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Ireland

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Contents

1 Introduction

- 1.1 Geography and history
- 1.2 Socio-demography
- 1.3 Economy
- 1.4 Political context
- 1.5 Child health and well-being status

2 Organization and governance of child health care services

- 2.1 Overview of the health system
- 2.2 Have there been any major organizational changes in the past 10 years?
- 2.3 Describe the approach to planning the health system?
- 2.4 How is health taken into account by other ministries and agencies across Government and other sectors?
- 2.5 Describe any international, national, or regional initiatives to reduce inequalities in health
- 2.6 Describe the information systems in place for collecting, analyzing and reporting data on activity, service, and quality of health care
- 2.7 Patient Safety and Quality
- 2.8 Post-graduate training of child health professionals
- 2.9 Systems for re-accreditation or re-licensing of health professionals
- 2.10 Please give an indication of the number of hospital beds available for children
- 2.11 Information for families on accessing and using health services
- 2.12 Patient choice of providers
- 2.13 How are children and families involved in decision making about health care?

3 Financing

- 3.1 What is your country's total expenditure on health?
- 3.2 How much of your country's health budget is devoted to child health?

- 3.3 Physical and human resources
- 3.4 Provision of services
- 3.5 Patient pathways
- 3.6 Primary/first contact care
- 3.7 Outpatient hospital care
- 3.8 Inpatient care
- 3.9 Emergency care
- 3.10 Chronic diseases and conditions
- 3.11 Safeguarding
- 3.12 Palliative care
- 3.13 Mental health care
- 3.14 Dental care
- 3.15 Specific vulnerable child populations
- 3.16 Maternity and neonatal care
- 4 Major health system reforms
 - 4.1 Health system assessment
- 5 Conclusions
- 6 References and Resources
- 7 Tables

Abstract

The Irish health system is based on a complex and costly mix of private provision, statutory provision, and voluntary provision. The majority of health care expenditure comes from the state, with a significant proportion of acute hospital care funded from private insurance, but there are relatively high out-of-pocket costs for most service users. There is free access to acute hospital care, but not for primary care, for all children. About 40% of the population have free access to primary care. Universal preventive public health services, for example Child Health Screening and surveillance, including vaccination and immunization, newborn blood-spot screening (NBS) and universal neonatal hearing screening (UNHS) are free. Health expenditure is towards the upper end of the EU norm, but this is for a country with a very young population. However, the Irish health services have more responsibility for social care than many of their peers. Specific community child health services are limited, although there is a good school immunization service, and a school dental service, there is limited and patchy child health surveillance.

The health of Irish children is not very different from that of most other developed countries. Major health challenges include poverty, with a relatively large number of children living in poorer households (1); obesity, with a high prevalence in school children (2); drug and alcohol use, with a high prevalence of binge drinking (3); mental health, with very high suicide rates both in male and female adolescents (4).

The health system has been dominated for the last 5 years by the impact of the current recession, which has led to very sharp cuts in health expenditure. There have been few corresponding changes in health system funding, structures, or mode of delivery. The system is skewed towards the acute hospital sector, with relatively less developed community care, and variably developed general practice and other primary care services.

It is unclear if the necessary substantial reform of the system will happen. Government policy calls for a move towards a patient-centered, primary care-led system, but without very substantial transfers of resources, and investment in ICT, this is unlikely to occur.

1 Introduction

1.1 Geography and history

Ireland and Northern Ireland (which is part of the United Kingdom) share a middle sized island (85,000 km²) with a population of 6.4 million people (4.8 million in the Republic and 1.6 million in Northern Ireland) in the North Atlantic. The country is flat or hilly, with a high rainfall, many rivers and few tall mountains. The landscape is visually dominated by small scale agricultural holdings, with relatively little woodland.

Politically, historically, and culturally the Republic has been very heavily influenced by the United Kingdom and there are very strong similarities between the two countries. The Republic gained its independence from Britain a little less than a century ago while Northern Ireland remains part of the United Kingdom.

The two most significant political developments in the Republic over the last thirty years have been its membership of the European Union (from 1973) which has led to an economic transformation; and the Northern Ireland Peace process (from 1998 onwards) which has greatly reduced violence on the island, and improved co-operation between the two jurisdictions.

