Programme Team Past & Present:

Clinical Leads:  
Professor Garry Courtney  
Dr Yvonne Smyth

Programme Manager:  
Blathnaid Connolly

Director of Nursing:  
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Mr Paul Nolan  
Naomi Oldenburg

HSCP Lead:  
Professor Shane O’Neill

Programme Coordinator:  
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Ms Margaret Gleeson

Previous Programme Managers:  
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Ms Roisin O’Hanlon  
Ms Alison Enright

Previous Directors of Nursing:  
Ms Avilene Casey  
Ms Margaret Gleeson

Previous HSCP Lead:  
Ms Avilene Casey  
Ms Margaret Gleeson

Programme History:
The Acute Medicine Programme was established in 2010 to standardise and improve the management of acutely ill medical patients in the Irish Healthcare system. Acute medicine is concerned with the immediate and early specialist management of adult patients suffering from a wide range of medical conditions who present to, or from within an acute hospital and require urgent or emergency care. Acute medical units (AMUs), acute medical assessment units (AMAUs) and medical assessment units (MAUs) have been developed to support the delivery of this care. The seminal report on The National Acute Medicine Programme was first published in December 2010. The overarching aims of the Programme are to ensure that all acute medical patients have a better patient experience with improved communication receiving safe, quality care with timely diagnosis and the correct treatment delivered in an appropriate environment. The key objectives of the programme are to improve the quality and safety of patient care by increasing access to timely diagnostic tests and eliminate trolley waits for medical patients, reduce cost and increase value by promoting an ambulatory model of care and shorten average length of stay for admitted patients. The programme emphasises the fundamental importance of allowing senior clinical decision makers to assess acutely ill patients without delay and to initiate rapid investigation, diagnosis and treatment, the concept of Clinical Justice. An important focus of the model is the close collaboration and interdisciplinary working with GPs and community care colleagues.
**The Key Objectives of the programme include:**

**Providing standardised, safe patient care:** detailed guidelines, algorithms, care pathways and patient information materials will be developed and implemented for the most common acute medical presentations.

**Hospital models:** The NAMP defined the four hospital models now used to describe the basic functionality of acute hospital activity in Ireland, and accepted by the Department of Health, Health Service Executive, Royal Colleges, Hospital Information and Quality Authority (HIQA). The purpose of these models is to provide a clear delineation of hospital services based upon the safe provision of patient care within the constraints of available facilities, human resources and local factors. The future growth in healthcare will be in the areas of ambulatory care and chronic disease management. As a result of these emerging models of healthcare delivery and the ageing population the total volume of activity in local hospitals will need to grow substantially for the successful implementation of this programme.

**Primary care:** General Practitioners (GPs) will be supported by their hospital colleagues and specialized nurses in the provision of chronic disease management in primary care.

**Acute medical units:** (AMUs), acute medical assessment units (AMAUs) and medical assessment units (MAUs): the programme defines these different types of assessment units, how they should be led, operated and resourced and how they differ per hospital model. Some model 4 hospitals may have a Medical Short Stay Unit (MSSU) to assist in the clinical management of patients requiring a 1-2 day admission under the governance of Acute Physicians.

**National Early Warning Score (NEWS):** the programme developed and implemented the NCEC (Guideline No.1) National Early Warning Score (NEWS) and associated communication and handover (iSBAR) protocols to enable early identification of deterioration in patients and how they should be best managed.

**Navigation hub/bed bureau and case manager (CM):** the programme believes that acute medical services are best delivered utilising a navigation hub concept where case managers (CMs) are able to stream patients referred by GPs and other services to the most appropriate pathways of care and back into the community or residential setting again following treatment and discharge.

**Governance and metrics:** the programme sets key accountabilities for the management of assessment units and key metrics to monitor their performance and effectiveness and so enable continuous improvement.

**New working practices/continuous presence:** the programme sets out recommended enhancements to clinical work practices in order to ensure patients receive timely care from a senior decision maker working within a dedicated multidisciplinary team.

**New approach to education, training and development:** the programme recommends the development of acute medicine as a specialty and the establishment of a cadre of acute medicine physicians (i.e. physicians with acute medicine as their primary specialty and physicians with a 50/50 acute medicine/other specialty interest). To facilitate this, the RCPI will consider a new acute medicine training curriculum. The programme also recommends the development of acute medicine as a specialty for nursing and therapy professions.

