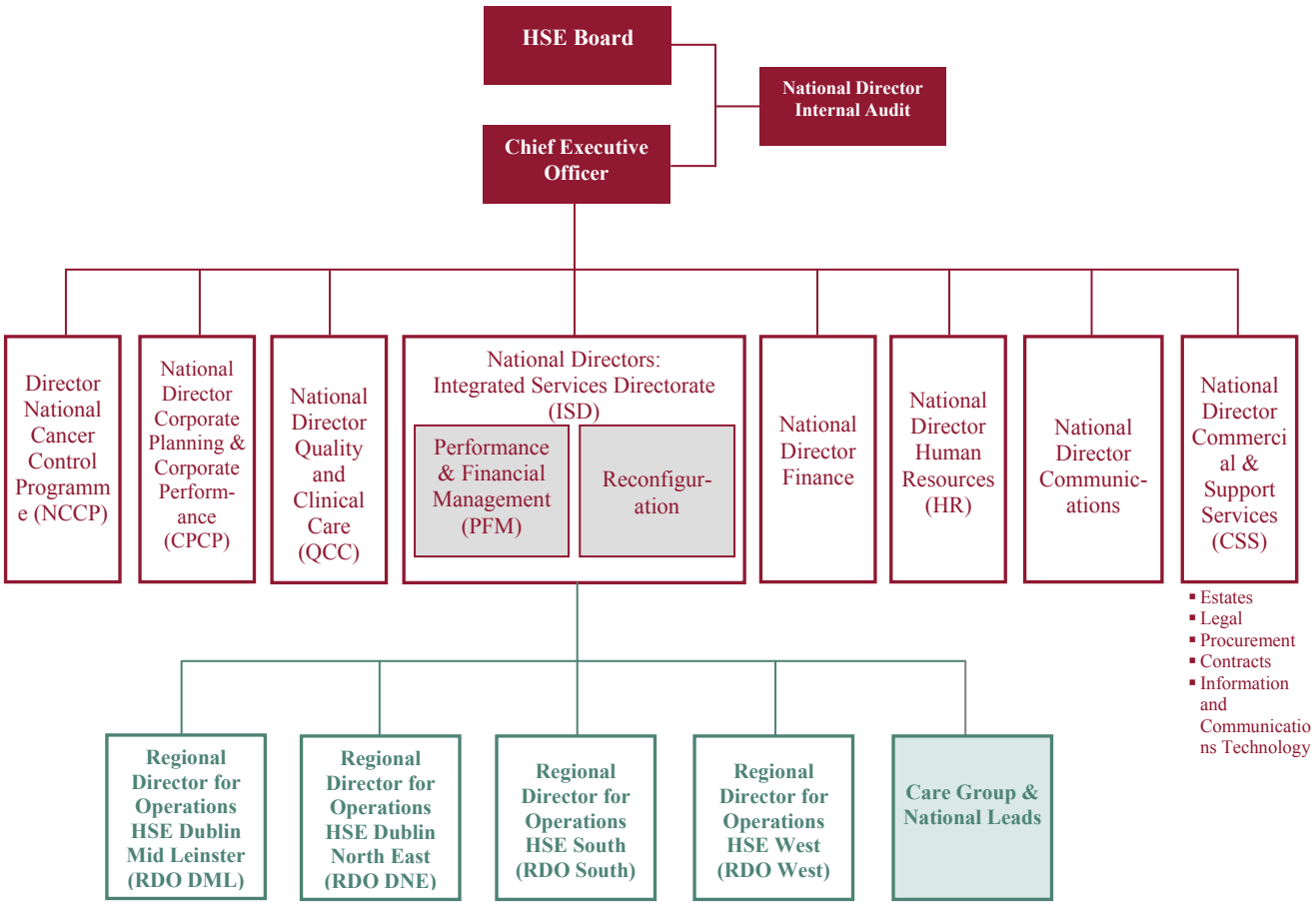


Figure 8-1: HSE corporate management structure

This is the first step in implementing revised organisation & governance arrangements at regional level and establishes the Regional Director & Regional Management Team as the key decision making and governance group at regional level. In respect of acute hospital services this structure provides for two hospital networks within the HSE South Region – South West Network & South East Network.

8.3.1 Integrated Service Areas

The HSE is now developing an integrated services structure to divide each region into a number of Integrated Services Areas (ISAs) within which acute and continuing care services (acute and community hospitals) and primary and community care services (primary care teams and all other community based services) can be managed as a single entity. It is intended to establish eight ISAs in the first phase of implementation. Key elements of the new model are:

- The ISA Manager is the single accountable person for all health and social care services in the Integrated Service Area.
- Continuing care services for older persons will be managed by the Acute and Continuing Care group with agreed protocols for access from Primary Care. Community services for older people will be delivered and managed through Primary Care.
- Executive Clinical Directors will be developed over time in acute hospitals and hospital groups to strengthen clinical leadership.

- Each Acute and Continuing Care group will have a strong management team of Executive Clinical Director, Operations Director and Director of Nursing.
- There will be a single point of accountability for each Acute and Continuing Care group. Initially this will be the Operations Manager with the intention to transfer to the Executive Clinical Director in time.
- An Executive Clinical Director for Mental Health will join the ISA Management Team.
- Some services will be managed at national level, integrating locally to support service delivery, e.g. the ambulance service and the environmental health service.
- Arrangements for the establishment of an Executive Clinical Director for Primary Care are being finalised.

8.3.2 ISA Development in HSE South

Two ISA's in the South West – Cork & Kerry – are to be established before the end of 2010. This will provide a new organisational structure for governance and accountability and support the implementation of significant change in the overall delivery of integrated services for the public.

A process has commenced in the South East to put in place an ISA structure and this work will be concluded in 2011 in consultation with all stakeholders.

8.3.3 Clinical Governance in Kerry

Both this roadmap and the Horwath and Teamwork review call for a single integrated acute hospital network between Cork and Kerry. The critical issue relates to achieving unified clinical governance across the acute hospitals in the South West and in this context KGH poses particular challenges. The isolated position of the hospital makes recruitment and retention inherently more difficult and creates greater challenges in maintaining accredited training.

The Integrated Services Directorate notes that "in some cases clinical governance arrangements are being put in place across a number of hospitals where an individual hospital is not of sufficient size to be able to put robust enough clinical governance systems in place." Following from this, the new ISA model will provide for clinical governance across the full hospital network of Cork and Kerry. Kerry will maintain a clinical director in KGH who will have overall responsibility for the clinical governance of all services provided in KGH, with clear accountability & reporting arrangements through the line management system to the ISA Manager while the system in Cork will move in time from individual hospital clinical directors to clinical directors for Medicine, Perioperative care, Diagnostics & Women and Children's care across all hospitals in both Cork and Kerry ISA's. Currently there are lead clincians for a department/speciality in KGH and this will continue. These lead clinicians will represent KGH on the regional specialty teams across Cork and Kerry and ensure implementation of appropriate standards, protocols and frameworks in KGH.

8.4 The Academic Health Centre Concept

An academic health centre is an alliance between one or more providers of health education and research and one or more providers of clinical services, which is designed to deliver demonstrable benefits in

- better patient outcomes,
- better health education programmes,
- better strategic direction,
- internationally recognised clinical research,
- the best possible staff,

- a learning culture,
- a more integrated organisation.
- maximal regional innovation and economic activity in healthcare

There are a wide variety of Academic Health Centres (AHCs) internationally. Organisational structures can take a variety of forms, ranging form simple partnerships to fully integrated organisations with a single management board. The AHC model has been found to bring a number of benefits, e.g.:

1. it promotes a culture of excellence in patient care;
2. it promotes a culture of continual improvement and renewal;
3. It brings university expertise in industrial liaison and technological innovation that will help create an innovation culture within the health service.
4. it embeds the use of evidence based practice as a driver of quality improvement;
5. it attracts the best staff;
6. it internationalises the search for solutions to healthcare problems;
7. it produces better fit for purpose healthcare education and training courses;
8. it opens the system to new ideas and new thinking;
9. it provides a reliable evidence base for driving efficiencies and value for money
10. it provides a more strategic approach to the delivery of clinical services (e.g. integrated care) informed by long term agendas of education and research, and
11. it brings greater clinical reality to education and research so both partners win.

Many reports in recent years have commented on the fragmentation of the Irish health services, the absence of effective clinical leadership and lack of an innovation culture. Currently the HSE is introducing the Integrated Services Programme to address these issues.

An AHC partnership can bring the capacity to introduce new drivers of change in both directions. Education and research are driven by new ideas and by testing of these ideas using well established qualitative and quantitative research methods, and by publication in international peer reviewed journals. This brings a culture of openness and transparency into healthcare organisations. Conversely, clinical practice brings a focus on accountability, quality and risk, cost containment and patient experience. Many of the top medical centres in the world are linked in this way to a university, for example: Karolinska Institute; Duke Medicine; UMC Utrecht; Stony Brook University Medical Centre; McGill University Health Centre, and Imperial College London.

The exploration of the AHC concept in Cork and Kerry will be through the vehicle of a Memorandum of Understanding (MOU) which will include among its core elements:

- A commitment to develop a strategic approach which aligns the delivery of health services with education and research agendas.
- Enhanced collaborative working arrangements between all sectors to deliver demonstrable benefits to patient care
- Strategies to ensure research and education are tailored to address the healthcare needs of the population.
- Commitments to working collaboratively to achieve clear measured improvements in patient care through maximising benefits of translational research and through optimal clinical education for health care professionals.

8.5 Recommendation

8.5	Recommendations on:		
	Governance	.1	A Memorandum of Understanding setting out the framework for a formal collaborative partnership between the HSE statutory hospitals, the voluntary hospitals and the university should be completed and signed within six months. This framework will be produced in the context of the discussions taking place nationally around the development of Academic Health Care centres.

9. RECONFIGURATION OF CLINICAL SERVICES

9.1 Introduction

The reconfiguration clinical services is presented as a sequential set of recommendations for acute care services beginning with pre-hospital care, primary care referral, hospital entry, and diagnostics. Medical, mental health and perioperative specialties come next, then services for women and children and hospital exit. The foundation of the roadmap is the work of the various subgroups[32] considered within the guiding principles set out in the Horwath and Teamwork Review, which are:

- Consultants should work in specialist teams to maximise quality of clinical care, cross cover, communication and effectiveness.
- Services should be situated such that specialties that naturally relate together should as far as possible be adjacently located.
- Complex acute care should be located on a single regional campus and non-complex care should be situated elsewhere. This will mean that a specialty service may exist on more than one site.
- Clinical services that support other services, such as radiology, pathology, laboratory services and anaesthesia, must be organised with particular attention to the services they support.
- Specialist teams must adopt regional responsibility for their specialty and structures must be created that give expression to that wider responsibility.
- That responsibility extends to providing as much as possible non-complex care as close as possible to people's homes through effective outreach services.

The Horwath and Teamwork Review, referring to international practice, states that for a population the size of Cork and Kerry (640,000), at least 8 consultants are required to provide a sub-specialty service on a regional basis, and further states that the best way of organising such a service is to base the team members in the tertiary centre rather than based in different hospitals across the region. The reconfiguration roadmap has the task of realising this ideal in a region where many sub-specialties are below this number and where the three Cork city hospitals are located within a short distance of each other. It must also do so without relying on additional resources. The answer has the following elements:

- Irrespective of current consultant numbers, every specialist service must establish a regional department with a named clinical lead. The specialist team must accept responsibility for the regional service and provide outreach services, working with other health professions in relation to assessment, follow up care and chronic disease management.
- Services should be structured within a number of clinical directorates, within parameters developed by the HSE's Directorate for Quality and Clinical Care, including Diagnostics, Medicine, Mental Health, Perioperative Care[33], Women and Children's Health, that will be responsible for clinical governance and will contribute to management at corporate level. Nurses and health and social care professionals attached

[32] *Subgroup reports that informed this plan are listed in* ***Error! Reference source not found.*** *on page****Error! Bookmark not defined.****.*

[33] *Surgery, Anaesthesia and Critical Care*

to a particular clinical service must be full participants in the appropriate Clinical Directorate.

- In keeping with the National Cancer Control Programme, regional cancer services will be concentrated at CUH, one of the eight designated national cancer centres.
- Most consultant teams should not have to work on more than two sites.[34] For example, Gynaecology currently provides services on four sites. The plan for this specialty places complex and cancer work at CUH and elective and less complex work at SIVUH because much of less complex gynaecology can be done as day cases at which SIVUH excels.
- Proposals seek to concentrate particular groups of cognate services in particular hospitals within Cork city so that hospitals can specialise in delivery of particular kinds of services.

9.2 PRE-HOSPITAL CARE

9.2.1 The Ambulance Service

The national ambulance service in Cork and Kerry provides emergency care "at scene" by trained paramedics in single patient ambulances. There are 19 ambulance bases operating a 24/7 response. The ambulance service also provides a transport service for patients from one hospital to another. This is done in fully equipped category C ambulances carrying one patient at a time, even though the patient may be stable, conscious, ambulatory and no longer acutely ill. Intermediate care vehicles (ICVs) are designed and equipped for hospital retrieval and can carry more than one patient at a time. The Emergency Services Review advocated use of ICVs to release category C ambulance teams from this duty.

Advanced paramedics (APs) are capable of providing advanced emergency care at scene in vehicles that can be independently tasked by Ambulance Control. APs also have the ability to decide the appropriate pathway for patient care including discharge at scene if appropriate. Currently there is a policy of encouraging the paramedic workforce to upskill to AP level so each year the numbers increase. To maximise their effectiveness as independent responders, it is essential that these APs are organised in teams strategically located throughout both counties. APs should be able to link in real time with appropriate medical practitioners, both local GPs/Southdoc, local hospital consultants and members of the tertiary ED duty team. AP teams should be in place in West Cork and North Cork by the second half of 2011. Audit and review should determine further roll out in Kerry and Cork city.

For many years, rural GPs have been providing emergency medical care directly or via the Southdoc out of hours service. They can be called to a scene of an accident by An Garda Síochána after the ambulance service and may arrive first. GPs have a valuable contribution to make to pre-hospital emergency care, particularly in the rural setting. If APs can communicate in real time with GPs individually or via Southdoc, this opens up the possibility of dealing with minor injuries in co-operation with primary care services without having to refer all call outs to a hospital Emergency Department. This ability to discharge minor cases at or close to scene, while in contact with a medical practitioner, with an appointment for follow up care if appropriate, could potentially relieve pressure from the regional Emergency Department, particularly in the period from 8.00pm to 8.00am, and would build a more flexible pre-hospital emergency response capacity.

[34] *Most consultants have a casemix that includes complex (requiring inputs from a number of specialist services) and less complex work and includes cancer and non cancer cases.*

9.2.2 Primary Care, Referral and Communication Pathways

In Cork and Kerry in 2009, there were over 90,000 GP referrals. A good GP referral system is a key element in a proper functioning hospital network. GP referral must be part of a broader system of patient pathway management which includes evidence-based process design, referral facilitation, booking and access guidelines, patient tracking, management and navigation. An Electronic Referral System (ERS) is a single component of this broader system. NHS Scotland introduced a patient pathway management system in 2008. This provides a valuable benchmark and context for developing an ERS for Cork and Kerry that could become a pilot for a national ERS for Ireland. Nationally, work on cancer referrals is taking place within the National Cancer Control Programme.

Table 9-1 Pre Hospital Care

9.2	Recommendations on:		
.1	**Ambulance Service**	.1	24/7 Advanced Paramedic (AP) teams for west Cork and north Cork should be operational by the second half of 2011. Audit and review should determine the further roll out of AP teams in Cork city and Kerry.
		.2	Intermediate Care Vehicles (ICVs) should be commissioned in west Cork and north Cork by the second half of 2011.
		.3	New AP teams should pilot new communication protocols with hospitals, individual GPs and Southdoc.
		.4	The GP role in provision of emergency care should be recognised, supported and developed.
.2	**Primary Care communication and referral pathways**	.1	An Electronic GP Referral System should be developed - co-ordinated with national policy - as a fundamental enabler to reconfiguration of acute services in Cork and Kerry.
		.2	A GP liaison group to promote liaison with the acute hospital network should be established, to include representation from the GP training unit, the academic department of general practice at UCC, the IMO, ICGP and Southdoc.

RATIONALE

Communication between acute and continuing care and primary and community care is a critical factor in a unified health system and of fundamental importance to patient care. Many complex cases will need ongoing monitoring, communication and planning across acute and community services if they are to be successfully and safely maintained in their local communities. Communication needs to operate directly between frontline professionals as well as 'up the line'.

Software must be user friendly. Information should be inputted once and once only. The Primary Care Team and/or the local community hospital should be kept informed of patient progress while in acute care so that arrangements for rehabilitation and step down care may be made *prior to* discharge. If home support is more appropriate, early communication will give the PCT time to organise it. The permutations of clinical decisions at the points of admission and discharge from acute care are endless. However, from the administrative perspective, the GP referral letter and the hospital discharge letter record the critical clinical information and the administration surrounding them forms a 'communication duel

carriageway' between community and hospital. Underscoring both is the need for a single and unique health identifier for each patient. These issues are dealt with later in this report.

The current system is often characterized by lack of uniformity in current referral data, lack of feedback on individual referrals, lack of pertinent data to assist the GP when making the referral, significant time variation in processing and acknowledging referrals, inefficiencies and risks in manually transferring patient data from primary care to hospital systems and lack of real time information. GPs work with different systems and practices. Some have developed excellent interfaces with hospitals while others do not have adequate clerical systems to proactively manage the interface. It is now possible to employ software that will allow a hospital system to interface with different GP systems via the Web. An ERS must include the following essential attributes:

- It must deliver effective two-way electronic communications between primary and acute hospital care with the flexibility to manage and report on all referrals within the system from inception until a first treatment result is entered;
- It must be integrated with GP software systems from the outset. All referral receiving administrative personnel should access the ERS directly through the Web interface;
- The system must be user friendly;
- The system should be designed to allow for referral to specialist services as well as referrals where the diagnosis is uncertain;
- It should be designed to allow referrals by GPs and/or hospital geriatricians to community hospitals for respite, rehabilitation or long term care, and
- It must be co-ordinated with national developments.

GP liaison with the acute hospital network needs to be placed on a formal footing so that we have a structure not just for implementing changes to the way primary care relates to secondary and tertiary care but for monitoring and guiding the development of a deeper relationship between GPs and hospital doctors. A liaison group should be established, to include representation from the GP training unit, the academic department of general practice at UCC, the IMO, ICGP and Southdoc. Over time this group would work to develop understanding and communication across a broad front.

9.3 DIAGNOSTICS

9.3.1 Diagnostics Directorate

Services falling within a Diagnostics Directorate include clinical biochemistry, clinical microbiology, haematology / blood transfusion science, immunology, histopathology and radiology (diagnostic imaging). A Regional Diagnostics Directorate (accredited or licensed) will provide strong clinical governance and leadership using common diagnostic protocols emphasising patient safety. Clinical audit, with corrective and preventive actions delivered by professionally registered staff, with optimum skill mix deployed with maximum flexibility, will be key elements. Others will include optimal use of laboratory estate, a robust logistics system for specimen transport, an IT system to handle patient requests, reports and data storage, and a regional out-of-hours on-call laboratory medicine service, staffed from within the current laboratories.

Table 9-2: Diagnostics Directorate

9.3	Recommendations on:		
.1	**Diagnostics Directorate**	.1	There should be a single regional clinical directorate for diagnostics (imaging and laboratory medicine led by a regional clinical director)

9.3.2 Laboratory Medicine

Hot Laboratory Services are emergency or urgent requests generally requiring a quick turnaround time of one to three hours.

Cold Laboratory Services are less urgent requests requiring a turnaround time of days to weeks. These can include routine requests and specialist referral requests. Not all GP requests are "cold test requests". Many can be of an urgent nature requiring specialist consultant interpretation and a fast response.

Point of Care Testing (POCT): POCT testing is carried out close to the patient by appropriately trained non-laboratory staff. It includes patient self-testing and self-care. It is more expensive on a cost per test basis but can be justified in circumstance where volumes are small and a very fast turnaround time is a clinical necessity. It needs strong clinical governance to deliver patient safety and appropriate quality assurance. National guidelines exist outlining appropriate use of POCT[35]. Functioning laboratories exist in all six hospitals, providing hot and/or cold analytical services for their hospital patients and for the community through GP referrals. The cost of in-house hospital tests for insured patients is met by their insurers but the cost of cold testing for all patients, public and private, is met by the hospital providing the service. This is anomalous and adds greatly to hospital laboratory costs. Work is carried out over a 9 – 5 day with on-call teams providing cover outside these hours. There is much potential for reorganising on-call arrangements on a regional basis. In recent years there has been a trend to transfer high volume work from the smaller laboratories to CUH but without a corresponding transfer of resource. This is significant because although analytical instrumentation can now process samples extremely rapidly, each sample requires the same amount of pre-analytical and post-analytical care in terms of process and the same standards of quality must apply throughout if a laboratory is to retain professional accreditation and HIQA licencing. Laboratories must provide consistent levels of accuracy and high turnover times if they are to operate successfully in the current clinical environment. This needs to be

[35] Guidelines for Safe and Effective Management and Use of Point of Care Testing - Academy of Medical Laboratory Science, Association of Clinical Biochemists in Ireland, Irish Medicines Board and RCPI Faculty of Pathology, 2007

addressed through more flexible deployment of staff and introduction of the extended working day concept.

Histopathology[36] Services at CUH are currently delivered by a team of clinical and academic consultants. Histopathology services are currently being consolidated at CUH. This will involve some leveraging of existing appointments within the system. When this is complete there will be an effective regional service delivered by 16 WTE consultant pathologists reporting on general surgical pathology, breast pathology, perinatal pathology and cytopathology.

9.3.3 Infection Control

An integrated health system for Cork and Kerry should ensure its individual hospital programmes of infection control are harmonised to the highest level, according to the HSE strategy "Say No to Infection" (2007)[37] which set the following targets:

- Reduce all healthcare-associated infections by 20% within five years;
- Reduce MRSA infections by 30% within five years;
- Reduce antibiotic consumption by 20% within five years.

Progress towards these and subsequent targets should be included in a range of corporate improvement targets within an integrated system.

Table 9-3: Laboratory Medicine and Infection Control

9.3	Recommendations on:		
.2	**Laboratory Medicine** (Clinical Biochemistry Clinical Microbiology Haematology Histopathology Immunology) [Refer: National Cancer Control Programme]	.1	There should be a single regional department of laboratory medicine with a named clinical lead
		.2	Laboratory medicine should be consolidated in CUH thus providing the option for a competitive bid for cold laboratory services.
		.3	A blood transfusion service for Munster should be built on a suitable site at CUH.
		.4	Laboratory infrastructure at MUH should be adapted to provide a regional specialist laboratory service.
		.5	Consolidation of the new regional laboratory service should be fully accredited and benchmarked against international best practice protocols and work practices.
		.6	Laboratory services in each hospital, including the option of POCT, should be tailored to the clinical demands of that particular hospital
		.7	KGH should retain laboratory services required to support its acute services
		.8	All histopathology services in Cork city and county should be consolidated in CUH by Quarter 2, 2011.

[36] *Clinical reporting is carried out by consultant histopathologists, working with medical scientists responsible for preparation and preservation of specimens. The highest standards of accuracy are required as the consequences of misdiagnosis can be far reaching. For this reason, good process, regulation and audit are essential and measures such as double reporting and multidisciplinary team meetings constitute best international practice.*

[37] *Say No to Infection: Healthcare-associated infection and Antimicrobial Resistance: a National Strategy" (Healthcare Associated Infection Control Governance Group, HSE, November 2007).*

9.3	Recommendations on:		
	Laboratory Medicine (Clinical Biochemistry Clinical Microbiology Haematology Histopathology Immunology) **/continued**	9.	Co-operation between KGH and BSH Tralee should be encouraged in the interests of delivering the best possible service to the people of Kerry based on a Service Level Agreement (SLA).
		10.	Priority of specimen reporting must be based solely on clear clinical criteria that are regionally consistent.
.3	**Infection Control** [Refer: National Strategy on Infection Control]	.1	Infection control referenced and harmonised to national targets should be a matter of corporate policy across all hospitals in Cork and Kerry.
		.2	The new integrated health system should ensure that HCAI[38] targets are adopted as performance indicators of reconfiguration change and each implementation workstream should review their applicability with the host hospital(s).

RATIONALE

Laboratory Medicine

POCT can provide a hospital or primary care centre with rapid analysis of routine blood and urine samples over an extended day. POCT should be available for hospital patients in BGH, MGH, MUH and SIVUH with equipment maintained and calibrated by medical scientists from CUH. Cold testing should be centralised in CUH with a commensurate transfer of resources to ensure an efficient service to GPs regardless of their location. Hot testing of more complex samples, e.g. full blood analysis, should be centralised at CUH with transport of samples at regular intervals 24/7.

Genetic analysis is now a routine analytical service for certain conditions. It requires specialist scientific expertise. This exists within the pool of medical laboratory scientists in Cork and Kerry but is not exploited to best advantage so that while there is the potential for in house testing of a range of genetic conditions, most is still outsourced to commercial laboratories. There is thus a mismatch between the competencies of staff and the analytical work they are doing. The pilot Haemochromatosis testing service at CUH provides an example of what can be done. The expertise existed, the equipment was provided and a screening process was introduced to avoid unnecessary testing. A preliminary audit has revealed that the cost fell significantly, the accuracy level increased and the service to GPs improved. There is a need to develop a regional site for specialist laboratory services. Priority consideration should be given to MUH for these services provided they can be justified on the basis of a robust business case.

The Haemochromatosis pilot demonstrated the potential for process driven reform and greater clinical involvement in the management of services. The reform agenda should include:

- consolidation of high volume testing at CUH with appropriate transfer of resources;
- development of robust business plans for new services, particularly at the higher end of the spectrum;
- more rigorous attention to defining priority ranking on a regional basis;
- introduction of extended hours working to improve efficiency, particularly in high volume work;
- process analysis using Lean methodologies, and

[38] *Health Care Associated Infection*

- education and training to ensure the service keeps abreast of analytical science and the latest technology.

KGH laboratories must continue to provide haematology, biochemistry and microbiology services to the hospital and community catchment area but with clinical governance and management from CUH. Services at KGH are currently delivered by two consultants and a laboratory team. There are close working relations with the Bon Secours Hospital Tralee which benefit both hospitals. Further scope exists for collaborative working to the benefit of patients and this should be encouraged. At the same time, KGH will benefit from stronger regional protocols and stronger clinical governance through enhanced linkage with CUH.

Consolidation on one site provides an opportunity for new arrangements and work practices to further enhance the pathology service. This will involve consolidation of existing appointments within the system. Processes, protocols and clinical governance will be developed on a regional basis by the Diagnostics Directorate.

The Chair of Pathology at UCC has an important leadership role in unifying the service and informing on international best practice. The successful implementation of changes already in train and the further development of internationally referenced practice will create a southern histopathology service capable of providing a high quality, accreditated service with progressive development of specialist groups of consultant histopathologists working with multi-disciplinary teams and participating in multidisciplinary meetings. Priority of specimen reporting will be based on regional clinical criteria and not on source of specimen.

Infection Control

Infection control policies are already an essential element in management of all hospitals in Cork and Kerry but would benefit from greater co-ordination within an integrated system that would implement national guidelines regionally, provide opportunities for developing common strategies and promote sharing of information and experience.

9.3.4 Radiology

Diagnostic Imaging is currently delivered in the six acute hospitals across Cork and Kerry, as well as at St Finbarr's Hospital and St Mary's Orthopaedic Hospital. The combined output from the radiology departments across the Cork / Kerry region was 378,656 imaging examinations in 2008 for a population of 640,000. A complete range of diagnostic and interventional radiology procedures is provided in the Cork-Kerry hospitals. This work is delivered by 26 consultant radiologists, 11 specialist registrars and 123.5 radiographers with support from nursing staff and medical physicists. Picture Archiving and Communicating Systems (PACS) are installed at three Cork Hospitals (CUH, MUH and SIVUH). No PACS systems yet exist at BGH, KGH or MGH but recently established IT connections between MGH and MUH demonstrate the potential of digital image transfer between hospitals.

Table 9-4 Radiology

	Recommendations on:		
.4	**Radiology** [Refer: National Integrated Medical Imaging System (NIMIS) roll out]	.1	There should be a single regional department of radiology with a named clinical lead.
		.2	A Picture Archiving Computer System (PACS) should be installed at all acute hospitals in the region and all should be linked by a functioning digital transfer system.
		.3	Access to radiological imaging for GPs should be substantially increased.
		.4	Out of hours radiology in BGH and MGH should be supported by the on-call radiology reporting roster in Cork city.

RATIONALE

Radiology is one of the critical diagnostic specialties that underpin the whole health system. The relationship between radiologists, general practitioners and hospital specialists requires strong clinical governance, robust oversight and transparent procedures with complete traceability. This starts with having a regional radiology team and a regional rota with clear lines of accountability. It is a specialty that is technology driven. A fundamental enabler for the improvement of the diagnostic services is the ability to transfer images electronically from place to place and to store these images safely for later retrieval. PACS and digital transfer are essential and should be installed throughout the region as soon as possible. The National Integrated Medical Imaging System (NIMIS) is being rolled out in hospitals throughout the country. Creation of a regional radiology service within a regional diagnostics directorate provides a unique opportunity to utilise the NIMIS initiative to its full potential in Cork and Kerry. Traditionally there has been a tendency for staff appointments to be concentrated on Cork city to the detriment of Kerry and Bantry. This imbalance should be rectified by the prioritising of KGH and BGH for future radiology appointments structured in a way that allows full participation in the regional radiology team.

The specialty already has a Chair of Radiology in UCC who provides leadership in education and research. This post provides a valuable focus for the future development of the specialty in Cork and Kerry and an opportunity for developing research and development contacts with industry.

9.4 MEDICINE

9.4.1 Medicine Directorate

Medical specialties, subspecialties and services that should be considered in one clinical directorate are Acute Medicine (9.4.2 – p.101); Cardiology; Clinical Haematology, Medical Oncology and Radiation Oncology (considered as one grouping); Dermatology; Emergency Medicine; Endocrinology; Gastroenterology; Infectious Diseases; Geriatric Medicine; Neurosciences; Acute Stroke; Palliative Care; Rehabilitation Medicine; Renal Medicine; Respiratory Medicine and Rheumatology. These medical specialties and subspecialties should each have a clinical lead who reports to a regional clinical director with a brief to establish clinical priorities, ensure services are safe, reliable and patient focused and staff are deployed in such a way as to deliver these services with maximum efficiency.

The threshold determining which cases are to be treated at CUH and which cases are to be treated at MUH will require further detailed analysis by each specialty, particularly including the issues of bed capacity, critical care capacity and theatre capacity. The assessment of this will be a central component of reconfiguration detailed implementation planning (Chapter 11 p.171). Thresholds that are agreed within each specialty will apply to all consultants within that specialty. It is particularly important that the critical care capacity at MUH is fully utilised.

As an intermediate step towards developing regional clinical services, every consultant in Cork and Kerry should have admitting rights to all the acute hospitals in the region.

Table 9-5 Medicine Directorate

9.4	Recommendations on:		
.1	**Medicine Directorate**	.1	There should be a single clinical directorate for medicine incorporating all medical specialties, subspecialties and services led by a regional clinical director[39].
		.2	As an intermediate step towards developing regional clinical services, every consultant in Cork and Kerry should have admitting rights to all acute hospitals in the region.

9.4.2 A Regional Department of Acute Medicine

For the AMUs to function effectively, there should be a regional department of acute medicine with a named clinical lead reporting to a regional clinical director for medicine. Regional protocols and procedures will ensure specialist input and support for AMUs is systematised, monitored and audited. For example, the cardiology team must agree with the department of acute medicine detailed referral and response criteria for the transfer of patients from AMUs to the Cardiac Centre at CUH. Similarly other specialties (particularly geriatric medicine) must agree protocols and structures governing their relationship with the department of acute medicine and their support for AMUs. Surgical specialties to be located in SIVUH must continue to have 24 hour medical support (as is currently the situation) In BGH and MGH, the current consultant numbers will need to be augmented to sustain an acute medicine roster in the long term. It will be the responsibility of the regional department of acute medicine to address these and any other inequities in the different AMU rotas over time.

[39] *This grouping excludes mental health which will be organised in a separate clinical directorate.*

Approximately half of all emergency presentations are patients requiring acute medical care. It is not feasible to separate general acute medicine from specialist medicine within consultant resources available to the hospital services. The regional department of acute medicine must include all consultants belonging to an acute medicine rota and put in place the necessary structures, schedules, protocols, processes and clinical governance to support the delivery of general and specialist medical care for the counties of Cork and Kerry.

9.4.3 Acute Medical Units

Acute medical units provide rapid assessment, diagnosis, stabilisation, admission, observation and early treatment which is dictated by clinical need and is not time limited. They are led by a consultant physician supported by medical, nursing, pharmacy and health and social care professional staff. They are best situated close to the ED and typically comprise 10 to 12 beds in open plan, visible at all times to the nursing staff in charge. Each is managed by a consultant physician with a strong interest in general internal medicine who carries sole clinical responsibility. Consultant staffing is provided by means of an acute medicine rota which must dovetail with the specialist rotas of the participating physicians in an equitable manner. Consultants must be protected from all subspecialty commitments, including rooms and outpatients, and must provide a continual presence while on duty.

Table 9-6: Regional Department of Acute Medicine and Acute Medical Units

9.4	Recommendations on:		
.2	**Regional Department of Acute Medicine**	.1	There should be a single regional department of acute medicine with a named clinical lead to manage acute medical units and their interface with specialist hospital medicine.
.3	**Acute Medicine Units** [Refer: National Acute Medicine Programme]	.1	Develop acute medical units in BGH, CUH, KGH, MGH and MUH operated to agreed regional protocols drawn up by the Department of Acute Medicine in consultation with the national Acute Medicine Programme.
		.2	In Cork city there should be acute medicine on-call rotas at CUH and MUH*. SIVUH physicians should contribute to the MUH rota.
		.3	Consultants must be protected from all subspecialty commitments, including rooms and outpatients, and must provide a continual presence while on duty in each AMU in Cork and Kerry
		.4	Cork city AMU rosters will provide out of hours medical cover for SIVUH.

**Priority for new acute medicine consultant appointments*

RATIONALE

The HSE is implementing a national acute medical programme which recognises four categories of hospital in ascending level of complexity for the purposes of determining the scale and purpose and range of medical conditions appropriate to each category. Acute medical units in Cork and Kerry will be developed within this framework. Units will be created at BGH (model 2), CUH (model 4), KGH (model 3), MGH(model 2) and MUH (model 3). Because of its particular location and catchment area, BGH should be classified as a remote rural hospital with particular definitions of selected acute medicine and particular arrangements for critical care as agreed with the national Acute Medicine Programme and the national Critical Care Programme. There will not be an acute medical service in SIVUH. Cork city rosters in CUH and MUH will provide out of hours medical cover for SIVUH. Bed capacity, staffing and hours of opening should relate to demand and patterns of patient

presentation in each hospital. Cardiology, neurology, dermatology, oncology and clinical haematology consultants will not participate in acute medicine rotas. They will however provide an urgent consultation service. Acutely ill patients will be referred directly to the most appropriate AMU by their GP. AMUs are not a replacement for the outpatients department and should not be used by patients with sub-acute presentations or to facilitate management of newly diagnosed chronic diseases.