1.2 Socio-demography

The demography of Ireland has been affected by four factors – relatively high birth rates (particularly in the last few years); increasing life expectancy (1); substantial immigration (mostly from other EU countries); and substantial emigration (particularly amongst the young during the recent years of the Global Financial Crisis). As a result, while the population age structure is currently relatively young, it is also aging rapidly (5,6)

The birth rate is high, with a total fertility rate of 2.05 in 2011. Irish birth numbers rose rapidly over the last two decades from approx. 42,000 births in 1994 - rates peaked between 2008/2009 and a reducing trend has been evident since then which is confirmed by preliminary figures from 2013, showing births below 70,000 for the first time since 2006. This rise in the number of births has severely stressed both maternity services and educational services.

[Table 1.1 Demography here]

The Republic of Ireland's population has increased by over one million in the last twenty years. The population growth rate increased dramatically to 8.0% between 1995-2000 and has remained steady since (to 2011). The average age of women at first childbirth has been steadily increasing and the average family size has been decreasing since 2000. After falling in the 1990s, fertility rate and birth rate increased steadily up to 2009, while the death rate has been falling consistently during the whole period. Immigration rose from the mid 1990's, but has recently fallen off. Emigration has also risen sharply in recent years. Consequently the age dependency ratio fell from 50 in 2000, to 46 in 2006 and is now back at 50 (World Bank data). Over the twenty years the national population has become progressively more urbanized with 62.0% living in urban areas in 2011. Over ten percent of households have been single parent households.

1.3 Economy

Ireland had gone from being one of the poorest economies in the EU to one of the strongest between 1984 and 2004. Since 2008 the economic picture has been dominated by the collapse of a property bubble, and the payments by Irish taxpayers to foreign bondholders of bonds in Irish banks. There has been a very severe recession with a rapid rise in unemployment, especially amongst the youth, very significant emigration, with severe cuts in funding for public health and social services.

There has been a rapid increase in GDP (and GDP per capita) followed by recent stagnation in GDP and significant fall in GDP per capita. The unemployment rate, which was persistently high until the mid 1990s, fell steadily, but has risen sharply again since 2005. The figures for the poverty rates mask the fact that the “at risk of poverty rate” was falling until 2009 but have been steadily increasing since and the “deprivation rate” and “consistent poverty rate” have both increased very considerably since then.

[[Table 1.2 Economics here](#)]

1.4 Political context

Ireland is a parliamentary democracy. It is, generally, a very centralized country. There is a bicameral parliament, known as the Oireachtas. This has one directly elected chamber, the Dáil, and a chamber largely elected by local authority members, the Seanad (Senate). Members of these are referred to as Teachtaí Dála (TDs), and Senators respectively. The President has a largely ceremonial role. The head of the Government, the Taoiseach, is a member of the Dáil, as are (currently) all the Ministers. Local authorities have limited powers with almost no role in either health or education.

The executive is part of the legislature, and the judiciary are independent of both. Responsibility for health policy lies with the Department of Health, led by a Minister who is a member of the Dáil. Responsibility for health care delivery lies with an executive agency, the Health Services Executive, but this is being brought back under the control of the Department of Health at the moment. A great deal of effective power is exercised by senior civil servants, and senior staff in local authorities.

The main political parties are Fianna Fáil, and Fine Gael, center-right parties with origins in the Irish civil war of 1922-1923, the Labour party, a social democratic party, and Sinn Féin, a nationalist and populist left-wing party. There are a large number of politically independent TD's, both on the right and the left, and several smaller left wing parties. The present government is a coalition of Fine Gael and Labour. The country ranks 21st in the global corruption indicator from Transparency International. Ireland is a member of the UN, the EU, the Council of Europe, GATT, the WTO, and has signed both the UN Convention on the Rights of the Child, and the European Human Rights Convention.

