

Section 6 – Specific Service Theme on Renal Services

Introduction

Kidney/Renal disease is a common health problem in Ireland. Chronic kidney disease (CKD) afflicts up to 280,000 citizens, most of whom are unaware of that fact. More significant kidney disease afflicts up to 180,000 citizens which result in a significant risk factor for cardiovascular disease and premature death. The most prominent manifestation of advanced kidney dysfunction is End Stage Kidney Disease (ESKD), requiring long-term dialysis or kidney transplantation.

In Ireland each year approximately 450 people develop end-stage of kidney failure and need treatment to replace their non-functioning kidneys. The main forms of treatment are haemodialysis or peritoneal dialysis. Those on haemodialysis require treatment usually three times per week, many will require this treatment indefinitely or some will receive a kidney transplant. Internationally there is an increase in the demand for treatment of end stage kidney disease predominantly due to the ageing population and the increase in diabetes. In Ireland this is expected to increase by between 5 and 10%. Analysis of national data indicates there will be an annual national increase in haemodialysis dialysis patients of between 20 and 45 per million of the population. Therefore the HSE needs to plan for an annual expansion in dialysis capacity to provide for an additional 85–170 patients each year.

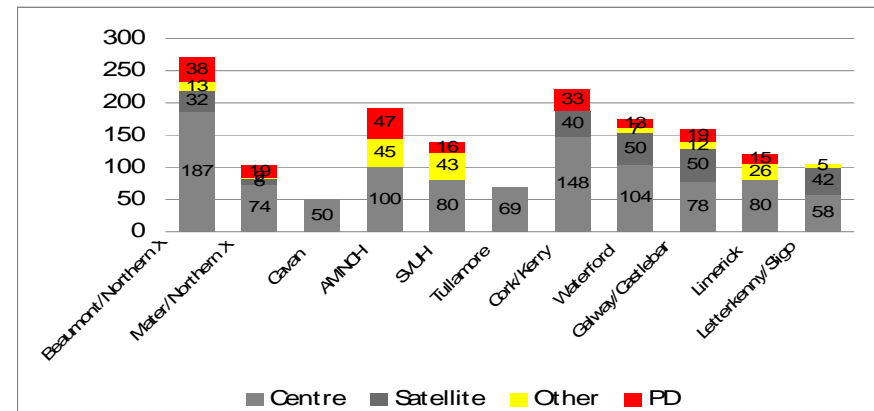
Renal Services Delivery

Renal services in Ireland are currently provided in each of the four HSE Areas: Patients are treated under the care of 11 parent renal units and receive their treatment either in a centre haemodialysis unit or in a satellite haemodialysis unit or in their own home.

All dialysis units liaise with the National renal transplant programme which is based in Beaumont Hospital.

HSE Area	Adult: Parent Renal Units	Satellite Renal Units	PD Programme
HSE Dublin North East	Cavan General		
	Beaumont Hospital Mater Hospital		X X
HSE Dublin Mid Leinster	Tullamore		
	St. Vincent's Hospital AMNCH/Tallaght	Beacon	X X
HSE South	Waterford Regional	Kilkenny	X
	Cork University Hospital	Tralee	X
HSE West	Limerick Regional	Riverside Park	X
	Merlin Park Hospital	Castlebar Parkmore	X
	Letterkenny General	Sligo	

Adult Patients under Supervision by Each of the 11 Renal Units by Dialysis Modality 31/12/08



'Other' relates to satellite units where there is shared/temp. governance arrangement in place

Children Renal Services Delivery

Children with kidney disease are supervised either the Children's University Hospital in Temple Street or Our Lady's University Hospital in Crumlin. Some are treated in-centre but the majority of children receive their treatment at home

What Is the Extent of the Problem?

At present Ireland does not have a National Renal Registry. In the absence of a national renal registry the National Renal Office (NRO) has been undertaking an annual census of activity, including incidence and prevalence in each of the renal units nationally.

The annual renal census (2008) has indicated that there were a total of **3,329** adult patients with End Stage Kidney Disease who required renal replacement therapy (renal transplant, haemodialysis, or peritoneal dialysis). Of these **1,728 (52%)** had a functioning renal transplant, **1,401 (42%)** were on Haemodialysis and a further **200 (6%)** were on peritoneal dialysis.

ESKD patients numbers have gone from 3,143 to 3,329 (+186 patients) in one year. Of these the number with a functioning transplant has increased from 1623 to 1728 (+105) Haemodialysis patients have increased from 1,329 to 1,401 (+72) and peritoneal dialysis patients have increased from 191 to 200 (+9).

The prevalence of ESKD in the Republic of Ireland is 785 p.m.p: The prevalence of a functioning renal transplant is 408 p.m.p. while the prevalence of haemodialysis is 330 p.m.p. and peritoneal dialysis is 47 p.m.p.