In CUH, because of its size and activity, the AMU will be supplemented by a medical Short Stay Unit (SSU) where patients can be admitted for short periods for acute treatment and/or observation where the estimated length of stay is less than 48 hours. Any patient requiring inpatient treatment after this limit must be moved into a dedicated inpatient bed. The SSU is not a "Day Ward" which is characterised by planned and scheduled procedures or investigations taking 23 hours or less. The unit in MUH will provide the acute medical service for SIVUH and be supported by consultant physicians at that hospital. MUH should be prioritised as a preferred site for future acute medical appointments.

9.4.4 Cardiology Service

Cardiology services are provided by a team of seven cardiologists and one academic professor with a half time clinical commitment. In addition a consultant cardiologist at Bon Secours Hospital Tralee provides a 30% time commitment to KGH. The consultant team is supported by consultant general physicians working in the smaller hospitals, by GPs in primary care and by dedicated medical and nursing teams in the most of the six hospitals in the region. There are 5.97 WTE cardiac technicians and 10.94 WTE health and social care professionals. There are three cardiovascular public health nurses working in North Lee, South Lee and West Cork. Complex care, predominantly of acute coronary disease, advanced/acute heart failure, advanced valvular heart disease and other complex conditions, is managed in acute hospitals. Prevention and cardiac rehabilitation are begun in the hospital setting and continued largely in the community through the Heart Watch programme. Surveillance and follow-up is managed in both settings, but in a relatively unstructured and variable manner. Patient information is fragmented, specific and isolated to each care environment which impedes delivery of integrated care. A new cardiac centre has been completed at CUH and this will allow acute services to be centralised in a modern up-to-date facility co-located with cardiothoracic surgery.

Table 9-7 Cardiology

9.4	Recommendations on:		
.4	**Cardiology** [Refer: National Acute Coronary Syndrome Programme] [Refer: National Heart Failure Programme]	.1	There should be a single regional department of cardiology with a named clinical lead.
		.2	Complex cardiology services will be consolidated in the cardiac renal centre at CUH.
		.3	Cardiac MRI must be provided in the cardiac renal centre.
		.4	Formally defined service arrangements for acute cardiology should be established at all acute hospitals in Cork and Kerry.
		.5	The cardiology team will provide a structured liaison service at MUH and SIVUH (Appendix IV)
		.6	There is a particular need to enhance cardiology services at KGH.
		.7	A comprehensive education and training programme should be put in place to facilitate provision of as much care locally as possible.

RATIONALE
Complex highly specialised cardiac care is best centralized in a single tertiary centre, providing necessary infrastructure, a critical mass of staff in all relevant subspecialties and disciplines, and the best possible care to patients while delivering economies of scale. The cardiac renal centre at CUH will be the regional centre. This new centre must provide adequate access for angiography, electrophysiology and cardiac MRI.

Many patients with less complex needs can continue to be treated safely in their local hospital according to patient pathways agreed with the cardiology regional team. For many, these hospitals provide timely and safe care close to patients' homes. Cardiologists in the smaller hospitals, and general physicians delivering cardiology care, should all be members of the regional team. Outpatient and ambulatory care requiring hospital input should be managed at general acute hospitals by the cardiology team.

Within Cork city, the cardiology team will provide a structured liaison service to MUH and SIVUH as outlined in Appendix IV. Cardiac illness comprises 25% of general medical acute patients that will present to the AMUs. Cardiology services to AMUs must therefore be structured, reliable and regarded as a primary duty of the cardiology team.

A significant proportion of long term follow-up and chronic disease management, including preventive cardiology, could be delivered in the community from a number of the larger primary care centres. In the interim, a multidisciplinary education and training programme ought to be devised to facilitate delivery of the appropriate level of care in as convenient a location for patients as possible.

9.4.5 Clinical Haematology Service

Adult inpatients are treated in Ward 2D at CUH (5 beds) but frequently overflow inappropriately to other wards in CUH and MUH. This can cause delayed admission for stem cell transplantation and acute leukaemia. Day care services for chemotherapy and a paediatric haematology service are provided at CUH and MUH.

Chemotherapy Day Care facilities in CUH & MUH are shared between clinical haematology & medical oncology. Chemotherapy is delivered in these units by specialist haematology/ oncology nurses. There is also a small dedicated haematology daycare facility at CUH with 1 bed & 1 chair. Procedures such as plasmapheresis, bone marrow and stem cell collections are carried out at this facility.

Coagulation Service: The service also manages an anti-coagulation clinic with 14,000 attendances each year from a small room in the main outpatient department at CUH. Plans are advancing for a comprehensive care haemophilia centre at CUH.

Paediatric Haematology: A paediatric haematology service is available in both CUH and MUH. The majority of the service – both malignant and benign – is provided at MUH where all medical, nursing and health and social care staff are located. All children with haemostatic disorders (both bleeding and thrombotic) are managed in CUH, along with a comprehensive consult service to paediatrics and neonatology. There is a six bedded isolation unit in MUH, providing both inpatient and day care for children with haematological malignancies and solid tumours. The majority of these patients are treated on a shared care model with Our Lady's Children's Hospital, Crumlin, with much of their care and chemotherapy provided in MUH.
The inpatient and day care facilities are dedicated to paediatric haematology. Outpatient, day care and inpatient services are linked, so patients can move seamlessly between the units. This is particularly important in the management of paediatric malignancies where children are treated mainly as day cases but do require admission from time to time. The unit is staffed by

nurses with specialist expertise in paediatric haematology/oncology and there are two dedicated outreach nurses that bring service to patients in the community.

9.4.6 Medical & Radiation Oncology Service

Oncology services comprise a medical oncology and radiation oncology service. Both are based primarily at CUH but are delivered at CUH, MUH, SIVUH and KGH. The medical oncology service is provided by three medical oncologists with commitments in four centres. Outpatient clinics and ambulatory care facilities exist in all centres. Ten 7 day beds are located at CUH and ten 5 day beds are located at MUH. The radiation oncology service is provided by four radiation oncologists based in CUH. The service has access to 10 inpatient beds including one bed for radioactive iodine ablation treatment. Nine outpatient clinics and an additional four review on treatment clinics are held each week.

9.4.7 A Single Regional Department of Clinical Haematology, Medical Oncology and Radiation Oncology

Already there is a large measure of discipline overlap between clinical haematology, medical oncology and radiation oncology and excellent on-the-ground collaboration. All three disciplines should be united in a single regional department of clinical haematology, medical oncology and radiation oncology with a named clinical lead and strong links to PCCC. The department should be located at CUH and as far as possible, inpatient beds and ambulatory care/OPD facilities should be adjacent. This would create economies of scale, enable more efficient use of chemotherapeutic agents, allow joint use of staff and facilities and provide a more joined up service for patients.

Table 9-8 Clinical Haematology, Medical Oncology and Radiation Oncology

9.4	Recommendations on:		
.5 .6 .7	**Clinical Haematology, Medical Oncology, Radiation Oncology – a single regional department** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of clinical haematology, medical oncology and radiation oncology with a named clinical lead.
		.2	All clinical haematology (malignant and non-malignant), medical oncology and radiation oncology services should be consolidated at CUH.
		.3	Ambulatory care facilities incorporating a 24 hour walk-in centre should be expanded at CUH so patients can bypass the ED
		.4	All hospital based warfarin clinics in Cork city should move to a location that optimises accessibility for patients.
		.5	Web based consult services should be provided to BGH, KGH, MGH and PCCC
		.6	Clinical governance must be in accord with the requirements of the National Cancer Control Programme.

RATIONALE

Creation of a single department of clinical haematology, medical oncology and radiation oncology would mean transferring services currently provided at SIVUH and MUH to CUH so the number of beds in ward 2D will need to increase with a further number of beds for less acute clinical haematology patients. Paediatric haematology (both inpatient and day-care) should transfer to CUH from MUH and be situated adjacent to the paediatric unit. Children should have direct access to the paediatric unit without having to pass through the ED. Nurse provided outreach services should be expanded outside Cork city as resources allow. A

structured consult service could be provided to other specialties in BGH, KGH, MGH and MUH. The consolidation of these services at CUH will take place in accordance with the National Cancer Control Programme. This includes clinical governance arrangements and the provision of all patient services.

9.4.8 Dermatology Service

The regional centre for Dermatology is located at SIVUH. Outreach clinics are held at BGH, CUH and KGH. The dermatology service at SIVUH consists of three consultants, one specialist registrar, 1.5 WTE senior house officers, one intern, three nurses and administrative support. The department is responsible for the delivery of service to the Cork/Kerry region but a significant number of referrals also come from Limerick, Tipperary, Waterford and further a field. In combination with a consultant in Waterford Regional Hospital, a service is provided to the whole of HSE South with a population of 1,082,000 (consultant/population ratio of 1/270,000).

Table 9-9 Dermatology

9.4	Recommendations on:		
.8	**Dermatology** [Refer: National Dermatology Programme]	.1	There should be a single regional department of dermatology with a named clinical lead.
		.2	The department should be consolidated at a regional dermatology centre at SIVUH with an additional phototherapy unit.
		.3	Inpatient and paediatric work, including the melanoma service, should be carried out at CUH.
		.4	A paediatric/dermatology OPD should be developed at CUH with a monthly pulse-dye laser clinic
		.5	There should be one dermatology outreach clinic at KGH each week (enabled by reconfiguration of upcoming consultant vacancy)
		.6	Dermatology outreach at BGH should be augmented by development of a CNS role shared with rheumatology to provide an infusion service for west Cork.
		.7	The next dermatology consultant appointment should have structured sessions at MGH.

RATIONALE

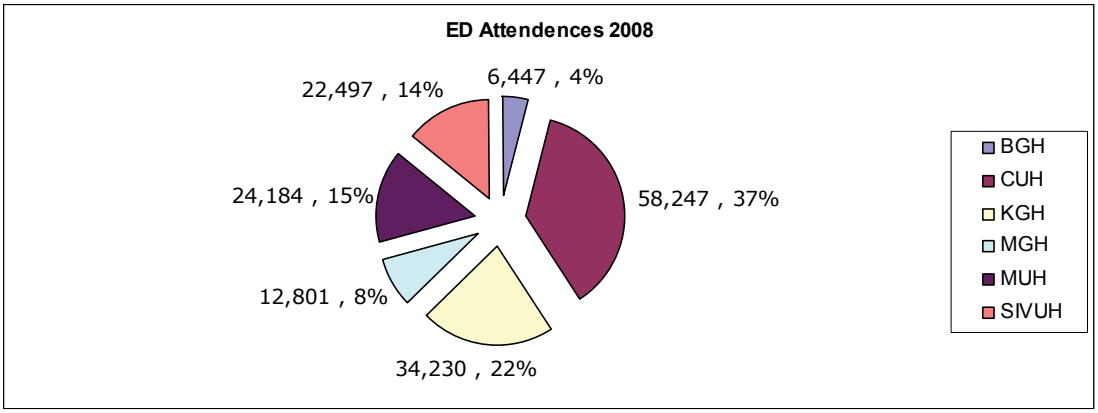
The existing dermatology service at SIVUH is working well and should continue, boosted by a third phototherapy suite, to enhance the services that it currently provides. It will benefit from the co-location of plastic surgery. Most of its services are provided on an outpatient or day surgery basis. Inpatient admissions are rare, most are complex and many are paediatric. All melanoma services should be consolidated at the regional cancer centre in accordance with the National Cancer Control Programme. SIVUH will become a largely surgical hospital so it is appropriate that inpatients are treated in CUH. A shared paediatric/dermatology outpatient department should be established at CUH, having monthly access to pulse-dye laser treatment for port wine stains. This will obviate the need for children having to go to Dublin for treatment as is currently the case. Full integration of paediatric dermatology on the CUH site will also enable the sharing of junior medical staff with paediatrics. There is an upcoming consultant vacancy and this should be structured with one clinic at KGH each fortnight thereby achieving an enhanced weekly service for Kerry. This will reduce the need for Kerry patients to travel to Cork for follow up. The next dermatology consultant appointment should have structured outreach sessions in Mallow. The current dermatology outreach service in Bantry should be augmented by the development of a clinical nurse

specialist (CNS) role, shared with rheumatology, to provide an infusion service for patients in west Cork.

9.4.9 Emergency Medicine

Figure 9-1 shows the distribution across the six hospitals in Cork and Kerry of 158,406 Emergency Department (ED) patient attendances for 2008.

Figure 9-1 Total ED attendances in Cork and Kerry in 2008 (PMU)



BGH: Bantry General Hospital; CUH: Cork University Hospital; KGH: Kerry General Hospital; MGH: Mallow General Hospital; MUH: Mercy University Hospital; SIVUH: South Infirmary Victoria University Hospital.

Problems of overcrowding and long waiting times in the ED can only be addressed by looking at the hospital network as a whole and improving patient flow, into, through and out of hospital.

This can be done by a number of strategies:

(a) An escalation strategy in response to circumstances such as extreme weather conditions. To retain a capacity to respond to the unexpected, escalation is needed when bed occupancy is 90%, not 100% as usually happens, but this will inevitably reduce a hospital's capacity for planned care. When reconfiguring six hospitals, this problem can be ameliorated by taking one or more hospitals out of the emergency system altogether. This is proposed for SIVUH.

(b) A discharge strategy to address delays proactively. In 2009, 500 patients in Cork hospitals experienced delays of up to 6 months because of the lack of suitable secondary care resulting in a loss of 40,000 bed days. These patients all had complex needs but no longer required acute care (Hospital Exit, p.159)

(c) Provision of pre-hospital diagnostics to enhance acute hospital avoidance.

(d) A triage strategy to determine broadly the most appropriate patient pathway at entry, providing emergency medical care for acutely ill medical patients, emergency medical and surgical care for trauma patients and wound care and splinting for minor injuries patients.

(e) Separation of emergency paediatric care for infants and children (between 10% and 20% of ED patients are in this category) from the adult ED. Paediatric emergency care should be provided by a consultant in emergency medicine with a special interest in paediatrics in a special area distinct from the adult ED.

There is a further requirement before hospital trolleys become a thing of the past in our Emergency Departments. There must be a corporate policy not to permit the use of trolleys in the ED for patients awaiting admission. A "no trolleys" policy plus co-ordinated action on Acute Medicine Units, Urgent Care Centres and effective discharge planning are all required if we are to seriously address the ED issue.

Urgent Care Centres

Minor injuries comprise typically around 40% to 50% and sometimes as high as 70% of patients who present to the ED. Three quarters will present between 8.00am and 8.00pm and can be successfully managed in urgent care centres, run and managed by suitably trained nursing and health and social care profession staff under medical supervision. The more difficult challenge lies in managing such patients out of hours. Currently this task falls to the ambulance service which is obliged to carry such patients to the nearest ED (which can be a wasteful use of the ambulance and the ED) and the Southdoc out of hours GP service. Many GPs, particularly in rural areas, have an expertise and commitment to emergency care which should be recognised, supported and extended into treating locally what can safely be treated locally and helping to avoid inappropriate transport of patients at night over long distances by ambulance and unnecessary referral out of hours to the ED in Cork city for treatment of a minor injury. GPs also have the broad diagnostic expertise to be able to recognise a minor injury that may have more serious consequences e.g. a diabetic patient or a patient on warfarin, and refer to the ED (see also: The Ambulance Service, p.93). The treatment capacity for urgent care currently provided by SIVUH must not be lost to the city. The recent Mater/Smithfield Urgent Care development provides a worthwhile model for possibly transferring this capacity to an urgent care centre at SMOH.

Table 9-10: Emergency Medicine

9.4	Recommendations on:		
.9	**Emergency Medicine** [Refer: National Emergency Medicine Programme]	.1	There should be a single regional department of emergency medicine with a named clinical lead.
		.2	Continue the 24/7 ED at CUH and KGH, (with new build at KGH). Maintain 14/7 ED at MUH.
		.3	Develop inter-hospital transfer and co-ordinated bed management in Cork City.
		.4	Develop Urgent Care Centres (UCCs) at BGH, CUH, KGH, MGH and MUH.
		.5	Introduce a rigorous, and regional, "no trolleys" policy following the introduction of AMUs and UCCs.
		.6	A consultant in Emergency Medicine with a special interest in Paediatrics should be appointed at CUH

RATIONALE

Recommendations on Emergency Medicine are based on the Emergency Services Review published in November 2009, available on the HSE website, and to which the reader is referred for further detail on emergency services within the overall reconfiguration roadmap. Equally important is the introduction of urgent care centres, AP teams, co-ordinated bed management, remote radiology reporting and all the other recommendations of the Emergency Services Review. All moves to implement these changes will need careful and deliberate implementation planning so that the existing integrity of the emergency response of our hospitals is maintained on an upward path as these changes take place.

9.4.10 Endocrinology Service

Hospital endocrinology services are currently configured over the six sites; three sites have a consultant endocrinologist presence (CUH, KGH, SIVUH) and three sites are without a consultant endocrinologist presence (BGH, MGH, MUH). In general, structures for endocrinology parallel those for diabetes.

In sites with a consultant endocrinologist presence, there are multidisciplinary teams who deal with acute emergencies and presentations, specialist investigation and therapy, outpatient clinics and day centres and essential support of other medical, surgical and obstetric services. Specialist clinics provide appropriate specialized care in addition to the more general aspects of diabetes and endocrinology practice and there are close two way interactions with other specialists. In hospitals without a consultant endocrinologist presence, some of the same structures are in place e.g. diabetes clinics run by general physicians. These provide vital additional capacity in the provision of diabetes and endocrine services. They are not resourced to provide comprehensive diabetes or endocrinology care. Outpatient diabetes services are significantly enhanced by a GP led initiative called the "Diabetes Interest Group" which provides a forum for best practice in the management of many aspects of the care of diabetes mellitus.

Many features of a regional service are already in place. Specialist services are located in centres with close access to specialist diagnostic testing. Due to the complex nature of diabetic and endocrine disease, there are close relationships with other speciality services. A regional academic network meets on a regular basis throughout the academic year. Links between primary care and hospital care are improving and will improve further through the work of the Diabetes Services Implementation Group.

Table 9-11 Endocrinology

9.4	Recommendations on:		
.10	**Endocrinology** [Refer: National Diabetes Programme]	.1	There should be a single regional department of endocrinology with a named clinical lead.
		.2	Diabetic day care services, ambulatory and outpatient endocrinology should be consolidated at SIVUH.
		.3	Diabetic services required for inpatients should continue at CUH.
		.4	Priority should be given to the appointment of an additional consultant endocrinologist with specific responsibility for the co-ordination of diabetic services in primary care and the community. This consultant should work closely with the Diabetic Interest Group to develop services in a structured manner.
		.5	Endocrinology consultants should participate in AMU acute medicine on-call rotas at CUH, KGH and MUH
		.6	Endocrinology consultants participating in the AMU on call roster in MUH will admit their specialist patients to MUH

RATIONALE

The vision for diabetes care has recently been articulated by the Diabetes Expert Advisory Group Report (2008) in respect of both hospital and primary care. This vision proposes integrated care with primary care centres, local hospital networks and a regional centre. Much of diabetes care can be provided on an ambulatory/day care basis. Within the concept of regional services being provided in Cork city rather than necessarily all at the Wilton campus, it is proposed that the day care diabetic centre at SIVUH should be developed as a full ambulatory/day care centre for the treatment of diabetes mellitus.

There needs to be excellent liaison between and within all levels of care for this specialty so that routine care can be provided over the long term as close as possible to patients' homes. Adequate resourcing of primary care will lead to a reduced need for hospital based services.

9.4.11 Gastroenterology Service

Gastroenterology services exist to a greater or lesser extent in all six hospitals in the region. There are only 3.8 WTE gastroenterologists in HSE South. UCC provides two academic clinicians who together provide 0.8 of the clinical WTEs.

MUH has one gastroenterologist who works with two functional endoscopy suites to provide daily diagnostic and regional therapeutic day case GI endoscopy. A regional endoscopy ultrasound service is provided for staging/biopsy of GI cancers. The service contributes to a one in 4/5 general internal medicine rota and provides two GI and general medicine outpatient clinics per week. There is also an extensive teaching and research programme in place.

CUH has 2.8 WTE gastroenterologists, including two academics with clinical commitments of 0.4, through which it delivers a regional gastroenterology service taking tertiary IBD and hepatology referrals from within and without the counties of Cork and Kerry (Limerick, Clare, Waterford and parts of Tipperary). The service provides diagnostics, screening and therapeutics of GI and liver cancers. Between 15 and 20 consults per week are provided to other divisions within the hospital. Clinics are carried out in a purpose built building which includes one functional endoscopy room. A comprehensive hepatology service takes referrals from a similarly wide area and is one of the 8 designated national centres for hepatitis C.

SIVUH Endoscopies are carried out by the general surgeons in the day medical unit theatre or the general operating theatre as required.

BGH A consultant general physician carries out gastroscopies and colonoscopies two days per week in a single room endoscopy suite. Patients come from the West Cork and South Kerry Region.

KGH There is a self contained endoscopy suite in the outpatients department which is utilised by three general surgeons and two physicians. The unit provides a five day service for patients requiring endoscopy procedures and breath tests.

MGH The medical gastroenterology service is provided by a general physician with an interest in gastroenterology. Two OPD clinics a week cover general medicine and gastroenterology. The endoscopy room is a side room of the operating theatre and is staffed by theatre nurses. Scoping occurs twice a week, limited to 12 day cases a week because of the size of the day ward. Two general surgeons carry out the majority of the endoscopes performed.

Table 9-12 Gastroenterology

9.4	Recommendations on:		
.11	**Gastroenterology**	.1	There should be a single regional department of gastroenterology with a named clinical lead.
		.2	A regional diagnostic centre for outpatients and ambulatory gastroenterology patients should be established under MUH governance and should include colorectal screening.
		.3	In the medium term, the gastroenterology regional department should provide endoscopy services to a targeted number of primary care centres.
		.4	There is a particular need to enhance gastroenterology services in KGH, including colonoscopy screening.
		.5	Gastroenterology consultants should participate in AMU acute medicine on-call rotas at CUH and MUH
		.6	Hepatology/hepatitis C services should remain at CUH.

RATIONALE

Gastroenterology is a key specialty within internal medicine but is seriously under-resourced in the HSE South region. For this reason, it is vital that the service is configured regionally in the most efficient way possible so that it is best placed to benefit from additional resources when these do begin to flow.

Because endoscopy is such a widely used investigative technique, a regional diagnostic centre for outpatients and ambulatory patients should be developed under MUH management where the following services would be provided/developed:

- Rapid access diagnostic endoscopy service
- Upper GI / Hepatobiliary / Pancreatic neoplasms assessment
- Coeliac disease service
- A regional open access H.pylori breath testing service
- A regional direct access daily therapeutic endoscopy (ERCP / EUS / EMR / RFA / Stenting) service
- A regional colorectal screening service

The endoscopy unit as CUH should continue to provide inpatient services and consult services to subspecialties.

KGH should develop a colonoscopy screening capability.

9.4.12 Infectious Diseases Medicine Service

Infections Diseases Service: This service offers a tertiary referral service at CUH for HIV, chronic hepatitis B and complicated infectious diseases. It provides an inpatient and hospital based consultant service for Cork city which runs two weekly OPD clinics. It provides one monthly combined ante-natal clinic and a monthly outreach paediatric clinic in CUMH. The service is delivered by one consultant, one specialist registrar, one senior house officer, one intern and two clinical nurse specialists. The use and control of antibiotics and the build up of antibiotic resistance is an ongoing challenge that requires a strategic response.

Genito-Urinary Medicine /Sexually Transmitted Infection Service (GUM /STI): This service has been based in SIVUH since 1984 and was subsequently expanded in 1997 with the appointment of an infectious diseases medicine consultant. It delivers a service offering screening, diagnosis and treatment of sexually transmitted infections. It runs five clinics per week plus an early morning nurse led clinic. The clinic runs on an appointment system with a 90% self referral rate and 10 % GP referral rate. In a typical week, the clinic has a total of 120 new patients, 120 returning patients and 40 patients who attend the nurse led clinic. The service is delivered by three doctors, four nurses, two health advisors (one of whom is a CNS), one CNM 2 and one medical scientist. It also runs a vaccination programme, cervical screening service, an outreach education programme, a telephone query line and 2 satellite clinics under the governance of the infectious diseases medicine consultant. One satellite clinic runs in KGH every Friday, led by a doctor and a health advisor, and the second is a Youth Health Service (YHS) based in Shandon Street, Cork. This clinic runs every Friday (ages 17- 21yrs only) and is led by a doctor, a nurse and a health advisor. Other support services available at this clinic include family planning, crisis pregnancy advice and addiction counselling.

Table 9-13 Infectious Diseases Medicine

9.4	Recommendations on:		
.12	**Infectious Diseases Medicine**	.1	There should be a single regional department of infectious diseases medicine with a named clinical lead.
		.2	Infectious diseases services should be provided at CUH and MUH with the sexually transmitted diseases unit remaining at SIVUH.
		.3	Infectious diseases medicine consultants should participate in AMU acute medicine on-call rotas at CUH and MUH
		.4	Regional outreach clinics should be developed, in collaboration with PCCC, targeted at vulnerable groups, with strong educational and health promotion input.
		.5	The soon to be appointed second consultant should take on a regional antibiotic stewardship responsibility

RATIONALE

The existing infectious diseases service is based at CUH where it provides critical support to other specialties. There is strong demand for the STI service and it is appropriate that it continues to be located at the SIVUH. There is an urgent need for a second ID consultant to sustain a viable ongoing service. This appointment should take responsibility for in-patient services at MUH. There is a need for stronger community outreach for vulnerable populations, demonstrated by the success of the Youth Health Service for 17 to 21 year olds.

An outreach service must combine treatment with health education. Current resources of the ID service will not of themselves provide this outreach so there needs to be agreement with PCCC on a strategy and programme to promote sexual health regionally. The service must have strong regional clinical governance that will bring both nurse led and consultant led services under a single clinical leader responsible for the service as a whole.

9.4.13 Geriatric Medicine Service

The geriatric medicine service provides acute medical inpatient and outpatient services in each of the six acute hospitals in Cork and Kerry. Each of the eight consultant physicians in geriatric medicine has developed links with the local community hospitals. Specialised rehabilitation wards for older people are available in St Finbarr's Hospital, SIVUH and BGH. In most of the acute hospitals multidisciplinary teams dedicated to the care of older individuals have developed in recent years. A large variety of health and social care services is provided by PCCC to older people in the community with varying amounts of multidisciplinary team backup and varying integration with hospital departments of geriatric medicine. UCC has recently obtained funding for a professor and senior lecturer in gerontology which will provide an academic framework for the development of the specialty. This development should centre on the establishment of an Institute of Ageing and Health to bring clinical, academic and research agendas together across all disciplines.

Table 9-14: Geriatric Medicine

9.4	Recommendations on:		
.13	**Geriatric Medicine** [Refer: National Care of the Elderly Programme]	.1	There should be a single regional department of geriatric medicine with a named clinical lead.
		.2	Ambulatory care units for the elderly should the established in Cork city, Mallow, KGH and BGH
		.3	Outpatient services and rehabilitation services for elderly patients in Cork city should be concentrated on the St. Finbarr's Hospital campus.
		.4	Geriatric medicine consultants should participate in AMU acute medicine on-call rotas at BGH, CUH, KGH, MGH and MUH.
		.5	An ortho-geriatrician appointment should be prioritised.
		.6	The consultant team should exercise formal clinical governance over the community hospitals and provide support for medical and nursing teams through regular visits.
		.7	The newly appointed academic consultants at UCC should provide academic leadership for development of the specialty through the establishment of an Institute for Ageing and Health.
		.8	Jointly agreed clinical care pathway should be developed between orthopaedics and geriatric medicine (Table 9-33 p.147).

RATIONALE

A comprehensive geriatric medicine service will provide an acute service, a rehabilitation service, an ambulatory care service; a community based continuing care service and a framework for academic development in education, training and research.

A consultant led geriatric medicine service should exist in all hospitals admitting elderly patients. A consult service should be available to SIVUH. The geriatric service should be led by a regional clinical head responsible for the provision of a fully co-ordinated service for older people. The regional team should have formal clinical governance over the 20 community hospitals in the region. Local policies and procedures and appropriate referral pathways should be agreed between general practitioners and the hospitals. Care pathways could make use of the potential for GPs to manage patients with specific conditions in community hospitals. An acute stroke unit should be developed at CUH (see also Neurosciences Service p.114). BGH and KGH should also develop acute stroke capacity. Thrombolysis should be available at all three sites. Provision of 24-hour radiological services at BGH and KGH can be provided by centralisation of CT brain scan reporting via electronic transfer to CUH with radiological interpretation being provided by the consultant on-call. A jointly agreed clinical care pathway should be developed between orthopaedics and geriatric medicine and elderly patients who present with a fragility fracture should be admitted under the care of a consultant geriatrician and a consultant orthopaedic surgeon. Tight discharge policies need to be developed at all six acute sites with input from supported early discharge teams (see also Hospital Exit p.159). Consultant geriatricians will be important contributors to the acute medicine rotas and ED departments at CUH and MUH. There is significant potential for GPs to provide care in community hospitals with enhanced nursing roles under a regional care pathway.

Academic development should centre on the establishment of an Institute of Ageing and Health to bring clinical, academic and research agendas together across all disciplines. The newly appointed professor and senior lecturer in gerontology at UCC should provide academic leadership for the integrated development of geriatric medicine services across the region, including education and training for the multidisciplinary team in line with the best clinical standards and multidisciplinary research into the health needs of older people. Development of the role of clinical nurse specialists would expand the reach of the service in hospitals and in the community. There is also a requirement to up-skill existing nurses in community hospitals and in general community services to provide a broader range of skills that would assist in reducing admissions to acute units.

9.4.14 Neuroscience Service (including Neurosurgery)

Cork is the only neuroscience centre outside Dublin. Most elements of the service accept referrals from Munster and parts of Leinster and Connacht and most of the service is delivered in CUH where there is a large multidisciplinary unit with neurology, neurosurgery, neuropathology, neurophysiology, neuroradiology, paediatric neurology, neuro-ENT, GP run migraine services, specialist nursing, physiotherapy and occupational therapy. There is also a full time neurologist based in MUH and a neurophysiology service of two consultant sessions. Neurology clinics and consult services are provided in BGH and KGH.

CUH - Theatre 3, Neurosurgery

There were 1,341 neurosurgical procedures in theatre 3 in 2008. Almost one fifth of those were recorded as emergency procedures. On average there were 89 (range 77 - 100) elective procedures and 23 (range 15-28) emergency procedures each month (Figure 9-2).

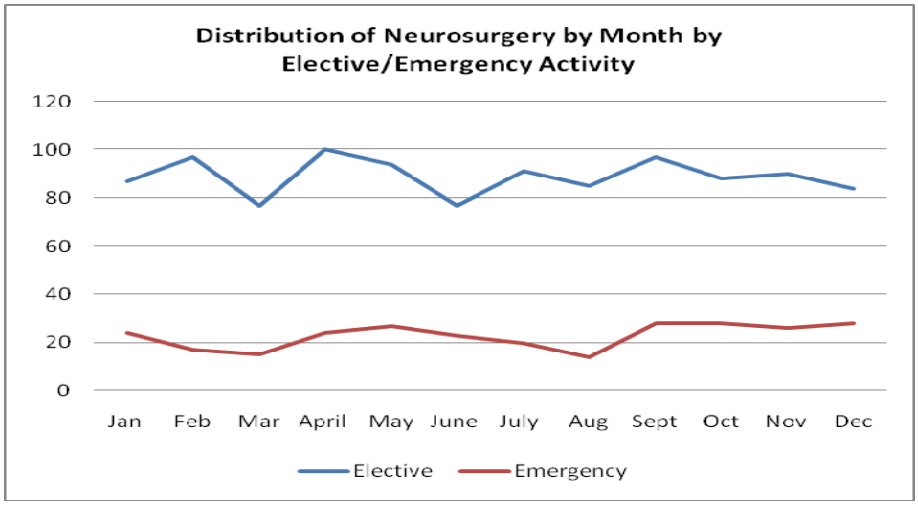


Figure 9-2 Elective and Emergency Neurosurgery activity 2008

Table 9-15 Neurosciences

9.4	Recommendations on:		
.14	**Neurosciences** (Neurology, Neurosurgery, Neuropathology, Neurophysiology, Neuroradiology, Neuro-rehabilitation Paediatric Neurology, Neuro-ENT, Clinical Neuropsycology) [Refer: National Epilepsy Programme]	.1	There should be a single regional department of neurosciences with a named clinical lead.
		.2	The regional department should prioritise discussions with UCC to formally establish an academic chair of neurosciences with the specific task of developing a clinical institute of neurosciences.
		.3	Inpatient neurology services should be consolidated at CUH but outpatient neurology in Cork city should be provided at a location that optimises accessibility for patients.
		.4	There should be a regional epilepsy service in line with the Directorate for Quality and Clinical Care (QCC) national programme for this condition.
		.5	Formally defined service arrangements for acute neurology should be established at all acute hospitals in Cork and Kerry. This is particularly important for the AMU in MUH.
		.6	Nurse/therapist led community clinics should be developed for chronic disease management under clinical governance of the regional centre.
		.7	Outreach clinics should be developed at BGH, KGH and MGH for minor neurological conditions and initial assessment of patients with more serious conditions.
.14	**Acute Stroke Unit** [Refer: National Stroke Programme]	.8	A regional acute stroke unit should be developed at CUH.
		.9	There should be a named lead clinician responsible for regional clinical governance of stroke care including the implementation of national standards.
		.10	Regional protocols must be developed and agreed with BGH, KGH and MGH for the future management of stroke patients.

RATIONALE
Neurosciences, incorporating neurology, neurosurgery and other supporting subspecialties, is already a tertiary centre at CUH so it is a question of how it can best be developed and how it should provide a regional service responsive to local need. It is a designated cancer centre for neurosurgery linked to Beaumont Hospital, Dublin.

A regional centre for epilepsy should be developed in line with the QCC national programme for this condition. There is a major issue about the development of stroke services and associated rehabilitation for stroke and acquired brain injury (ABI). The correct response to these needs, taking account of current financial constraints, is the creation of an acute stroke unit at CUH co-located with the current neurosciences tertiary centre. The development of stroke and ABI rehabilitation is best done on separate sites, referral to which should be as a result of a considered multidisciplinary team decision based on the capacity for recovery in each patient.

Outreach clinics should handle minor neurological conditions and initial assessment that may subsequently lead to inpatient admission or outpatient treatment at CUH.

Chronic neurological disease management[40] should be co-ordinated from the acute department in CUH. It should be provided by clinical nurse specialists and/or therapist led clinics at the smaller hospitals or in primary care centres (see also Rehabilitation Medicine Service p.118). Such clinics should have direct access to consultants and function as a triage point from GPs and the community. Care pathways currently being developed by the national Quality and Clinical Care directorate should be implemented.