1.5 Child health and well-being status

Of Ireland's 4.6 million population, 1.25 million (23%) are children under 16 years of age. Ireland has the highest birth rate in the European Union (16.3 per 1,000) and almost 70,000 births per

annum. There are 145,000 pediatric inpatient admissions (1 in 9 children), 244,000 Emergency Department pediatric attendances (1 in 5) and 387,000 outpatient attendances (1 in 3) per annum. Ireland has an infant mortality rate of 3.5 deaths under one year of age per 1,000 live births (OECD average is 4.4 per 1,000). Sudden Infant Death Syndrome has dropped quite dramatically (an overall drop of 57% since 2002) to 0.29 per 1,000 live births. Ireland's under 5 mortality has been lower than the EU average since 2004. From the age of one year, the greatest proportion of childhood deaths (32%) are due to injuries (chiefly road-related and drowning) and are thus potentially avoidable.

Ireland ranks 8th in the EU for Child Well-being across six parameters in the latest UNICEF Innocenti Report (7). Striking inequities can be noted in children's life chances and health outcomes, resulting from a complex interaction of cultural, social and economic forces, including differential risk exposure and access to high quality health care. Many aspects of child health are affected by government policies, especially policies that affect the distribution of resources, employment, housing, education and health care.

Looking at the data collated in Table 1.3, the overall health of Irish children is improving. Having said that, the data available are very limited. For example, almost no routine data are available on illness in children, and while the available survey data from HBSC (8) and Growing Up in Ireland (9) are very useful, they are cover limited age groups, and time periods, and are based on relatively small samples.

[\[Table 1.3 Measures of Health here\]](#)

There are a few specific health conditions which are commoner amongst Irish children, for example VTEC infection (10) and cystic fibrosis (11), which are discussed further below, but in general their health is not dissimilar to that of other wealthy EU countries. There are some specific issues, relating to social, economic and lifestyle factors, for example, the relatively large number of children living in poorer households (1); a high prevalence of both overweight and obesity in school children (2); a high prevalence of binge drinking (3); and poor mental health, with very high suicide rates both in male and female adolescents (4), all of which continue to challenge the Irish health services.

2 Organization and governance of child health care services

2.1 Overview of the health system

2.1.1 System components

The Minister and the Department of Health are responsible for the formulation and evaluation of policies for the health services. The health services are delivered, in the main, by the Health Service Executive (HSE). Public acute hospitals, mental health services, and most community services are

funded directly by HSE. The HSE also has contracts with a large number of providers, including GPs, community pharmacies, providers of care services for people with physical, sensory or intellectual disabilities, and long-stay care facilities.

The Department of Children and Youth Affairs (DCYA) grew from the Office of the Minister for Children and Youth Affairs in 2012. This office was established between the Departments of Health, Education and Justice, to bring greater coherence to policy-making for children. DCYA also have policy functions on Youth Justice and Early Years Education. Their key policy document is the recently published 'Better Futures, Brighter Options' which outlines the Irish states policy on children for the next six years (12).

2.1.2 Delivery

The delivery agents vary across the country. Secondary and tertiary care (including mental health) providers include publicly-owned hospitals, private hospitals and voluntary hospitals. General practitioners are largely self-employed small contractors. Most community care services are provided by the HSE, some by voluntary or private providers. Social care, such as disability services, is provided by several thousand separate providers, many of whom are small.

2.1.3 Funding

Ireland has a mixed public and privately-funded health system. The public system is largely funded through general taxation, and a modest contribution from user charges. The budget for 2014 is €13.12 billion. This has reduced since the economic downturn: between 2000 and 2009 Irish expenditure on health care rose from 5.7% of GDP to 9.7% (13). In 2012, the latest year for which figures are available, Ireland spend 8.5% of GDP and 10.5% of GNP on healthcare.

There are two categories of entitlement for public services and some supplementary schemes to assist with meeting other expenses. All those ordinarily resident in Ireland are entitled to use public hospital services. These are free, apart from charges for walk-in A/E attendance, and a €75 a day charge for inpatients, now capped at €750 a year. (Patients with notifiable infectious diseases are exempt from these charges). However, only those meeting the criteria for a medical card (based on means and/or a criterion of undue hardship that could include medical needs) get general practice and community based care free at the point of delivery. This is about 40% of the whole population, but a higher proportion of families with children. Some people, mostly older people, are entitled to a GP Visit card (means-tested but a higher threshold than the medical card) and get services from their family doctor (primary care services) free. Free GP services, but not free prescriptions, have recently been extended to all children aged under 6. Medical card holders pay a fee per item dispensed for medication, with a cap of €25 per month. The number of medical card holders has increased as a consequence of the economic downturn in recent years.