**Acute floor:** the development of an acute floor concept (in model 3 and 4 hospitals).

The programme believes that the successful implementation of its recommendations will provide benefits to both service users and service providers. Patient advocates played a key role in the design of the programme and will continue to be involved in its implementation and evaluation.
The programme targets include:

- 95% of all medical patients attending should spend less than 6 hours from registration to discharge in AMU/AMAU/MAU
- All patients will be seen by a senior clinical decision maker within 1 hour of arrival
- Implementation of the National Early Warning Score (NEWS) and iSBAR
- Access to same day diagnostics and reporting
- 25% of admissions should receive appropriate care without an overnight hospital stay
- 31% acute medical admissions should spend no more than 1-2 nights in hospital
- 33% of AMAU admissions should require LOS of between 3 – 14 days
- 11% or less of AMAU admissions will require no more than 14 days

The Programme Key performance Indicator metrics are (KPIs)

<table>
<thead>
<tr>
<th>KPI</th>
<th>Source</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number admissions to AMAU</td>
<td>Varied across services</td>
<td>Yes</td>
</tr>
<tr>
<td>% with total medical assessment time &lt;6 hours (Registration to discharge AMAU/AMU/MAU)</td>
<td>Varied across services</td>
<td>Yes</td>
</tr>
<tr>
<td>% of patients with LOS=0</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>% of patients with LOS 1-2 days</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>% of patients with LOS&gt;2 days</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>% of patients with LOS&gt;14 days</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>AvLOS for those staying &gt;2 days</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>Overall AvLOS for medical patient</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
</tr>
<tr>
<td>30 day re-admission rate</td>
<td>HIPE /NQAIS Clinical</td>
<td>Yes</td>
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Achievements 2011-2014 overall:

- All acute Hospitals in Ireland reconfigured into Models 1-4
- Reduction of national medical average Length of Stay 8.61 days (Jan 2009), 7.38 days (Nov 2012)
- Implementation of National Early warning Score, COMPASS education programme and structured escalation communication tool (iSBAR) across 34 hospitals
- Formation of local and regional clinical and project governance teams involving multidisciplinary leadership in each acute hospital site
- Completed diagnostic gap analysis across sites undertaking NAMP implementation against NAMP national targets
- 185 nurses in post in acute medicine
- Consolidated and disseminated programme methodology in relation to the 4 areas of interventions: Ambulatory Care, Medical Short Stay, Inpatient care & Frail older person care
- Delivered structured change management and performance improvement support to targeted acute hospital sites
- Programme delivered process improvement workshops, training and coaching. Harnessing innovation and leadership training across the acute emergency medical pathway
- Established Multidisciplinary clinical, professional advisory and working groups (Consultants, Nursing (2012) and Health and Social care professions)
- Reduction of 1.6 days in average length of stay nationally was achieved between 2010 and 2013

KPI Data 2012:

<table>
<thead>
<tr>
<th>Metric</th>
<th>National target</th>
<th>Performance 2009</th>
<th>Performance 2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of patients with LOS=0</td>
<td>25%</td>
<td>9.0%</td>
<td>21%</td>
</tr>
<tr>
<td>% of patients with LOS 1-2 days</td>
<td>31%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>% of patients with LOS &gt; 2 days</td>
<td>44%</td>
<td>65%</td>
<td>55%</td>
</tr>
<tr>
<td>% of patients with LOS &gt;14 days</td>
<td>Comp 11%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Overall AvLOS for AMP patient</td>
<td>5.8 days</td>
<td>8.5</td>
<td>7.0</td>
</tr>
</tbody>
</table>
2012:
Working with the assistance of the national team, accelerated improvement projects have been identified in individual sites which have broadly fallen into the following categories:-

Operational
- Visual hospital bed modelling (Beaumont hospital)
- Navigation Hub development (Mater Hospital)
- ICT solutions to track patient experience times (Tallaght)
- Discharge planning and patient flow (Galway University Hospital Group)

Clinical
- Nationally agreed referral criteria to AMAU (ICGP)
  - Accelerated process improvement events with targeted sites
  - Established governance structures Key Stakeholders e.g. SDU, other clinical programmes, Patient advocacy groups, ICGP
- Allocation of 36 new Acute Physician Consultant posts
- Development of 3rd level postgraduate diploma Acute Medicine Nursing programme.
- Development of Health and Social Care Professional Competency Framework.
- Establishment of the Irish Society of Acute and Internal Medicine (ISAIM) – a multidisciplinary forum to support continuous professional development, promote shared learning and build and acute medicine community in Ireland
- Establishment of the Acute Medicine Nurse Interest group (AMNIG)
- Research and consultation to support development of an acute medicine nursing strategy conducted
- Template for Writing Standard Operating Policies Designed and circulated
- Development of nursing skills and competencies (core, specialist and enhanced / advanced) directory
- Clinical Nurse Manager 2 appointed to AMAU’s & MAU’s