The interdisciplinary nature of this clinical area, and the rapid advances being made in neuroanatomy and neurophysiology, suggest potential for academic development led by a chair in neurosciences tasked with developing a clinical institute for neurosciences.

9.4.15 Palliative Care Service

Marymount Hospice, Cork city, is the hospice of St Patrick's Hospital/Marymount Hospice. Staffed by a multidisciplinary team led by two consultants in palliative medicine, it supports:

- 24 bed inpatient unit (427 admissions in 2008)[41],
- A community service in Cork city and county (825 referrals);
- An acute hospital service in CUH (762 referrals), MUH (737 referrals), and SIVUH (585 referrals),
- Day care services delivered in Marymount Hospice (832 patient visits),
- Consultant-delivered outpatient services, available on request in Marymount Hospice, CUH, MUH and SIVUH,
- Education centre in Marymount Hospice,
- Consult services.

KGH has a palliative care unit. Staffed by an interdisciplinary team led by one consultant in palliative medicine, it supports:

- A community service in Kerry (318 referrals);
- An acute hospital service in KGH (286 referrals) and BGH (131 referrals);
- Day care services delivered in the specialist palliative care department (1,108 patient visits);
- Consultant-delivered outpatient services in KGH (741attendances) and BGH (48 attendances);
- Consult services.

[40] National Service Framework for long-term (neurological) conditions. UK DoH (2005)
[41] All data in this section is based on 2008 records.

Specialist palliative care services are supported by a network of 29 intermediate care beds in the community hospitals and one bed in a nursing home funded by the local hospice committee, supported as necessary by the community specialist palliative care services.

The palliative care team in Cork and Kerry is provided by three consultants in palliative medicine, supported by a medical team of eight non-consultant hospital doctors and a multidisciplinary palliative care team of nurses, physiotherapists, social workers, a pharmacist and pastoral care workers.

Table 9-16 Palliative Care

9.4	Recommendations on:		
.15	**Palliative Care** [Refer: National Palliative Care Programme]	.1	There should be a single regional department of palliative care with a named clinical lead.
		.2	Within the next six months there should be a comprehensive review – in the context of the implementation of this roadmap – of palliative care services in Cork and Kerry by St Patrick's Hospital/Marymount Hospice and the HSE that would include issues of location, management, funding mechanisms, clinical governance and service level agreements.
		.3	The resources currently being utilised for palliative care in KGH should be reconfigured to staff a new palliative care inpatient facility (for which there is philanthropic funding available).
		.4	Educational programmes to raise awareness and increase appropriate referrals should continue to be developed.
		.5	The specialty should be included in IT patient information systems upgrades

RATIONALE

Palliative care services are designed to ensure that patients may access the level of care and expertise that is appropriate to their needs at any point in time. Care needs to be available in all care settings, (hospital, hospice or home) on a 24/7 basis. Services must be integrated so that patients may move easily from one care setting to another depending on their clinical needs and personal choices. Palliative care is not exclusively defined by 'end of life care'. It is often appropriate to access specialist palliative care for pain and symptom management at an earlier point in the disease trajectory.

Specialist palliative care services for the region are coordinated from Marymount Hospice where a new 44 bed unit is currently under construction on a new site in Cork city which replaces the existing 24 bed facility. A new 15 bed facility is awaiting development at KGH. Both units will provide specialist inpatient care to patients and families with complex needs. In addition to inpatient care, both units will provide community based services in collaboration with community based colleagues as well as outpatient services and day care facilities. Each acute general hospital in the region will have defined specialist palliative care input, in line with the recommendations of the report of the NACPC[42], 2001.

Both units will have an important role in the development and delivery of education programmes for students and health care professionals in the region and beyond. Continued

[42] National Advisory Committee on Palliative Care report 2001

engagement in research and audit activity will help create a vibrant learning culture. Recent publication of a national audit of end-of-life care in Ireland and quality standards for end-of-life care in Irish hospitals provide a comprehensive picture of current end-of-life services, a direction for improvement and a clear set of standards to guide that improvement[43].

Although geographically separate, the two units should function as a single, integrated service. Within six months of the launch of this roadmap, and in the context of its implementation, there should be a comprehensive and joint review of Palliative Care services in Cork and Kerry by St Patrick's Hospital/Marymount Hospice and the HSE, that would include issues of location, management, funding mechanisms, clinical governance and service level agreements.

9.4.16 Rehabilitation Medicine Service

Rehabilitation is currently delivered through acute hospitals, primary care teams and non-statutory specialist providers funded by the HSE. There is currently no consultant led rehabilitation medicine service in Cork or Kerry. The need for such a service has been highlighted in many reports over the past decade[44]. The non-statutory specialist agencies are the main providers of a wide range of services in domiciliary, residential and day centres.

CUH provides acute inpatient rehabilitation for Acquired Brain Injury (ABI) patients on its Neurosurgery and Neurology wards. Physiotherapy, occupational therapy, nursing and speech and language therapy have evolved independently and specialist skills have developed *post hoc*. This mitigates against their effectiveness as cohesive acute specialist rehabilitation teams. Clinical psychology/neuro-clinical psychology is provided by the voluntary sector. Liaison Psychiatry plays a valuable role but there are no dedicated beds to manage the entirely predictable occurrence of a patient with post traumatic brain injury exhibiting challenging behaviour. There is no neuro-psychiatry. Patients are followed up post-discharge as outpatients.

MUH provides some rehabilitation for dysvascular amputees in the region as well as for neurology patients. Inpatient neuro-rehabilitation is limited to a range of diagnoses such as stroke, multiple sclerosis and motor neuron disease and needs clear outcome driven goals. Outpatient rehabilitation is limited by having no occupational therapist and a limited speech and language therapy service. A wound care nurse advises on early intervention for amputees but the psychologist at MUH only takes referrals from the pain management team.

SIVUH provides some inpatient rehabilitation and a follow up outpatient service.

SMOH caters for elective orthopaedic surgery and has some inpatient beds for pain management. Outpatients cover all ages mainly exhibiting musculo-skeletal pathology.

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[43] Quality Standards for End-of-Life Care in Hospitals, C.Twomey, 2010, Hospice Friendly Hospitals Programme; National Audit of EoLC in Hospitals 2008/2009, K McKeown, Hospice Friendly Hospitals Programme

[44] *Development of a Rehabilitation Service in Cork and Kerry, our vision for the future, SHB, March 2003*

Acquired Brain Injury (ABI) Working Group Report to the Regional Co-ordinating Committee on Physical and Sensory Disability, HSE, February 2007

Public private partnership group proposing the development of an Rehabilitation Network for the South and West of Ireland proposing a 60 bed inpatient unit in Cork, March 2000 and February 2008.

BGH[45] has 4 dedicated beds for inpatient rehabilitation of stroke patients of all ages. There is a 16 bed rehabilitation unit for the over 65s. Mental Health teams and clinical psychology are available on site but are not part of the multidisciplinary team. A small number of elderly patients with amputations pass through BGH annually following surgery in Cork.

KGH has an inpatient rehabilitation unit taking stroke patients above the age of 55. Other diagnoses are only considered for those above 65. Younger, predominantly Traumatic Brain Injury (TBI) patients, receive input from other disciplines. There is no clinical psychology or social work input. Joint ABI forum meetings are held monthly to ensure standardised discharge processes prior to transfer to the support of Headway Ireland or ABI Ireland. Outpatient support includes home visits and domiciliary therapy from the multidisciplinary team. There is only a limited speech and language therapy service. Inpatient rehabilitation for amputees includes physiotherapy, occupational therapy and dietician input but no psychology or counselling.

National Rehabilitation Hospital Dublin (NRH): The NRH is the only accredited specialist inpatient Neuro-rehabilitation facility in the country. The establishment of regional rehabilitation units with clear lines of clinical governance to the NRH with a mandate to develop academic training and research will significantly enhance the outcomes of rehabilitation in Ireland.

Paediatric Rehabilitation: Paediatric rehabilitation for enduring childhood disability, congenital or acquired, does not occur within an organised outcome driven framework. The development of a national paediatric hospital in Dublin and a reorganisation and increase in capacity in NRH promises an improvement in the current system. The development of a regional paediatric hospital in Cork should take into account the needs of these patients. .

Transition years: The Central Remedial Clinic, Enable Ireland and the NRH's paediatric programme link with a plethora of voluntary and charitable organisations across the country. Transitional care arrangements from childhood to adulthood (ages 16-18) should occur in a timely and seamless manner as the joint responsibility of consultants in rehabilitation medicine and paediatrics.

Specialist Therapy Skills: Rehabilitation of ABI patients is an area requiring specialist skills. The HSE operates a national recruitment panel for senior and basic grade therapists that interviews for core competencies to generic appointments. This system mitigates against the direct recruitment of therapists with specialist skills and experience.

[45] *BGH and KGH are both linked to the acute hospitals in Cork and may accept discharges from the National Rehabilitation Hospital, Dublin, but they also manage patients acutely with acute ischaemic stroke.*

Table 9-17 Rehabilitation Medicine

9.4	Recommendations on:		
.16	**Rehabilitation Medicine** [Refer: National Rehabilitation Strategy (work in progress)]	.1	A consultant in rehabilitation medicine, shared between HSE South and the National Rehabilitation Hospital (NRH), should be appointed.
		.2	There should be a new regional rehabilitation medicine service, with formal links to the NRH and a named clinical lead.
		.3	A regional rehabilitation unit should be established at MUH.
		.4	A regional amputee rehabilitation centre should be developed at MUH.
		.5	The new services should provide education and advice on rehabilitation to other specialty services and members of the general public.

RATIONALE

Cork and Kerry need an acute rehabilitation medicine service that would provide a post acute specialist rehabilitation service for ABI and all neurological diagnoses for those between 18 and 65 years of age[46]. The service should be established at MUH, capacity permitting, and following best practice recommendations from the consultant in rehabilitation medicine. It should be developed within the National Rehabilitation Strategy and data systems should link to relevant national databases. The service should be led by a consultant in rehabilitation medicine linked to the NRH in Dublin and supported by a regional rehabilitation co-ordinator and a multidisciplinary professional team including a Clinical Neuro-Psychologist. The lead consultant should exercise clinical governance over the regional service, operating within the clinical directorate for medicine. Involvement of patients and patient support groups as collaborators in the development of patient pathways has been demonstrated successfully in Scandinavia and the UK and should be actively supported by the new service.

The consultant in rehabilitation medicine should be joined by a second consultant as soon as resources permit. The presence of specialists in rehabilitation medicine would be of considerable benefit to the health service of Cork and Kerry. It would develop a deeper understanding of the meaning and potential of rehabilitation among clinical colleagues, managers and the public. Sessions at the NRH would provide a link with national strategic planning. Links with UCC would help establish a profile within medical education programmes.

A regional amputee service is being established at MUH and will provide a Prosthetic Orthotic and Limb Absence Rehabilitation (POLAR) service under the leadership of the consultant in rehabilitation medicine. This should be a regional service with strong links to NRH for complex specialised rehabilitation. An outreach service should be provided to BGH and KGH.

The regional rehabilitation unit will provide an important new element in the rehabilitation continuum. There must be clear and robust links to community services that facilitate the flow of patients in both directions. Rehabilitation and disability management should occur *after* discharge from acute and post acute services if sustainable clinical outcomes are to be

[46] *These age limits should be subservient to a professional assessment of the likelihood to engage in and benefit from active rehabilitation.*

achieved. Such links will maximise opportunities for rehabilitation gains and minimise obstacles to timely readmission to an acute setting if and when this may be required. The development of Primary Care Teams and specialist teams operating at network level will provide the framework for community based neuro-rehabilitation. These teams will need the capacity and skill mix to operate confidently in relation to discharge and referral. The consultant in rehabilitation medicine will have a critical role in supporting, guiding and liaising with these teams.

The specialties of paediatrics, geriatric medicine and orthopaedics operate their own rehabilitation services. These services should not be part of the new regional rehabilitation medicine service but there should be clear liaison arrangements and clear lines of responsibility so that there is no confusion over what patient is the responsibility of which service. The rehabilitation medicine service would provide advice in varying degrees to other specialties, including neurosciences, geriatric medicine, vascular surgery, orthopaedics, rheumatology, paediatrics, mental health, palliative care and pain management.

9.4.17 Renal Medicine Service

The Renal Medicine service comprises four consultants and a medical team of eight supported by a multidisciplinary team of nurses, physiotherapists, dieticians and biomedical technicians. It is the sole provider of adult renal medicine services to the population of Cork & Kerry. These fall into three categories.

- End-Stage Kidney Disease (ESKD) Programme
- Acute & Consultative Programme
- General Nephrology Programme

The service will shortly move into the new cardiac renal centre at CUH. This will provide facilities for the training and follow-on care of Home Dialysis (Peritoneal Dialysis) patients. A 35-station Haemodialysis Unit will provide outpatient haemodialysis for up to 175 patients and an upgraded clinical environment will provide acute haemodialysis to unstable inpatients. Support facilities include a 29-bedded ward to provide the renal care-specific elements of inpatient management for patients from Cork and Kerry.

A satellite high dependency facility at KGH retains some capacity for growth in activity, and the outreach service there continues to expand. An integrated multidisciplinary model of care applies. Ongoing developments in renal service will occur in line with the principles enunciated by the National Renal Office (www.hse.ie/eng/about/WHO/NRO)

Table 9-18 Renal Medicine

9.4	Recommendations on:		
.17	**Renal Medicine**	.1	There should be a single regional department of renal medicine with a named clinical lead.
		.2	The renal service should be consolidated at the cardiac renal centre at CUH in line with existing policy.
		.3	The regional department should prioritise discussion with UCC to formally establish an academic post in renal medicine.
		.4	Renal medicine consultants should participate in the AMU acute medicine on-call rota at CUH.
		.5	Health promotion programmes should be developed in collaboration with UCC and PCCC

RATIONALE
Renal medicine is already well integrated with national renal services and its transfer to the new cardiac renal building in CUH is at advanced planning stage. This should be accomplished as quickly as possible.

Ongoing liaison with PCCC and primary care is needed to maximise the cost effectiveness and minimise travel times for patients.

The use of health education as a means of disease reduction is accepted by the specialty. Their health promotion programmes for at risk groups, in collaboration with PCCC and UCC, should continue to be developed.

9.4.18 Respiratory Medicine Service

Respiratory consultants are based in CUH (three consultants with a further appointment imminent) and MUH (two consultants). MUH provide consultation services for SIVUH and St Finbarr's Hospital. CUH provides consultation services for MGH and SMOH. Both centres provide a general respiratory service. Subspecialty services include:

- a regional thoracic oncology service (CUH)
- a regional adult cystic fibrosis service (CUH)
- a specialist asthma clinic (CUH)
- a monthly rheumatology / respiratory connective tissue disease clinic (CUH)
- sleep services (MUH)
- a regional tuberculosis service(MUH)
- COPD is managed in both institutions with services ranging from non invasive ventilation (NIV) in acute hypercapnic respiratory failure to pulmonary rehabilitation in the outpatient setting.

BGH, KGH, MGH and SIVUH all have a significant referral base of both elective patients and acute patients with respiratory diagnoses. Management of respiratory patients at these hospitals is summarised below:

BGH: on site general physicians with referral support predominantly from CUH; rapid access for lung cancer patients; bronchoscopy and pulmonary function services on site.

KGH: on site general physicians with referral support predominantly from CUH; rapid access for lung cancer patients; bronchoscopy and pulmonary function services on site.

MGH: on site general physicians with referral support from CUH and MUH and once weekly consultation from CUH; rapid access for lung cancer patients.

SIVUH: on site general physicians with referral and twice weekly consultation support predominantly from MUH; rapid access for lung cancer patients; spirometry services on site.

BSH: a substantial number of patients with respiratory diagnoses are diagnosed and managed in the Bons Secours hospitals in Cork and Tralee.

Table 9-19 Respiratory Medicine

9.4	Recommendations on:		
.18	**Respiratory Medicine** [Refer: National COPD and Asthma Programmes]	.1	There should be a single regional department of respiratory medicine with a named clinical lead.
		.2	Respiratory services in Cork city should be further developed on two sites, CUH and MUH.
		.3	Respiratory consultants should participate in AMU acute medicine on-call rotas at CUH and MUH.
		.4	Outreach support should be provided for respiratory services in BGH, KGH and MGH and these patients should have ready access to CUH/MUH as required.
		.5	Discussions should take place with BSH Tralee on provision of shared specialist respiratory service on the basis of a Service Level Agreement.

RATIONALE
After the appointment of the additional consultant, there will be six consultant respiratory physicians for a population of 640,000. Rapid access arrangements for lung cancer patients to CUH appear to work well. Specialist activity is currently spread across both sites. In Cork city, respiratory consultants are key members of the general internal medicine rota as well as providers of specialist services. They provide both complex and less complex care. The reconfiguration roadmap is for two AMUs for Cork city with two on-call rosters. A unified service delivered from two sites meets more closely the range of patient needs than consolidating the entire service at CUH. The two sites however must be under the one clinical governance and their development must be complementary. Discussions should take place with BSH Tralee with a view to rationalising the cross provision of services to maximise convenience and health outcomes for Kerry patients.

9.4.19 Rheumatology Service

Rheumatology services in Cork and Kerry are currently delivered from two sites – CUH and SIVUH. CUH and SIVUH have a consultant led service to both inpatients and outpatients with an outreach monthly clinic at KGH provided by a CUH consultant. Patients from KGH requiring treatments and investigations are admitted to CUH. A small number of rheumatology patients are admitted to BGH, KGH, MGH and MUH under general medical consultants. When required, consults to these patients are provided by rheumatology consultants from CUH and SIVUH.

CUH: Rheumatology services are provided by two consultants, three registrars, one senior house officer, one intern, one advanced nurse practitioner (ANP), one clinical nurse specialist CNS) and one clinical specialist rheumatology physiotherapist. The rheumatology team arranged and reported on over 5,000 DEXA scans in 2008 and additionally participate in a one in six general internal medicine roster. The ANP operates a nurse led clinic that reviews over 1,600 patients annually. The new to return patient ratio is currently 1:3.4. a combined Rheumatology/Respiratory clinic, treating patients with scleroderma and pulmonary hypertension, linked with the Mater Hospital in Dublin is a successful innovative service development. The clinical specialist physiotherapist runs group exercise classes and completes annual reviews of patients with ankylosing spondylitis in line with best practice guidelines.

SIVUH: Rheumatology services are provided by two consultants, two registrars, two senior house officers and two interns. There is a one in five on-call commitment for general internal medicine including chest pain and intensive care. Within the rheumatology clinics there are clinics reserved for early inflammatory arthritis and severe metabolic bone disease. The bone densitometry service at SIVUH is run and reported by one consultant although the radiographers perform the actual scans. One CNS and one staff nurse support the service. An occupational therapist provides seven hours per week dedicated to rheumatology (= 0.2WTE). There is no dedicated physiotherapy service although WTE usage is 1.4 WTE. The CNS operates a nurse led clinic reviewing over 1,400 patients annually. There is no physical rheumatology department at SIVUH.

Table 9-20 Rheumatology

9.4	Recommendations on:		
.19	**Rheumatology** [Refer: National Rheumatology Programme]	.1	There should be a single regional department of rheumatology with a named clinical lead.
		.2	Diagnostic, ambulatory, infusion and outpatient rheumatology services should be consolidated on the SIVUH site.
		.3	Rheumatology consultants should participate in AMU acute medicine on-call rotas at CUH and MUH
		.4	Rheumatology consultants participating in the AMU on call roster in MUH will admit their specialist patients to MUH.
		.5	Outreach clinics should be provided at BGH and MGH.
		.6	Rheumatology outreach at BGH should be augmented by development of a CNS role shared with dermatology to provide an infusion service for west Cork.

RATIONALE
There should be a single regional department of Rheumatology with a named clinical lead. The service should be centralised at SIVUH where it will be co-located with Orthopaedics, and from this site, should provide a regional service linked to a service at KGH utilising the existing staff complement there. This includes a consultant rheumatology post for KGH which has been prioritised. Co-location with Orthopaedics and the already developed expertise in day cases at the hospital will help the specialty to consolidate and develop.

9.5 MENTAL HEALTH

9.5.1 Mental Health Directorates

All mental health services in Cork and Kerry will be led by two Executive Clinical Directors each responsible for their respective super-catchment areas.

9.5.2 Mental Health Services

Mental Health services span all life stages and include a broad range of primary and community based services as well as specialised services for children, adolescents, adults and older persons. Services are provided in a number of different settings including home, in-patient facilities, out-patient clinics/ departments, day hospitals and day centres, low support and high support community accommodation. Recent years have seen increasing sub-specialisation of mental health in areas such as rehabilitation & recovery, liaison psychiatry, forensic psychiatry and mental health and intellectual disability. All specialty and sub-specialty services are at an embryonic stage in Cork and Kerry and require further development.

Services in Cork & Kerry are divided into five catchment areas (Local Health Offices) identified as follows: North Lee, South Lee, North Cork, West Cork and Kerry. These catchment areas vary in population from 54,000 to 180,000 and each provides a mental health service with different ratios of acute beds, long stay beds and medical/nursing/allied health professional staff per capita. As a result, there is variable access to acute and long term care and to different therapies throughout the region. The cost of the service per capita also varies between catchment areas. Very few, if any, community mental health teams are fully staffed.

Table 9-21 Mental Health

9.5	Recommendations on:		
.1	**Mental Health** [Refer: National Mental Health Programme / *Vision for Change*]	.1	Executive clinical directors should take responsibility for: f. co-ordinating mental health services in both counties, g. integrating mental health with acute clinical networks and care pathways, h. co-ordinating mental health with primary care, i. delivering mental health promotion initiatives, and j. implementing *Vision for Change*
		.2	Liaison Psychiatry services should be strengthened in all hospitals, and in the context of regional consolidation of emergency care.
		.3	Focused centres for specific mental health issues should be developed, e.g. eating disorders, perinatal mental health.
		.4	All subspecialty services should be strengthened and developed regionally within the context of implementing *Vision for Change.*
		5.	An examination should take place, in the context of the implementation of reconfiguration in Cork and Kerry, of present patterns and outputs of service delivery in Mental Health and future patterns/outputs anticipated under *Vision for Change*

RATIONALE

Development will be formulated around the strategic objectives set out in the national mental health policy framework, ***A Vision for Change (2006)*** which is based on a recovery approach that seeks to put patients, families and carers at the centre of service provision. The policy recommends that well-trained, fully staffed community-based, multi-disciplinary Community Mental Health Teams (CMHTs) be put in place for all mental health services. This is not yet possible within existing resources.

Mental Health services are delivered through catchment areas, each with its own management structure, funding stream and clinical teams. The system ensures clear clinical responsibility for every person wherever located in the region. Funding across catchment areas needs to be equitable and based on identified means. The catchment area approach to managing and delivering service should be implemented in a more flexible manner to order to be as responsive as possible to the needs of individual patients and to achieve great co-ordination between mental health services and acute hospital services.

Most mental health services are provided in the community with in-patient care only for those who are acutely ill. However, many patients in acute general hospitals also have liaison psychiatry needs and these patients make up a significant proportion of delayed discharges. The new regional neuro-rehabilitation unit will also have patients with challenging behaviour needing a liaison psychiatry service. SIVUH will require a consult service.

Reduced acute admissions and more rapid discharge of physically well patients would be aided by the following strategies:

- Assertive outreach by properly resourced community mental health teams.
- Extended hours of community team working
- Improved assessments in primary care especially out of hours
- Improved rehabilitation facilities. Some catchment areas have none.
- Expansion of old age services, particularly step down care.

Good liaison is a key determinant of good mental health service provision. Links between specialist mental health services, primary care services and voluntary groups that are supportive of mental health need to be enhanced and formalised. Potential communications problems can occur when patients with psychiatric needs move into and through the acute hospital network and back into the community. These need to be proactively addressed by the mental health team. A secure IT system linking out-patient facilities to primary care will be a key enabler for better integration of services.

Mental health promotion should be available for all age groups to help reduce risk factors and generate positive approaches to mental health. Videoconferencing facilities in hospitals should link to those in community centres and primary care centres to promote greater interactions between GPs, mental health professionals, service managers and hospital based clinical staff.

As reconfiguration begins to deliver more acute and continuing care locally, more shared issues will emerge with mental health services. A broadly based examination of current and future mental health delivery and its links to acute and continuing care should be undertaken within the context of Vision for Change and the implementation of this roadmap in Cork and Kerry.

9.6 PERIOPERATIVE CARE

9.6.1 Perioperative Directorate

Surgical, anaesthesia and critical care specialties and subspecialties that should be considered in one clinical directorate are general anaesthesia, critical care, pain medicine, general surgery, cardio-thoracic surgery, otorhinolaryngology (Ear, Nose and Throat surgery), Maxillo-facial Surgery, ophthalmology, orthopaedic Surgery, Plastic Surgery, Urology and Vascular Surgery. These specialties and subspecialties should each have a clinical lead who reports to a regional Clinical Director with a brief to establish clinical priorities, ensure services are safe and reliable and staff are deployed in such a way as to deliver these services with maximum efficiency.

The threshold determining which cases are to be treated at CUH and which cases are to be treated at MUH will require further detailed analysis by each specialty, particularly including the issues of bed capacity, critical care capacity and theatre capacity. The assessment of this will be a central component of reconfiguration detailed implementation planning (Chapter 11 p.171). Thresholds that are agreed within each specialty will apply to all consultants within that specialty. It is particularly important that the critical care capacity at MUH is fully utilised.

The organisation of operating theatres in Cork and Kerry must be fundamentally overhauled. A major rescheduling exercise to maximise throughput and efficiency will be undertaken. All surgical services should introduce pre-admission clinics as best practice. As an intermediate step towards developing regional clinical services, every consultant in Cork and Kerry should have admitting rights to all acute hospitals in the region.

9.6.2 General Anaesthetic Service

There are separate departments of anaesthesia in each of the six acute hospitals in Cork and Kerry providing anaesthetic services over seven sites. There are 48 consultant anaesthetists who with non consultant hospital doctors provide services in pre-operative and post operative assessment, medical assessment, anaesthetics, intensive care medicine, acute and chronic pain, undergraduate and post graduate teaching and research. Anaesthetists are also prominent in the areas of in-hospital clinical governance and national and international training and research bodies. They have key expertise in theatre operation and management. Like other medical and surgical specialties, anaesthetists tend to see their role in hospital terms in which the "department" in each hospital is a self sufficient entity. It is essential for the success of reconfiguration that anaesthetics becomes a true regional department.

Table 9-22 Perioperative Care Directorate and General Anaesthetics

9.6	Recommendations on:		
.1	**Perioperative Care Directorate**	.1	There should be a single regional clinical directorate for perioperative care incorporating all anaesthetic and surgical specialties and subspecialties led by a regional clinical director.
		.2	Detailed analysis to define thresholds for each hospital will need to be carried out by each specialty
		.3	Pre-admission clinics should be introduced as best practice for all surgical services. Day of surgery admissions and day surgery should be the norm for all surgical services.

9.6	Recommendations on:		
	Perioperative Care Directorate continued	.4	As an intermediate step towards regional clinical services, every consultant in Cork and Kerry should have admitting rights to all acute hospitals in the region.
.2	**General Anaesthetics**	.1	There should be a single regional department of anaesthetics with a named clinical lead.
		.2	Anaesthetics must be involved in planning of all surgical services.
		.3	Each operating theatre should be the particular responsibility of a named anaesthetist who with the appropriate nurse manager will be tasked to drive theatre efficiency.
		.4	The regional department must support the development of outreach surgery in the smaller hospitals.

RATIONALE
Anaesthetics, together with theatre nursing, has a key role to play in the provision of safe and efficient surgical services, both elective and emergency, in the six acute hospitals in Cork and Kerry, and in the future perhaps also in some of the larger primary care centres. This needs to be effected through a clear system of theatre management and control. The configuration of anaesthetic services must support the provision of day surgery and inpatient surgery in whatever location it is practiced throughout the region. Because of anaesthetics' key role in theatre use and management, the numbers of anaesthetists in the region and the subspecialty development within the profession, it is important that there is a clear regional structure with regional clinical governance and regional protocols governing the practice of anaesthetics and the management of theatres.

9.6.3 Critical Care Service

Critical care capacity in Cork and Kerry is well below recommended international levels. This leads to significant patient problems with delayed access to intensive care, cancellation of major elective surgery, unplanned discharge and provision of care outside the intensive care unit. On other occasions, delayed discharge leads to inappropriate utilisation of critical care resources.

For the purposes of this report, critical care includes level III critical care (advanced respiratory support or monitoring/support of two or more organ systems) and level II care (monitoring/support of one organ system or the combination of basic respiratory support and cardiovascular support). The definition of level I critical care is to resuscitate, stabilize and transfer. Transfer is often framed within a "no refusal" policy whereby the larger hospital must accept patients from a level I facility into level II or level III critical care on the instruction of the referring doctor. Critical care in Cork/Kerry is delivered in CUH, MUH, SIVUH, KGH, MGH, and BGH. Level III general intensive care beds are nominally distributed as follows: CUH - 8, MUH - 6, SIVUH - 3, KGH - 5, BGH - 4, MGH - 2. Beds in CUH and MUH are staffed entirely by intensive care nursing staff; beds in SIVUH, BGH, and MGH are not staffed exclusively as full-time level III beds.

Consultant intensivist staffing of level III intensive care is contractually provided only in CUH. In the other hospitals cover is either provided on an internally devised rostering system from within the pool of anaesthetists allocated to theatre, or is provided by sharing consultant time between theatre and ICU.

Informal support exists between the intensive care units. All hospitals cooperate where capacity is short, with MUH and CUH taking tertiary referrals from the other units, and from outside the group. Formal pathways of referral are not in place which can lead to delay or confusion in regard to referral.

Beyond the medical and nursing care a vital component of patients' care is provided by health and social care professionals and medical scientists including physiotherapists, pharmacists, speech and language therapists, occupational therapists, dieticians and biomedical engineers. They are significant participants in the multidisciplinary team.

Table 9-23 Critical Care

9.6	Recommendations on:		
.3	**Critical Care**[47] [Refer: National Critical Care Programme]	.1	There should be a single regional department of critical care with a named clinical lead.
		.2	Level III and level II critical care are required in CUH, MUH and KGH.
		.3	Level II critical care is required in SIVUH, with appropriate transfer protocols and access priorities to MUH/CUH.
		.4	Level I critical care is required at BGH* and MGH with a "no refusals" policy for transfer to MUH/CUH.
		.5	As an immediate first step, the current level III facility at CUH needs to be extended to include the space being vacated by the transfer of the cardio-thoracic level III facility to the cardiac renal centre.
		.6	A paediatric retrieval service should be developed with the new national paediatric hospital in Dublin with support for acute assessment, treatment and stabilisation at CUH.

***** *Arrangements suitable for remote rural hospitals to be agreed with National Critical Care Programme*

RATIONALE

Reconfiguration changes will fundamentally alter the demands for critical care across our six hospitals. While acknowledging that there is a national shortage of critical care capacity, the initial challenge is to ensure that resources (particularly nursing WTEs) released by the reconfiguration of all services are prioritised to increase critical care capacity. The medium term goal is the construction of a new critical care facility at CUH – this has been incorporated into the CUH development control plan. As an immediate first step, the current level III facility at CUH needs to be extended to include the space being vacated by the transfer of the cardio-thoracic level III facility to the cardiac renal centre. It is important that this new critical care unit is a combined level II/III facility. This combined format will allow the most flexible use of staff and resources. The retention of the combined level II/III at MUH is a very important contribution to the critical care capacity in the region. This facility needs to be fully utilised, thus ensuring that the range and scope of surgical procedures in MUH can remain as broad as possible.

[47] *Level III critical care: advanced respiratory support or monitoring/support of two or more organ systems. Level II critical care: monitoring/support of one organ system or the combination of basic respiratory support and cardiovascular support. Level I critical care: resuscitate, stabilize and transfer*

As BGH and MGH are reconfigured, their facilities should move to level I but should be supported by a 'no refusals' policy that will facilitate immediate transfer to an appropriate city hospital for any patient deemed to require it by the BGH or MGH consultants. All sites should have the ability to upgrade a bed to short term level III pending intensive care retrieval to the tertiary centre. Configuration of level II/III areas should allow for flexible staffing of beds so that bed stock can respond more flexibly to clinical demand. A paediatric intensive retrieval service needs to be arranged with the National Paediatric Hospital in Dublin as soon as possible. A regional department of critical care will allow the most effective use of the limited critical care bed resources.

9.6.4 Pain Medicine Service

Pain medicine describes the work of specially qualified medical practitioners who undertake the comprehensive management of patients with acute, chronic, and cancer pain using physical, pharmacological, interventional, and psychological techniques in a multidisciplinary setting. MUH and CUH have a multidisciplinary approach to both acute and chronic pain. These have evolved into a significant service delivered from within their respective departments of anaesthesia. Currently there are 3.25 WTE pain consultants working in the service across MUH, CUH and SMOH. There is also a limited service in KGH. There are two components within the pain service - chronic pain and acute pain.

The acute service is post-operative and post traumatic, delivered locally where surgery is carried out. It was developed to enable patients to avail of a wide array of therapies that optimise pain relief in the perioperative period. The chronic pain service is primarily outpatient based with emphasis on day case procedures with access to diagnostic and therapeutic facilities. The pain service is supplemented by a senior psychologist and other health and social care professionals.

Table 9-24 Pain Medicine

9.6	Recommendations on:		
.4	**Pain Medicine**	.1	There should be a single regional department of pain medicine with a named clinical lead.
		.2	A regional pain management centre should be developed at SIVUH.
		.3	Outreach should be developed at BGH, KGH and MGH.

RATIONALE

The pain medicine service has developed from small beginnings but has enormously beneficial effects on the quality of life of many suffering from acute and chronic pain. The most effective way to extend the service regionally would be to create a stand alone dedicated and comprehensive pain management centre which would bring great benefits to patients in Cork and Kerry. There are important synergies between orthopaedics, rheumatology and pain medicine and this is why they will all be co-located.

9.6.5 General Surgery Services

The surgery service includes colorectal & lower gastrointestinal (GI), upper GI, hepatobiliary, breast and endocrine surgery. Complex and cancer procedures, elective surgery, less complex day and inpatient procedures are delivered from most of the six hospitals within the region. Emergency surgery is undertaken in all centres. Breast cancer services for the region have now been centralised at CUH. The ongoing implementation of the National Cancer Control Programme (NCCP) will see other cancer related surgical services also being centralised at CUH. All surgical services are supported by non consultant hospital doctors (NCHDs), specialist nurses, anaesthetic services, health and social care professionals and general support services. The service is delivered 24/7. Emergency services are currently undertaken at all sites with future plans to centralise to CUH and KGH.

