Acute Medicine Units – the future for treating serious medical disorders

This month’s issue of Reconfiguration Times focuses exclusively on the development of acute medicine units in our region. The care of patients with serious medical disorders is probably the biggest single challenge that our hospital system faces. The conference on acute medicine units, on April 16th last, organised by Dr Jennifer Carroll and the Reconfiguration Team, allowed a full and frank debate of the key issues around the establishment of these new units in five acute hospitals in Cork and Kerry. This was the most multidisciplinary conference that I have ever attended. Among the many important take home messages, I ranked the three most profound as being:

• general practitioners referring patients to hospital should have a single point of contact
• appropriate patients should be directly streamed to the acute medicine units
• acute medicine units should have both an assessment and an admission function.

I would not underestimate the challenge we face in implementing the solutions proposed at the conference – we shall all need to contribute to the changes required. It raises the more fundamental question which is “can all of us who work in the Irish healthcare system genuinely work together for shared common goals?” The answer is “of course we can and by pulling together, rather than apart, we can really change the system!” The contribution of each and every one of you is important. We are all privileged to work in the Irish healthcare system.

Prof. John R. Higgins,
Director of Reconfiguration

The conference on acute medicine units (AMUs) organised by the Reconfiguration Team last month made for a most interesting afternoon and sparked a very lively debate.

With many health care professionals interested in the benefits to be gained from AMUs, there were over 130 delegates in attendance. These included a broad spectrum of staff namely, consultants, directors of nursing, GPs, hospital CEOs, senior managers, allied health professionals, NC HDs, UCC academics, specialist nurses, clinical directors and public health specialists.

The conference drew on the experiences of those working in AMUs or similar facilities in Kilkenny, Dublin and London.

Faster assessment of patients arriving at hospital offers real advantages:

• rapid assessment reduces length of stay;
• discharge rates can be increased with no increase in readmission;
• assessment is no slower and mortality no higher at week ends (in contrast with the general picture where slower assessment has been shown to lead to higher mortality);
• door to needle time for MI is rapid;
• fragile elderly can be assessed and discharged safely in 48 hours.

There is no doubt that patients and clinicians much prefer it.

DEREK BELL, PROFESSOR OF ACUTE MEDICINE, IMPERIAL COLLEGE LONDON
We welcoming the delegates, the Director of Reconfiguration, Prof. John Higgins, told them that there was a very interesting line up of speakers for the afternoon who were sure to entice reflection and debate.

Pat Healy, Regional Director of Operations, HSE South opened the conference. He said “the experience and knowledge of the speakers offer an important learning opportunity for everyone here. This will ensure an informative and focused conference which will contribute significantly to the effective development of acute medicine units in HSE South.” He informed delegates that Reconfiguration is one of his top priorities for 2010 saying that “HSE South has responded very well in delivering our service plan and has brought forward innovative and practical solutions to the challenges of the day. I am confident that we will continue to do so and that the AMUs will form a key element of this.”

Patient advocate, Mary Vasseghi, set the tone for the afternoon by making delegates experience a minute’s silence with eyes shut. After she compared the experience to patient vulnerability and lack of knowledge when they arrive ill or injured in the emergency department. Many reported that they felt the shut eye lasted much longer than a minute!

Dr. Richard Brennan, a Kilkenny based GP, praised the medical assessment unit (MAU) at St Luke’s General Hospital for Carlow/Kilkenny, which recorded patient turnaround time averaging 2hrs 45 minutes, in 2009. He stated that the main reasons for this rapid assessment are that: GPs can make direct referrals to the MAU; there is a single point of contact (bed manager) for those making referrals and strong communication exists between the bed manager and the GPs. Dr. Brennan’s positive presentation drew support from Dr. Kieran Carroll a consultant radiologist at St Luke’s whose department supports the MAU. Dr. Carroll compared radiology activity for the MAU and ED for 2009, see table below:

<table>
<thead>
<tr>
<th></th>
<th>2009 MAU Exams</th>
<th>2009 ED Exams</th>
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</thead>
<tbody>
<tr>
<td>Plain Films</td>
<td>958</td>
<td>9,451</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>390</td>
<td>550</td>
</tr>
<tr>
<td>CT</td>
<td>376</td>
<td>328</td>
</tr>
</tbody>
</table>