2014:
- Operational policies across all units completed in 2014
- National figures from 2014 to date, show significant improvement across all KPIs for medical patients. The national benchmark of 25% same day discharges was achieved in 2014. The national AvLoS for medical patients was 6.8 days in 2014 down from 7.58 days in June 2012
- Total medical discharges up to the end of October 2014 increased by 28% compared to October 2010 figures. AMAU activity accounted for 33% of the total discharges nationally in 2014. In 2014, up to end of October, there were 8,724 additional medical discharges compared to the same period in 2013.
- Preliminary work was completed on the National Quality Assurance Information system (NQAIS) for medicine. This system is an essential electronic tool to capture data on medical patients to deliver further efficiencies and improved quality in acute medicine
- All 41 acute and single speciality hospitals (100%) have implemented the NEWS to some degree, and 98% of departments within those hospitals have
implemented the NEWS. Over 5,000 staff have registered to complete their NEWS/Compass training through HSELand in addition to multiple structured classroom based multidisciplinary programmes run by Centres for Nursing & midwifery Education and over 500 staff have completed the Train the Trainer programme including nurses, doctors and physiotherapists

- A competency framework has been established for Health and Social Care Professionals working within the Acute Medicine environment
- The National Clinical Guideline No. 1. The National Early Warning Score was updated in 2014 identifying a NEWS ≥ 4 (5 if patient on supplementary O2) as a trigger to screen for sepsis.
- The COMPASS / NEWS Programme is being included in the curricula of undergraduate medical and nursing third level institutions.
- The COMPASS/NEWS e-learning programme development was completed
- The NAMP linked with the Irish Maternity Early Warning System (IMEWS) project, which has been implemented in all 19 Maternity Units throughout the country and with the PEWS which is in development
- The NAMP contributed to the work of the National Sepsis Steering Group Sepsis Screening & National Clinical Guideline for Communication (Handover) which has been identified as a priority by the Dept of Health for 2014

Programme Accolades:
Taoiseach’s Public Service Excellence Award (2012)
Healthcare Innovation Award (Biomnis) Patient Safety Category (2012)
Irish Medical Times Healthcare Award – Excellence in Healthcare Management (2012)
Society of Acute Medicine Conference (UK) poster submission received a commendation for the National Patient Observation Chart (Irl) project
European Union Commission selected the National Acute Medicine Programme along with the National Early Warning Score project as an innovative project from a large number of entries across Europe in 2012. The submission was placed on their website
Key Programme Outputs 2015 - 2016:

- Number of medical patients who attended AMAUs in 2016: **101,575**
- Number of medical patients who are discharged or admitted from AMAU within 6 hours of AMAU registration: **64,156**
  PET of <6 hours = **63.1%**

- 560 (460 WTE) Nurses working in Acute Medicine nationally 2016

- NQAIS KPIs: Using NQAIS Medicine and site data received from hospitals, the NAMP team developed and agreed national KPIs for the measurement of AMAU performance in achieving model of care (MOC) implementation and the benefits that accrue in terms of bed days saved due to a reduced average length of stay and improved patient experience times

- Site Visits: The NAMP team conducted site visits to all Model 4 hospital Acute Medical Units (AMUs) except for one during 2016 to review progress on implementation of the MOC, AMU staffing and access to diagnostics

- Criteria Led Discharge: The Nursing Lead, with sponsorship of the Clinical Strategy and Programmes Division, supported a multi-disciplinary clinician led team in St Luke’s Hospital Kilkenny to test a model of Criteria Led Discharge (CLD), the learning from which will inform a wider national programme

- Pilot of Common HSCP Screening Tool: A number of pilots were carried out in 2016 and then CST adjusted as part of a PDSA cycle. A guidance document, SOP and dataset to measure CST effectiveness were drafted in December 2016 and will be finalised in early 2018

- The National Quality Assurance Improvement System (NQAIS) has been implemented into the programme as a tool for capturing data on medical patients. It was tested in the Mercy and Mater University Hospitals. NAMP commissioned Dublin Institute of Technology (DIT) to undertake mathematical modelling simulation of acute medical patient follow in collaboration with Tallaght Hospital

Site visits conducted to model 3 & 4 hospitals. A site visit report, including recommendations, is provided to each site for feedback

- NAMP continues to gather and analyse monthly KPI data from AMAU/AMU/MAU sites and this information is shared with all acute physicians and hospital managers on a monthly basis.