Those not entitled to public care have to pay for most community services directly. Private health insurance, held by about 45% of the population, and attracting tax relief, mainly covers hospital costs, either for inpatient stays or for investigations. Most insurance schemes also have a threshold that has to be paid by the insured person before they will reimburse expenses. Drug costs are capped, presently at €140 a month per family, under the Drug Payments Scheme. The Long-Term Illness scheme allows people with certain conditions to get drugs required for that condition free of

charge. GPs, other primary care providers such as dentists and optometrists, consultants in some specialties and the hospitals generate income from the private patients they treat.

The HSE Primary Care Reimbursement service provides reimbursement to providers for the services they deliver to eligible patients. This includes GPs, who are independent practitioners, dentists, pharmacists and optometrists/ophthalmologists. GPs are the central providers of primary care. They work either single-handedly or in a group. The staff-mix in the practice varies but increasingly GPs employ practice nurses to work with them. Primary Care - A New Direction laid the foundation for the development of Primary Care Teams, where GPs would be co-located with key community care professionals (such as Public Health Nurses, Physiotherapists and Social Workers) and the 'team' would deliver integrated, inter-disciplinary, high-quality and user -friendly services to the local population (14). This continues to be the vision for the future of primary and community services although implementation so far has been patchy.

Children's Services, apart from direct healthcare services, together with the Family Support Agency and the National Educational Welfare Board, transferred at the start of 2014 into a separate agency – the Child and Family Agency (Tusla) – which is a dedicated State agency responsible for improving well-being and outcomes for children (15).

2.2 Have there been any major organizational changes in the past 10 years?

The Irish Health Care system has been going through a period of reorganization over the last decade. Prior to 2004 the health boards planned and delivered care across acute hospital, mental health and community care programs. They all had a CEO, a Board and employed their own staff. Their budgets were devolved directly from the Department of Health. The HSE was created on 1st Jan 2005 from the existing regional Health Boards. It had a CEO, and its own board, and was directly accountable to the Oireachtas for the bulk of the health budget. It was created as a national organization, with all staff in the constituent health organizations transferring into it. The initial organizational structures included four regions, with services reorganized into three main programs.– the National Hospitals Office; Primary, Community and Continuing Care and Population Health.

In 2013 the HSE reorganized again to be more directly accountable to the Department of Health with a Director General and a Directorate structure. At Directorate level the responsibility for services is organized into five divisions: Acute Services; Mental Health; Social Care; Primary Care and Health and Well-being. These are supported by the Patient Quality and Safety program and more than 30 National Clinical Programs. There is a national Paediatrics and Neonatology Clinical Program, which is a joint initiative between the HSE and the Faculty of Paediatrics, RCPI. From January 2015, the secretary General of the Department of Health, and not the CEO of the HSE has been the accountable person for the health vote in Ireland.

The establishment of the DCYA in 2011, and the Child and Family Agency (Tusla) in 2014, described above, also represents a major change for children's services.

In 2013, the Government launched preliminary paper called “The Path to Universal Healthcare - Preliminary Paper on Universal Health Insurance” which laid out a broad outline of its plans to move towards a universal insurance scheme. The first step towards this, making free GP care

available to children aged 6 and under is expected by the end of 2014, but this deadline has already been extended twice.

2.3 Describe the approach to planning the health system?

As is the case in many other European countries, the Irish health care system is the fruit of well over 300 years of history. As such, much of the structure reflects the interests and needs of previous generations (16). Over the last 10 to 15 years there has been a more focused approach to service provision. However, until very recently decision making in the system was dominated by the needs of acute general hospitals, to the detriment of investment in other services, such as primary care and mental health.

Over the last eight years, the pieces required to plan services, for example basic information systems, knowledge of staff and patient numbers and locations, current service use and others have been put in place, and these are being increasingly used (17). The HSE still lacks a single financial system, but steps are being taken to remedy this. Although there is currently no unique health identifier a Health Identifiers Bill (2014) has been passed and is expected to be implemented over the next few years.

