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CONFERENCE ABSTRACT

MICAS: An Integrated National Critical Care Retrieval Service

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Introduction: The reorganisation of health services and the delivery of the 'hub and spoke' Model of Care for Adult Critical Care (HSE 2014) necessitates the requirement to transfer critically ill patients between hospitals to an appropriate location. As specialty services and critical care units are centralised and consolidated, more critically ill patients will need to move between hospitals (NOCA MTA Report 2016).

It is generally accepted that trained specialist retrieval teams have lower rates of morbidity, mortality and adverse clinical events (Droogh 2015), yet most critically ill patients in Ireland are transferred by non specialist teams. (Murphy 2016). Funding was made available to develop three regional critical care retrieval hubs to form a national service for the retrieval of critically ill patients in Ireland. A framework did not exist through which these hubs could be connected and enabled.

Short Description of Practice Change Implemented: In 2016, the National Transport Medicine Programme, underwent a transformation to a National Transport Medicine Service. The adult retrevial service (MICAS - Mobile Intensive Care Ambulance Service) is identified as the mechanism to enable the three adult critical care retreival hubs.

Three local working groups of local and national stakeholders were formed. These included medical and nursing staff from critical care specialties, ambulance personnel, biomedical engineering and the new National Transport Medicine Service.

Agreement was reached on ambulance and equipment specifications. A training programme, modelled on a national training programme for inter hosptial transfers, was introduced. Clinical governance strucutres were agred and staff operating in the NTMS follow national Standard Operating Proceedures.

Aim and Theory of Change: The philosophy of care in MICAS to provide the highest quality care to critically ill patients whilst transporting them to a facility that meets their medical needs by an appropriately qualified and skilled team of critical care staff. It ensures every patient is transported in a way that maximised, not only their medical care but the safety, dignity and comfort of the patient and their families.

It is hypothesised that, an increasing numbers of transports undertaken by MICAS, will result in a reduction in adverse clinical events in transfer and increased staff and patient satisfaction. Additionally, the use of the specialist retrieval team removes the need to deplete the referring hospital of resources.

Targeted population and Stakeholders: Targeted population is adult critially ill patients who require transfers between two hospitals under the supervision of a critical care medical team. Stakeholder engagement was important both nationally and locally. Stakeholders included critical care doctors and nurses as both providers and users of the service. Integration with the ambulance service and clinical engineering was a key enabler.

Timeline: There are three hubs identified in the model of care: One hub has an existing 5/7 service, which is funded to expand to 7/7. Two new hubs are funded to provide a 5/7 service.

A pilot 3/7 serviceis in operation since Q4 2016 on the second site, and is scaling to 5/7 in Q1 2017. The third hub is scheduled to commence operations in Q2 2017. A scaled approach has allowed the integration of care with existing clinical teams prior to expansion on a larger scale.

Highlights: The impact of this is yet to be felt systemically. Hoewever, it is estimated that in the region of 1000 critically ill adult patients are transported between hospitals annually, with approximately 100 moved by specialist teams. The outcome of this integration will be that up to 75% of existing transfers are moved by specialist teams. Those that are time critical and out of hours, will still be moved by local (non specialist) teams.

Sustainability: Staffing models using a high specialist to trainee ratio are the desired model in the longer term. A secondment model of employment are felt to be sustainable in the short term in order to allow integration and confidence in the new service to grow. Dedicated resources for this service are ringfenced so that as teams are integrated, the level of service can increase.

Keywords: retrieval; critical care; ambulance; paramedic