The Galway Experience

Dr. Ruairi Waters
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Galway University Hospital

- Main acute hospital in West of Ireland
- Model 4 Hospital with 24/7 care
- Teaching Hospital (NUIG)
- Supra regional centre for cancer and cardiac services
- Core Catchment area of 314,758
  - Wider area serving 1 million
    (Donegal to North Tipperary)
- Recognised for HST intake in all specialities

Falls & Syncope Epidemiology

- Annual Falls
  - 1 in 3 people > 65
  - 1 in 2 people > 80
- 40% of ambulance calls in over 65s due to falls
- 7% of over 65s attend ED with a fall
- 40% of Nursing Home residents fall twice a year or more
- Falls accounts for 35% of all patient safety incidents in hospital

Predominantly a problem of ageing and frailty

Future Planning

- Rationale for a Syncope Clinic in Galway
- Key points when setting up a service

- Audit to assess unmet clinical need
- Understand requirement of service you are providing
  - Age cut off?
  - Integration with AMAU/Emergency Department?
  - Is it a syncope clinic or combined syncope/falls service?
  - MDT provisions?
  - Is it mainly a tilt-only service?
- Understand Finances: crucial in preparing business case for service
  - What is the projected demand for the service?
  - Will my business case be successful?
  - Who should I lobby?
  - Cost and maintenance of expensive diagnostic equipment?
Our Aims

- Design a solid conceptual framework
- Add value to existing resources with cost effectiveness to the patient journey
- Increase rapid diagnostic access and yield
- Improve Patient Outcome
- Scope for continuous education and research

Value of a Syncope Unit

<table>
<thead>
<tr>
<th>Centre without access to Syncope Unit</th>
<th>Syncope Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Degree in variability</td>
<td>Reliable</td>
</tr>
<tr>
<td>Practice Patterns</td>
<td>Appropriate Resources</td>
</tr>
<tr>
<td>Diagnostic Yields</td>
<td>Improved diagnostic yield</td>
</tr>
<tr>
<td>Protracted Length of Stay</td>
<td>Reduced admission and total LOS by &gt; 50% in intermediate risk patients</td>
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GUH Syncope Clinic

- Initiated June 2016
- Tilt Testing: 5 half days per week
- 3 Consult rounds per week
- Falls Registrar – 0.5 FTE
- Nurse Specialist/Research Assistant (advanced paramedic)
- Based on SJH Dublin Model of Care
- High new to follow up ratio
- Clinic: 40min consultation, 8-12 patients
- Tilt Table Service
- Liaison with Neuro + Cardiology + ENT

GUH Syncope Clinic

- Physician Led
- Dedicated Inpatient & Outpatient service
- Multidisciplinary
- Age Cut Off: >50 in Year 1
- All patients seen within 1-3 weeks
- Jan - Dec 2017: 625 patients
- Atrial Fibrillation screening in post TIA/Stroke patients – >800 since 2016
- 218 New Cases of A.F detected

Multidisciplinary Team

- Comprehensive MDT focus
- 0.5 FTE Physiotherapy – Special interest in vestibular disorders
- 0.5 FTE Occupational Therapy
- 0.5 FTE Clinical Research Assistant
- 0.2 FTE Administrative Support
**GUH Syncope Clinic**

- PAVD
- 24 Hour Holter
- Ambulatory Blood Pressure Monitoring
- Carotid Sinus Massage
- Echocardiogram
- ECG
- R Test
- History & Clinical Examination
- Active Stand & HUT

**Start Up Costs**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Cost</th>
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<tbody>
<tr>
<td>R Test x 20</td>
<td>€48,000</td>
</tr>
<tr>
<td>Finapres NOVA</td>
<td>€28,500</td>
</tr>
<tr>
<td>High Speed Tilt Table Bed</td>
<td>€11,500</td>
</tr>
<tr>
<td>ABPM x 8</td>
<td>€10,250</td>
</tr>
<tr>
<td>ECG Mortara Machine</td>
<td>€6,300</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>€4,500</td>
</tr>
<tr>
<td>Vital Signs Monitors</td>
<td>€1,650</td>
</tr>
</tbody>
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**Syncope Clinic Funding**

- Synergistic relationship between our syncope clinic and clinical research

- Blended funding model
  - Business case
    - Business Case Manager
    - Lobby Hospital Manager, Director of Nursing
  - Clinical Research

**Referral Pathway**

- Primary Care
- ED/AMU
- Physician
- Diagnosis
- MDT
- Syncope Clinic

**GUH Syncope Pathway**

**Syncope Clinic GUH**

- Number of Patients vs Month
Syncope: ED/AMU presentations 2015

Over 16 week period (1st September to December 22nd 2015)

261 acute presentations with syncope

Mean age 67 years

Syncope presentations to GUH in 4 months (2015)

146 Admissions

Mean LOS 5.69 days

Age >60 Mean LOS 7.69 days
Age <60 Mean LOS 2.24 days

830 Bed days (3323 per annum)

€3 million per annum

Acute Medical Admissions to GUH (2017)

Syncope Admissions to GUH 2017

Total 415

AMAU 210

Non AMAU 215

LOS 1.1 days

LOS 4.6 days

Mean LOS 2.8 days

> 50% reduction in LOS

1200 Bed Days

Net Saving – €1,100,000
Education

- Clear visibility across Saolta Group
- Gain knowledge through Case Studies, up to date research, ECG traces and practical training sessions in syncope unit
- Avoid duplication of work by collaboration with hospital services
- Risk Assessment
- Diploma in Syncope & Related Disorders

R-BEAT

Risk Based Screening for the Evaluation of Atrial Fibrillation Trial

- Stroke is a leading cause of death & the main cause of adult acquired disability in Ireland
- Atrial Fibrillation is a major modifiable risk factor
- Oral anticoagulant therapy has a two thirds risk reduction in ischaemic stroke in atrial fibrillation
- Opportunistic pulse screening in patients > 65 years results in 1% detection of PAF.
- Traditional holter monitor has limited duration (24-48 hours)
- Emergence of R Test allows prolonged (1-2 weeks) monitoring

CHADS2-VASc score: risk stratification of patients with atrial fibrillation

We believe CHADS2-VASc score represents an opportunity to identify patients at high risk of atrial fibrillation

Inclusion: CHADS2-VASc >2

Health Research Board Funded

Our clinical trial targets a major key care-gap in stroke prevention

May transform our approach to detecting covert atrial fibrillation in the community

Inpatient Falls

- Appointment of Inpatient Falls Coordinator
- Policy Development (support from SJH)
- Build an MDT Falls Prevention Committee
- Sharing of knowledge/staff awareness/huddles
- Creation of a tool to identify risk factors
- Understand reported falls
- Measure under reporting

Take Home Messages

- Understand current service provisions within the group
- Clear referral pathways
- Consult with colleagues
- Engage with frontline leaders
- Understanding finances – NB in supporting your business case for syncope service
- Understand the structure & requirements of service you are providing
- Syncope Service Staffing
- Resilience
- Don't forget Administrative support, porters etc.

Barriers to establishing a syncope unit

- Underestimation of the consequences of syncope
- Lack of awareness of benefit of SU on quality-of-life
- Low numbers of syncope specialists
- Lack of formal syncope training programmes
- Wide age range of patients
- Multi-speciality skill set required
- Reluctance to introduce innovative proposals
- Multiple stakeholders
- Inadequate reimbursement
- Fear of increasing costs rather than reducing them
- Lack of awareness of benefits of syncope units