Service planning is dominated by the declining budgets. Since 2008 the Irish health budget has fallen faster and further than that of any other OECD member apart from Greece (13). Coping with this rapid decline has been the priority of managers across the service of the last few years.

However, more formal planning processes have been brought in for newer services, such as cancer screening, and the implementation of centers of excellence for cancer care, and the new set of clinical pathways for many major health conditions.

2.4 How is health taken into account by other ministries and agencies across Government and other sectors?

The country's first national policy framework for children and young people, "Better Outcomes Brighter Futures" (12) was published in 2014 and attempts to achieve greater cohesion in policy across Government. It promotes a whole of government approach by setting out and centralizing five common outcomes, capturing policy commitments and identifying key transformational goals necessitating action. One of those transformational goals is "Cross-governmental and inter-agency collaboration and co-ordination".

One of the four goals in the country's national policy framework for health and well-being, "Healthy Ireland 2013-2015" (18), is to "create an environment where every individual and sector of society can play their part in achieving a healthy Ireland". The governance arrangements for Healthy Ireland have been established to support the "Health in All Policies" (HiAP) approach (19). One of its five Frameworks for Action is "Partnership and Cross-Sectoral Working". Healthy Ireland reports to the Cabinet Committee on Social Policy, and a Healthy Ireland Cross-Sectoral Group and Healthy Ireland Council have been established. To support a Health in All Policies approach in Ireland, one of Healthy Ireland Actions is to develop an integrated Social Impact Assessment (SIA) as a feature of policy development and policy impact analysis.

Like Better Outcomes, Brighter Futures, Healthy Ireland sees child health, well-being, learning and development as inextricably linked. It states that the most effective time to intervene is before birth

and during early childhood. Outcome 1 of Better Outcomes, Brighter Futures is to have every child and young person “active and healthy with both physical and mental well-being”. The Department of Health through Healthy Ireland leads on the national delivery of Outcome 1.

2.5 Describe any international, national, or regional

initiatives to reduce inequalities in health

Ireland is a partner in a number of European-wide initiatives to tackle social and health inequalities. Amongst these are the “Crossing Bridges” project which is currently building upon the work of earlier ‘Closing the Gap’ (2004-2007) and ‘Determine’ (2007-2010) projects. It will complement Equity Action (the Joint Action on Health Inequalities) (2011-2014) to advance the implementation of HiAP approaches in EU member states.

The Program for Government 2011-2016 (20) (PfG) outlines the visions of the current government. The Program for Government Office monitors the implementation of the commitments across all Departments, it ensures that all Departmental Strategy Statements reflect the PfG commitments. In March it publishes its Annual Report, which sets out the progress made across Government and reflects the priorities for the coming year.

The PfG contains a number of commitments that aim to end the unfair, unequal and inefficient two-tier health system and reduce the cost of achieving the best health outcomes for all citizens. These include commitments to:

- Developing a universal, single-tier health service, which guarantees access to medical care based on need, not income
- Reforming the model of delivering healthcare, so that more care is delivered in the community
- Reforming how we pay for healthcare through Universal Health Insurance

Particularly relevant to children is a commitment to implement free GP care to under 6s to commence in 2014 as a phase of plans to introduce Universal Primary Care that will remove fees for GP care. The PfG commits to maintain the free pre-school year in Early Childhood Care and Education. As resources allow, the PfG commits the government to invest in a targeted early childhood education program for disadvantaged children such as the Young Ballymun project (21).

2.6 Describe the information systems in place for collecting, analyzing and reporting data on activity, service, and quality of health care

There is, as yet, no national child health information system that integrates existing sources of child health data such as public health nurse visits, surveillance and screening activities, and immunization for individual children, although various models exist in different areas. National administrative data sources report annually on primary childhood immunization uptake (Health Protection Surveillance Centre), perinatal care (National Perinatal Reporting System) and activity in acute public hospitals (Hospital In-Patient Enquiry Scheme). The National Set of Child Well-being

Indicators are compiled from a number of data sources and reported every second year to monitor child well-being and highlight policy issues (22). The Department of Children and Youth Affairs Children's Database provides free, searchable, on-line access to research and information on children including access to Government reports, peer-reviewed literature, databases, specialist libraries and other resources at <http://www.childrensdatabase.ie/>.