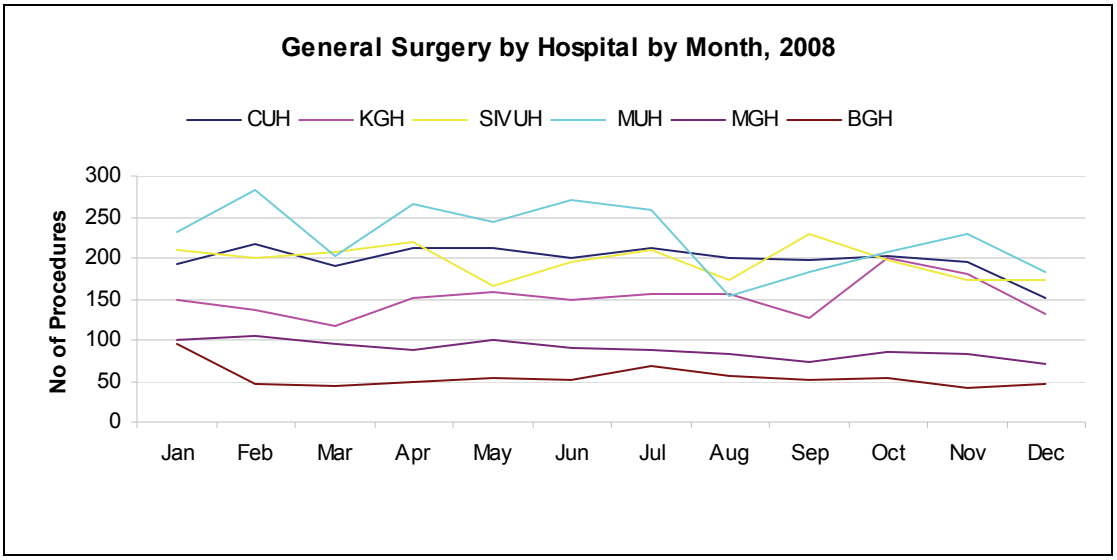


Figure 9-3 General surgery activity 2008

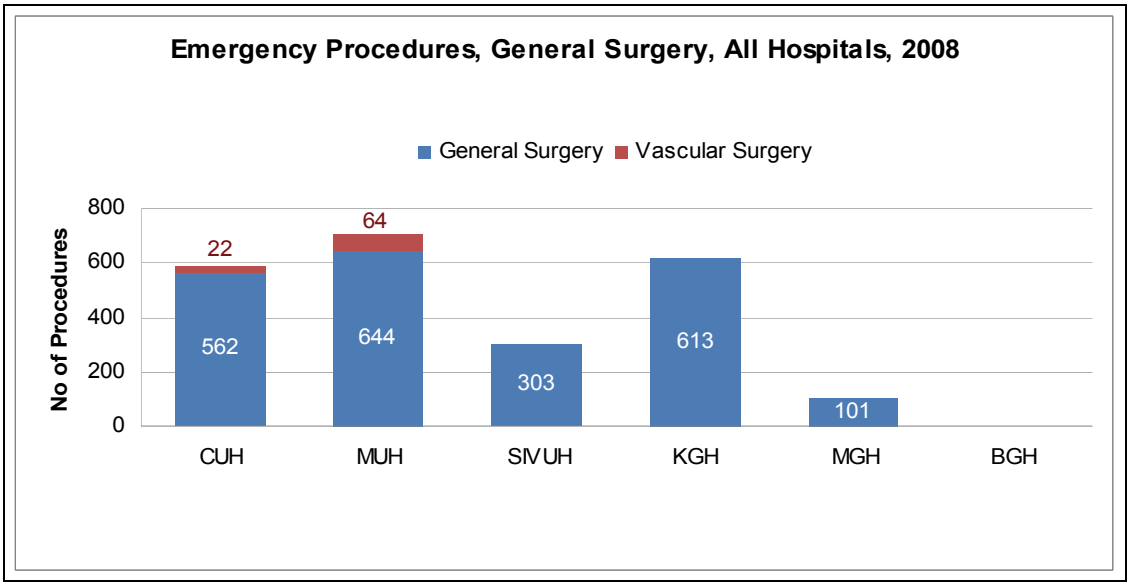


Figure 9-4 Emergency procedures in general surgery 2008

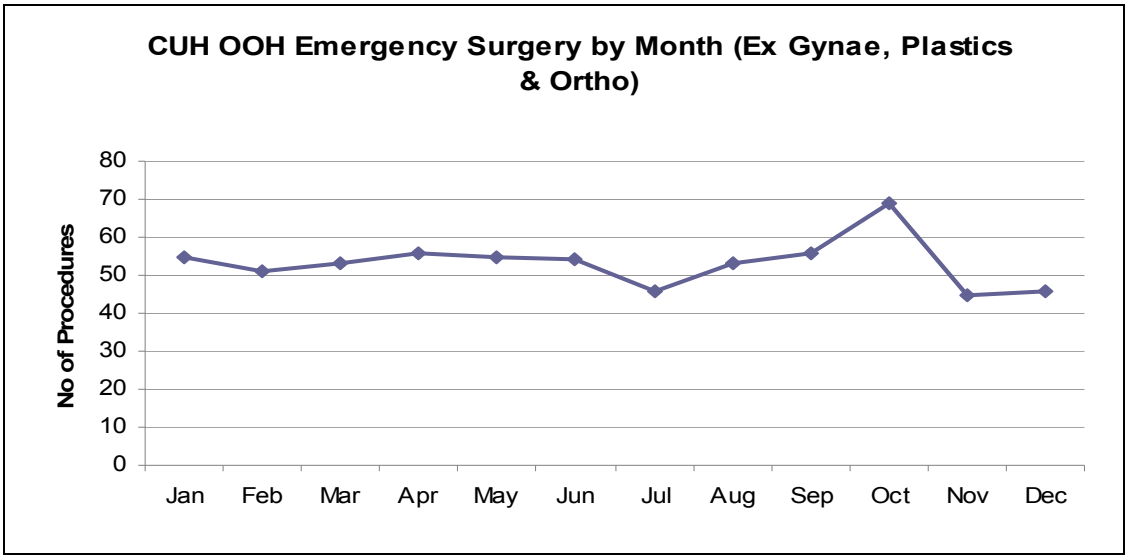


Figure 9-5 Out of hours (OOH) emergency surgery monthly pattern in 2008

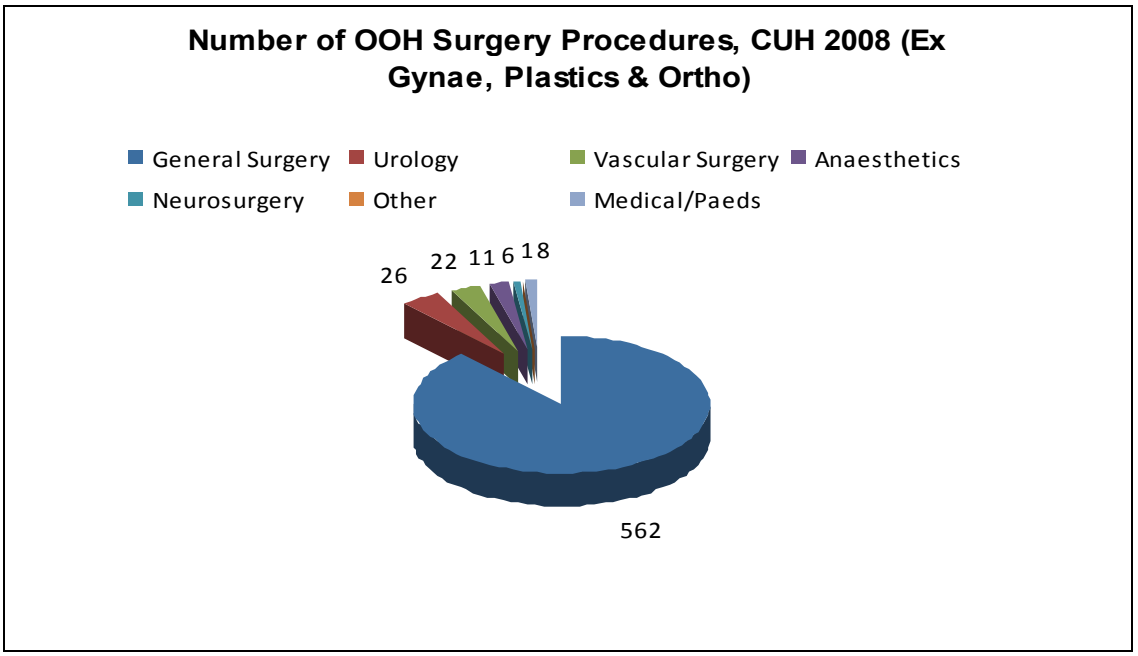


Figure 9-6 Out of hours emergency surgery by specialty in 2008

Table 9-25 General Surgery

9.6	Recommendations on:		
.5	**General Surgery** [Refer: National Surgery Programme] [Refer: National Cancer Control Programme]	.1	There should be a single regional department of general surgery with a named clinical lead.
		.2	There should be a single on-call emergency rota in general surgery for Cork based at CUH. The on-call consultant surgeon will be protected from all other commitments (including outpatients, rooms, elective surgery).
		.3	General surgery will have access to a surgical emergency ward and an emergency theatre at CUH.
		.4	Emergency general surgery services will continue at KGH.
		.5	In keeping with the NCCP, cancer surgery will be concentrated at CUH. Upper GI, hepatobiliary and pancreatic cancer surgery will remain in this region and be provided at CUH.
		.6	Elective general surgery should be carried out at MUH.
		.7	The integrity of the general surgery rota must be retained by ensuring that consultants with sub-specialty interests in vascular, upper GI, hepatobiliary, pancreatic, colorectal, breast and endocrine surgery all continue to participate in this rota.
		.8	BGH and MGH should evolve into day surgery hospitals.
		.9	To ensure the surgical expertise in colorectal currently in KGH, is fully used, referral patterns for colon cancer in Cork & Kerry, should be reviewed to increase their referral base.
		.10	A regional paediatric surgery service is required, particularly for children under one year of age and neonates. This excludes complex paediatric surgery which will be performed in the national paediatric hospital.

RATIONALE

The decisions to establish a general surgical rota for Cork city and a regional training scheme are fully in accord with the principles of reconfiguration. So too is the recommendation to provide an emergency theatre at CUH with associated dedicated beds. In recent years, day surgery and the processes around its organisation have developed in all our hospitals and this trend should continue, including the reorganisation of theatre usage to provide more day surgery and an adoption of pre-assessment clinics to improve efficiency. In accordance with the National Cancer Control Programme, all surgical oncology will take place at CUH. Apart from cancer surgery, all Cork general surgeons should do their elective surgery at MUH.

A regional paediatric surgery service is required, particularly for children under one year of age and neonates. This excludes complex paediatric surgery which will all be performed in the national paediatric hospital.

9.6.6 Cardio-thoracic Surgery Service

Cardiac Surgery: The cardiac surgical unit provides adult cardiac surgery to the Cork and Kerry population and some cardiac surgery services to the wider population in HSE South and HSE West (population circa 1 million). The service is based at CUH and is provided on a 24/7 basis by three full time cardiothoracic surgeons along with consultant anaesthetic, perfusion, nursing, physiotherapy, clinical nutrition, occupational health, speech and language therapy and allied staff support. 60% of cardiac surgical activity is Coronary Artery Bypass Grafting (CABG), the remaining 40 % being valve procedures, combined valve/CABG procedures and surgery of the thoracic aorta.

Thoracic Surgery: CUH is a designated regional centre for the diagnosis and treatment of lung cancer. Lung cancer will continue to be a major cause of cancer mortality for the foreseeable future as efforts to detect lung cancer by screening have so far failed. However earlier diagnosis, staging and multidisciplinary management lead to improved short and long term survival and good quality of life. CUH provides all adult thoracic surgery to the patients in Cork and Kerry on a 24/7 basis. The unit accepts referrals from Limerick, Waterford and Clonmel. The service is delivered by three cardiothoracic surgeons along with consultant anaesthetic, nursing, physiotherapy, occupational health, clinical nutrition and health and social care profession staff.

CUH: Theatre 1/1A, Cardiothoracic Surgery activity

There were 907 procedures in theatres 1/1A in 2008. Procedures are subcategorised as cardiac, (requiring by-pass pump), non-cardiac (e.g. bronchoscopy and venous access), pacers (pacemakers), cardiothoracic (lung resection) and other non-cardiac surgery (Figure 9-7).

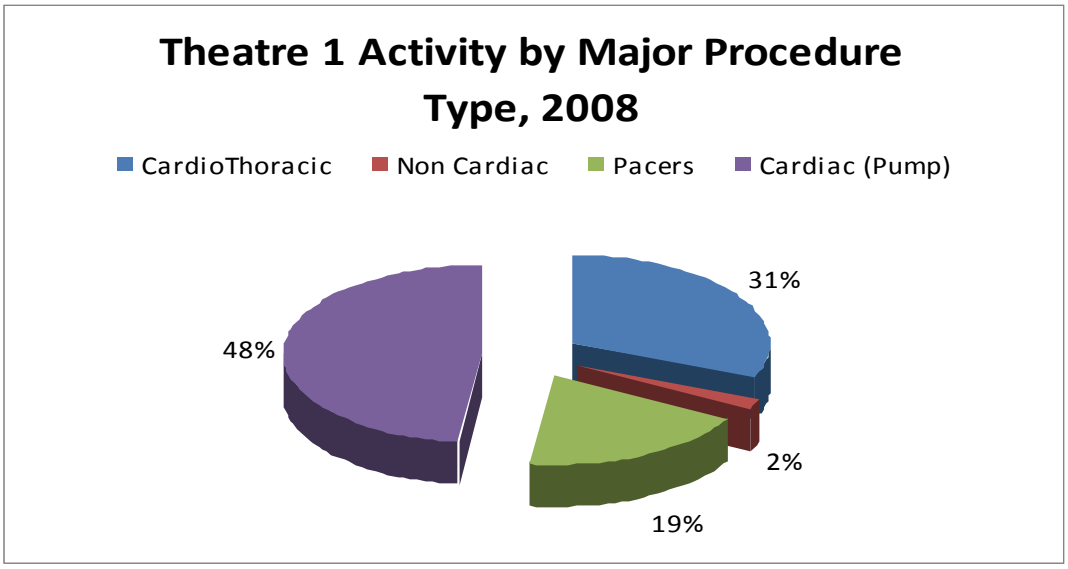


Figure 9-7 Cardiothoracic surgery by major procedure in 2008

The number of procedures undertaken ranged from 60 to 87 per month; almost half (48%) of which were cardiac (Figure 7-9).

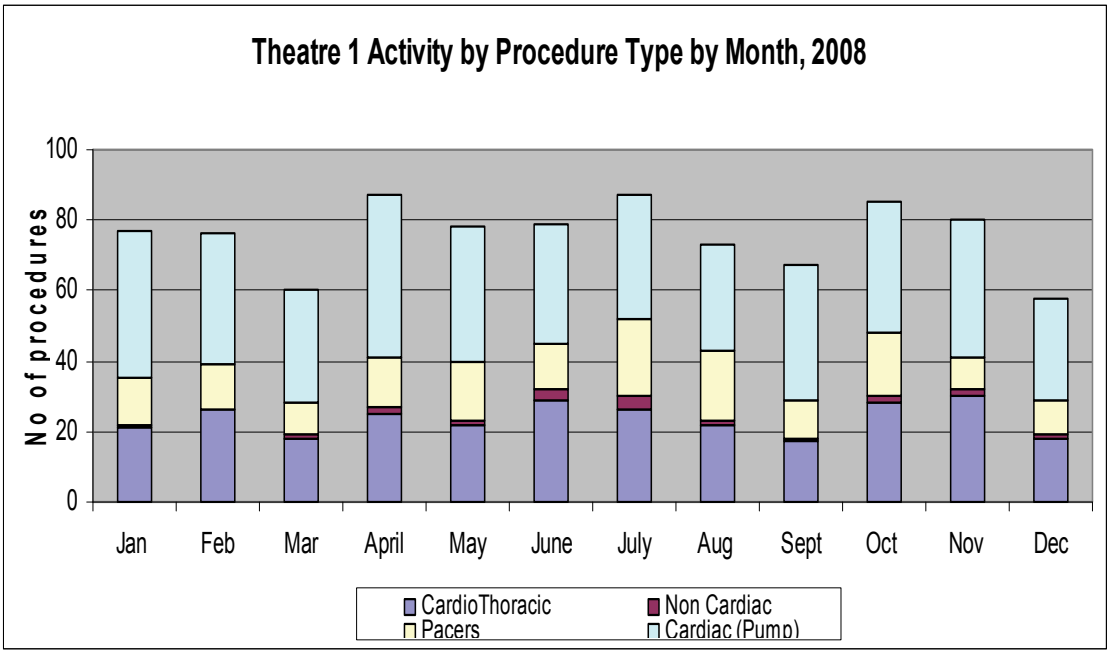


Figure 9-8 Cardiothoracic activity by month 2008

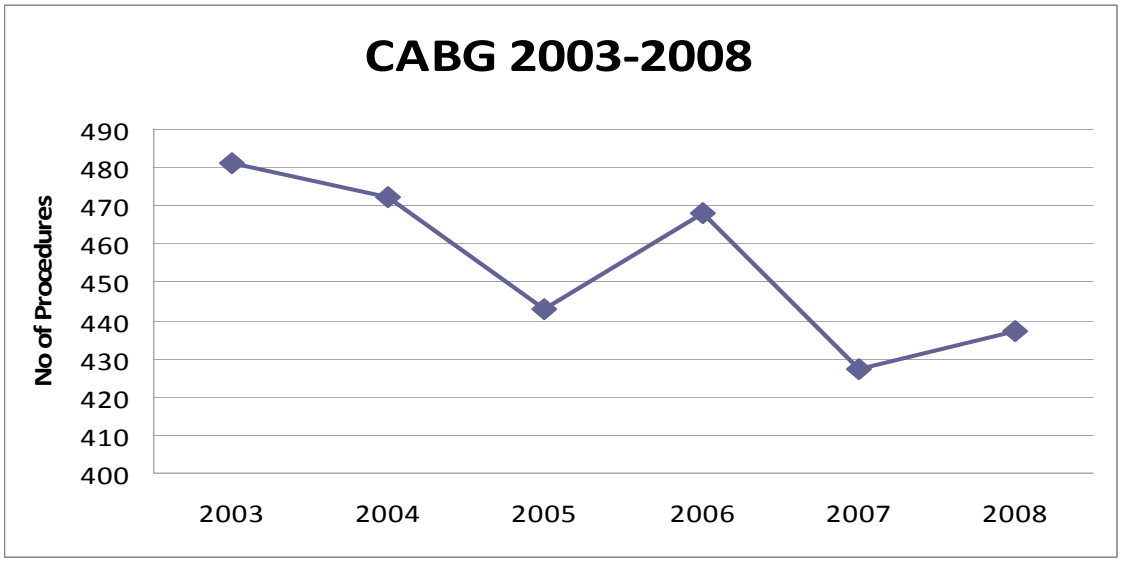


Figure 9-9 Coronary artery bypass grafting trend over six years 2003-2008

A steady decline in coronary artery bypass grafting is evident. This is in line with national and international trends, attributed to an increase in angioplasty and other radiologically guided stenting procedures.

Table 9-26 Cardio Thoracic Surgery

9.6	Recommendations on:		
.6	**Cardio-thoracic Surgery**	.1	There should be a single regional department of cardio-thoracic surgery with a named clinical lead.
		.2	The development of cardiothoracic critical care in the new cardiac renal centre should be organised initially around a ten bed dedicated critical care facility (combining Level III and Level II critical care). This facility should be ring fenced for cardio-thoracic surgery.
		3.	Regional electronic referral systems, protocols and care pathways should be developed to ensure timely referral of patients with cardiac and/or lung disease regardless of their place of residence.
		.4	All cardiac and thoracic surgery should be performed in the new cardiac renal centre.

RATIONALE

CUH will remain the supra-regional centre for cardio-thoracic surgery in the HSE South area, accepting referrals from Limerick, Tipperary, Waterford and Wexford. It will be located in the cardiac renal centre at CUH. This has a dedicated cardiothoracic unit with level III and II critical care and adequate bed capacity. When the centre opens, two new operating theatres will be commissioned immediately. A third may be commissioned at a later date depending on funding and activity levels. The issue of the flexible use of critical care beds is critical to the most cost effective use of the facility. This depends on staffing numbers and deployment. Staff deployment should depend on the needs of the patient at any given time, not the designation of a particular bed in a particular location. If this principle is accepted, then beds in the critical care facility can be used more effectively and more patients can be treated by the same staff complement. It is important that the efficiency of critical care beds is maximised before a decision is taken on the opening of a third theatre which may become necessary in the future as surgical referral rates increase.

UCC has an active cardio-vascular surgery research group. The clinical service and the university, acting co-operatively, should maximise the impact of this research group on the future development of cardio-thoracic surgery in Cork.

CUH has been designated by the National Cancer Control Programme as one of eight national lung cancer diagnostic and treatment centres and one of four national lung cancers surgical treatment centres. This will drive the development of lung cancer diagnosis and treatment in the whole southern region and guide the thoracic oncology group in implementing protocols and care pathways for the regional population it serves.

9.6.7 Otorhinolaryngology (including ENT and Audiology Services)

Otorhinolaryngology includes Ear, Nose and Throat (ENT) surgery (adult and paediatric) and Audiology (adult and paediatric). Four centres carry out ENT surgery in Cork and Kerry – SIVUH (the regional centre), CUH, KGH and MGH. In the region as a whole, there are 5 ENT surgeons supported by a surgical team of 12 including 2 interns. The health and social care professional team includes audiologists and speech and language therapists based in the hospital service, in the community (PCCC) and in voluntary agencies.

ENT Activity

ENT procedures are performed primarily in the SIVUH, but also in MGH and KGH. A total of 3,033 such procedures were undertaken in 2008. Figure 9-10 below illustrates the distribution of activity by hospital by month for 2008, while Table 9-27 shows total numbers by hospital.

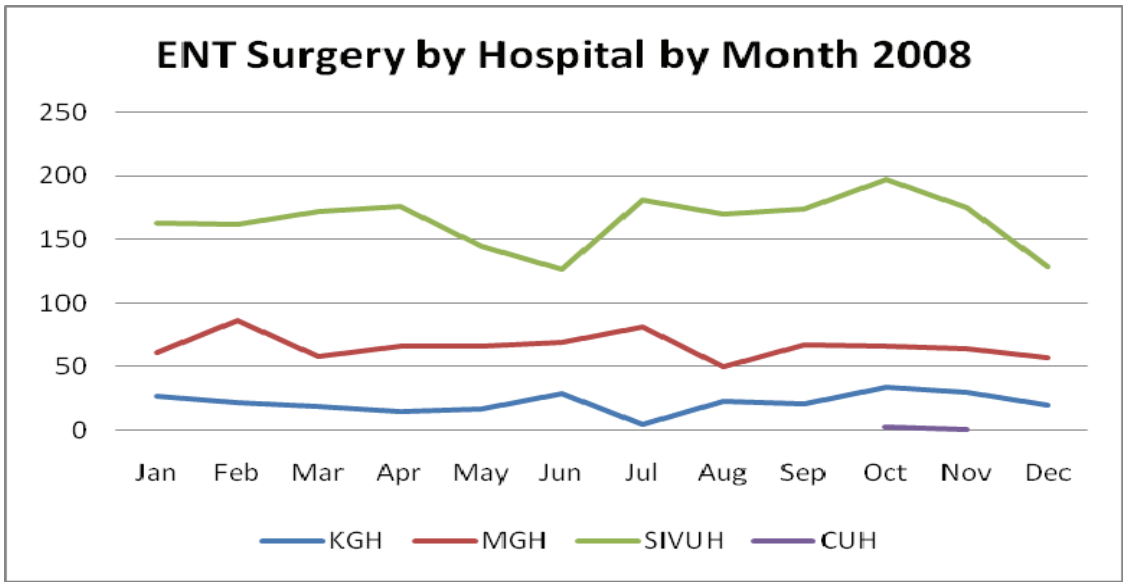


Figure 9-10 ENT surgery by hospital by month in 2008

Table 9-27 ENT surgery by hospital in 2008

Hospital	No of Procedures in 2008
KGH	262
MGH	791
SIVUH	1,971
CUH	9
Total	**3,033**

Audiology Services

SIVUH, KGH and PCCC provide audiology services to varying extents. SIVUH receives all referrals from ENT outpatients, inpatients and PCCC. KGH accepts inpatient referrals and community referrals and offers a neonatal screening pilot programme. PCCC provides audiology services from:

- St. Finbarr's Hospital Cork- paediatric screening two days week: three clinics, two rooms utilised.
- North Main Street Cork- paediatric and adult diagnostic and rehabilitation five days per week.

The PCCC audiology service receives referrals from GPs, speech and language therapists and ENT surgeons.

Table 9-28 Audiology patient numbers 2008

Area PCCC	Screening	Diagnostics	Hearing aids fitted	Reviews (returns)	Waiting list
Child screening St Finbarrs	1,933	N/A	N/A	N/A	750
Cork Child North Main St.	N/A	800	391	899	938
Cork Adult	N/A	3,143	1,160	760	680
Kerry Adult	N/A	1,123	329	560	200
SIVUH					
Adult	N/A	2310	N/A	855	18 (VNG)
Child	N/A	1890	N/A	1045	18 (ABR)
KGH					
Adult	957	N/A	N/A	636	48
Child	640	N/A	N/A	489	369
Neonatal	1869	N/A	N/A	N/A	

Table 9-29 Otorhinolaryngology

9.6	Recommendations on:		
.7	**Otorhinolaryngology** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of otorhinolaryngology with a named clinical lead.
		.2	The regional centre should continue to be located at SIVUH.
		.3	In keeping with the NCCP, complex head and neck cancer surgery will be carried out at CUH.
		.4	During the day emergency service will be provided at SIVUH. Out of hours emergencies will be seen at CUH.
		.5	SIVUH and PCCC should collaborate to provide an enhanced regional audiology service under SIVUH clinical governance - to include neonatal screening at CUMH.
		.6	KGH should be developed as an ENT/audiology satellite. The speciality needs to be supplemented by another consultant and additional clinical sessions at KGH and SIVUH.
		.7	In the context of the implementation of this roadmap, the regional department should address the issue of the emergency service in KGH, consulting with SIVUH, KGH and BSH Tralee.
		.8	Outreach and day surgery should be developed at MGH.

RATIONALE

SIVUH currently acts as the base for a regional ENT surgery service and receives audiology referrals from PCCC, hospital outpatients and hospital inpatients. KGH acts as a spoke for Kerry, but the single consultant service cannot meet the current demand and there is no cross cover arrangement with the BSH in Tralee. ENT surgeons do not currently have scheduled operating time at CUH. When they carry out complex head and neck cancer related surgery and complex surgery on children less than three years of age and 15kg in weight they are provided with operating time by other surgical teams. SIVUH currently provides a paediatric service for children over three years of age including a 24/7 emergency service. It provides a service for adults and children and is the regional tertiary referral centre for head and neck cancers. This situation presents a number of challenges to the reconfiguration project, namely:

- Services at KGH must be strengthened through further development of the ENT regional team.
- ENT surgeons must have scheduled access to CUH theatres for complex work relating to cancer and children under three years of age.
- It will take time to develop a comprehensive paediatric hospital at CUH capable of providing 24/7 emergency ENT with the necessary nursing and anaesthesia support, yet the requirement of emergency paediatric ENT alone does not justify a 24/7 service at SIVUH.
- There is a pressing need to provide a more joined up and expanded audiology service for the region, with stronger clinical governance.

The response needs to be calibrated such that existing levels of service are not compromised and change brings incremental improvement. The endpoint – vision – for this service ought to encompass the following elements:

1. A regional centre at SIVUH, co-located with plastics, providing elective ENT surgery for adults and children over three years of age and exercising regional clinical governance over ENT and audiology services in closer collaboration with PCCC.
2. A satellite at KGH providing general ENT surgery for Kerry adults and children over three years of age that includes adequate staffing and cross cover arrangements with BSH Tralee. It should be prioritised for an additional ENT consultant with joint clinical sessions with SIVUH. This would address excessive waiting lists.
3. An operating list with admitting rights at CUH for complex adult surgery, complex paediatric surgery (including adenotonsillectomy in children under the age of three) and a neonatal screening service at CUMH. This service will require medical, nursing and speech and language therapy support and an outpatient clinic.
4. An integrated head and neck cancer service that makes the best use of facilities at SIVUH and CUH – e.g. diagnostics and radiology at SIVUH, radiation and chemotherapy at CUH, operating location to relate to levels of complexity and involvement of other surgical specialties.
5. Emergency cover must continue at SIVUH, supported by on-call arrangements for nursing, anaesthesia and surgical staff, until such time as out of hours emergency cover can be transferred safely to the CUH ED/CUH Paediatric unit.
6. Outreach and pre-assessment/outpatient follow up with anaesthetics supported day surgery at MGH.

9.6.8 Maxillofacial & Oral Health Service

For the purpose of this plan "dental services" refers to:

- Oral and maxillofacial surgery
- Special care/needs dentistry (child and adult)
- Orthodontics
- Oral rehabilitation/restorative dentistry.

The Cork Dental School and Hospital (CDSH) is owned and run by University College Cork and most dental consultants are employees of UCC with just three being employed by the HSE. Two of these provide the regional orthodontics service, of which one holds a chair in orthodontics with UCC, and the third is a Maxillofacial surgeon. The CDSH provides some secondary and tertiary level care in restorative dentistry/oral rehabilitation, paediatric dentistry or special care dentistry (via its academic consultants), but it is not meeting current demand. Existing service level agreements between CDSH and the PCCC provide some resources for routine adult oral healthcare and a postgraduate orthodontics training scheme.

Oral and Maxillofacial Surgery: Two consultants, one employed by UCC and one employed by HSE, provide the following services:

- On-call for all oral, maxillo-facial and dental emergencies
- Maxillofacial Trauma
- Major and minor oral surgery for the HSE orthodontic service
- Surgery for all patients with benign oral and jaw pathology
- Alveolar bone grafting and jaw surgery.
- Dental assessment and care for cardiac, orthopaedic and oncology patients
- Consultant surgical cover for HSE oral surgeon
- Consultant surgical cover for adult special needs.

The dental outpatient theatre at CUH is no longer fit for purpose, and there is a lack of infrastructure in HSE Cork/Kerry to support a maxillofacial surgery unit at the present time[48].

Oral Medicine: A referral service provided by an academic consultant is available in the CDSH for patients with oral mucosal lesions (e.g., lichen planus, leukoplakia, mucosal dysplasia or neoplasia). Some joint clinics are held with a consultant dermatologist. The service is accessed by primary care practitioners and at tertiary care level.

Special Needs Dentistry: Patients with medical and intellectual disability require routine care at primary care level, and occasionally general anaesthesia for pain management and infection in the orofacial region. Hospitalisation is sometime required due to the complex nature of their medical history. This service is organised through the public dental service (PDS) which is responsible for organising primary care and using the CDSH setting for delivery of secondary care. This service is not meeting the demand from special needs children and adults. Access to appropriately supervise general anaesthesia limits timely intervention.

Orthodontics: The public orthodontics service in Cork and Kerry is currently led by a single consultant with the help of two orthodontic specialists. A second consultant post is vacant at the present time. A unit at St. Finbarr's Hospital is staffed by dentists with an interest (but not specialist level qualifications) in orthodontics. Patients from Kerry must travel to Cork for treatment. There are guidelines for referral to this service, but there is a waiting list of many years duration.

[48] *Governance and Growth document; Orthodontic Review group 2006*

Restorative Dentistry: Oral rehabilitation of patients with orofacial cancer, congenital absence of teeth and genetic syndromes requires appropriately trained specialists working in conjunction with medical and surgical teams. Four academic consultants in CDSH provide this service on an *ad hoc* basis. Demand greatly exceeds the capacity to meet it and there are no referral guidelines for access to this care.

Paediatric Dentistry: Oral healthcare of children with complex medical needs (e.g., intellectually disabled, chronically ill with cancer, congenital acquired syndromes) requires an appropriately trained specialist. Some care is provided by a single academic consultant and a specialist in paediatric dentistry in CDSH, but demand far exceeds the available resources. Many patients are referred to Our Lady's Hospital for Sick Children in Dublin.

Dental and Maxillofacial Surgery activity

There is a once a week maxillofacial list in Theatre 8 in CUH and there is also a dental surgery unit located elsewhere in CUH, in addition to facilities in the CDSH. Community dentists perform a limited number of dental extractions under general anaesthesia in BGH and MGH.

A total of 67 Maxillofacial operations were performed in Theatre 8 in 2008 (Figure 9-11).

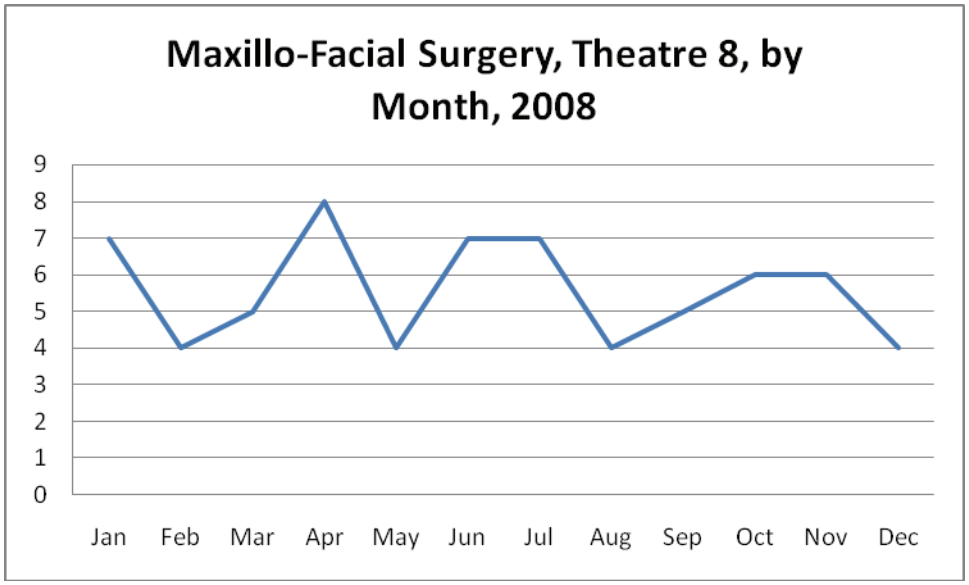


Figure 9-11 Maxillofacial surgery activity 2008

Table 9-30 Maxillofacial Surgery and Oral Health

9.6	Recommendations on:		
.8	**Maxillofacial Surgery and Oral Health**	.1	A regional clinical director should be appointed for three years to re-organise specialist dental and maxillofacial services more effectively. Thereafter, there should be a regional clinical lead.
		.2	Maxillofacial surgery should be located at SIVUH. The dental outpatient theatre at CUH should be moved to SIVUH.
		.3	Adults and children with special needs should continue to be treated at CUH
		.4	An option appraisal should be conducted to assess the feasibility of moving the Cork Dental School and Hospital to SIVUH from CUH.
		.5	The new regional director for dental services should develop a new sustainable funding model for dental services, in consultation with the HSE and UCC, by December 2011.

RATIONALE

What appears clearly from the work of this subgroup is a "frameshift" problem of a lack of fit between services required and where/by whom they are provided. Because resources are lacking in Oral health, patients deteriorate clinically to the point where they must access secondary and tertiary care. If they could be seen sooner, their own health outcome would be better and their call on services would be less.