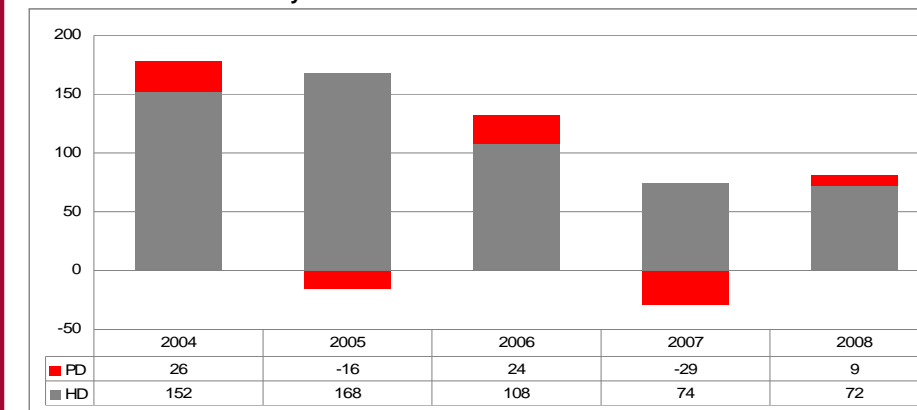
The growth in ESKD between 2007 and 2008 has been 43 p.m.p. 56% of this growth has been in the prevalent transplant population.

The incidence of ESKD in 2008 was 105 p.m.p. 446 patients required long term renal replacement therapy for the first time. 377 (85%) had haemodialysis as their first treatment; 63 (14%) had PD as their first treatment while 6 (1%) received a transplant before the need for dialysis.

National Prevalence of Dialysis Patients at year end (31st Dec)

	2003	2004	2005	2006	2007	2008
Haemodialysis Patients	826	978	1,146	1,254	1,328	1,402
Peritoneal Dialysis Patients	187	213	197	221	192	200
Total Dialysis Patients	1,013	1,191	1,343	1,475	1,520	1,602
Increase on Previous Year	Actual	178	152	132	45	82
	%	18%	13%	9%	3%	5%

Variation in Growth in Dialysis Prevalence



Trends:

In the five years between 31/12/03 and 31/12/08 total dialysis patients have increased from 1,013 to 1,601 i.e. 58%. The number receiving haemodialysis has increased from 829 to 1,401 – 70% in this five year period. The number receiving peritoneal dialysis has increased from 187-200 (7%).

The increase in dialysis prevalence (haemodialysis and PD) year on year has been variable:

- 178 in 2004
- 152 in 2005
- 132 in 2006
- 45 in 2007
- 82 in 2008

The variation reflects incidence rates, transfer to transplant rates and death rates.

Based on analysis of national data and on the observed increment in prevalent dialysis patients between 2004 and 2007 it has been anticipated there will be an annual national increase in haemodialysis dialysis patients of between 20 and 45 per million of the population. The increment in total dialysis numbers in the last year falls at the lower part of this range (19 p.m.p.)

The National Renal Office predicts that an increase range of 20 and 40 per million of the population can be expected in 2009 (i.e. 85-170). It must be emphasised however that the increase demand is not uniform either in time of presentation or in regional location. Considerable small area variation throughout the country can be anticipated.

Expansion of capacity:

It is acknowledged that there is a shortage of haemodialysis capacity nationally. Units in Beaumont, Limerick, Cork, Galway and Waterford operate extended hours including dialysing patients late into the night and many patients have to travel long distances for their treatment

Over the past three years the HSE has made improvements in tackling the increasing demand for dialysis and addressing the severe overcrowding which has developed in some of the renal units under the most capacity restraints. The HSE has also been working to ensure that where possible patients do not have to travel long distances for treatments and are treated as near to their home as is possible

The expansion of capacity is currently being addressed through a range of initiatives in both the public and private sectors. New dialysis units have been commissioned over the past year which will result in additional extra capacity made available in both the public and private sectors.

The HSE will continue to work to expand capacity for renal patient nationally to accommodate the growth in demand (i.e. 85 – 170 additional patients each year). It is anticipated that expansion in the future will be addressed through a combination of expansion within existing renal units and the establishment of additional contracted satellite units.

Contracted units:

The HSE has been availing of dialysis capacity for public patients in the private sector since 2004.

Early in 2007 the HSE went to tender to establish a panel of suitably qualified providers who can be contracted to provide haemodialysis services when and where an identified need exists. Quality of care, location, time frame for service delivery and value for money are key components of the decision making process.

Contracts are in place with commercial providers in the following regions**North Dublin**

In November 2006 a 16 station satellite unit opened in North Dublin. There are currently 53 patients from Beaumont and the Mater hospitals being treated there. This additional capacity has reduced some of the pressure on both hospitals, particularly the dialysis unit in Beaumont hospital which has reached absolute capacity.

