Briefing Paper – Children's Hospital Group

Future Committee on Healthcare
16th November 2016

Introduction

The Children's Hospital Group (CHG) consists of the three Dublin children's hospitals, Our Lady's Children's Hospital, Crumlin; Temple Street Children's University Hospital; and the National Children's Hospital at Tallaght Hospital. It also has academic partnerships with all academic institutions providing paediatric professional education, research and innovation.

The Children's Hospital Group Board was established in August 2013 as an administrative board and has a 12 members in place, is chaired by Dr James Browne, President, National University Ireland Galway and meets monthly on the following remits;

- Amalgamation of the three Dublin children's hospitals
- Corporate / Clinical Governance
- Service Integration Plan
- Transfer of services to new hospital
- Client for the capital project

It established the Children's Hospital Programme which consists of the three pillars of work:

- Integration of three children's hospitals
- ICT Programme
- Client for the build

The Children's Hospital Group Board is working with the Department of Health to become legally established in 2017 through a new statutory instrument.

Children's Hospital Programme

The Children's Hospital Programme will be responsible for managing the complex and large scale integration of the three existing Dublin children's hospitals.

At the core of the system-wide public policy commitment to the new children's hospital and satellite centres is the fundamental goal of safeguarding and improving health outcomes for the children and young people of Ireland on an all-island basis. To do this, Ireland must offer more advanced tertiary and quaternary services across a broader range of sub-specialities than at present. There is a strong case for this being on a single hospital campus. In this way, children and young people with life-threatening and complex chronic medical and surgical conditions can have access to specialist clinicians providing services with a scale and complexity that will support the best possible therapeutic interventions that will deliver the best clinical outcomes.

The Children's Hospital Programme is at the centre of government policy. Hospital reform in Ireland is being primarily driven under the Department of Health's strategic

framework, Future Health. The framework contains a suite of measures to give effect to the commitment to reform the health services as set out in the Programme for Government. Included in this range of measures is the formation of hospital groups, providing the overarching policy context for establishing and empowering the Children's Hospital Group. Based on the developing HSE National Model of Care for Paediatrics and Neonatology, the new children's hospital is designated as the central component of an integrated clinical healthcare system for Ireland's children and young people. The new children's hospital and satellite centres also support Ireland's eHealth strategy.

The Children's Hospital Programme will not only deliver on government policy goals, it will also provide an invaluable blueprint for future health service programmes in Ireland and a skillset within the Irish healthcare system to deliver on large systems change and complex programme management.

While recognising that reform of the healthcare system is a remit of the several agencies in the system, it is important to note that the level of change planned for the Children's Hospital Group is significantly greater than changes planned for other Hospital Groups. This difference is primarily driven by the effort required to successfully merge three hospitals into a new single hospital, transform local general paediatric and emergency care in the greater Dublin area, plan for the largest capital investment in the system and be the first to implement an electronic healthcare record.

Strategic rationale for the Children's Hospital Programme

The strategic importance of the Children's Hospital Programme is proven through the myriad of challenges associated with the development of the new children's hospital and satellite centres. For the Irish healthcare system, the project is unprecedented in scale and complexity. It involves bringing together three existing independently governed children's hospitals as a single, new, organisation – at three new sites – using a new model of care, supported by a major ICT transformation. The urgent need for new facilities and systems require a fast pace of change. The satellite centres at Tallaght and Connolly Hospitals must be operational by 2018 and transition to the new children's hospital to begin in late 2020 for which planning permission was granted in April 2016. In addition, there is the added pressure of the high level of expected demand at the time of opening. "Getting it right first time" is an imperative to avoid the chaos and reputational damage which will result from inadequate planning and preparation. A successful opening and operation of the satellites in 2018 is critical to managing the demand risks.

Without the Children's Hospital Programme the goals of the new children's hospital and satellite centres cannot be realised. With adequate resourcing the Children's Hospital Programme will position the State's €650m capital investment and the additional ICT investment to deliver the outcomes targeted, managing the risks naturally associated with such complex healthcare projects.

The capital project to build the new children's hospital and satellite centres will only provide buildings. Without a parallel programme focused on transformative service change, the new facilities would be operated by three different organisations, with different ways of working that have not been altered to reflect the possibilities created by bringing all services under one roof, moving into the new buildings, the equipment and ICT. This critically important investment cannot be a success without

the Children's Hospital Programme which will establish a new single entity to govern and manage paediatric services in existing locations, standardise all clinical, non-clinical support and corporate processes and to act as a client for the building and ICT projects and ultimately provide services at the new children's hospital and satellite centres.

The case for change

The case for change is driven by three interlinked factors:

- there are significant clinical and non-clinical benefits to be realised from the consolidation and integration of services provided by the existing children's hospitals into the new children's hospital resulting in the provision of all specialist services 'under one roof', tri-located with adult acute and maternity facilities
- the health and wellbeing of the majority of children and young people is best served by local paediatric services, as clinically appropriate, with speciality services consolidated in a single children's hospital, operated as a single hospital
- the existing children's hospitals' infrastructure is inadequate and in need of fundamental modernisation. To deliver the required model of care, the design and operational model for the new infrastructure must be child-centred and family focused, coordinated and led by the Children's Hospital Group

Delivering on these policy objectives will require a significant process of change – not alone in the delivery of new physical facilities - but also relating to the broader health care reforms at the heart of the National Model of Care for Paediatrics and Neonatology.

The fundamental case for investment in the new children's hospital and satellite centres is best explained with reference to the main drivers of change, outlined below.

- **The vision for national paediatric care**

  The new children's hospital and satellite centres are part of a wider integrated programme of changes designed to improve the future care of children and young people in Ireland. The National Model of Care for Paediatrics and Neonatology is the framework for how and where healthcare services will be delivered, managed and organised nationally. It is the means by which the Irish healthcare service can respond to changing healthcare needs, improve the existing model of service delivery and incorporate national and international best practices.