The lack of clarity between what UCC is resourced to provide and what the people of the region require is another cause of inefficiency. There is a need for a formal review of the relationship between the HSE and the CDSH, including issues of location, funding mechanisms and service level agreements. All HSE funding currently flows through PCCC and this causes difficulties in the provision of dental care of tertiary referral inpatients with complex conditions who may reside outside the counties of Cork and Kerry.

In association with achievement of greater clarity on resourcing arrangements, there is a strong case for a regional clinical director for acute and related dental services with the authority to deploy resources so as to get better value for money and better patient outcomes. The regional clinical director would be responsible to the HSE for delivery of dental services funded by the state, but would also work closely with the CDSH to ensure that student learning was not adversely affected by changes in the organisation of dental services. The Clinical Director and Dean of the Dental School would sign off on an annual service plan and a service arrangement between the HSE and the CDSH. When the service becomes successfully reorganised, the clinical director post should revert back to a named clinical lead.

Paediatric Dental services in MGH and BGH need to be examined in the broader context of reconfiguration.

The maxillofacial operating theatre should transfer to SIVUH which has both the experience and interest to develop day and short stay surgery. It would also locate this specialty with otorhinolaryngology and plastic surgery which will be located at SIVUH.

There should be an options appraisal study on the possibility of transferring the CDSH to SIVUH as there do not appear to be strong clinical arguments for its remaining on the Wilton campus.

9.6.9 Ophthalmology Service

The regional centre for ophthalmology is currently located at CUH. Outreach clinics and inpatient consults are provided at MUH and SIVUH. CUH is the regional tertiary referral centre for complex vitro-retinal work, malignant melanoma of the choroid and paediatric ophthalmology. An outpatient unit in CUH is situated close to the emergency department (ED) and there is a dedicated emergency eye service in the ED. Five consultants are supported by a medical team of nine, a clinical photographer, three orthoptrists and a nursing team.

A regional community ophthalmology service to approximately 10,000 patients is provided by a community ophthalmologist and PCCC also have a service level agreement with a private community ophthalmology physician. The following treatments were provided under the pilot initiative:

- acute medical treatments
- long term medical treatments
- surgical treatments
- domiciliary visits

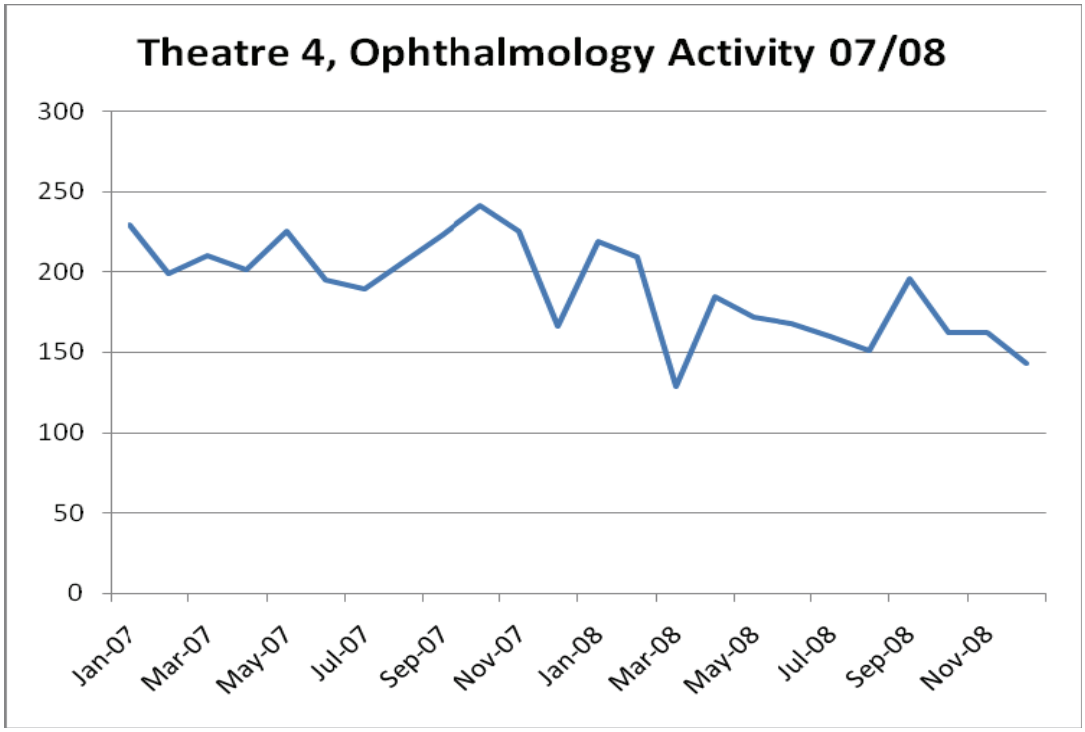


Figure 9-12 Ophthalmology theatre activity 2007 & 2008

2,056 operations were carried out in the ophthalmology theatres in CUH in 2008. This is less than previous years, as one of the theatres was closed for much of the year (2,509 procedures were performed in 2007). Cataract operations account for approximately half of all procedures undertaken in 2007 and 2008.

Table 9-31 Ophthalmology

9.6	Recommendations on:		
.9	**Ophthalmology**	.1	There should be a single regional department of ophthalmology with a named clinical lead.
		.2	Ophthalmology services should be consolidated at a new regional ophthalmology centre at SIVUH.
		.3	During the day emergency service will be provided at SIVUH. Out of hours emergencies will be seen at CUH ED.
		.4	The next ophthalmology consultant appointment (new or replacement) should have a special interest in vitro-retinal surgery to bring the consultant numbers in this subspecialty to three.
		.5	Priority should be given to the appointment of additional community ophthalmologists.
		.6	Digital image transfer technology should be developed between KGH and SIVUH.

RATIONALE

All Ophthalmology services should be transferred to SIVUH, because -

- The synergy between elective and emergency work requires that they be co-located. This requires adequate space which is available on SIVUH site due to the relocation of breast cancer services to CUH.
- The reconfiguration roadmap also proposes to locate allied specialties on this site which will enable optimisation of patient care pathways and staff skills.
- SIVUH has already developed skill and commitment to day surgery.

The SIUVH site will enable:

- A comprehensive ophthalmology department on one site equipped to deal with elective and emergency care.
- Improved outpatient access and procedures which will also facilitate general and ophthalmological pre-assessment of patients

The ophthalmology subgroup has identified a requirement for 2 theatres (a dedicated day theatre and inpatient theatre) providing 60 hours of surgical access, (based on 2007 activity). However under reconfiguration efficiency proposals this level of activity should be achieved by the provision of one theatre operating on a 12-hour / 5 day a week basis. There is a need to enhance community ophthalmology services. There is a need to develop services for diabetic patients within a diabetic care pathway being developed under the direction of the Quality and Clinical Care Directorate.

Education programmes should be developed to up-skill GPs and practice nurses in the diagnosis and management of certain conditions of the eye.

9.6.10 Orthopaedic Service

Approximately 3,450 patients require admission to hospital for elective orthopaedic operations each year (2,700 in CUH and 750 in KGH) and some 9,000 are treated as outpatients in fracture clinics (mainly trauma). The HSE service for public patients (elective and trauma) is delivered by seven full-time consultants and two locums (a consultant-to-population ratio of 1:80,000). A majority require physiotherapy and/or occupational therapy as part of their rehabilitation. Currently in the Cork and Kerry region there is no paediatric orthopaedic surgeon. An elective paediatric outpatient service is provided at SMOH by visiting paediatric consultants from Our Lady's Children's Hospital, Crumlin.

The elective orthopaedic service at SMOH delivers secondary-level care for patients with acute and chronic musculoskeletal disorders across Cork city and county, and tertiary-level care (within some specialist areas) for all of Munster. The elective orthopaedic service at KGH delivers secondary-level care for the population of county Kerry. Some elective orthopaedic surgery is also carried out at private hospitals within the region (Bon Secours hospitals in Cork and Tralee, Shanakiel Hospital in Cork).

In KGH, elective and trauma surgery is carried out in a single operating theatre (approx. 1,500 cases per year, half trauma and half elective) which is not best practice.

The orthopaedic trauma service at CUH delivers secondary-level care for patients with musculoskeletal injury across Cork city and county, and tertiary-level care for all of Munster. The trauma service at KGH delivers secondary-level care for the population of county Kerry. A limited independent trauma service is provided by Swiftcare/VHI in Cork city.

In CUH there is a significant delay in the provision of trauma surgery and patients often experience delays for surgery in excess of 48 hours. This is in part due to the limited theatre capacity, with only one dedicated operating theatre. There are also insufficient beds dedicated to trauma patients (24 dedicated beds for on average 50-60 trauma inpatients). Ten fracture clinics operate per week and the current waiting time for a fracture appointment is nine days.

KGH has no dedicated theatre for trauma surgery. Trauma cases are higher in the summer than in the winter.

A total of 5,471 procedures were undertaken in the region in 2008. Figure 9-13 illustrates orthopaedic activity by hospital by month for 2008. As expected there are more emergencies during the summer months. Elective activity in SMOH declines at year end, though 2008 is not typical of other years as a number of surgeons left the service that year.

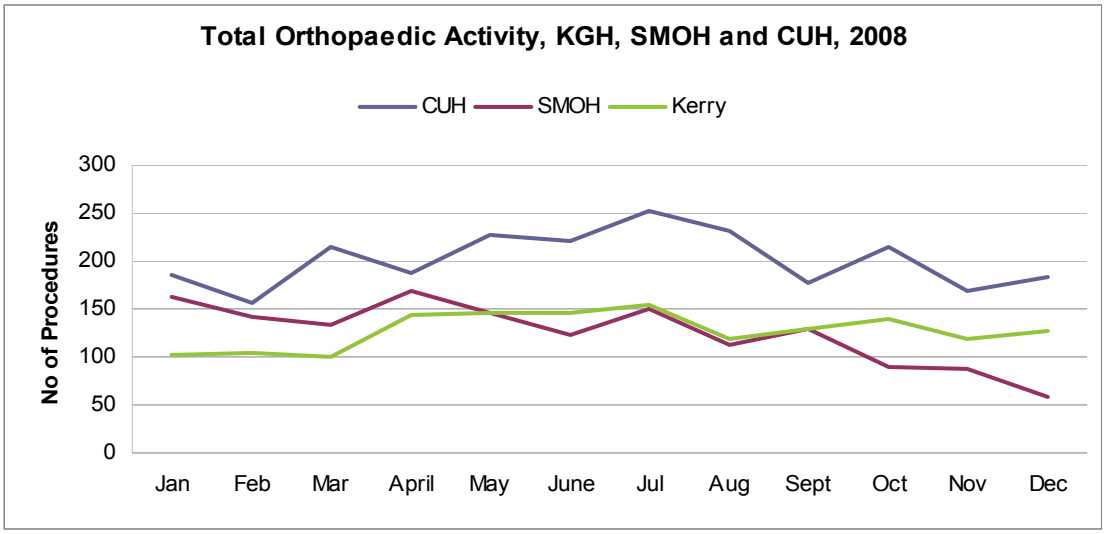


Figure 9-13 Total orthopaedic activity 2008

Table 9-32: Number of orthopaedic procedures in all hospitals 2008

Orthopaedic Surgery	Total No of Procedures
CUH	2421
SMOH	1521
KGH	1529
Total	**5,471**

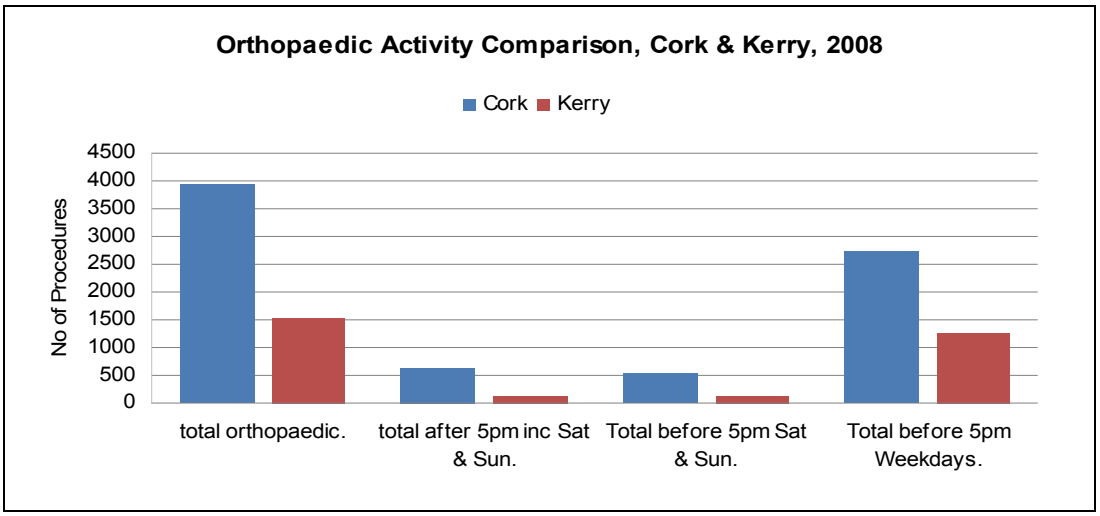


Figure 9-14 Comparison of activity between Cork and Kerry, 2008

Table 9-33 Orthopaedics

9.6	Recommendations on:		
.10	**Orthopaedics**	.1	There should be a single regional department of orthopaedics with a named clinical lead.
		.2	All elective orthopaedics in Cork city should be consolidated at SIVUH and trauma orthopaedics should continue at CUH.
		.3	Elective and trauma orthopaedics should continue at KGH but additional elective capacity should be made available for specialist joint work at SIVUH for KGH orthopaedic consultants.
		.4	There should be an second orthopaedic trauma theatre at CUH as almost half the current trauma work is out of hours
		.5	The next two orthopaedic surgeon consultant appointments in Cork should have a subspecialty interest in paediatric orthopaedics.
		.6	Protocols should be developed covering stabilisation and transfer of trauma patients from KGH to CUH within 24 hours where deemed clinically necessary.
		.7	Jointly agreed clinical care pathway should be developed between orthopaedics and geriatric medicine (Table 9-14 p.113)
		.8	Nurse/therapist led outreach services should be developed for back pain, fracture clinics and rehabilitation.

RATIONALE

The public Orthopaedic service, for various reasons, has suffered from poor planning, organisation and resourcing over many years. Accessing the elective orthopaedic service at SMOH is unsatisfactory and outpatient waiting times approach almost two years across the range of specialties provided, due mainly to the small number of consultant staff but also to the limited theatre capacity, with only two laminar air-flow operating theatres at SMOH.

Patient care in the region falls short of best practice because of failure to develop properly staffed groups with specialist training and interest in trauma, spine, hand, upper limb, hip-and-knee, foot-and-ankle and sports surgery, in line with modern international orthopaedic practice.

Reconfiguration offers an opportunity to put the fundamentals in place that will allow the service to develop in the future. Elective orthopaedics should move from SMOH to SIVUH as many of the procedures are straightforward for the medically fit patient. The trauma service should continue to be based at CUH where it should have access to an emergency theatre with laminar flow on a 24/7 basis.

Acute trauma services should centralise to a single facility at CUH with protected beds and an additional trauma theatre. Both theatres should be available from 08.00 to 20.00 hours and one should be available for out-of-hours emergency surgery between 20.00 and 08.00 hours. There should be a dedicated day ward. This would give trauma patients rapid access to beds and facilitate them being seen within 24 hours by an orthopaedic consultant. All patients with a hip fracture should be admitted to an acute orthopaedic ward within 4 hours of presentation and patients who are medically fit should have surgery within 24 hours, during normal working hours.

Early and appropriate referrals to specialist rehabilitation services should be considered for patients who have been admitted with poly-trauma and an identifiable enduring neurological injury to the brain or spinal cord.

Services at KGH must continue to provide for trauma patients but where clinically appropriate, they should be stabilised by the ED team and transferred to Cork for orthopaedic surgery. In the meantime, surgeons in Kerry should have admitting rights to SIVUH for their elective work. Development along these lines would enable greater sub-specialisation which would ultimately be in the better interest of patients in the region as a whole.

Elderly patients who present with a fragility fracture should be admitted under the care of a consultant geriatrician and a consultant orthopaedic surgeon. All patients should have access to a fracture clinic appointment within 48 hours of presentation at an Emergency Department. There is potential to expand the role of a trauma nurse co-ordinator to provide clinical audit and research into service improvements. The trauma nurse co-ordinator could replace some of the duties of the non consultant hospital doctors, improve the patient pathway and enhance the link with the community trauma service.

Outreach services, including fracture and rehabilitation clinics, should be provided at the smaller hospitals, and in the future possibly in primary care centres in collaboration with nurses and therapists. Improved resourcing of discharge services will lead to improved discharge planning and greater liaison with the community services.

9.6.11 Plastic Surgery Service

Plastic surgery provides a wide range of surgical services in its own right and works closely with other specialties e.g. head and neck otorhinolaryngology, orthopaedics, rheumatology and maxillo-facial surgery. Some 40% is delivered as emergency surgery in CUH and 60% as elective surgery in CUH, SIVUH and SMOH. An outpatient service is provided at KGH. Much of the elective work lends itself to day surgery. Four consultant plastic surgeons currently work in four locations - two exclusively in Cork city at CUH and SIVUH and two between Cork and Tralee at SMOH and KGH. Plastic surgeons in Cork city tend to operate in more than one hospital.

Plastic surgery is performed in CUH, SMOH and SIVUH. Emergency plastic surgery is undertaken in Theatre 9 of CUH and also in Theatre 6 at weekends. Figure 9-15 shows activity by hospital for the year. Figure 9-16 shows activity within CUH. A total of 4,698 procedures were performed in Cork city in 2008.

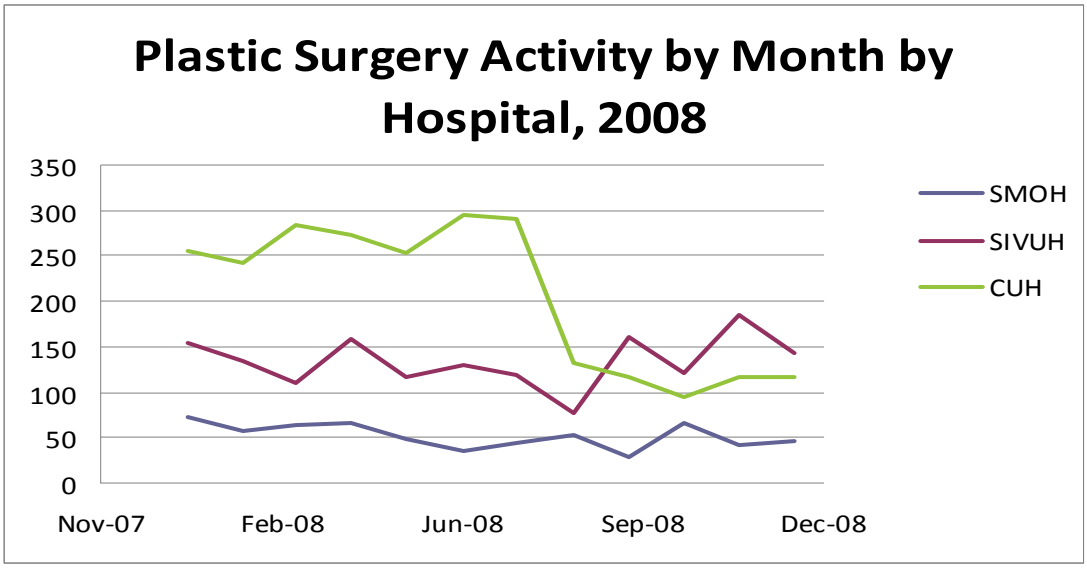


Figure 9-15 Plastic surgery activity by hospital 2008

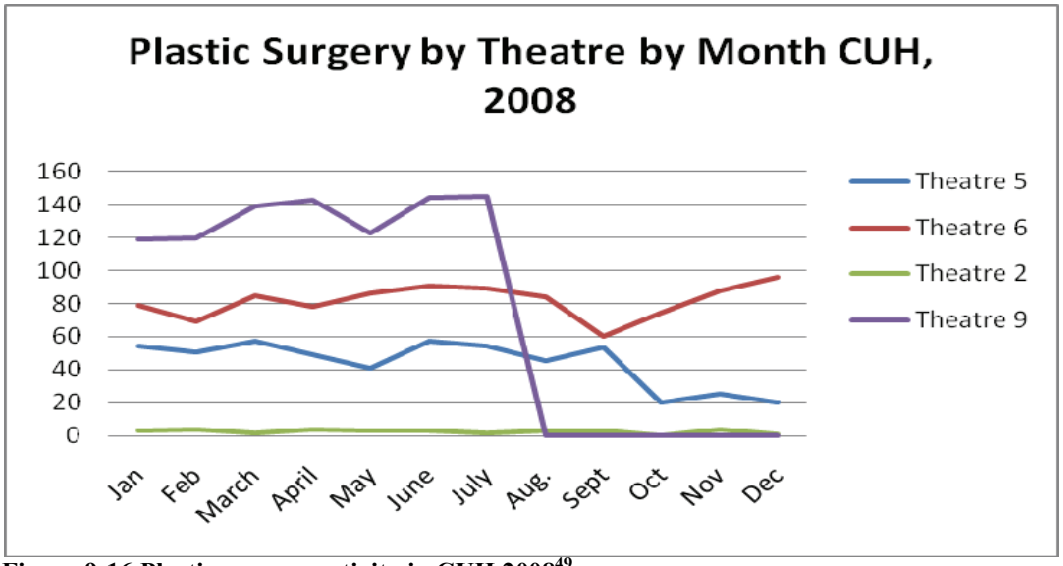


Figure 9-16 Plastic surgery activity in CUH 2008[49]

The total number of procedures carried out in each hospital/theatre in 2008 is summarised in Table 9-34.

Table 9-34 Number of plastic surgery procedures in all hospitals 2008

Hosp/ Theatre	SMOH	SIVUH	Theatre 5	Theatre 6	Theatre 2	Theatre 9	Total
No of Procedures	621	1608	525	979	32	933	4698

Procedures undertaken in SMOH and SIVUH are generally elective. A large proportion of activity in SIVUH is undertaken on a day-patient basis. This variable was poorly recorded in the SMOH theatre log books for 2008, (Figure 9-17).

[49] Theatre 9 was closed for refurbishment from August onwards in 2008.

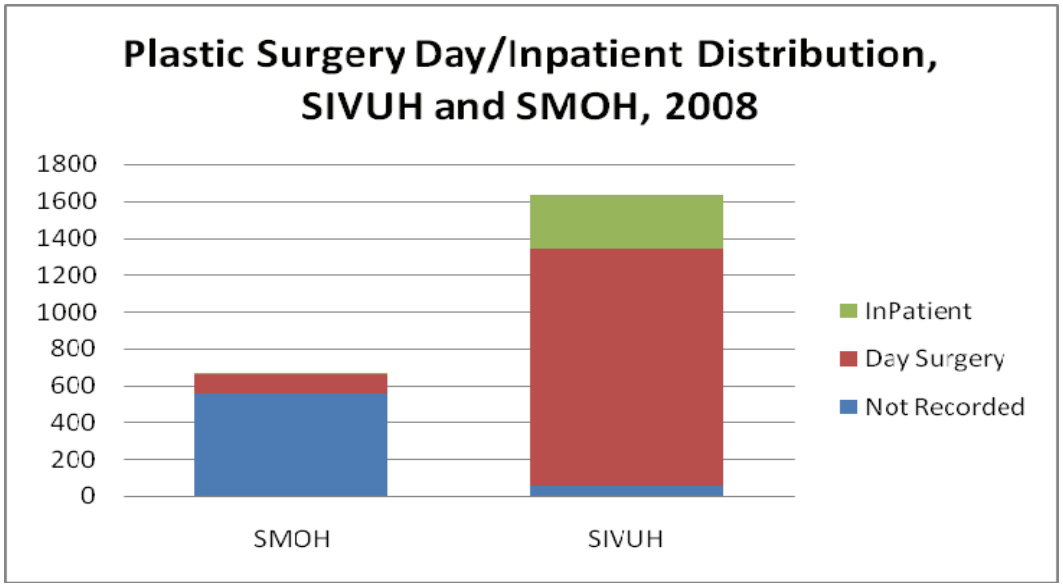


Figure 9-17 Day/inpatient distribution in SMOH and SIVUH 2008

Table 9-35 Plastic Surgery

9.6	Recommendations on:		
.11	**Plastic Surgery** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of plastic surgery with a named clinical lead.
		.2	Trauma work should be carried out in the dedicated emergency theatre at CUH
		.3	In keeping with the NCCP, complex cancer-related surgery should be carried out at CUH.
		.4	All other plastic surgery should transfer to SIVUH, with as much as possible on a day surgery basis.
		.5	Outreach should be developed at BGH, KGH and MGH.
		.6	The regional department should prioritise discussions with UCC for an academic post in plastic surgery.

RATIONALE

Plastic surgeons should conduct all trauma and cancer work at CUH where facilities for these two categories will be concentrated. This should including related outpatient sessions. All elective work should be consolidated at SIVUH which will have elective orthopaedics, ophthalmology, otorhinolaryngology and dermatology, all cognate specialites. SIVUH will also specialise in day surgery and much of plastic surgery falls into this category. Full requirements will be quantified at detailed implementation stage. An outreach service should be provided in BGH, KGH and MGH as resources permit.

9.6.12 Urology Service

The consultant to population ratio is particularly low in urology. At present there are three consultant urologist posts shared between CUH and MUH (one wholetime post at CUH, one at MUH and one split-site post) providing a service for the whole of HSE South. A fourth post, approved under the National Cancer Control Programme, is being recruited. The service includes the south east so that the consultant WTE split following recruitment of the fourth post will be 3.6 Cork city hospitals and 0.4 Waterford Regional Hospital (WRH). The consultant team provides a rapid access clinic at CUH and the fourth consultant will be responsible for establishing a second rapid access clinic at WRH. CUH will be the regional centre for all urological cancer surgery. CUH also provides a paediatric urology service.

MUH provides specialist clinics in haematuria, a PSA clinic for patients presenting with elevated PSAs and men's health. An ambulatory diagnostic centre provides bladder cancer surveillance, intravesical immunotherapy and chemotherapy urinary incontinence, erectile dysfunction and assessment of new cancer patients. Surgical procedures with an emphasis on urological malignancy are undertaken and a special expertise exists in minimally invasive surgery.

Day procedures are carried out at MGH.

The specialty contributes to an active academic and teaching program and is affiliated to the national urological residency training scheme under the auspices of the RCSI.

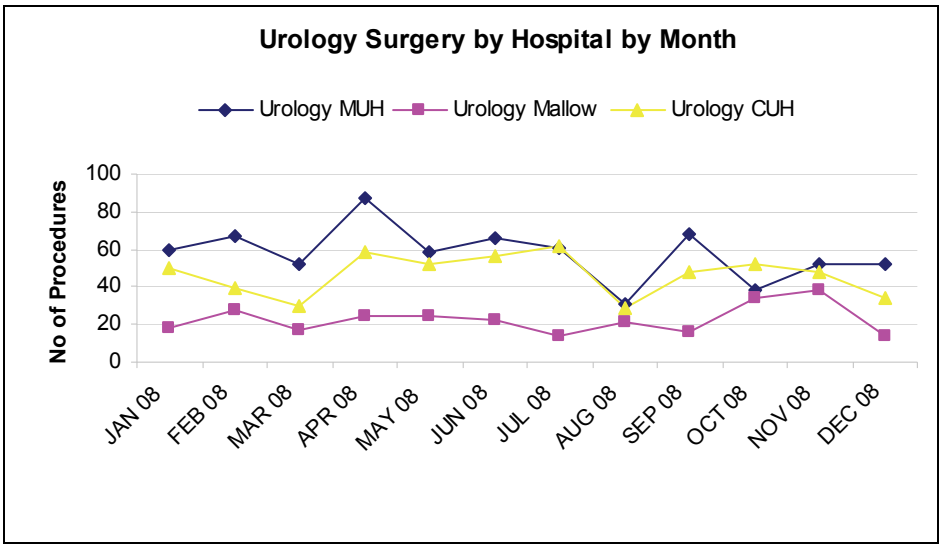


Figure 9-18 Urology activity by hospital 2008

Table 9-36 Urology

9.6	Recommendations on:		
.12	**Urology** [Refer: National Cancer Control Programme]	.1	There should be a single regional department of urology with a named clinical lead.
		.2	Urological cancer surgery (in keeping with the NCCP) and paediatric urological surgery should be located at CUH.
		.3	Diagnostic, outpatients, ambulatory and elective urological surgery should be carried out at MUH.
		.4	Outreach should be developed at BGH, KGH and MGH.

RATIONALE
The National Cancer Control Programme will see the concentration of all urological cancer services at CUH. Apart from cancer surgery, Cork urologists should do their elective surgery at MUH. The existing paediatric urology service should remain at CUH. MUH has developed an effective diagnostic and ambulatory care centre and this should be further developed. Building on existing services, outreach should be developed in BGH, KGH and MGH.

9.6.13 Vascular Surgery Service

Regional vascular services for Cork and Kerry are delivered on two sites, CUH and MUH. Two consultant general/vascular surgeons work on each site.

Inpatient Service: Both hospitals provide an on-call emergency service supporting immediate access for emergency cases such as ruptured aortic aneurysm and acute limb ischaemia. A vascular trauma service is provided at CUH. Single on-call rotas are in place to provide emergency care for the region. There are no dedicated vascular wards on either site so patients are managed on mixed surgical/medical wards. Evidence suggests this can lead to longer length of stay[50]. Planned elective admissions are undertaken within a three month timeframe. A longer waiting time exists for varicose vein surgery and patients waiting longer than three months are offered the National Treatment Purchase Fund. Patients are prioritised according to need. Elective major surgery patients are pre-assessed prior to surgery. There is a structured service for patients requiring angiogram/angioplasty in MUH with 5 slots allocated per week and 3 slots allocated per week in CUH (minimal waiting lists). CUH currently has one WTE vascular Clinical nurse specialist (CNS) who is involved in the planning and delivery of care to vascular patients in outpatient and inpatient settings. The vascular CNS also provides a link between the community and the acute setting, aiding communication and collaboration between all members of the multidisciplinary team. The development of policies, procedures and patient information is also a key function of the role of the vascular CNS. CUH provides an arterio-venous access service for dialysis patients. However this service is unstructured with no allocated theatre slots.

Outpatient Service: An outpatient service is provided at both hospitals. Outpatients receive routine appointments within two months, with a longer time frame for patients presenting for varicose vein assessment. The outpatient service is not streamlined and in the absence of a vascular lab on either site, patients have to undertake multiple trips to undergo investigations and assessment. The vascular service is supported by other consultants with particular

[50] *The Provision of Services for Patients with Vascular Disease 2009, The Vascular Society of Great Britain and Ireland*

expertise in vascular work such as radiologists, anaesthetists and cardiologists. A significant aspect of the service involves the management of chronic conditions such as leg ulcers, lymphoedema and chronic venous insufficiency which is supported by dedicated dressing clinics on both sites. Wound care specialist nurses on both sites link with public health nurses to enhance the quality of the service. A diabetic foot service and lymphodema service are also provided at CUH. Amputees from both centres are referred to the National Rehabilitation Hospital and are seen at a fortnightly clinic at St. Finbarr's Hospital (SFH). Some are managed with outpatient physiotherapy attendances at MUH or at the day hospital at SFH. A dedicated outpatient amputee rehabilitation unit is planned for MUH in 2010.

Neither of the two vascular units in the city has a fully operational non-invasive vascular lab. This is a major deficit and leads to less co-ordinated care and a culture of multiple attendances.

Community Service: Both sites have established links with the GPs and the public health nursing (PHN) service. Good cooperation exists in the management of chronic conditions such as leg ulceration and a facility exists for PHNs to refer patients for assessment of leg ulceration. In the last 3 months of 2009, West Cork set up the Desmond Pre-diabetes service (weekly clinic run by the primary care team), identifying those at risk of diabetes and supporting these patients to make the necessary lifestyle/self management changes. The expert diabetic programme is also available in the area with multidisciplinary team input. This is an effective programme targeted at optimising patient involvement in managing their own health.

A total of 1,114 vascular surgery procedures were performed in Cork in 2008. There is no vascular surgeon operating in KGH; vascular procedures undertaken in KGH are recorded as general surgery in the theatre log book. A small number of vascular procedures are carried out in MGH each year. Figure 9-19 illustrates the distribution of activity by hospital by month for 2008.

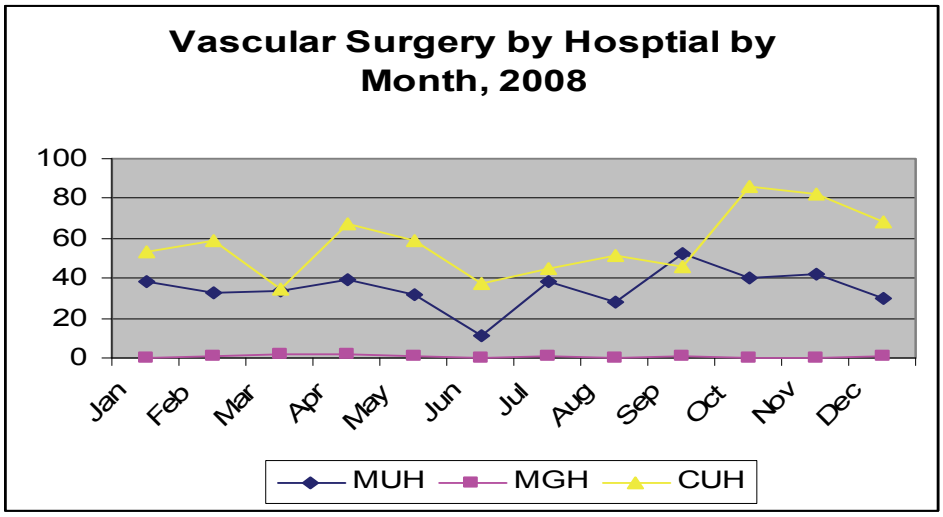


Figure 9-19 Vascular surgery in MUH, MGH and CUH 2008

Table 9-37 Number of procedures by hospital 2008

Vascular Surgery	No of Procedures
MUH	417
MGH	9
CUH	688
Total	**1,114**

Table 9-38: Vascular Surgery

9.6	Recommendations on:		
.13	**Vascular Surgery**	.1	There should be a single regional department of vascular surgery with a named clinical lead.
		.2	Diagnostics, including a new non-invasive vascular laboratory and outpatients service (including a new venous laser facility), should be provided at a location that optimises accessibility for patients.
		.3	Emergency and cancer surgery should be carried out at CUH. Elective surgery should be carried out at MUH.
		.4	A new endovascular laboratory should be developed in the new cardiac renal centre at CUH.
		.5	Outreach should be developed at BGH, KGH and MGH.
		.6	Research and development of novel vascular devices should be developed in association with UCC and CIT

RATIONALE

Vascular surgery will function as a single regional team. Emergency surgery, cancer surgery and endovascular work should be carried out at CUH. All Cork vascular surgeons should do their elective surgery at MUH. The absence of a non-invasive vascular laboratory needs to be addressed as a priority.