He acknowledged that while the MAU did generate activity for radiology, however as the table shows, the activity is less than the ED for everything except CT. According to Dr. Carroll, there is a two way flow between radiology and the MAU in that the radiologists occasionally refer patients to the MAU!
The acute medicine admission unit (AMAU) based at St James’s Hospital is the biggest in Ireland and most of its patients are from Dublin’s inner city and are elderly, according to Siobhan Donnelly, CNM3. This meant that the hospital had to cope with long, unnecessary patient stays. To counteract the problem they set up an AMAU seven years ago, with 59 beds taking acutely ill patients from the ED 24/7.

Ms. Donnelly outlined the benefits as follows:

**Patient**
- More rapid admission
- More rapid diagnosis
- Earlier consultant/specialist opinion
- Planned discharge.

**Staff**
- Speciality wards restored to speciality
- Improved teaching/training in acute medicine.

**Hospital**
- Admission delay eliminated for emergencies
- Reduction in waiting list times
- Greater access for elective surgical activity.

The model of AMAU differs at St James’s to Kilkenny in that GPs cannot refer patients directly. They first have to present in the ED for triage.

Ms. Donnelly’s colleague Dr. Bernard Silke a consultant cardiovascular physician provided delegates with a lot of food for thought in his presentation, with data from research proving that acute medicine units improve patient mortality rates and improve delays in patients being seen and transferred.

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The potential impact of an AMAU is influenced by large numbers of patients awaiting long term care.

**Siobhan Donnelly, Assistant Director of Nursing, AMAU, St James’s Hospital, Dublin**

Research has shown that AMAUs contribute to improved patient mortality rates.

**DR. BERNARD SILKE, CONSULTANT CARDIOVASCULAR PHYSICIAN, ST JAMES’S HOSPITAL, DUBLIN**

AMUs in Cork and Kerry will aim to assist in eliminating the trolley crisis and reduce length of patient stay.

**DR. JENNIFER CARROLL, CONSULTANT PHYSICIAN, RECONFIGURATION**

We work on the basis of excellent relationships between the community, the hospital, the GPs, public health, the consultants and Friends of St Luke’s focusing on what is the best way to get a patient sorted?

**DR KIERAN CARROLL, CONSULTANT RADIOLOGIST, ST LUKE’S HOSPITAL**

ED is a bridge, a place of transit between daily life and the final destination of high quality, safe and appropriate care. Today new bridges are streaming users, increasing safety, efficiency and effectiveness for all.

**MARY YASSEGH, IRISH PATIENT REPRESENTATIVE ON SAFETY TO WHO**

We all have deeply embedded processes that need to be changed and that will be a fundamental challenge to all of us, requiring lots of energy.

**PROF. JOHN HIGGINS, DIRECTOR OF RECONFIGURATION, ACUTE SERVICES, HSE SOUTH**
Our keynote speaker, Derek Bell, Professor of Acute Medicine Imperial College London and Co-Chairman, Acute Medicine Task Force, Royal College of Physicians, London had to address delegates by teleconference from London due to the volcanic eruption in Iceland. His huge expertise in the area of acute medicine was a vital input and delegates were delighted that he was able to make his presentation despite the flight ban.

Prof. Bell outlined the historical model for acute care, which he cited as the reason why it has become such a problem for hospitals world wide:

- > 80% medical admissions are emergencies; 60% plus of all admissions are emergency
- “team” of junior doctors deliver the service
- consultant physicians practice acute medicine alongside an organ based specialty
- no specific time assigned to provide acute care
- emergency work fitted around elective activities like OPD procedures etc.

He presented figures from other studies supporting Dr. Silke's findings on improved patient mortality rates and decreased length of patient stay if they attend an AMU.

He suggested the following team for an AMU:

- Dedicated:
  - Consultants - protected sessions
  - Junior doctors – 2-6 month blocks
  - Primary care physician(s)
  - Skilled nursing staff
  - Therapy input (7 days)
  - Pharmacy service (7 days)
  - Administrative support.

- Defined specialist input and support services:
  - Cardiology
  - Geriatrics
  - Respiratory.

And the following consultant patterns of work:

- Consultant
  - of the week – ‘hard work’
  - of the day – ‘poor continuity’ most common!