  The new children's hospital and satellite centres will provide tertiary and quaternary care on a national basis, and in some specialities on an all-island basis, and secondary care for the Greater Dublin Area in the hospital and satellite centres. It will link with local and regional paediatric centres via an integrated national clinical network with a shared care model of working and better integration via contemporary ICT.

- **Achieving critical mass on a single site**

  There is a strong case for change in relation to the integration of existing paediatric services and specialities “under one roof”. A substantial and growing body of literature points to the fact that quality of care and improved clinical outcomes are best achieved with higher case volumes of specialist treatments in larger scale hospitals. By bringing together the full spectrum of sub-specialties in paediatrics and neonatology on a single campus, a degree of scale and critical mass can be attained that will support better outcomes from the most complex treatment and care for the sickest children and young people of Ireland. To achieve this effectively and efficiently, a minimum population threshold in the region of 3.5 to 5 million is needed, and the McKinsey report argued that Ireland should only strive for a single tertiary children’s hospital with this level of specialism. The right care in the right place at the right time.

- **The right care in the right place at the right time**

  While the combination of scale and critical mass to support sub-specialisation are central to achieving better outcomes for the sickest children and young people, the majority of paediatric healthcare can and should be delivered locally and as close to home as possible, including – if clinically appropriate – in the child’s home. Acute paediatric care, based in the hospital setting – and in an urgent care and ambulatory care setting (satellite centres) – can complement this approach to provision of paediatric services in the community, local healthcare centres and by enhancing the interface between primary and secondary services and care.

- **The benefits of co-location**

  The range of studies and reviews undertaken over the past decade posited that co-location with a large academic adult teaching hospital (and preferably tri-location with a maternity hospital) is the optimum configuration to best support paediatrics, highly complex foetal and high risk maternal medicine and chronic disease management in young people.

- **The benefits of tri-location**

  Building on the advantages of co-location, tri-location refers to adult, children’s and maternity services coming together on the same campus. At its most basic level, tri-location will facilitate the transfer of sick newborns into the children’s hospital and the transfer of critically ill mothers from the maternity to St. James’s Hospital.

- **The existing infrastructure**

  The existing children’s hospital infrastructure is dated and, in many cases, in need of overhaul. Features of the existing hospitals limit the physical capacity for expansion and the potential for retro-fitting to deliver 21st century medical care for children and young people is severely constrained. The infrastructure hampers the implementation of changes to the way services are operated. New technology is difficult to fit into old buildings and the technology necessary to support modern care needs must be incorporated into the fabric and design of the hospital.

- **Learning from international experience**

  In the developed world, the construction of a new children's hospital providing tertiary and quaternary care to a population of 5 million is a relatively rare event. It is for this reason that the new children's hospital and satellite centres programme, like most of the major programmes in recent years, has taken time to learn the lessons from similar size developments across the globe such as those in Karolinska Hospital in Stockholm, Alder Hey in Liverpool and Lady Cilento Children's Hospital in Brisbane. A high-level review of new children's hospitals in the past decade highlights that many have addressed broadly similar strategic issues to those faced by Ireland's new children's hospital and satellite centres programme.

- **Demand drivers**

  The nature and scale of demand for healthcare services will be determined by demographics and other drivers, both at a national level and in the Greater Dublin Area. Child population growth projections provide a starting point for understanding the future need for secondary paediatric services in Dublin, and tertiary and quaternary services for the entire island of Ireland. While Ireland's population is forecast to grow steadily in aggregate terms, the age profile is changing. This has particular implications for the trend in paediatric population levels. Over the medium-term, there is forecast to be a period of growth into the early part of the next decade, reflecting elevated birth rates in recent years. Furthermore, there is an element of currently unmet, or under-met, need in paediatric healthcare at present. This investment can help address this shortcoming. Forecast activity levels in 2022 are therefore set to be approximately 30% higher than in existing hospitals in 2014.

Hospital Group Metrics

Inpatients	24,981
Day Cases	27,870
Outpatient	153,228
Emergency Department	117,748
Total Bed Number	443
Workforce (wte)	2,865
Expenditure	€299.4m

The following specialties are delivered in each of the three children's hospitals:

General Medicine; General Surgery; General Paediatrics; Neonatal Surgery; Neurosurgery (for under six year olds); Neurology; Orthopaedic Surgery; Gastroenterology; Emergency Medicine; Respiratory Medicine; Dermatology; Urology; Liaison Psychiatry; Metabolics; Neurology; Orthopaedics; Respiratory; Urology; Endocrinology Radiology; Dental; Neonatology; Plastic surgery; Rheumatology; Paediatric Intensive Care; Diabetes; Airways management; Pain Management; Immunology and Renal services

Additional specialties are delivered in one hospital on a national basis are;

Cleft Lip and Palate; Cochlear Implant – Shared Care with Beaumont Hospital; Irish Paediatric Acute Transport Service (IPATS); National Airway Management Centre; National Centre for Inherited Metabolic Disorders (NCIMD); National Centre for Paediatric Ophthalmology; National Meningococcal Reference Laboratory (NMRL); National Newborn Bloodspot Screening Laboratory (NNBSL); National Paediatric Craniofacial Centre (NPCC); National Paediatric Haemodialysis and Transplantation Programme; National Burns; National Bone Marrow Transplant; Cardiac Surgery, catheterisation and interventional cardiology, ECLS; Haematology (Sickle cell, Haemophilia); Oncology; Palliative; Transitional Care Unit (Long term ventilated); Cystic Fibrosis; Infectious Diseases; and Maxillo-facial.

All the national paediatric specialities are based in the CHG.

END Nov 2016