Primary care should have the back-up of community podiatry services and specialist diabetic footcare teams so that high risk patients can be managed appropriately and provided where necessary with prompt specialist treatment. Vascular community services should be developed in the areas of disease prevention and health promotion, particularly for diabetic patients where early intervention will save limbs and prolong active life. Community rehabilitation should be supported by hospital and GPs working collaboratively. Specialist nurses trained in the assessment, management and treatment of leg ulceration should expand the number of leg ulcer clinics with occupational therapy, physiotherapy, dietetics and social work review. Linkages between the prosthetic, orthotic and limb absence rehabilitation (POLAR) clinic at MUH and the leg ulcer clinic will provide much needed specialist orthotic assessments that will enhance the vascular service.

Considerable potential exists for developing vascular research in collaboration with UCC and CIT. The vascular units in Cork had been to the forefront in embracing the shift towards minimally invasive therapies in recent years. An endovascular skills course for vascular and interventional trainees is planned for 2010, and will be the first such course of its kind in Ireland. UCC has research expertise in vascular cardiology and CIT has expertise in medical devices development. Medical devices companies have invested heavily in Ireland and have established centres in Cork. A UCC clinical research facility is being built at MUH which will provide facilities for stage two clinical trials. In short, there are excellent opportunities for developing vascular research with good prospects of novel product development.

9.7 WOMEN AND CHILDREN'S HEALTH

9.7.1 Women's and Children's Health Directorate

Specialties relating to women's and children's health that should be considered as one clinical directorate are gynaecology, neonatology, obstetrics and paediatrics. Each should each have a clinical lead who reports to a regional clinical director with a brief to establish clinical priorities, ensure services are safe and reliable and staff are deployed in such a way as to deliver these services with maximum efficiency. As an intermediate step towards developing regional clinical services, every consultant in Cork and Kerry should have admitting rights to all the acute hospitals in the region.

Table 9-39: Women and Children's Health Directorate

9.7	Recommendations on:	
.1	**Women and Children's Health Directorate**	There should be a single regional clinical directorate for women's and children's health led by a regional clinical director.

9.7.2 Gynaecology Service

Gynaecology services are currently delivered in BGH, CUH/CUMH, KGH, MUH and SIVUH. Complex (including cancer) procedures are undertaken in CUH/CUMH, KGH and SIVUH. Emergency, elective less complex day and inpatient procedures are undertaken in all of the above. The only hospital in the region which currently does not provide any gynaecology service is MGH. The implementation of NCCP and the associated transfer of gynae-oncology to the CUH site will pose a challenge for the CUH cancer centre and by default will impact on the current type and level of gynaecology activity undertaken outside CUH.

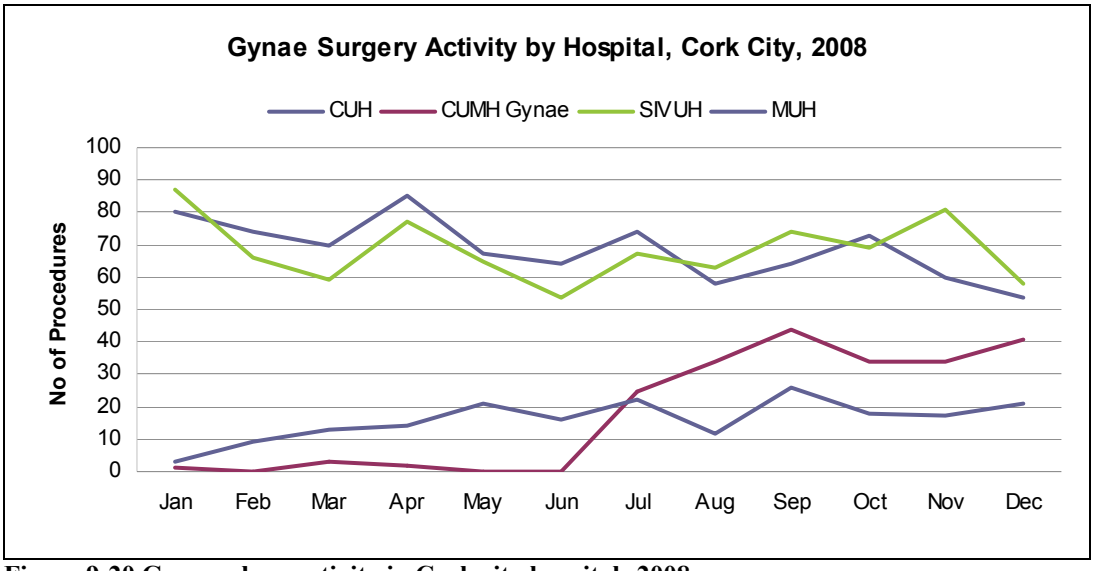


Figure 9-20 Gynaecology activity in Cork city hospitals 2008

Gynaecological surgery is perfomed in CUH, CUMH, KGH, SIVUH and MUH. A total of 3,383 procedures were performed in 2008 across the region. The CUMH opened in April 2007 and the gynaecology theatre was operational from July 2007 limited to two days per week. While rates increased in MUH, very few procedures are undertaken there. The number of procedures undertaken in the SIVUH are consistently high.

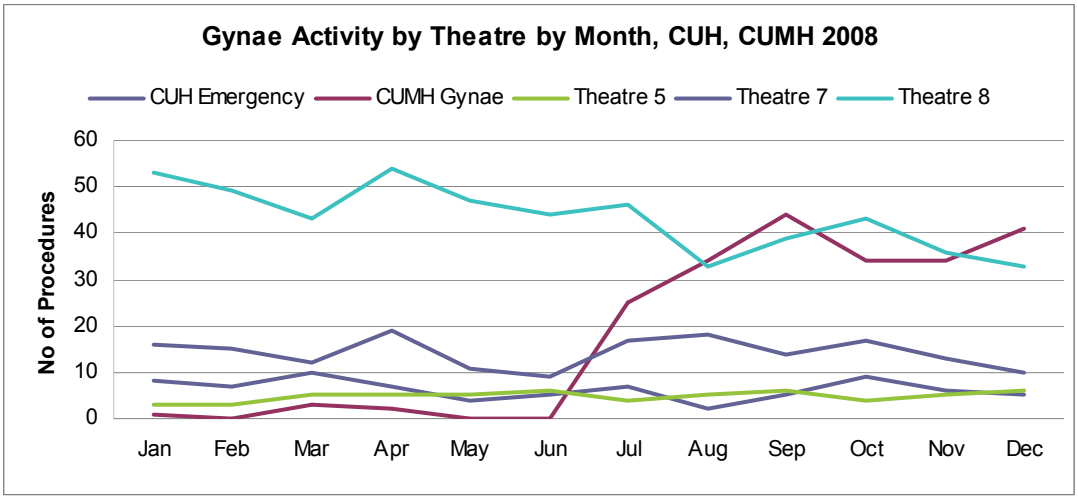


Figure 9-21 Gynaecology activity by theatre at CUH/CUMH 2008[51]

Table 9-40 Number of procedures by hospital and theatre 2008

Hospital	CUH Emerg-ency	CUMH Gynae	Th. 5	Th. 7	Th. 8	SIVUH	MUH	KGH	Total
No of Procedures	75	218	57	171	520	820	192	1330	3,383

9.7.3 Obstetrics and Neonatology Services

The obstetrics and neonatology service for Cork and Kerry is based in the Cork University Maternity Hospital (CUMH) and in KGH. The same obstetrics consultant team provide the general gynaecology and gynae-oncology service.

KGH: The obstetrics and gynaecology unit has a total bed capacity of 49 which includes gynaecology and antenatal beds plus a delivery suite. The birth rate for 2008 was 1,861 with a caesarean section rate of approx 27%. There are three consultant obstetricians who also provide a general gynaecology service.

The neonatal unit has capacity to accommodate 10 infants in total and contains 10 cots and 5 incubators. There were a total of 21 infants transferred from KGH in 2008 of which 10 went to Our Lady's Children's Hospital Crumlin (OLCHC), eight to CUMH, two to Temple Street Children's Hospital and one to the National Maternity Hospital, Holles Street.

CUMH: Cork University Maternity Hospital is the result of the amalgamation of four services and three sites; St Finbarr's Hospital, Erinville Hospital, Bon Secours Hospital and the Gynaecology service of CUH. The unit opened in April 2007 and was planned to provide a service based on 7,000 births but currently deals with almost 9,000. This amalgamation of services and integration of staff involved a significant change management process.

CUMH has a total bed capacity of 162 which includes gynaecology, antenatal beds and a delivery suite. The birth rate for 2008 was 8,788 with a caesarean section rate of approx 27%.

[51] *As the number of procedures undertaken in CUMH increased activity dropped in CUH.*

There are fifteen consultant obstetricians (11 WTEs) with various special interests who also provide a general and oncology gynaecology service.

A significant obstetrics outreach service has been developed by CUMH staff (Cois Tí) and currently provides a service across five sites in Cork city and county, the exception being east Cork. Within the hospital, patients are seen by teams of consultants and midwives. Antenatal care is provided in an integrated manner which involves consultants, midwives and GPs.

A number of specialist clinics are provided on site such as perinatal medicine, early pregnancy loss, foetal medicine, multiple births, diabetes. Structured weekly clinical meetings review the service provision as well as maternal morbidity and mortality.

A seamless link exists between the clinical service, UCC department of obstetrics and gynaecology and the Anu research centre. Research and education is considered an integral part of the service; e.g. SCOPE, NEMO and NPEC. MD, PhD and post doctoral students work in the environs of the CUMH/UCC and significant funding flows from agencies such as the Health Research Board, Science Foundation Ireland, the Wellcome Trust and individual donors.

The neonatal unit at CUMH was designed with 50 neonatal cot spaces but currently has 37 cots open. These include 6 intensive care, 6 high dependency and 25 special care cots.

Table 9-41 Maternity Services

9.7	Recommendations on:		
.1	**Maternity Services** Obstetrics, Gynaecology Neonatology and Midwifery [Refer National Obstetrics and Gynaecology Programme] [Refer: National Cancer Control Programme]	.1	There should be single regional maternity service with a named clinical lead which should encompass regional departments of: – Obstetrics, Midwifery and Gynaecology, – Neonatology.
		.2	Emergency gynaecology and gynae-oncology should be concentrated at CUMH/CUH.
		.3	Elective gynaecological day surgery should transfer to SIVUH.
		.4	Day surgery, diagnostics (including colposcopy, hysteroscopy, cystoscopy/urodynamics and ultrasound) and gynaecology outpatients should be concentrated at SIVUH, establishing a gynaecological "one-stop shop".
		.5	Midwifery provided care should be developed within an integrated regional maternity service.
		.6	The maternity unit at KGH should continue to be an obstetrics led service.

RATIONALE

In order to realise the long term vision of gynaecology, elective services should be concentrated in SIVUH on an 8am to 8pm basis and over time a "one stop shop" approach should be maximised. Emergency work, gynae-oncology and major gynaecology surgery should continue to be carried out at CUMH/CUH. Outreach services (day surgery, pre-assessment and outpatient clinics) should be expanded at BGH and extended to MGH on a similar basis.

The obstetrics and neonatology service currently operates from the CUMH and KGH with good liaison between the two centres. Consultants provide outreach services to BGH and MGH. The Cois Tí model has been successful and should be expanded regionally. Arrangements should be formalized and protocols agreed at regional team level. The development plan should be based on equity of access and consistency of clinical outcomes.

Horwath and Teamwork recommended discontinuation of obstetrics services at KGH and suggested that the hospital would be ideal for the development of a midwifery led care unit. The discontinuation of obstetrics services at KGH is not recommended in this roadmap. We believe that the hospital's isolated location and its rural and remote hinterland, together with a birth rate of nearly 2,000 per year and the need for an obstetrics and gynaecology service for the county all argue for continuation of an obstetrics service at KGH. Home-from-home birthing facilities should be developed at KGH and CUMH.

9.7.4 Paediatrics Service

Paediatrics is delivered in CUH, MUH and KGH. Most acute care is consultant delivered. The Cork unit is accredited for postgraduate medical training. Some tertiary and national level services exist in CUH and MUH, and there are good relationships with children's hospitals in Dublin. There is duplication of secondary level services in CUH and MUH.

CUH is the only site in Ireland where paediatrics is co-located with neonatology and adult services but the gains are offset by the fact that there are no dedicated specialist health and social care professionals and no dedicated outpatient facilities, which does not comply with international best practice. The physical facilities in Cork and to a lesser extent in Kerry are not currently adequate. At the acute hospital/PCCC interface many of the services are currently delivered by voluntary organisations. This makes provision planning and integration of existing services difficult.

Table 9-42 Paediatrics

9.7	Recommendations on:		
.4	**Paediatrics** [Refer: National Paediatric Strategy and National Model of Care for Paediatric Healthcare in Ireland]	.1	There should be a single regional department of paediatrics with a named clinical lead.
		.2	Paediatric hospital services in Cork city should be concentrated in CUH as soon as possible.
		.3	The medium-term goal should be the construction of a new regional paediatric hospital, within the framework of the national paediatric strategy, to be built on the CUH site to cater for all paediatric medicine and surgery and non-complex rehabilitation.
		.4	A regional paediatric surgery service is required for children, including neonates. This excludes complex paediatric surgery which will be performed in the national paediatric hospital.
		.5	Formal paediatric consult arrangements should be available to paediatric surgical services at SIVUH.
		.6	An ambulatory care unit should be built at CUH where a direct access emergency care service for children could be provided.

RATIONALE
With the consolidation of the three Dublin paediatric hospitals into a single National Paediatric Hospital, it is important that HSE South develops a regional centre capable of providing secondary and as much tertiary care as possible so transport of children to Dublin is limited to those complex cases requiring subspecialty expertise. This should be referenced to the national paediatric strategy which sees the Dublin tertiary centre as *"the nexus of an integrated paediatric service, also comprising important outreach capabilities at key non-Dublin Hospitals*[52]*"*. The National Model of Care for Paediatric Healthcare in Ireland (2010) comments: *as acute paediatric… healthcare outside Dublin is provided …, any review and reconfiguration needs to reflect the "hub and spoke" relationships between the national centre in Dublin and the regional and local hospitals outside Dublin."* and *"paediatric healthcare services in Ireland will be delivered through an integrated clinical and organizational network of facilities…connected by transport and retrieval systems, ICT links and movement of personnel"* The Cork paediatric hospital should be able to provide inpatient beds with single rooms for infection control, paediatric level II critical care, children's outpatient suite and day case beds, an ambulatory care unit for rapid and emergency assessment in facilities separate from the adult ED at CUH, a haematology/oncology unit and appropriate paediatric rehabilitation facilities.

Paediatric Joint appointments between hospital and community exist at MUH and KGH and should be further developed.

An early task for the reconfiguration project should be the development of a children's haematology/oncology unit (with inpatient and outpatient facilities) situated adjacent to the existing paediatric unit at CUH. Children's medicine at MUH should be discontinued. This will allow a unified regional service to develop prior to the building of a new paediatric hospital on the CUH site in the medium term. CUH should have a paediatric surgery capability for small infants.

9.8 Hospital Exit

There are a number of ways of entering and exiting an acute hospital. All need to be considered in the interests of achieving better patient flow through the system. Better patient flow means that:

1. unnecessary admissions are avoided,
2. patients who do require admission are admitted promptly,
3. inpatients get appropriate treatment,
4. those whose treatment is complete are discharged promptly, and
5. those who require further treatment (such as rehabilitation or long term care) have a discharge plan executed without excessive delays.

The first two points relate to how GPs interface with the acute hospitals, how the hospital organises its emergency processes (emergency departments, acute medical units, urgent care centres) and how it processes its elective admissions.

Point 3 means that patients are not discharged prematurely. This is the responsibility of the specialty services within the acute hospitals. It is also the responsibility of hospital management working with bed management to define wards more clearly with categories of patient, e.g. surgical ward, elderly care ward, orthopaedic ward, etc. and to ensure that the system knows in real time when each patient is ready for discharge.

Points 4 and 5 revolve around good discharge planning and execution.

[52] Children's Health First International Best Practice in Tertiary Paediatric Services: Implications for the Strategic Organisation of Tertiary Paediatric Services in Ireland *(McKinsey, 2006*)

Discharge planning: Most patients will be discharged from hospital with a letter to their GP outlining any further care requirement. For many this is minimal and they return to independent life in the community. For others, the discharge plan requires extensive support through rehabilitation, further hospital treatment as an inpatient or outpatient, and in some cases, long term care. This can involve a whole range of professional inputs such as public health nursing, occupational therapy, psychiatric support, social workers, GPs and many others. Some patients with complex needs can spend many days in acute hospitals after the acute phase of their illness has been treated waiting while the appropriate care package is put in place. Current figures suggest that approximately 8% of total available bed days in acute hospitals in Cork city are used by less than 1% of patients due to delayed discharge.

Nursing Homes Support Scheme – *a Fair Deal*: The Nursing Homes Support Scheme is a new scheme of financial support for people who need long-term nursing home care. It replaces the Subvention Scheme which has been in existence since 1993. It is based on the principle that the person requiring long term care makes a contribution towards the cost of that care based on an assessment of assets and income. That contribution amounts to 80% of assessable income and 5% of the value of any assets per annum. The first €36,000 of capital assets, or €72,000 for a couple, is exempt from the financial assessment. If the cost of care exceeds this, the State pays the balance. This applies whether the nursing home is public, private or voluntary. This scheme will bring greater clarity to discharge planning but it will not solve the difficult issue of a patient or family having made their choice but still having to wait for an available place.

Community Hospitals: There are 20 community hospitals in Cork and Kerry that in total provide 1,669 beds, most of which provide 24 hour nursing care. These hospitals are valuable and necessary contributors to the care system, performing a key service to their local communities. It is vital for the acute hospitals that community hospital beds are used as efficiently as possible, and that their interfaces with the private nursing home sector and with other forms of care such as sheltered housing and home care are managed carefully and compassionately. Key players, but by no means the only players, are community hospital managers, public health nurses, social workers, local GPs, one of whom may have "medical officer" status at the hospital, and the acute hospital geriatricians. Community hospitals provide four categories of care:

- primary care admission beds for short stay use
- non-complex rehabilitation and recovery beds
- respite care
- long term care

It should be a primary responsibility of the geriatricians working in collaboration with the GPs and Medical Officers, operating as a regional department liaising as necessary with other services such as the rehabilitation service, the orthopaedic service and the neurosurgery service, primary care and PCCC, to define a new relationship between the acute hospital network and the community hospital network with streamlined clinical governance and administrative procedures so that community hospitals can fulfil their roles in the most effective way possible.

Rehabilitation is a key element of good discharge planning. Appropriate and timely rehabilitation reduces hospital readmissions and returns people more quickly to active life. Rehabilitation medicine specialists are also most qualified to judge whether and by how much a patient can benefit from rehabilitation so resources can be used most effectively. Rehabilitation medicine consultants, working closely with colleagues in neurosciences and geriatric medicine, and with a wide range of health and social care professionals, should take the lead in ensuring that rehabilitation medicine services are correctly aligned with effective discharge planning.

Challenging Behaviour can make it difficult to find the appropriate long term setting for such patients, with the result that they can end up spending weeks or months in an acute hospital ward, or usually a private room. Providing timely discharge can be problematic and requires a high level of coordination and liaison with different services. The admitting consultant is often not best placed to deal with these issues which may be either temporary or longer term in nature. A prompt assessment by liaison psychiatry is necessary to determine patient needs and arrange the most appropriate discharge plan.

Hospice care: For some, the acute hospital services reach the point where they can no longer contribute meaningfully to a patient's health and wellbeing. For patients who are terminally ill, the hospice provides more holistic care with greater expertise in pain management and end of life issues than an acute hospital. It is the primary responsibility of the hospital specialist into whose care the patient has been entrusted to liaise with palliative care colleagues, the patient and the family in order to provide a timely referral. The pastoral care team in the acute hospital also has a role to play in facilitating discussion of these issues in a manner that helps timely referral to hospice care.

Table 9-43: Hospital Exit

9.8	Recommendations on:		
	Hospital Exit (see also Geriatric Medicine, Mental Health, Rehabilitation Services)	.1	The regional department of geriatric medicine, working with related services, should develop comprehensive discharge planning pathways as a major implementation workstream of reconfiguration.
		.2	Community hospitals in Cork and Kerry should come under the clinical governance umbrella of the department of geriatric medicine.
		.3	The capacity of rehabilitation services for both older and younger patients needs to be enhanced.
		.4	Patients awaiting long term care should not remain in the acute hospital longer than 10 days.

RATIONALE

A number of reports have drawn attention to the complex nature of discharge planning and the need for a co-ordinated team approach involving senior hospital management and enhanced co-ordination between acute hospitals and primary, continuing and community care. Reconfiguration provides an opportunity to revisit this issue in a regional context and to invite the regional geriatric medicine team to take a lead role in addressing it. This will involve investigating the problem in depth in the particular context of Cork and Kerry and liaising nationally as necessary. Clearer clinical governance arrangements linking acute and continuing care facilities should be part of the solution. While complex discharge planning is a particular feature of older patients, it is not exclusively so. Younger patients with complex rehabilitation needs must also be included. The rehabilitation medicine and mental health services must also be involved. An outcome target should be set that patients should not wait longer than 10 days in an acute hospital awaiting discharge**.**

10. RECONFIGURED ACUTE HOSPITALS

The effect of the changes outlined in this chapter will create a new set of relationships between the six acute hospitals in Cork and Kerry. No longer should each have to strive to maintain a full range of services against a background of diminishing resources; each instead will provide a range of services appropriate to their position within an integrated system where the problems of one will be the problems of all. This can only happen if service responsibility is regional rather than institutional. The range of services in each hospital will be determined by its location and size and ultimately by quality and safety standards imposed by HIQA. For each to play its part will require systems of communication, transfer and retrieval that are superior to those that exist at present and regional oversight that combines clinical governance and corporate governance. A system of clinical governance must be established based on a limited number of clinical directors working with a clinical lead for each service. At present, there are a number of interim clinical directors and acting clinical directors who are hospital based. They have little practical support and must carry out their functions while carrying heavy clinical workloads without support of business managers and nurse managers. Nevertheless, hospital managers value their contribution and are anxious not to lose their advice and support by moving too quickly to a regional structure. So there needs to be a well defined and time limited transition period during which a solution is found to this need for clinical input into hospital management that does not cut across or inhibit the greater goal of a regionally integrated health system.

The reconfiguration roadmap follows the direction of travel provided by Horwath and Teamwork with an emphasis placed on acute services and on the interface between hospital care and general practice. The full integration of acute services with community and social services is a larger task. The HSE Integrated Services Programme will over time enhance this integration within each ISA. In the meantime, the current roadmap charts how acute services and the crucial hospital/GP interface can be reconfigured in the interests of better patient flow through the hospital network and better patient experience while in hospital care.

10.1 The Future – a New Hospital for Cork

Before looking at the reconfigured hospitals, there should be a clear vision for the long term future of healthcare provision in Cork and Kerry. We believe this would be best served by a new hospital, built on a new site easily accessible by road and public transport. This hospital would be a state-of-the-art specialist elective inpatient and day-patient hospital and ambulatory diagnostic centre whose services would complement the acute services of CUH. Together with CUH and KGH, with excellent telemedicine links to MGH and BGH, the new hospital would function as a key element in an integrated acute hospital network for Cork and Kerry. Its systems would be geared for its patient mix and it would pioneer new forms of acute care. We envisage this hospital being developed over time to the point where it could provide a new home for MUH and SIVUH. This is not a new idea but what is novel is the type of hospital being proposed and its integration as a key element in a reconfigured regional network. The transfer of outpatient activity to a new purpose-built facility would free up space on the regional tertiary centre for the expansion of acute complex inpatient care. We envisage a timeframe of ten to fifteen years to realise this vision. The data in
Table 10-1 sets the numerical context for the proposal.

Table 10-1: Patients seen in Cork city hospitals in 2008

Patient category	CUH	MUH	SIVUH	Total
Outpatients	140,000	37,000	55,000	232,000
Emergency Dept patients	55,000	25,000	23,000	103,000
Inpatients	25,000	9,500	9,500	44,000
Day patients	46,000	16,000	20,000	82,000
Total per hospital	**266,000**	**87,500**	**107,500**	**461,000**

An options appraisal should be carried out at an early stage of reconfiguration to explore the possibilities for creating a new build (or adapting an existing facility) elective and ambulatory care, outpatient and diagnostics centre within or close to Cork city where convenient access would be a prime consideration. This would allow transfer of all outpatient services from hospital campuses to the new centre which would be designed with the needs of the ambulatory outpatient uppermost.

In the meantime, the reconfigured acute hospitals are envisaged as follows:

10.2 Bantry General Hospital

BGH provides a vital service to the people of west Cork, many of whom live in remote rural locations. It will continue to provide consultant delivered selected acute medicine and geriatric medicine. The National Acute Medicine programme and the National Critical Care programme have recognised the remote rural location of BGH and that it needs to be allowed flexibility in the application of their programmes. It will be a centre for outreach specialist services that can provide initial assessment and post treatment follow up care in an increasing range of services, for example, gynaecology, rheumatology, orthopaedics, urology and gastroenterology. It has excellent relationships with local primary and community care services and these should continue to be supported and developed. There is already an advanced paramedic (AP) service based at the hospital able to deliver advanced emergency care to home or roadside anywhere in West Cork. APs will be in communication with specialists in Bantry and Cork hospitals and so not only will be able to deliver high levels of emergency care at the scene but also make correct calls according to agreed protocols as to whether to go to BGH or bypass to one of the Cork hospitals. Arrangements should be made to enable ambulance personnel to communicate directly with GPs in the locality to benefit from their local and medical knowledge. There must be at least five consultant physicians based at BGH in order that the hospital can maintain a viable consultant duty roster and play its full part in the regional hospital system envisaged in this report. Its location, activity and integration with local primary and community care services will make it an important teaching site for medical and other health profession students from UCC.

Table 10-2: Bantry General Hospital after reconfiguration

<table>
<tr><td colspan="4">Bantry General Hospital – A remote rural hospital, providing for routine local needs and medical admissions with capacity for rapid transfer to the tertiary centre, when required, according to regional protocols. Remote rural classification will require particular definitions of selected acute medicine and particular critical care arrangements to be agreed with the national Acute Medicine Programme. Outreach services provided by specialist teams. A teaching hospital of UCC.</td></tr>
<tr><th>Diagnostics</th><th>Medical Services</th><th>Perioperative Services</th><th>Women's and Children's services</th></tr>
<tr><td rowspan="3">More acute lab work
Less cold lab work</td><td>Selected acute medicine**</td><td rowspan="3">Day surgery in:
• General surgery
• Gynaecology
• Plastics</td><td>Gynaecology outreach</td></tr>
<tr><td>Geriatric medicine incl. ambulatory care</td><td rowspan="2">Obstetrics outreach</td></tr>
<tr><td>Gastroenterology – endoscopy</td></tr>
<tr><td rowspan="4">Radiology</td><td>Medical Assessment Unit open 12/7*</td><td>Critical Care** (transfer protocols for remote rural hospital)</td><td>Mental Health Services</td></tr>
<tr><td>Urgent care centre open 12/7</td><td>Dental</td><td rowspan="3">Mental Health</td></tr>
<tr><td>Rehabilitation medicine</td><td>Urology</td></tr>
<tr><td>Outreach – other medical specialties</td><td>Outreach – other surgical specialties</td></tr>
</table>

** Direct admission to wards outside these hours*
*** Arrangements suitable for remote rural hospital to be agreed with National Critical Care and Acute Medicine programmes*

10.3 Cork University Hospital

CUH will be the main regional tertiary centre for Cork and Kerry. It will continue to be a major teaching hospital of University College Cork. Those services presently at CUH that can be safely located at alternative city hospitals will be moved in order to allow CUH to become an efficient tertiary specialist hospital for those complex conditions – emergency and elective – that require inputs from multiple specialist services, for example, serious trauma, cancer and neurosurgery. There will be a 24/7 emergency theatre and a 24/7 emergency orthopaedic theatre. There will be an Acute Medicine Unit and Short Stay Unit staffed by consultant physicians 24/7. All cancer work will be concentrated at CUH. All maternity services in Cork county, and all complex obstetrics care in Cork and Kerry will be delivered from Cork University Maternity Hospital. It will house the regional laboratory. All histopathology apart from KGH will be concentrated in CUH. Paediatric services should be concentrated at what should ultimately become a regional paediatric hospital on the CUH campus. Level II/III critical care resources at CUH should be configured in such a way as to allow individual beds to be staffed up or down from level II to level III in response to individual patient need.

Table 10-3 Cork University Hospital after reconfiguration

<table>
<tr><td colspan="4">Cork University Hospital – main regional centre for complex medical and surgical care, 24/7 level 1 trauma, regional cancer centre, regional maternity hospital, regional paediatric hospital, blood transfusion service for Munster. Major teaching hospital of UCC.</td></tr>
<tr><td>Diagnostics</td><td>Medical Services</td><td>Perioperative Services</td><td>Women and Children's services</td></tr>
<tr><td rowspan="8">Laboratory Medicine
Cl. Biochemistry
Cl. Microbiology
Haematology
Histopathology
Immunology</td><td>Cardiology (regional centre)</td><td>Regional cancer centre</td><td>Gynaecology – emergency and cancer</td></tr>
<tr><td>Dermatology</td><td>Emergency general surgery</td><td rowspan="3">Obstetrics
Midwifery
Neonatology</td></tr>
<tr><td>Emergency Dept open 24/7 level 1 trauma</td><td>Cardio thoracic surgery</td></tr>
<tr><td>Urgent care centre open 12/7</td><td>Critical care – levels II and III</td></tr>
<tr><td>Endocrine/Diabetes inpatients</td><td>Maxillo Facial – trauma & cancer</td><td>Paediatrics</td></tr>
<tr><td>Gastroenterology – emergency endoscopy service</td><td>Neurosurgery</td><td>Mental Health Services</td></tr>
<tr><td>Acute Medicine Unit and Short stay unit open 24/7</td><td>Otorhinolaryngology - cancer</td><td rowspan="6">Mental health and liaison psychiatry</td></tr>
<tr><td rowspan="2">Clinical Haematology
Medical Oncology
Radiation Oncology</td><td>Orthopaedics – trauma</td></tr>
<tr><td>Plastics – trauma & cancer</td></tr>
<tr><td>Infectious diseases</td><td rowspan="8">Vascular surgery - emergency and inpatient elective endovascular lab.</td></tr>
<tr><td>Radiology</td><td>Geriatric medicine</td></tr>
<tr><td rowspan="6">Munster Blood Transfusion Service</td><td>Neuroscience/Neurology</td></tr>
<tr><td>Acute stroke unit</td></tr>
<tr><td>Palliative care</td></tr>
<tr><td>Renal medicine</td></tr>
<tr><td>Respiratory medicine</td></tr>
<tr><td>Rheumatology inpatients</td></tr>
</table>

10.4 Kerry General Hospital

KGH provides a range of acute services to the population of Kerry. It has a heavy caseload and traditionally has strong links with acute services in Cork. The future for KGH lies in strengthening these links to ensure sustainable hospital services within an integrated regional hospital network. Its close proximity to the Bon Secours Hospital Tralee holds out the prospect of greater collaborative arrangements based on formal Service Level Agreements within a broad strategic relationship that will ultimately be to the benefit of all patients. It must continue to provide a 24/7 Emergency Department supported by general and orthopaedic (trauma) surgery. It must continue to be able to provide unselected acute medical care, elderly care and obstetrics care. Horwath and Teamwork advocated a Midwifery led care unit for KGH. While this recommendation has not been adopted in this roadmap, KGH nevertheless provides an ideal location for the further development of midwifery provided care with obstetrics care. The hospital has developed strong links with community services and these should continue to grow. Its rehabilitation unit for the elderly will expand and will include a number of beds for medical rehabilitation of younger adults. There should be a level II/III

integrated critical care unit capable of dealing with most trauma but there must also be clear protocols and retrieval arrangements with the regional trauma centre at CUH for those small number of patients who require rapid transfer. Certain services need to be strengthened by new regional arrangements which may include additional consultant appointments. These include Cardiology, ENT, Radiology and Orthopaedics. While it is essential that KGH retains a capacity to deal with orthopaedic trauma and some elective work, there will never be enough work to sustain subspecialty orthopaedic skills and therefore orthopaedic surgeons should have admitting rights to the regional elective orthopaedic centre (SIVUH below) for agreed subspecialty elective work.

The range of services at KGH needs to be increased through outreach and additional appointments of Kerry based consultants. This will have to be done over time as opportunities arise for the deployment and redeployment of staff. While the county of Kerry will have its own ISA under the new integrated services programme, KGH staff should be included in regional specialty teams and regional clinical governance network.

The hospital has over the years build up positive and mutually beneficial links with the Institute of Technology Tralee which provides undergraduate and postgraduate training for nurses, hosts GP trainees for educational sessions and has successfully piloted inter-professional education for undergraduate medical, nursing and physiotherapy students. It has been innovative in developing research and technology programmes in certain areas of health sciences including health informatics. These links should be nurtured in the interests of the people of Kerry.

Table 10-4 Kerry General Hospital after reconfiguration

<table>
<tr><td colspan="4">Kerry General Hospital – serves a remote, rural, population; must continue to provide the bulk of routine hospital care for the population of Kerry, including 24/7 ED. Stronger links should be developed with Bon Secours Tralee. Consultants should be part of regional teams. Options for enhanced midwifery provided care should be explored. A teaching hospital of UCC.</td></tr>
<tr><th>Diagnostics</th><th>Medical Services</th><th>Perioperative Services</th><th>Women and Children’s services</th></tr>
<tr><td rowspan="5">Laboratory Medicine
Cl. Biochemistry
Cl. Microbiology
Haematology
Core Histopathology</td><td>Cardiology* – linked to regional hub and BSH Tralee</td><td rowspan="3">General surgery – emergency and elective</td><td rowspan="5">Maternity Services –
▪ Obstetrics
▪ Gynaecology

Paediatrics</td></tr>
<tr><td>Endocrinology</td></tr>
<tr><td>Palliative care</td></tr>
<tr><td>Geriatric medicine incl. ambulatory care</td><td>Otorhinolaryngology (ENT)</td></tr>
<tr><td>Gastroenterology *</td><td>Orthopaedics</td></tr>
<tr><td rowspan="2">Radiology</td><td>Acute Medicine Unit open 12/7. Out of hours medical to KGH ED (medical team)</td><td>Critical care level II/III</td></tr>
<tr><td>Respiratory Medicine*</td><td rowspan="7">Outreach – other surgical specialties</td><td>Mental Health Services</td></tr>
<tr><td>Emergency Dept open 24/7 Level 2 Trauma</td><td rowspan="6">Mental health acute inpatient services</td></tr>
<tr><td>Urgent Care Centre open 12/7</td></tr>
<tr><td>Rehabilitation Medicine</td></tr>
<tr><td>Rheumatology*</td></tr>
<tr><td>Outreach – other medical specialties</td></tr>
</table>

** Priority for development*

10.5 Mallow General Hospital

While MGH is less than 30 minutes by ambulance from CUH, it nevertheless provides a vital service to the population of North Cork. One of the principles of Horwath and Teamwork was that as much healthcare as possible should be provided locally. The future role of MGH should be as a focus for local healthcare to the population of north Cork, a vital and necessary location for the delivery of day surgery and outreach services, outpatients, diagnostics, pre and post operative assessment and follow up care. As techniques and therapies advance, more sophisticated healthcare will become accessible locally. MGH, situated ideally with respect to tertiary support in Cork and a newly built primary care centre in Mallow, should become a particular focus for pioneering a wide variety of non complex locally accessible healthcare services for the people of North Cork. Consultant delivered services should include geriatric medicine and selected acute medicine. There must be at least five consultant physicians based at MGH in order that the hospital can maintain a viable consultant duty roster and play its full part in the regional hospital system envisaged in this report. Day surgery should be a central part of its activity and in this respect, it should develop systems and processes that facilitate as much day surgery as it can deliver. It should have an Acute Medicine Unit and an Urgent Care Centre so that unnecessary referrals to Cork city are avoided. Outreach services should include gynaecology, obstetrics, paediatrics, and other surgical and medical specialties.