- The NAMP collaborates with other relevant National Clinical Programmes to develop clinical care pathways for common acute presentations in the Acute Medical Assessment Unit and ED; the delirium pathway has been implemented nationally and other pathways are expected to be implemented in late 2017

- The NAMP team has been pivotal in the progression of the ‘Acute Floor’
concept, which originated in the NAMP model of care (2010). The ‘Acute Floor’ concept aims to facilitate a seamless provision of effective care across a range of specialities involved in the early management of acutely and critically ill patients. It also aims to provide early access to senior clinical decision makers which reduce delays in instituting necessary investigations and treatment thereby often preventing admission (Ambulatory Emergency Care) or reducing the length of inpatient admission.

- The NAMP team was also integral to the design and development of the forthcoming Acute Floor Information System (AFIS). This system will provide for the real time electronic recording of patient interventions in Emergency Departments, Acute Medical Assessment Units, Acute Surgical Assessment Units and Injury Units, resulting in a paper-lite environment for all unscheduled care provision in acute hospitals and one which will lend itself to meaningful analysis of flow and optimisation of care pathways.

- In collaboration with the National Deteriorating Patient recognition & Response Improvement Programme, CS&P and AHD the NAMP is refining the operation and monitoring of the National Early Warning Score (NEWS).

- Director of Nursing AMP Chair of National Clinical Guideline No1 (NEWS) review working group.

- Acute Medicine Nurse Interest Group representation invited onto DoH / ONMSD National Quality Indicators for Nursing (Metrics) review group. Small number of units now collecting nursing metrics. Pre site visit survey forms developed for nursing services which identify quality initiatives as examples of good practice for dissemination; staffing and skills mix, scope and scale of nursing influence in service design, delivery and governance, operational plans and staff development (clinical and managerial).

- AMNIG evidence based publication setting out the skills and competencies required of acute medicine nurses at core, specialist and enhanced / advanced nurse practice level was launched by Junior Minister for Health (Sept 2016) Casey, A., et al Setting the Direction: A development framework Supporting Practice Skills 7 Competencies in Acute Medical Assessment Units & Medical Assessment Units ONMSD AMP CS&PD, HSE, Dublin.

- ONMSD sponsored nationwide acute medicine nursing clinical education needs assessment survey conducted and analysed. Foundation education programme design and tendering for Level 8 NMBI accredited programme completed. Funding allocated by ONMSD for all 560 acute medicine nurses to participate over three year period.

- Enhanced and extended roles undertaken by nurses include cannulation & phlebotomy and first dose I/V antibiotics.

- An expert Advisory Group chaired by the NAMP Director of Nursing, sponsored by the ONMSD was established to provide Guidance to Sites Developing Advanced Nurse Practitioners in Acute Medicine. Site visits identified a range of potential scopes of practice. Draft KPIs for Advanced Nurse Practitioners submitted to DoH to advise policy development. Survey of all units identified readiness of candidates and sites for 49 Advanced Nurse Practitioners.
• Multidisciplinary Master class for acute medicine teams provided in association with ONMSD
• Nursing Symposium attended by 120 nurses and Junior Minister Sept 2016 Dublin Castle.
• Nursing Lead presented posters and oral presentations at: Nursing Symposium 2016; NES Scotland Fellowship (Quality and Patient Safety) programme; Integrated Care Conference (IrI); Society for Acute Medicine (Belfast). Results of education needs assessment also presented at SAM Edinburgh.
• The NAMP runs annual conferences to enhance education and training
• The National Doctors and Training Programme received submissions from the NAMP on future manpower planning
• The clinical lead NAMP is a member of and advises the Joint HSE and Department of Health (DoH) Emergency Department Taskforce
• The Clinical Lead and Nurse Lead NAMP both sit on the DoH taskforce on Nurse Staffing and Skills Mix (Phase1) Medical and Surgical settings, and Phase 2 (Emergency Settings) steering groups
• The Nurse Lead sits on the DoH Steering Group to oversee implementation of the Draft Policy on Graduate, Specialist and Advanced Nurse Practice (2017)
• An Acute Medicine Nurse Interest Group member (Director of Nursing) represents the contribution of the NAMP on the DoH Steering Group to oversee implementation of the Draft Policy on Community nursing Responses (2017)