- Recommended: Consultant of several days
  - 48hrs minimum
  - 4 day and 3 day weekend
  - Minimum of 2 ward rounds per day
  - A consultant managing 25 new patients/24 hrs.

He outlined the roles of the consultants as follows:

- Acute physician
  - Up to 50% of time involved in acute care
  - Leadership role in the AMU
  - Practical skills: procedures e.g. endoscopy, ultrasound or specialty e.g. ITU, HDU or educational.

- Specialist with GIM commitment
  - 2-3 sessions in acute care
  - minimum take frequency 1:15
  - Remaining sessions in specialty care.

His thoughts on the structure on an AMU were in tangent with previous speakers:

- Beds
  - Equivalent to take plus 10%
  - Monitored and single rooms
  - Up to level 2

- Near side testing
- Co-locate with Emergency department
- Therapy suite (larger units)
- Common discharge drugs on unit – medicine reconciliation
- Teaching area.

Note: Further details on Prof. Bell’s presentation will be published in forthcoming issues of Reconfiguration Times.
Reconfiguration Calendar

During March we continued to inform, consult and engage staff and key external stakeholders on reconfiguration. Here’s some of those whom we met in March.

**MARCH 2010**

1. **General Surgery Subgroup feedback session to Reconfig. Team**
   - Orthopaedics Subgroup feedback session to Reconfiguration Team

2. **Presentation on Reconfiguration to Corporate Induction Day, HSE South**

3. **HSE, Nursing Services Director and staff**
   - Gastroenterology Subgroup feedback session to Reconfig. Team
   - Electronic GP referral subgroup, session with ICT National Director and Irish College General Practitioners

4. **Vascular Subgroup feedback session to Reconfiguration Team**

5. **Reconfiguration Forum Meeting**
   - Centre for Advanced Manufacturing and Management Systems (CAMMS), CIT on Lean Projects

6. **Orthopaedics Subgroup**

7. **West Cork based advanced paramedics review**

8. **Orthopaedics Subgroup**

9. **Non Executive Advisory Board Meeting**

10. **Haemochromatosis Subgroup**

11. **Visit to NICHE, Knocknaheeny/Hollyhill Community Health Project**

12. **Reconfiguration Forum**

13. **Medical Resource Utilisation Subgroup**

14. **Histopathology Subgroup**

15. **Haemochromatosis Subgroup**

**AMUs in Cork and Kerry**

Dr. Jennifer Carroll, Consultant Physician, outlined her plans for AMUs in Cork and Kerry. She described the AMU as:

- the hub for all acute medical care
- receiving direct admissions from GPs
- being co-located with ED, having close working relationships and rapid flow to AMU for patients who self refer
- having consultant physicians on site providing care and assessment with a specialist in reach
- having dedicated real time diagnostic support 24/7.

and cleared up any misconceptions stating that AMUs are not:

- ED short stay observation wards
- overflow wards
- places to queue for an inpatient bed
- a by-pass to specialist opinion e.g. neurology / elderly care
- urgent access points to diagnostic procedure e.g. endoscopy/ultrasound/ CT brain
- outpatient department opinion providers on non-acute medical conditions.

She plans that the AMUs will function as follows:

- Rapid Assessment by
  - a) Specialist medical nurses
  - b) Senior medical physicians
- Diagnosis and management plan implemented
- Same day diagnostics
- Treatment commenced
- Decision – discharge or admit.

Lively deliberations followed the presentations and in his sum up Prof. John Higgins, Director of Reconfiguration, Acute Services, Cork and Kerry thanked the speakers, guests, staff who organised the conference, UCC for hosting and representatives of the pharmaceutical industry for attending and their sponsorship.

He also thanked Dr. Garry Courtney, Joint National HSE Lead for Acute Medicine Programme, who joined the panel discussion supporting the development of AMUs for HSE South.

He summarised the most salient points of the conference having relevance for the AMUs in Cork and Kerry as:

- Direct GP referral into AMU
- Direct point of contact in AMU for GPs
- Strong communication between AMU point of contact and GPs

Prof. John R. Higgins, Editor. Dr. Jennifer Carroll, Norma Deasy, Nora Geary, Micheal Hanna and Geraldine Keohane, staff writers.

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