As it develops its range of services, it will become an important site for health education and training with respect to outreach, local services and integrated service delivery between the hospital and its catchment community of North Cork.

Table 10-5 Mallow General Hospital after reconfiguration

<table>
<tr><td colspan="4">Mallow General Hospital – rural, providing for routine local needs and selected medical admissions with capacity for rapid transfer to the tertiary centre for the effective management of emergencies according to regional protocols. Outreach services provided by specialist teams. A teaching hospital of UCC</td></tr>
<tr><th>Diagnostics</th><th>Medical Services</th><th>Perioperative Services</th><th>Women and Children's services</th></tr>
<tr><td>POCT</td><td>Selected acute medicine</td><td rowspan="2">Day surgery in:
• General surgery
• Plastics
• Dental
• Urology</td><td rowspan="6">Gynaecology outreach

Obstetrics outreach</td></tr>
<tr><td rowspan="5">Radiology</td><td>Geriatric medicine incl. ambulatory care</td></tr>
<tr><td>Gastroenterology – endoscopy</td><td>Medical Assessment Unit open 12/7*</td><td>Critical Care Level 1</td></tr>
<tr><td>Urgent care centre open 12/7</td><td rowspan="3">Outreach – other surgical specialties</td></tr>
<tr><td>Rehabilitation medicine</td></tr>
<tr><td>Outreach – other medical specialties</td></tr>
</table>

* *Direct admissions to wards outside these hours*

10.6 Mercy University Hospital

MUH is a major teaching hospital of University College Cork. MUH will provide a wide range of specialist services. There will be a significant transfer of acute medical services from SIVUH to MUH. Inpatient medical services will include Acute Medicine, Endocrinology, Gastroenterology, Geriatric Medicine, Respiratory Medicine, Rheumatology and Infectious Diseases. MUH will admit unselected acute medicine patients. It will develop a new 12/7 Acute Medical Assessment Unit supported by level II and III critical care. It will be a priority

site for new acute medical consultant appointments. Out of hours acute medical patients will be seen by the on call medical team. The hospital will also provide out of hours medical cover for patients at SIVUH.

It will continue to provide a broad range of medical and surgical diagnostic services, including the necessary work up of patients (cancer and non-cancer) who may require a surgical procedure elsewhere.

The emergency department should become a model provider of 12 hour seven days per week emergency care and urgent care. It will work closely with CUH ED to co-operatively manage Cork city's emergency response capacity.

It will develop a regional gastroenterology diagnostic centre for ambulatory and outpatients that includes the national colorectal screening programme. This will require capital investment.

MUH will be the regional centre for elective general surgery, urology and vascular surgery. All Cork consultants in general surgery, urology and vascular surgery will do their elective work at MUH. These services will also be supported by Level II/III critical care.

MUH will become the regional centre for a new Rehabilitation Medicine service and a new regional amputee service for Cork and Kerry. Rehabilitation has a key role in the interface between acute hospital exit and a return to community living. MUH should become the hub of this new service providing rehabilitation for young and mid life adults suffering from acquired brain injury (including stroke) and amputee patients requiring rehabilitation after loss of limbs.

Building on the international reputation of the Cork Cancer Research Centre, MUH will be the location of a clinical research facility for University College Cork. This facility is part of a national initiative of the Health Research Board and the HSE to facilitate the translation into therapeutic form of biomedical sciences research in Irish universities. It will be capable of conducting stage two clinical trials and will have overnight facilities for patients with rapid access to emergency care in the event of any unforeseen reactions. Its laboratory infrastructure will be used to develop regional capacity in specialist laboratory services.

Table 10-6 Mercy University Hospital after reconfiguration

Mercy University Hospital – A wide range of specialist services and regional centres. Regional diagnostic centre for gastroenterology patients under MUH governance. Regional centre for elective general surgery. Regional centre for new Rehabilitation Medicine service. Regional centre for certain specialist laboratory services. Level II/III critical care. 12/7 emergency department will pioneer deferred emergency care in close collaboration with CUH ED; Acute Medical Assessment Unit with consultant roster appropriate to a model 3 hospital. Major teaching hospital of UCC.			
Diagnostics	**Medical Services**	**Perioperative Services**	**Women and Children's services**
Regional specialist laboratory service	ED open 12/7, incl. urgent care	General surgery – elective, day surgery, outpatients	Gynaecology consult service
	Acute unselected medicine*	Urology – non cancer	**Mental Health services**
	Acute Medical Assessment Unit**	Vascular surgery – elective	Mental health
	Endocrinology***	Level II/III critical care	
Radiology	Geriatric medicine		
	Gastroenterology regional diagnostic centre		
	Rehabilitation medicine regional centre		
	Regional amputee service		
	Respiratory medicine		
	Rheumatology***		
	Cardiology on site consult service (Appemdix IV)		
	Infectious diseases		

**priority site for new acute medicine consultant appointments*
***Opening hours to be finalised with regional lead of Acute Medicine Programme*
**** Specialist cover to be provided by regional team*

10.7 South Infirmary and Victoria University Hospital

SIVUH has already developed a particular expertise in day surgery. It will continue to be a major teaching hospital of University College Cork. It should become primarily an elective surgical hospital with a particular concentration on day surgery or on surgery where the need for inpatient beds is limited. SIVUH should become a regional centre for elective orthopaedics, plastics, otorhinolaryngology (ENT), ophthalmology, pain medicine, rheumatology and dermatology. The nurse led sexually transmitted disease unit should remain at SIVUH and all benign gynaecology surgery should be conducted there. It should be taken out of the emergency care system. Its consultant physicians should support the AMU roster in MUH.

Table 10-7 South Infirmary and Victoria University Hospital after reconfiguration

South Infirmary and Victoria University Hospital – A specialist day surgery and elective surgery hospital. Ambulatory day care centre for medical specialties with a high proportion of day cases such as rheumatology and endocrinology; same for surgical specialties such as ophthalmology, ENT, maxillofacial, orthopaedics and plastics. Trauma rehabilitation. Level II Critical Care. SIVUH medical consultants will participate in MUH AMU and Cork city medical rosters will provide out of hours medical cover for SIVUH. Major teaching hospital of UCC.			
Diagnostics	**Medical Services**	**Perioperative Services**	**Women and Children's services**
POCT	Cardiology on site consult service	Maxillo-Facial - elective	Gynaecology and uro-gynaecology day services, diagnostics and outpatients
	Dermatology regional centre	Orthopaedics – elective and paediatric	
	Endocrinology ambulatory care and day care centre	Ophthalmology regional centre	
	(Will contribute to AMU in MUH)	Otorhinolaryngology regional centre	**Mental Health Services**
	Geriatric medicine consult services	Plastics - elective	Mental health consult services
Radiology	Sexually Transmitted Diseases unit	Pain medicine regional centre	
	Rheumatology regional diagnostics and ambulatory centre	Trauma rehabilitation	
		Level II critical care	

10.8 Private Hospitals

Private hospitals in Cork and Kerry are important providers of a range of elective medicine and surgery and associated diagnostics. A number of consultants provide sessions in public and private sectors and mutual arrangements exist in relation to certain diagnostic services. UCC has a teaching agreement with Bon Secours Cork which enables student nurses and doctors to gain clinical experience there. It should be an objective of a new single hospital system for Cork and Kerry to explore mutually beneficial links with the private health sector covering clinical services, education and research. Where there are a broad range of issues of importance to both sides, a broadly based strategic relationship of benefit to both parties should be explored and become part of the strategic development of the participating organisations.

11. IMPLEMENTATION

11.1 Approach

While subgroups were analyzing and envisioning the future of their specialties, other actions were taken to generate momentum and motivation.

- Funding was invested in LEAN training for staff and subgroup members through the Centre for Advanced Manufacturing and Management at Cork Institute of Technology in order to build belief that change can bring meaningful improvement to the workplace. This work is ongoing.
- A Haemochromatosis protocol and testing regimen was successfully piloted at CUH. This work provides a model for examining further change in Laboratory Medicine. An audit was conducted at the end of 2009 and the service continues.
- About 40 staff (professional and administrative) from all the hospitals in the two counties and from UCC were given project management training to help them manage the work of the subgroups. This has created a cadre of trained personnel who are already committed to the project and to collaborative working with consultant subgroup chairs. It is from this group that project managers will be invited to participate in implementation.

11.2 Why should we implement Reconfiguration?

Present economic circumstances present increasing challenges to HSE managers responsible for the daily and weekly delivery of services. The contribution that reconfiguration can make is to provide a goal, and a roadmap towards that goal, that sees services delivered more logically, consultants managing regional services more proactively, and provides a sensible framework for identifying and eliminating wasteful practices.

Reconfiguration puts forward a secure future for each hospital within an integrated healthcare system. If this integrated system can create meaningful links with local higher education and research institutions, each hospital will also have access to new education, training and research opportunities and each can provide clinical training and education for students.

11.3 Values to guide the implementation of change

Implementing fundamental change in an environment where financial pressures are increasing puts pressure on the core values of the organisation and the underlying motivation of care that forms the basis of why many people commit so much of their working lives to the care of patients. Reconfiguration therefore needs to find a way for these values to guide the implementation of change at every step. This should be a stated aim of reconfiguration and a responsibility shared by every member of the Reconfiguration Forum and every member of each implementation workstream.

In section 3.3.1 the importance of respect for the trust that patients place in clinical staff was stressed. This relationship between patient trust and clinician respect should guide the implementation of reconfiguration change. However it is to be measured, it should increase in strength if reconfiguration of services is soundly based and correctly executed. The issue of patients' trust in individual providers of care and in the system as a whole should become a touchstone of the implementation process and the concern of professionals and administrators at every level of the health service in Cork and Kerry.

11.4 Methodology for implementation planning

Each implementation project will have its own implementation subgroup and workstream(s). Membership of the subgroups will be based on a broadly representative template and will include patient advocates. Each will be chaired by a clinician with a management co-chair.

1. The Director of Reconfiguration and the Reconfiguration Team will establish an implementation subgroup for each implementation project.
2. The Director of Reconfiguration and the Reconfiguration Forum will sign off on the membership of each project subgroup.
3. The Reconfiguration Forum will receive periodic reports on progress and approve any necessary changes in trajectory or deal with any issues that may occur.
4. Each implementation subgroup will work to a Gantt Chart providing a timeline for each element in the project
5. Each implementation subgroup will conduct a risk assessment and prepare risk mitigation strategies. These will feed into a Risk Register for Reconfiguration that will be maintained by the Reconfiguration Team on behalf of the Forum.
6. Each workstream will work with a detailed programme management pack so that progress can be clearly monitored and measured and costs and benefits can be captured (see next section).

The Director of Reconfiguration will join the HSE senior management team headed by the Regional Director of Operations. By this means the interface between the implementation of reconfiguration and the day to day operation of HSE South will be managed.

11.5 Detailed Implementation Planning – Programme Management Pack

A programme management pack has been prepared for use by the Reconfiguration Forum and the project workstreams. This provides templates for every stage of the implementation process and defines roles and responsibilities of individuals and groups. Under this scheme the Reconfiguration Forum becomes the steering group for implementation, setting up project workstreams, appointing members, receiving progress reports and signing off on closeout. The documentation is available in the detailed appendices to this report. It is sufficient here to list the table of contents:

1. Project life cycle
2. National management structure
3. Regional management structure
4. Role and working structure of Reconfiguration Forum
5. Role and working structure of Reconfiguration project groups
6. Role of co-chairs and project managers
7. Terms of reference of the Reconfiguration Non executive Advisory Board
8. Project documentation flow
9. Work break down structure
10. Top level Gantt chart
11. 2nd level Gantt chart
12. Key deliverables for 3 years of the plan
13. Key deliverables for 2010
14. Draft approval letter
15. Project group plan template
16. Risk assessment template
17. Issues documentation
18. National documentation

11.6 Implementation Timelines

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	*2010*	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
	Overarching deliverables							
General	Principles for Resource Allocation agreed							
General	Communication engagement plan completed							
General	Service user involvement strategy completed							
General	Gap Analysis AHC model and ISA model							
General	Memorandum of Understanding signed							
General	Roadmap stress tested and launched							
General	Options appraisal completed for New OPD, Ambulatory Care, Diagnostic, Elective Hospital							
General	Collaborative service arrangements identified with private hospitals							
	Key Enablers							
ICT	Electronic GP Referral System - national pilot completed							
All specialities	Comprehensive discharge planning pathways in place for the region							
ICT	IPMS implemented in South Infirmary and Mercy Hospitals							
ICT	Upgrade KGH IPMS to same operating platform							
ICT	Implement single patient Identifier for Cork and Kerry							
Surgery	Standard Theatre Log Book data set agreed							
Surgery	Introduce Electronic Theatre Log book in all theatres							
Surgery	Revised Theatre Schedule for all Theatres in region agreed							
Training	LEAN Project training & schedule agreed with FORUM							
Pre hospital	Advanced Paramedics (Aps) in place in North Cork							
Pre hospital	Intermediate Care Vehicles (ICVs) introduced in West and North Cork							
Pre hospital	Audit of the operation of APs in West Cork completed							
Pre hospital	Audit of the operation of APs in North Cork completed							
Pre hospital	Audit operation of ICVs completed							
Pre hospital	Decision for further roll out of APs agreed							
HR	Standardised Recruitment process for Consultants in all hospitals							
Radiology	NIMIS implemented in all hospitals (dependent on national roll out plan)							
Training	Education Programmes reviewed and synchronised to meet service requirements							
Research	Steering Group in place to develop Health Technology & Innovation campus in Cork							
Bed Mgmt	Bed Management Navigation Hub implemented in Cork City							
Pre hospital	Cost Benefit Analysis completed for Air Ambulance Services							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	*2010*	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
	Clinical Specialties							
	4 Regional Directorates established across the Hospital network (Medicine, Perioperative, Diagnostics, Women & Children)							
	4 Regional Clinical Directors in place							
	Regional Departments for each sub specialty in place							
	Clinical Lead for each sub specialty in place							
	Appoint a Clinical Director for 3 year period only to organise specialist dental and Maxillofacial services							
	All Consultants enabled to admit patients to all hospitals in region (as per Reconfiguration plan)							
	Individual Hospital Based Clinical Directors ceased							
	Location & Schedules for Out Reach services agreed							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	*2010*	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
	Diagnostics Directorate							
Laboratory	Transfer Lab services from KGH to CUH excluding those required to maintain 24/7 ED services							
Laboratory	Proposal for expansion of existing Cold Laboratory services submitted within existing resources							
Laboratory	Point of care testing implemented in all 6 Acute Hospitals where appropriate							
Laboratory	Histopathology Consultants recruited to enable outsourcing to cease.							
Laboratory	Regional protocols for priority specimen reporting implemented							
Radiology	Access to Imaging services for GPs increase							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	*2010*	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*	*Jan - June*	*July - Dec*
	Medical Directorate							
General Medicine	Regional Department of Acute Medicine established							
	Agreed complex medical inpatients at CUH							
Acute Med	Transfer MUH OPD to suitable location							
Acute Med	AMUs in place in 5 hospitals							
ED	Urgent Care Centre model defined							
ED	Urgent Care Centres implemented in 5/6 centres							
ED	Out of hours ED services in MUH, BGH and MGH, SIVUH discontinued							
ED	1 24/7 ED in Cork city and couty and 1 24/7 ED in Kerry as MUH, BGH and MGH, SIVUH discontinued							
Cardiac	Cardiac services transferred to CRC							
Haematology / Oncology	Clinical Haematology, Medical Oncology, Radiation Oncology Ambulatory Care facilities established at CUH							
Haematology / Oncology	Clinical Haematology, Medical Oncology, Radiation Oncology Inpatient services consolidated at CUH							
Haematology	Warfarin Clinics consolidated in OPD facility accessible to patients							
Dermatology	Dermatology out reach clinics established in Mallow, Michelstown, Kerry (dependent on consultant appointments)							
Endocrine	Endocrinology day care and ambulatory services consolidated at SIVUH							
Gastro-enterology	Regional Elective Gastroenterology centre established under MUH governance							
Colorectal Screening	National Colorectal screening programme operational in new gastroenterology regional centre							
Geriatric Medicine	Ambulatory Care Units for Elderly in place in Cork City Mallow, Kerry and Bantry							
Geriatric Medicine	Consultant Geriatricians have clinical governance responsibility for Community Hospitals							
Geriatric Medicine	Institute for Aging and Health established with UCC							
Stroke	Acute Stroke Unit developed at CUH							
Neurology	Neurology OPD relocated to a site that □ptimizes accessibility for patients							
Palliative	Palliative Care resources managed through Marymount Hospice and service Level Agreement implemented							
Rehabilitation	Feasibility Study completed for development of Rehabilitation Regional Centre							
Renal	All Renal Services concentrated in the Cardiac Renal Tower							
Rheumatology	Rheumatology Day Care and Ambulatory Services consolidated at SIVUH							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	2010	2011		2012		2013	
		Oct - Dec	Jan - June	July - Dec	Jan - June	July - Dec	Jan - June	July - Dec
	Perioperative Directorate							
General	SIVUH established as an Elective Hospital							
Surgery	Emergency Surgical Theatre established at CUH							
Surgery	Surgical Assessment Unit developed at CUH							
Surgery	All Emergency Surgery for Cork county and city carried out at CUH							
Surgery	Single on call emergency surgery rota in place for Cork city and county with on-call surgeon protected from all other commitments							
Surgery	All surgeons with sub specialty interest in Vascular, Upper GI, Hepatobilitary, colorectal, breast and endocrine participating in the general surgery rota							
Surgery	Thresholds and classification for complex, intermediate and day surgery agreed							
Surgery	All cancer and agreed complex surgery carried out at CUH							
Surgery	Pre Admission clinics introduced for All Elective Surgical Services							
Pain Mgmt	Regional Pain Management Service established at SIVUH							
Surgery	Elective General Surgery concentrated at MUH							
Surgery	Out reach Day Surgery programme implemented in BGH and MGH							
Anaesthetics	Protocol developed and agreed to ensure Anaesthetic involvement in the planning of Surgical services							
Surgery	Operational Responsibility for individual Theatres assigned to specific Anaestheist and Nurse manager							
Critical Care	Critical Care services aligned with national critical care programme							
Critical Care	Paediatric retrieval service developed in association with the Dublin paediatric service							
Cardiothoracic	Critical Care Unit (10 beds) in place for Cardiothoracic surgery in Cardiac Renal Tower							
ENT	Regional Audiology Services enhanced by the development of a clinical governance protocol between SIVUH and PCCC							
Maxillofacial	Maxillofacial surgery transferred to SIVUH							
Dental	Dental OPD Theatre at CUH transferred to SIVUH							
Dental	Theatre capacity for Special Needs patients in place at CUH							
Dental	Optional Appraisal completed re feasibility of transferring Cork Dental School and Hospital to SIVUH							
Dental	Sustainable funding model for dental services in place between HSE and UCC							
Ophthalmology	Ophthalmology inpatient services transferred to new Regional Centre at SIVUH							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	2010	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July- Dec*	*Jan - June*	*July- Dec*	*Jan - June*	*July- Dec*
Ophthalmology	Ophthalmology outpatient services transferred to new Regional Centre at SIVUH							
Ophthalmology	Protocol for the delivery of ophthalmology emergency services developed for SIVUH service							
Ophthalmology	Image transfer technology in place for Ophthalmic images between KGH and SIVUH							
Orthopaedics	Elective Orthopaedic services established in SIVUH							
Orthopaedics	Second Trauma Theatre established in CUH							
Orthopaedics	Orthopaedic Surgeponsx2 with special interest in paediatrics in place							
Orthopaedics	Protocols in place re stabilisation and transfer of trauma orthopaedic patients from KGH to CUH							
Orthopaedics / Geriatrics	Care Pathways in place between Orthopaedics and Geriatric medicine							
Orthopaedics	Nurse/therapist led outreach clinics in place for back pain, fractures and rehabilitation							
Plastics	Elective plastic surgery transferred to SIVUH							
Plastics	Outreach plastic surgery in place in KGH,MGH and BGH							
Urology	Urology cancer surgery and paediatric Urology surgery carried out at CUH							
Urology	Diagnostic outpatients, ambulatory and elective urology carried out at MUH							
Urology	Outreach urology services in place at KGH,BGH and MGH							
Vascular	Diagnostic, non invasive vascular laboratory and OPD services provided at a location that maximises accessibility for patients							
Vascular	Emergency vascular surgery carried out at CUH							
Vascular	Elective vascular surgery carried out at MUH							
Vascular	Endovascular laboratory at cardiac renal tower							
Vascular	Structures in place to support the development of novel vascular devices between HSE, UCC and CIT							

High Level Time Lines (by speciality) to be developed with Subgroups in detailed planning stage

Category	Deliverables	*2010*	2011		2012		2013	
		Oct - Dec	*Jan - June*	*July- Dec*	*Jan - June*	*July- Dec*	*Jan - June*	*July- Dec*
	Women's and Children's Directorate							
Gynaecology	Emergency gynaecology and gynae-oncology consolidated at CUMH							
Gynaecology	Elective gynaecology consolidated at SIVUH							
Gynaecology	One stop shop for all gynaecology and OPD services in place at SIVUH							
Gynaecology	Colposcopy services transferred from SFH to SIVUH							

12. OUTCOME MEASURES AND REVIEW

12.1 Overarching Goals and Outcomes

As outlined previously, the overarching strategic goal of reconfiguration is that the people of Cork and Kerry benefit from having a unified integrated acute healthcare system, integrated with all other elements of the health service, that:

a. achieves the best possible health outcomes for the people it serves,
b. realises for the people of the region the economic and other benefits that flow from leading edge health research, technology and innovation,
c. delivers value for money.

Items a, b and c in this strategic goal define the overarching outcomes to be achieved, i.e.:

1. best possible health outcomes for people served;
2. economic and other benefits for the people of the region; and
3. value for money.

12.2 Specific Measures Related to Overarching Outcomes

Best possible health outcomes

Defining specific measures that can be used to demonstrate achievement of overarching outcomes is challenging.' In the NHS in England, the National Centre for Health Outcomes Development (NCHOD - http://www.nchod.nhs.uk/) is a unique national resource concerned with all aspects of health outcomes assessment. It was created in April 1998 and is involved in three main groups of activities:

- Design and development of measures of health outcome;
- Production of comparative health outcome indicators using available routine data in the form of the *Compendium of Clinical and Health Indicators*; and
- Electronic publication of extensive statistical and bibliographic information about health outcomes in the *Clinical and Health Outcomes Knowledge Base*.

The compendium of indicators currently available from NCHOD is extensive and varied, including indicators such as:

- Deaths within 30 days of a hospital procedure: coronary artery bypass graft
- Deaths within 30 days of a hospital procedure: surgery (non-elective admissions)
- Deaths within 30 days of emergency admission to hospital: fractured proximal femur
- Deaths within 30 days of emergency admission to hospital: myocardial infarction
- Deaths within 30 days of emergency admission to hospital: stroke
- Years of life lost due to mortality from all circulatory diseases
- Years of life lost due to mortality from asthma
- Years of life lost due to mortality from bladder cancer
- Years of life lost due to mortality from breast cancer

- Years of life lost due to mortality from bronchitis and emphysema
- And so on.....

In addition to NCHOD, pilot work is underway to test a system of patient reported outcomes (PROMS) for selected clinical procedures (see http://www.ic.nhs.uk/proms).

There are currently, however, no universally agreed standard measures and methodologies for assessing 'best possible health outcomes.' It is vitally important that robust outcome measures be developed and applied as a matter of urgency in order to demonstrate improved health outcomes as a result of reconfiguration. Work to realise this needs to be carried out over the coming 12-18 months so that we will have an objective basis for adjudicating on whether particular changes – big and small – are actually improving the health of the population we serve. This work should assess outcome measures currently in use in Ireland, identify other potential measures from a review of international approaches, and working with key stakeholders including clinicians and patients/service users, agree standard measures and methodologies. This should include patient reported outcome measures similar to what is currently being piloted in the UK.

In the meantime, and in the absence of robust health outcome measures for healthcare in Ireland, the following proxy outcome targets are proposed by which the success of reconfiguration implementation can be measured by the general public at the two year review point.

1. **No more trolleys in hospital emergency departments.**
2. **Same day admission for 90% of acutely ill patients requiring a hospital bed.**
3. **A functioning paperless referral system – reply in 7 days with a future appointment date for 80% of referrals.**
4. **Day surgery for 60% of total surgery cases.**
5. **Patients awaiting long term care should not remain in the acute hospital longer than 10 days.**
6. **Real time waiting lists.**
7. **2008 service levels achieved in all hospitals.**
8. **Transfer of at least 20% of all outpatient activity off CUH/MUH/SIVUH hospital campuses.**

There are a number of mechanisms by which management can be aware of progress in reconfiguration over a shorter time interval – say every three months – and address problems that may occur. Executive action will be provided by the Reconfiguration Team acting collaboratively with the Regional Management Team. Oversight and advice will be provided by the Reconfiguration Forum and the Non Executive Advisory Board. These bodies should agree broad outcome measures that will drive forward the process of change. An initial seven might include:

1. Monitor service levels and match them against 2008 levels. In an environment of diminishing resources, this will drive efficiency.
2. Agreeing targets appropriate to different services for waiting list reductions. This will indicate whether the changes in service configuration are working.
3. Agree interim targets for trolley reduction in the Emergency Departments of KGH, MUH and CUH and review same day admission data for acutely ill patients requiring a hospital bed. This will measure whether or not we have succeeded in improving

patient flow through our hospitals, and through the regional centre in particular. It will also tell us if our new arrangements for the acute medicine service are working.

4. Reviewing incident reporting and claims made data[53]. This can be done regionally by reference to hospital management data and benchmarked nationally with data from the State Claims Agency (SCA). This will measure patient experience, drive safety of care and the working environment for staff. It should be linked to robust local systems of incident reporting, both in relation to "adverse events" (i.e. incidents involving harm or death to patients) and "near misses". These should be reviewed regularly at local level, compared with SCA data at corporate level and used to guide change and development.
5. Reviewing staff absenteeism levels would tell us something of how staff are responding to change and whether motivation initiatives are working.
6. Developing feedback systems that measure patient experience and linking output to regular corporate review. This will tell us if we are succeeding in building patient trust.

Establish electronic storage of theatre log data and review at three monthly intervals. This will track theatre efficiency and indicate whether targets for day surgery are being achieved.

Economic and other benefits for people of the region

Successfully quantifying "the economic and other benefits for the people of the region that flow from leading edge health research, technology and innovation" will require a suitable economic model that can capture those benefits and relate them in a meaningful way to the service and governance changes that we expect to flow from reconfiguration.

In addition to the economic benefits, other benefits include success in the stimulation of education, training, research and innovation, all of which will bring positive long term benefits to the health services in Cork and Kerry. Outcome measures might include growth in:

1. The numbers of staff who are entering and completing education and training programmes.
2. The number of new healthcare patents being applied for by staff of our hospitals and HE institutions.
3. The number of start up companies seeking to develop innovative healthcare products.
4. The number of clinical trials being conducted in Cork and Kerry.

Baseline information going back perhaps three years will be required so that trends can be identified as early as possible.

Value for money

An independent 'value for money' study of the reconfiguration project should be conducted two years post commencement. Such a study would examine specific reconfiguration changes (e.g. the transfer of elective orthopaedics from SMOH to SIVUH) and seek to reach a judgement on whether value for money has been achieved. Good baseline data and a clear definition of what is meant by value for money would be prerequisites for any meaningful study. The UK National Audit Office, for example, defines good value for money as "the optimal use of resources to achieve the intended outcomes."

The Office of the Comptroller and Auditor General carries out value for money studies to "examine whether each body administers its resources economically and efficiently and has mechanisms in place to evaluate the effectiveness of operations." One means of demonstrating value for money for the proposed reconfiguration project might be to work with the Office of the Comptroller and Auditor General to have that Office carry out an

[53] In 2009, there were 84,000 adverse incidents reported to the State Claims Agency by Irish hospitals which resulted in 510 claims made at a cost of nearly €50,000,000.

independent assessment two years post commencement. Alternatively, an independent commercial audit organisation might be commissioned to carry out the work. This will be a decision for the Forum to take at the appropriate time.

12.3 Review

The Forum should review progress of all groups and audit reconfigured services on a half yearly basis.

In addition to a value for money study, a formal independent audit and review of all service developments should be conducted two years post commencement and both should be reviewed by the Forum.

The Forum should make public the results of all its reviews so that stakeholders can make their own assessment of the benefits of reconfiguration.

13. GLOSSARY OF ABBREVIATIONS

A&E	Accident & Emergency
ABI	Acquired Brain Injury
AHC	Academic Healthcare Centre
AHP	Allied Health Profession
AHPF	Acute Hospitals Planning Forum
A.L.O.S.	Average Length of Stay
AMU	Acute Medical Unit
ANP	Advanced Nurse Practitioner
AP	Advanced Paramedic
A-SRS	Acute Specialist Rehabilitation Service
BGH	Bantry General Hospital
BSH	Bon Secours Hospital
CABG	Coronary Artery Bypass Grafting
CAIPE	Centre for the Advancement of Inter-professional Education
CAMMS	Centre for Advanced Manufacturing and Management Systems
CARF	Commission on Accreditation of Rehabilitation Facilities
CB-SRS	Community based Specialist Rehabilitation
CDSH	Cork Dental School and Hospital
CEO	Chief Executive Officer
CF	Cystic Fibrosis
CIT	Cork Institute of Technology
CMHT	Community Mental Health Team
C.N.S.	Clinical Nurse Specialist
COPD	Chronic Obstructive Pulmonary Disease
CRT	Community Rehabilitation Team
CSSD	Central Sterile Services Department
CUH	Cork University Hospital
CUMH	Cork University Maternity Hospital

DoHC	Department of Health and Children
DoR C&K	Director of Reconfiguration Cork & Kerry
DPU	Day Procedures Unit
ECG	Electrocardiogram
ED	Emergency Department
EM	Emergency Medicine
EMR	Endoscopic Mucosal Resection
ENT	Ear Nose and Throat surgery
ERCP	Endoscopic Retrograde Cholangiopancreatography
ERS	Electronic Referral System
ESKD	End-Stage Kidney Disease
ETR	Education, Training and Research Unit
EUS	Endoscopic Ultrasound
FESS	Functional Endoscopic Sinus Surgery
GI	Gastrointestinal
GIM	General Internal Medicine
GP	General Practitioner
GUM	Genito-Urinary Medicine
HCAI	Healthcare Associated Infection (Control Governance Group)
HD	High Dependency
HDU	High Dependency Unit
HE	Higher Education
HEA	Higher Education Authority
HIQA	Health Information and Quality Authority
HIV	Human Immunodeficiency Virus
HR	Human Resources
HRB	Health Research Board
HSE	Health Services Executive
IBD	Inflammatory Bowel Disease

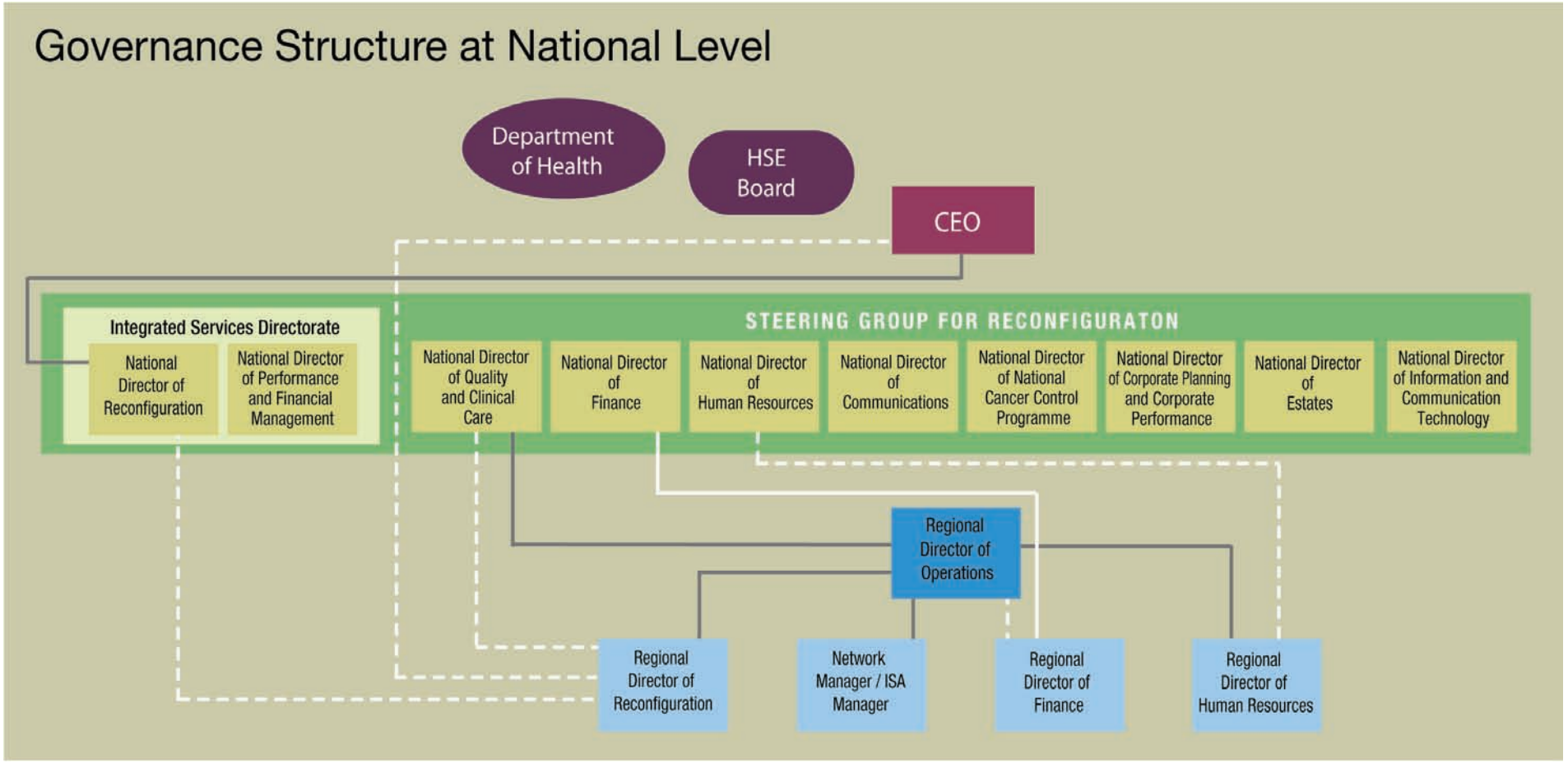
ICD 10	International Classification of Diseases
ICGP	Irish College of General Practitioners
ICT	Information and Communications Technology
ICU	Intensive Care Unit
ICV	Intermediate Care Vehicle
ID	Infectious Disease or Intellectual Disability
IDA	Industrial Development Authority
IMO	Irish Medical Organisation
IPMS	Integrated Patient Management System
ISQSH	Irish Society for Quality and Safety in Healthcare
IT	Information Technology
ITU	Intensive Treatment Unit
KGH	Kerry General Hospital
LEAN	**Note: This is not an acronym**
MD	Doctor of Medicine
MDT	Multidisciplinary Team
MGH	Mallow General Hospital
MoU	Memorandum of Understanding
MRSA	Methicillin-Resistant Staphylococcus Aureus
MUH	Mercy University Hospital
NACPC	National Advisory Committee on Palliative Care
NCCP	National Cancer Control Programme
NCHD	Non Consultant Hospital Doctor
NEMO	NEonatal Medications Off-patent
NIMIS	National Integrated Medical Imaging System
NIV	Non-invasive ventilation
NMPDU	Nursing and Midwifery Planning and Development Unit
NPEC	National Perinatal Epidemiology Centre
NRH	National Rehabilitation Hospital
NTPF	National Treatment Purchase Fund