Kilkenny

On the 31st of August 2009 a new satellite dialysis unit opened in Kilkenny. This unit has 16 stations and a capacity for over 64 patients. Prior to the opening of this unit patients have been treated by another contracted provider pending the opening of this new facility. There are currently 52 patients being treated in Kilkenny which provides a local service to patients in the South East who previously had to travel to Dublin or Waterford.

South Dublin

The HSE has had a contract in place with a private dialysis provider since June of 2004. This contract was extended to accommodate growth in demand in the South Dublin region. The unit has a total of 31 dialysis stations, and is now treating 130 patients on behalf of the HSE.

Limerick

The dialysis unit in Limerick has been under considerable pressure. Following an EU tender process the new satellite dialysis unit opened in February of 2009. This facility has the capacity to provide dialysis for up to sixty patients and has relieved the pressure on the regional unit. The opening of this unit ended the unsatisfactory situation where on an interim basis some patients had to travel to Galway to receive dialysis.

Galway

Currently 18 patients are being dialysed in a commercial dialysis unit in Galway. These patients are accommodated there pending agreement on the expansion plans for the West.

As of the end of December 2008 there were a total of 226 patients treated in the contracted units – i.e. 16% of all haemodialysis patients. This equates to 7% of all ESKD patients nationally (which includes patients who have had kidney transplants and who remain under their parent renal unit for ongoing follow up).

Renal Transplantation

Renal transplantation is the optimum treatment for ESKD – it has been established worldwide as a highly effective life saving procedure. However, organ transplantation is limited by the increasing shortage of available organ donors in most European countries. Ireland has a relatively high rate of (deceased) organ donation, the rate is 18.4 per million in 2008 (the European average is 13 to 22 per million population). Despite a relatively high deceased donor organ transplant rate, transplantation has not kept pace with the increased numbers of dialysis patients.

In Ireland 52% of all patients with end stage kidney disease are treated with a functioning renal transplant. This for patients is a very positive feature of the care to those with kidney disease.

To the end of August 2009 a total of 106 cadaveric transplants have been undertaken (in addition to 5 simultaneous kidney and pancreatic transplants).

In 2006 the HSE received funding for the establishment of a Living Donor Programme which is to be based in Beaumont Hospital. (The service has been in existence since 1972 to this but has been enhanced in recent years).

To date in 2009 (end August) a total of 12 living donor transplants have been undertaken.

National Planning – The National Renal Office (NRO)

Earlier this year the HSE established a National Renal Office (NRO) which is responsible for planning, co-ordinating and managing the strategic development of Renal Services across the country. The Office will provide Governance, Integration and Leadership in developing a National Framework for delivering Renal Services in Ireland and will facilitate an immediate integrated focus on a number of priority areas of concern.

The primary role of the National Renal Office is in governance, planning and strategic development. Network Managers/Regional Directors and local Renal Units will continue to maintain operational responsibility for the delivery of Renal Services within their region especially as they relate to the care of individual patients.

The NRO is currently positioned within National Hospital's Office structures, pending HSE organisational restructuring, as a facilitating and integrating entity across the service and support directorates.

Clinical Director:

Dr. Liam Plant, Consultant Renal Physician from Cork University Hospital has been appointed the National Clinical Director of the National Renal Office.

The Office will be supported with input from those with key competencies in clinical, business and organisational support that will provide dedicated input into the planning and operational aspects of this Office.

The immediate priorities for the National Renal Office are:

- Expansion of renal capacity to accommodate growth in demand
- Provision of services closer to patients homes
- Improvement in patient centred care with the closure of night time shifts

It is important that service expansion and development are all based on clinical need, in line with priorities identified by the National Renal Office and adequately address the key considerations of: Capacity, Configuration & Governance.

The strategic vision for Renal Services:

- The patient is central to Renal Services design and delivery. The patient should be fully informed on treatment options and prognosis of kidney disease.
- Services are provided to populations at local level, consistent with safe and effective care and practice.
- Networks of appropriately designed and maintained Renal Units, with adequate inpatient, outpatient, laboratory and radiology facilities, are provided to support patient care in a manner fully integrated with Primary Care and other Community Services.
- Access is available to the most modern diagnostic and treatment equipment.
- Effective governance arrangements exist to ensure that Renal Services are delivered to nationally defined standards.

Funding

In 2009 the NHO has prioritised renal services and made available €5.5m additional funding for renal service developments in 2009. This will enable the HSE to fund the cost of existing contracts with the private sector and will enable the HSE to begin planning for an expansion of facilities nationally to cope with the increasing demand in line with the priorities identified by the National Renal Office.

With the funding provided this year the NHO has prioritised funding for three additional consultants nephrologists for Tullamore, AMNCH (Tallaght) and St. Vincent's University Hospital. It is hoped that these posts will be filled as soon as possible. An additional consultant is due to start in Waterford Regional Hospital in October and recruitment is ongoing for an additional post covering Cork and Kerry.

For further information please contact:

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