OECD	Organisation for Economic Co-operation and Development
OLCHC	Our Lady's Children's Hospital Crumlin
OOH	Out of Hours
OP	Out Patient
OPD	Out Patients Department
OT	Occupational Therapy
PACS	Picture Archiving and Communicating Systems
PCCC	Primary, Community and Continuing Care
PCT	Primary Care Team
PDS	Public Dental Service
PhD	Doctor of Philosophy
PHN	Public Health Nurse
PM	Project Manager
POCT	Point of Care Testing
POLAR	Prosthetic, Orthotic and Limb Absence Rehabilitation
PT	Physiotherapy
QCC	Quality and Clinical Care (Directorate of the HSE)
R&D	Research & Development
RDO	Regional Director of Operations
RFA	Radiofrequency Ablation
SCI	Spinal Chord Injury
SCOPE	SCreening Of Pregnancy Endpoints
SEHB	South Eastern Health Board
SFH	St. Finbarr's Hospital
SHB	Southern Health Board
SHI	Southern Health Identifier
SHO	Senior House Officer
SIVUH	South Infirmary Victoria University Hospital
SLA	Service Level Agreement

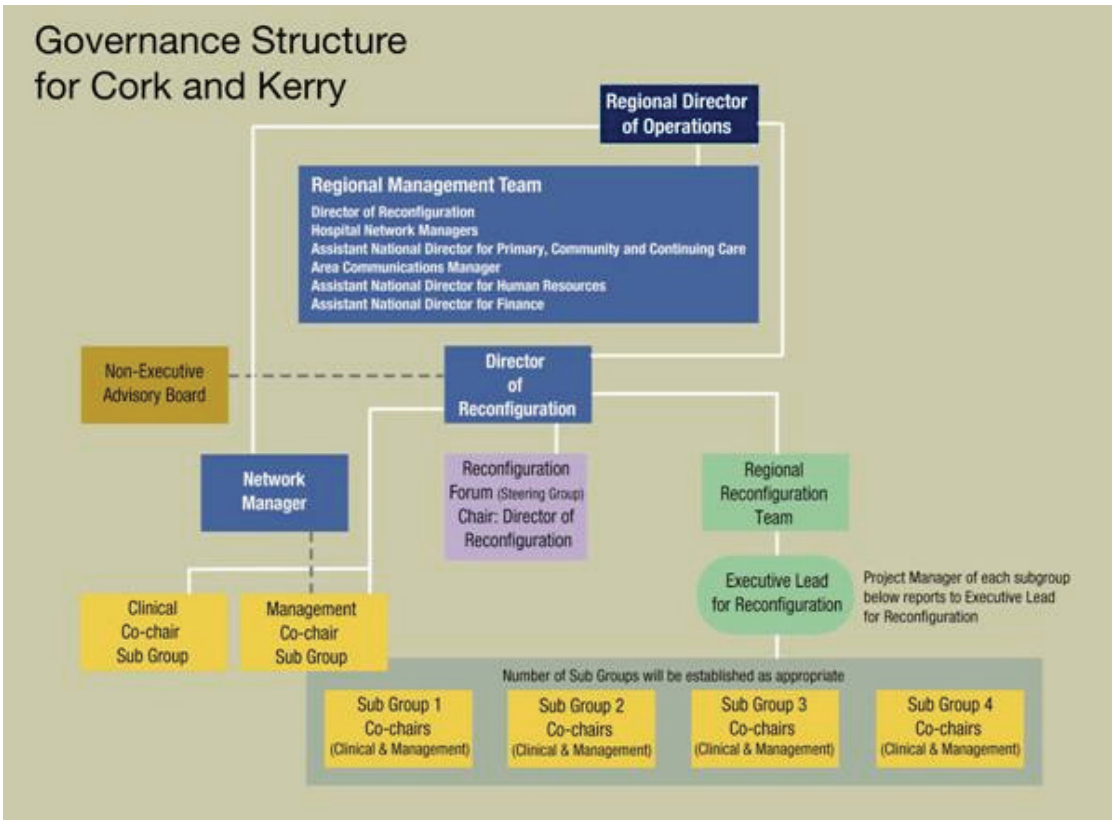
SLT	Speech & Language Therapy
SMOH	St Mary's Orthopaedic Hospital
SPH	St Patrick's Hospital / Marymount Hospice
SpR	Specialist Registrar
SSU	Short Stay Unit
STI	Sexually Transmitted Infection
TBI	Traumatic Brain Injury
UCC	University College Cork OR Urgent Care Centre (depending on context)
WTE	Whole Time Equivalent
YHS	Youth Health Service

14. APPENDICES

APPENDIX I National and Regional HSE governance structures



APPENDIX I National and Regional HSE governance structures



APPENDIX II Integrated Services Programme

INTEGRATED SERVICES PROGRAMME

STAGE III

Working Paper: ISA Management Team Model

V0.11

October 22nd 2010

CONTENTS

OBJECTIVES

Why are we making these changes?

- To drive and support safe, quality care for patients and clients.
- To bring decision making close to where services are delivered.
- To allow clinicians to shape and assure the services they work in.
- To get the best health outcomes for the money spent.
- To plan and organise around what we know people need and what we know works to give the best results.
- To organise to meet increasingly complex patient and client needs
- To remove barriers to integrated care.

ORGANISATION DESIGN PRINCIPLES

The aim is to develop a 'best fit' structure at local (ISA) level to:

- Deliver excellent health outcomes for the population by driving integration of services
- Ensure more efficient use of resources
- Have a clear spinal cord of accountability from top to bottom
- Support the strategy of shifting balance of activity towards prevention and community based care and away from hospital based care
- Ensure services are organized around the population based service delivery model
- Streamline and reduce the management layers and numbers bringing decision making as close as possible to service delivery
- Develop clinical leadership

Any organisation design must be 'road tested' against these principles that have been used for the overall organisation design and agreed with the HSE Management team and Board.

PURPOSE OF THIS PAPER

The purpose of this paper is to set out the management team roles and responsibilities within an ISA.

It is not intended to set out the detailed structures in each service setting, such as in mental health or in acute services, as these are being developed through a detailed design process that is already underway. It is also not intended to set out the specific grades at this stage as this work is currently being undertaken by HR as part of the Integrated Services Programme.

CURRENT MANAGEMENT STRUCTURES

Previously services were organised around hospitals (NHO) and primary, community and continuing care (PCCC). Services within PCCC were organised within four PCCC regions and thirty two Local Health Offices, which are responsible for all primary, community and continuing care services. The 50 hospitals were organised around eight hospital networks.

Hospitals essentially fall into a number of different types:

- Tertiary hospital
- Regional/General hospital
- Local hospital
- Continuing Care facility (Older Persons)

As a result of reconfiguration programmes in each region hospital groupings are emerging. In some cases clinical governance arrangements are being put in place across a number of hospitals where an individual hospital is not of sufficient size to be able to put robust enough clinical governance systems in place.

A single Integrated Services Directorate (ISD) was established. Four regions were put in place, led by a Regional Director of Operations whose role is to be responsible for the delivery of all health and social care services and to lead the reconfiguration of services to deliver the model of care.

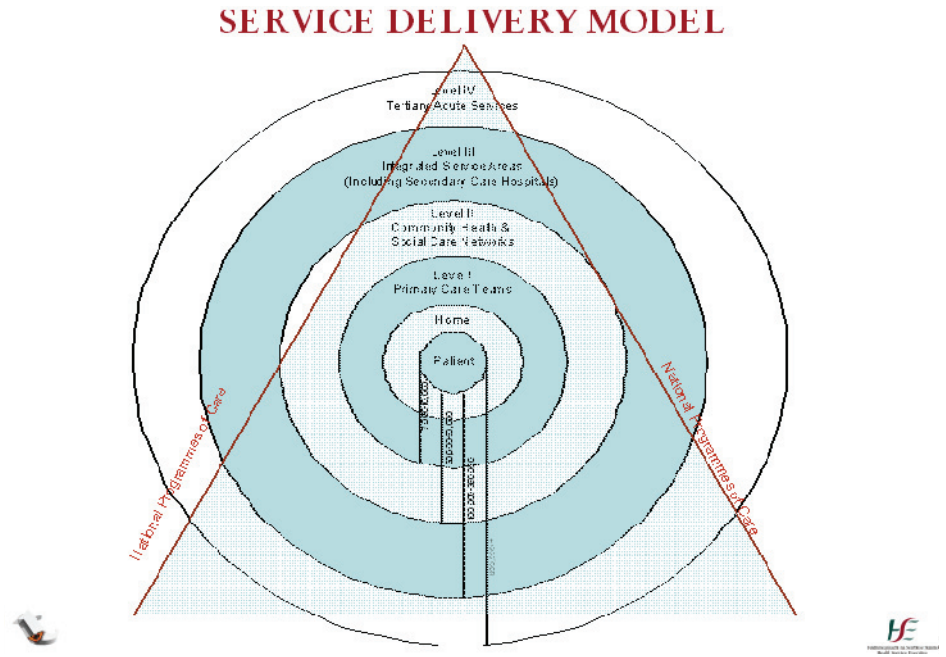
A strategic decision was taken to establish Integrated Services Areas (ISA) in the four regions that combine operational responsibility for all services within that ISA. Although services are now managed within four regions the Hospital Networks and Primary, Community and Continuing Care pillars remain largely in place, although some interim Integrated Service Areas have been established.
All Primary, Community and Continuing Care services are still delivered through the thirty two Local Health Offices. While Primary Care Teams are being advanced the majority of professionals in these teams and indeed outside the teams are still being managed in a uni-disciplinary manner.
Mental Health services are migrating to the new service delivery model outlined in Vision for Change. Work is ongoing on determining the detailed management arrangements within Mental Health services and how they will interact at primary care team and health and social care network level.

In Childcare services the PA report recognised that there is a distance between front line staff and the top of the organisation which is unhelpful in terms of service delivery. In addition it identified a lack of clarity around responsibility, authority and accountability for services between key local management roles, Principal Social Worker and Child Care Manager. It also identified differences in the sub-structures between many of the Local Health Offices. The Service Delivery Model and management structures are now being designed based on this report.

A variation of service arrangements exist across the country for the various care groups with most care groups redefining or clarifying their service delivery model and management arrangements.

DESIGN PROCESS

A series of workshops were held with some of the care groups and services to ensure the optimum design for the ISA Management team model. In addition a detailed design process is in place to ensure that the organisation structure for each service is aligned to the service delivery model.



SERVICE DELIVERY MODEL

There were a number of decisions taken by the HSE Management Team and adopted by the HSE Board at the end of stage II:

- Service Delivery Model adopted

- Within each region there will be a number of Integrated Service Areas with a single ISA Manager accountable for all services that are appropriate to be delivered within that ISA
- Clinical Leadership needs to be an integral part of the ISA design and the role of Clinical Director needs to be strengthened and clarified
- Finance will report at national level through four regional finance directors
- Regions are intended to be lean units that focus on strong operational performance rather than being service delivery units in themselves
- Executive Clinical Director for Mental Health will be put in place and be on the ISA Management Team

The Service Delivery Model is outlined in greater detail in a separate document entitled 'HSE Service Delivery Model Version 1.3'.

INTEGRATED SERVICE AREAS (ISA)

There are essentially three types of Integrated Service Areas:

- ISA with population between 100,000 than 300,000
- ISA with population greater than 300,000
- ISA with population greater than 300,000 and a Model 4 hospital that is a large non-statutory provider

As of 1st June 2010 there are eight ISA's agreed for implementation. It is planned that the others will be phased in over a number of years following further design work.

ISA MANAGEMENT TEAM DESIGN

The organisation chart for an ISA is depicted underneath. The sub-structures are being developed separately in conjunction with the various Care Group managers and with the Quality and Clinical Care Directorate.

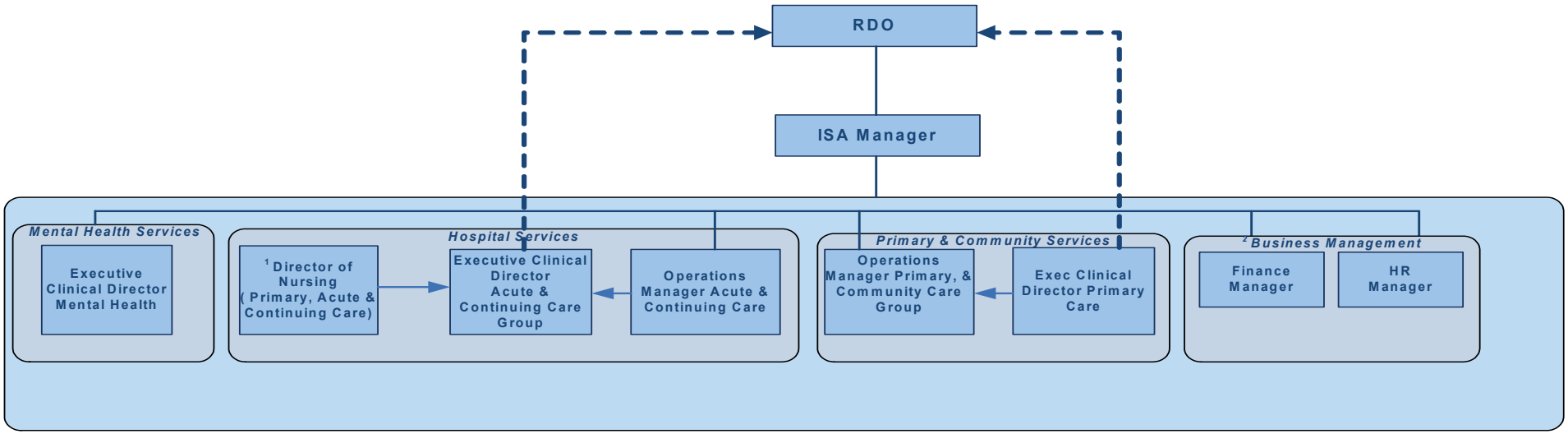
In confirming the design there was a number of key design decisions that were made by the ISP Steering Group:

- ISA Manager must be in place for all health and Social Care Services; This is the single accountable person, in line with our design principles, for all health and social care services in the Integrated Service Area (ISA); This person will drive the integration within and between services and support the shift in the balance of care from hospitals to community based services.
- Continuing Care Services for older persons are managed by Acute Care with agreed protocols for access from Primary Care; Over 75% of the people in Continuing Care services for older persons are referred from acute care. In addition many continuing care facilities also house rehabilitation services that may operate more effectively if under the management of the acute care setting.

  The most effective use of long stay facilities and to ensure maximum utilisation of those services will be achieved by shared management with the acute facility.
- Executive Clinical Directors will be developed over time in our acute hospital and hospital groups to strengthen clinical leadership; Each Acute and Continuing Care Group will have a strong management team of Executive Clinical Director, Operations Manager and Director of Nursing.
- There will be a single point of accountability for each Acute and Continuing Care Group. This will be Acute and Continuing Care Operations Manager (CEO/GM) with the intention to transition to an Executive Clinical Director over time. This will help address some of the recommendations from recent HIQA reports and from the Patient Safety Commission.
- Clinical Directorates will be established in each Model 4 hospital/hospital group.

- Clinical Leadership needs to be strengthened in Primary Care; An Executive Clinical Director Primary Care will be put in place, this position requires approval and a separate business case has been developed to support the introduction of this role over a period of time. The existing GP Unit Doctor role will cease.
- Executive Clinical Director Mental Health will be on the ISA Management team; this is to ensure that there is integration between mental health, acute care and most importantly primary care. The model for Mental Health is based on community based services supporting a number of primary care teams with more specialist services available in acute settings. This will support that objective.
- A single Children and Family Services manager will be in place for an ISA.
- The reconfiguration of Disability services, arising from the national policy review, will require a role to implement these recommendations.
- Community services for older people will be delivered and managed through primary care.
- A Health and Social Care Network manager will be responsible for all the primary care teams in that network. All other Primary and Community Care services will report through the Operations Manager Primary and Community Care.
- Some services will be managed at national level, although they will still integrate locally to support service delivery. Examples include the ambulance service and environmental health service.

ISA Management Team



Mental Health Services will be delivered for a catchment area led by an ECD. The ECD will have a Nurse Manager and Business Manager. Further work is needed on proposed roles for key Allied Health Professionals in Mental Health

Hospital Services In a Hospital Group with a large Tertiary Centre (Model 4 Hospital) services will be delivered through Clinical Directorates e.g. Women and Children's Directorate.

Primary & Community Services The Operations Manager Primary & Continuing Care Group will be responsible for the delivery of Primary Care Services through PCTs (5-10,000). Health & Social Care Networks (30-50,000) and for an Integrated Service area (120,000)

Business Management Embedded Finance & HR resources will be consolidated to provide support the ISA

[1]. Nursing roles to be determined
[2]. The Q&CCD are developing the model for Quality & Risk at local level

KEY ROLES AND RESPONSIBILITES

The following section sets out the Roles and Responsibilities of the ISA Management Team members. The transition process identifies the steps and timeframes in which this will be achieved. This may vary significantly over time across ISA's.

Note that it is intended that functional supports will be available to the ISA Management Team, such as Finance and HR Officers. These are not depicted in this model as the model concentrates on the core service management arrangements.

Title	Role/Scope	Responsibilities
Regional Director of Operations (RDO)	Role: Responsible for the delivery of services, across hospital & community, through continuous control, monitoring, review and delivery on key service, financial and people targets. *(This will include responsibility for ensuring that the services to specific care groups (children and families, disability, mental health and older persons) are delivered in line with agreed targets and resources.)* Scope: All Health and Social care services in their region.	• Leading management team in reconfiguring services consistent with the new model of care to ensure integrated services for patients and clients • Responsible and accountable for the delivery of all services, within nationally defined frameworks, standards and resources • Resourcing and supporting clinical leadership in the delivery and governance of integrated service provision, ensuring safety and quality of service • Providing a public leadership and communications role to support staff morale and public confidence within their region
ISA Manager	Role: Responsible for, under the direction of the Regional Director of Operations, for delivery of services, across hospital & community, through continuous control, monitoring, review and delivery on key service, financial and people targets Scope: All Health and Social care services in the ISA	• Responsible and accountable for the efficient, effective and safe delivery of health and personal social services for patients and clients for an ISA , within national frameworks and for the resources allocated • Ensuring that services are delivered to the highest standards within available resources. • Leading their team in delivering services consistent with the service delivery model to ensure integrated service for patients and clients • Supporting clinical leadership in the delivery and governance of integrated service provision, ensuring safety and quality of service including delegation of responsibility for the quality and safety of services as appropriate to the clinical directors • Providing a public leadership and communications role to support staff morale and public confidence within their area

Title	Role/Scope	Responsibilities
Executive Clinical Director – Acute and Continuing Care	Role: Responsible for the operational performance and clinical leadership of all services within Acute and Continuing care services Scope: Acute and Continuing Care hospitals group and working with the Primary Care Clinical Director to ensure implementation of the programmes of care across settings	▪ Providing leadership and direction for Acute and Continuing care services ▪ Responsible and accountable for the efficient, effective and safe delivery of acute and continuing care services for patients and clients of an ISA , within national frameworks and for the resources allocated ▪ Reconfiguration of acute care services in line with the national protocol and programmes of care ▪ Leading the development of effective relationships and structures across all services, i.e. Outside acute and continuing care ▪ Ensuring compliance with statutory requirements and ensuring patient satisfaction and patient advocacy ▪ Leading clinical practice development and overseeing research activity ▪ Providing public leadership and communications role to support staff morale and public confidence within their area ▪ Working on the ISA Management Team to integrate services and patient pathways across all care settings.
Operations Manager Acute and Continuing Care	Responsible for the day to day operational performance of Acute and Continuing Care under the leadership of the Executive Clinical Director Acute and Continuing Care Scope: Acute and Continuing Care services	▪ Ensuring optimal Operational performance of Clinical Directorates, Departments and Continuing Care facilities ▪ Supporting the ECD Acute and Continuing Care in the reconfiguration of primary care services and ensuring that there are robust quality and safety systems in place ▪ Ensuring that the support services and infrastructure required to deliver patient services are in place and maintained effectively. ▪ Managing the resources required to support clinicians in delivering clinical services and ensuring patients and their families are cared for in a patient centric environment. ▪ Developing and monitoring budgets and operational plans for the Acute and Continuing Care services ▪ Working with the Clinical Director for acute and continuing care to develop and implement clinical service improvements ▪ Working on the ISA Management Team to integrate services and patient pathways across all care settings.

Title	Role/Scope.	Responsibilities
Executive Clinical Director Mental Health	Responsible for the operational performance and clinical leadership of all services within Mental Health	• Providing clinical leadership and direction for Mental Health services ▪ Responsible and accountable for the efficient, effective and safe delivery of mental health services for patients and clients of an ISA , within national frameworks and for the resources allocated ▪ Reconfiguration of Mental Health services in line with Vision for Change and programmes of care • Ensuring compliance with statutory requirements and ensuring patient satisfaction and patient advocacy • Leading clinical practice development and overseeing research activity • Working on the ISA Management Team to integrate services and patient pathways across all care settings
Operations Manager Primary and Community Care	Role: Responsible for the operational performance and leadership of all services within Primary and Community Care services	▪ Providing leadership and direction for Primary and Community Care services ▪ Responsible and accountable for the efficient, effective and safe delivery of Primary and Community Care services for patients and clients for an ISA , within national frameworks and for the resources allocated ▪ Leading the development of effective relationships and structures across all services, i.e. outside acute and continuing care ▪ Supporting the ECD Primary Care in the reconfiguration of primary care services and ensuring that there are robust quality and safety systems in place ▪ Working on the ISA Management Team to integrate services and patient pathways across all care settings.
Executive Clinical Director Primary Care	Role: Responsible for the delivery and reconfiguration of primary care services	▪ Providing clinical leadership and direction for Primary Care services ▪ Responsible and accountable for the efficient, effective and safe delivery of primary care services for patients and clients of an ISA , within national frameworks and for the resources allocated ▪ Implement the primary care strategy through reconfiguration of primary care services while ensuring an integrated service for patients and clients with other specialist services ▪ Ensuring compliance with statutory requirements and ensuring patient satisfaction and patient advocacy in Primary Care ▪ Leading clinical practice development and overseeing research activity in Primary Care ▪ Leading the development of effective relationships and structures across all services, i.e. outside Primary care ▪ Working on the ISA Management Team to integrate services and patient pathways across all care settings.

Title	Role/Scope	Responsibilities
Clinical Directors	Role: Leads all clinical employees, including doctors, under his or her area of service delivery	▪ Receives authority from the Executive Clinical Director Acute and Continuing Care for a group of clinical services. The span of responsibility may be within a specific setting/site or span a number of settings/sites where common services or services that benefit from integration across sites are delivered. ▪ Planning, budgeting, clinical service delivery and operational management of the clinical services in line with National Clinical Programmes.
Director of Nursing for Primary, Acute & Continuing Care	Role: TO BE AGREED	▪ TO BE AGREED ▪ This is being developed by the Office of the Nursing Director in conjunction with the ISP Programme Team

ISA WITH POPULATION OVER 300,000

In an ISA with a population greater than 300,000 there are a number of additional considerations to ensure the ISA management team roles are 'doable' including:

- Primary and Community Care services will have two Operations managers to manage those services with the services divided on a geographical basis; note there will be some services that should be managed across the two operating units for which one of the operations managers would take responsibility such as Civil Registration
- ISA will have a Clinical Directorate model for acute services as all ISA's over 300,000 will have a tertiary hospital (Model 4); guidelines for establishing Clinical Directorates are being developed by the Directorate of Quality and Clinical Care
- Acute and Continuing Care sub-structure may need some adaptation as there will inevitably be a wider span of control; for example in Galway/Roscommon and Cork there will effectively be hospital groups and very large numbers of continuing care facilities to be managed

ISA BLUEPRINT

An ISA Blueprint is being developed that sets out the agreed organisation structure and management processes for an ISA to a more detailed level, including for each care group. This will clearly evolve as further service reviews and reconfiguration plans are developed.

IMPLEMENTATION APPROACH

The model will be implemented in a phased manner. The HSE is committed to implementation of these changes using the recent public services agreement.

Each ISA area will develop its own implementation plan for the national model influenced by geography, population size, existing and future configuration, but adhering to the principles of this management model. A single nominated project manager will be appointed who will be responsible for implementation in each ISA. This will be supported by the Integrated Services Programme team.

This will be co-ordinated by each Regional Director of Operations.

TRANSITION

There will be a transition period in order to migrate to the future model. The transition stages are seen as:

STAGE I

- Appointment of the ISA Manager
- Agreement on the ISA Primary and Community Care boundaries and appointment of the Primary and Community Care Operations Manager(s)
- Appointment of the Acute and Continuing Care Group Operations Manager; may initially be appointed with the Continuing Care facilities managed through the Primary and Community Care Operations Manager
- Reporting relationship for the Executive Clinical Director of Mental Health changed to the ISA Manager
- ISA Management Team meetings in place on a regular basis

Note that in line with the HR principles some of the appointments may be reassignments of people in existing positions.

STAGE II

- Agreement on the Clinical Directorates, for an ISA with a Model 4 hospital[i], and implementation of those directorates
- Appointment of the Executive Clinical Director Acute and Continuing Care
- Agreement on the Health and Social Care Networks (HSCN) for the ISA and an implementation plan developed for the alignment of all services, including care groups, to those HSCNs
- Agreement on the Primary Care Teams for the ISA and an implementation plan for the Primary Care Teams
- Alignment of the Mental Health catchment areas with the ISA catchment area
- Agreement on the Mental Health Management team for the region and appointment of same
- Consolidation of the functional supports and appointment of HR, Finance and ICT Leads for the ISA
- ISA Performance Report agreed in line with Regional reporting requirements

STAGE III

- Implementation of the new Childcare structures as set out in the PA Childcare Report[ii]
- Implementation of Primary Care Teams
- Implementation of the Health and Social Care Networks (HSCN)

The stages are not intended to be entirely sequential but reflect a logical progression. As some of the actions are dependent on strategic decisions and IR agreement at national level there may be some change to the timing of each stage. In addition local priorities, such as reconfiguration of services, may result in some of the steps being taken in a different sequence.

DEVELOPING CLINICAL LEADERSHIP IN THE ISA

ISA management model is based on a strong management team approach of Clinical Leadership, Operational Management and Nursing Leadership.

A number of ISA's will be identified for early implementation of Executive Clinical Directors in Acute and Continuing Care for a defined period to enable full evaluation of the role and to identify any adjustments that are needed.

It is recognised that as the existing Clinical Director role has only been in place for less than two years that it may take some time for Clinicians to develop the necessary skills and experience to take on the Executive Clinical Director role in some hospitals. Indeed in some hospitals clinicians may prefer to assume or continue in the Clinical Director role. The ECD role should only be put in place when a clinical leader emerges in a hospital or hospital group combined with a strong CEO, Director of Nursing and the necessary supports to ensure the role is a success.

An Executive Clinical Director for Primary Care will be appointed in each ISA. A business case has been developed for an Executive Clinical Director Primary Care role to be implemented that will require the approval of the Department of Health and Children. This will replace the current GP Unit Doctor role that is currently being negotiated out of the system but will be a more expansive role with direct operational responsibility for key aspects of primary care. It is planned to initially implement in two sites during 2011 and 2012 before being rolled out further.

Transition plans will be drafted and agreed with the Regional Directors of Operations and will be aligned with plans around reconfiguration and the rollout of the programmes of care.

APPENDIX III Risk Mitigation Strategies

Strategic goals	Risk issue (i.e. issues that create uncertainty in relation to achieving goals/objectives)	Mitigation strategies
The overarching strategic goals of reconfiguration is that the people of Cork and Kerry benefit from having a unified acute healthcare system integrated with all other elements of the health service that: 1. achieves the best possible health outcomes for the people it serves, 2. realises for the people of the region the economic and other benefits that flow from leading edge health research, technology and innovation, 3. delivers value for money.	Lack of agreement on a clearly enunciated vision from: ▪ Voluntary hospitals ▪ Academic institutions ▪ HSE corporate ▪ DoHC	• Clearly define the vision and the strategy • Back it by argument, data and benchmarks • Conduct a round of discussions with all the potential partners to arrive at a common understanding of the vision and develop a Memorandum of Understanding that all will sign up to. (This will help inform our response to, and contribution to, draft legislation when this emerges). • Draw upon international experience to develop shared awareness and understanding of the vision.
	Lack of beds to enable reconfiguration to be implemented	• Review bed capacity of all acute hospitals and match to current usage by clinical services.
	Inadequately defined responsibilities, accountabilities and authority	• Develop a document setting out proposed responsibilities, accountabilities and authorities of key individuals and groups. • Include strong recommendations for managing implementation and managing the interface between implementation of reconfiguration and the day to day operation of the health service. • Clarify respective roles of RDO and Director of Reconfiguration • Hold regular minuted meetings between RDO, Dir of Reconfiguration, Interim Hospital Network Manager and Executive Lead (Reconfiguration)
	Lack of local stakeholder buy-in	• Engage with senior management to protect integrity of the roadmap against operational and financial pressures • Communication and consultation strategy around each initiative considering key groups and individuals, e.g. hospital managers; local community groups; local politicians; unions; etc
	Lack of national corporate support	• Close working with HSE's Director of Quality and Clinical Care and Department of Health and Children
	Mis-alignment with national policy	• Adopt a strategy of working with HSE Corporate, HIQA and DoHC to avoid mis-alignment.
	Independence of voluntary hospitals	• Ensure voluntary hospitals have a sustainable future • Engage with voluntary hospitals to develop a shared vision of a unified system • Set down the shared vision in a Memorandum of Understanding
	Self interests (e.g. job security, workloads, financial, workplace attachment) of various parties, including academia and industry	• Communication and consultation strategy aimed at getting the parties 'on-board' (see also risk issue 3) • Utilise agreed national facilitation process for transfer of Cancer services (Ms Janet Hughes) where resolution is not possible through informal means.
	Over-reliance on individuals within the Reconfiguration Team	• Harness resources from the line to assist the Reconfiguration Team.
	Inadequately specified management arrangements to deliver reconfiguration	• Conduct an exercise to discuss the options currently proposed and identify an optimal management arrangement for consideration.
	Conflicting national policies	• Establish a shared understanding of what policies may conflict with Reconfiguration • Establish a shared understanding of those that are reconcilable and those that are not. • Endeavour through dialogue and discussion to change/mitigate those that are not.

APPENDIX IV

Acute Cardiology Services in Cork City Hospitals

This document updates that previously presented by Prof. David Kerins and represents the position of all Consultant Cardiologists in Cork City/MGH as of 16/10/2010.

Cardiology services for Cork (city and environs), currently operating on separate sites (SIVUH, MUH and CUH), will **consolidate on one site** at the newly built Cardiac Renal Centre on the CUH campus. Commissioning has started and will continue to early 2011.

It is intended that **all patients requiring acute admission to hospital for a cardiac condition will be directed to the Cardiac centre**. This will be communicated to General Practitioners, the Ambulance service and patients.

There will be patients with a **primary cardiac condition who do present to the MUH AMU**, including self presenting patients, those inappropriately/unwittingly referred by GPs, those inappropriately transferred by the Ambulance service. Where admission is judged necessary, they will be redirected to the Cardiac Centre. Patients with primary cardiac conditions should not be admitted to ward beds in MUH.

Patients with **incidental cardiac conditions** (such as newly diagnosed atrial fibrillation), who require hospitalization for primarily non-cardiac medical or surgical conditions may require consultation with a Cardiologist.

A structured liaison service will be provided by the team of Cardiologists and Cardiac Technicians based at the Cardiac Renal centre for both the MUH and SIVUH. The former is likely to require a significant Cardiology presence and it is proposed that on the basis of a weekly roster, each Cardiologist will provide consultation services in a structured manner to the AMU and medical/surgical wards of the MUH.

1. The liaison cardiologist will start their day by rounding the hospital for the required duration and undertake a second mid/late afternoon round.

2. A proportion of patients will be investigated on site utilizing non-invasive facilities that will be serviced by a cardiac technician who will be seconded from the amalgated team of technicians based at the Cardiac Renal centre (weekly or fortnightly basis).

3. If a patient is judged to require invasive treatment or intensive cardiac monitoring, and their condition to be primarily cardiac, they should be transferred to the Cardiac centre.

4. The liaison service would be facilitated by a Liaison Cardiac Nurse.

5. The medical liaison service will be consultant delivered. Cardiology registrars may join rounds for training purposes.

6. The liaison cardiologist will be available throughout the day on a dedicated mobile phone.

7. A patient with a primary cardiac condition who should be redirected for admission to the cardiac centre will, if there are no beds in the cardiac centre, be admitted in the Mercy University Hospital under the cardiologist on call.

8. If there is a difference of opinion with regards to whether a patient has a primary cardiac condition or not then the view of the general physician will prevail (this is a named in be principles arrived which the acute medical unit are set up).

9. In planning the resource allocation for the new cardiac centre the WTEs needed for cardiac services in the mercy University hospital and the SIVUH should get priority.

10. These new arrangements should be audited to ensure they are satisfactory to both parties.

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[i] HSE Acute Medicine Programme Report; Defines hospital models

[ii] HSE Inspiring Confidence in Children and Family Services - Putting children first and meaning it; Strategic Review of the Delivery and Management of Children and Family Services FINAL REPORT; PA Consulting Group for the HSE 1 October 2009.

HSE South (Cork and Kerry)

HSE Offices | Model Business Park | Model Farm Road | Cork | Ireland

reconfig.south@hse.ie

www.hse.ie

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Coláiste na hOllscoile Corcaigh, Éire
University College Cork, Ireland

Mercy University Hospital

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