Tusla routinely inspects early years services (i.e. pre-schools, play groups, nurseries, crèches, day-care and similar services which cater for children aged 0-6 years) following a set of Standard Operating Procedures.

Current Government policies highlight the need for improved information systems. Healthy Ireland: A Framework for Improved Health and Well-being (18) will develop a child health dataset. Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People 2014-2020 (12), will develop a set of indicators to monitor progress on its five national outcome areas. Improved monitoring and evaluation of children's services is one of five objectives of the National Strategy for Research and Data on Children's Lives 2011-2016 (23).

Professional behavior is monitored by the registration bodies, for example, the Irish Medical Council, and an Bord Altranais (the Irish nursing board).

The Health Information and Quality Authority (HIQA) and the Quality and Patient Safety Division of HSE have responsibility for setting standards, and developing a patient safety culture respectively. Both will be described in more detail below.

2.7 Patient Safety and Quality

The HSE has a Quality and Patient Safety Division which has overall responsibility for supporting quality improvement throughout HSE to improve outcomes and reduce patient harm. At present it has no remit outside HSE, but it is proposed to set up a Patient Safety Authority, which would have this role.

The Health Information and Quality Authority (HIQA) is responsible for setting national standards and driving improvements in the quality and safety of health and social care services for all ages. In particular, they have National Children's Standards for protection and welfare services, residential care, residential services for children with disabilities, foster care, and detention schools. HIQA routinely monitors compliance with these standards through inspections and conducts investigations where there are reasonable grounds to do so.

Quality of training professionals is regulated by the respective professional training bodies. Currently professional training is regulated in a single discipline fashion by a range of bodies, e.g. an Bord Altranais for Nurses/Midwives; the Irish Medical Council for all medical practitioners; the Faculty of Paediatrics, Faculty of Public Health Medicine, and the Irish College of General Practitioners for their respective groups; and CORU which registers a suite of Health and Social Care Professionals (14 professional groups including social workers and speech and language therapists). Professionals on completion of registration, may, and are increasingly required to, continue their training on 'Continuous Professional Development' or 'Professional Competence' schemes. Non-statutory and non-regulatory professional bodies such as Irish Paediatric Association (IPA), Irish Paediatric Nursing Association, Association of Lactation Consultants of Ireland (ALCI) are also involved in supporting and complementing the training of respective professionals.

Two key pieces of work aim to support the delivery of integrated care for children. There is a report on 'Review of Paediatric and Neonatology Services and Framework for Future Development' which describes the future structures to deliver integrated health care for sick children (24). A further fundamental change is the establishment of Tusla - the Child and Family Agency (CFA) to transfer responsibilities for delivery of children and family services from the Health Service to the CFA in 2014. The CFA will be providing for 6,500 children in care and 40,000 referrals to welfare and protection services including family, community and pre-school support and inspection (15).

2.8 Post-graduate training of child health professionals

Healthcare workforce planning in Ireland is very under-developed, although formal processes are beginning to be used. The Paediatric Strategy (24) calls for workforce planning in paediatrics that meets the needs of patients and is aligned with the training schemes. The Strategy also recommends consultant numbers be reviewed, and the ratio of consultant to non-consultant hospital doctors be improved. Few formal processes yet exist to look at the numbers of other professionals required, although this will be considered by Tusla. Although there is recent work on the Irish nursing workforce, this has not yet considered children's nursing separately (25).

Consultant paediatricians will all have specialist registration with the Irish Medical Council. Nurses will be registered with an Bord Altranais (the Nursing Council) in the Children's Nurses division of the register of nurses. Training in child health for other health professionals working with children is not yet very systematic. The Paediatric Strategy (24) calls for the continued professional development of staff to be supported; for a team based approach to paediatrics to be improved; for training in sexual assault to be developed; and that all paediatricians should have child protection training. Less consideration has been given to other staff.

In primary care, training is most systematic for GPs - all will have obtained the MICGP or equivalent, and have at least 6 months paediatric SHO training. The training program provides weekly structured teaching over 4 years and 20% of this is in paediatrics. GP registrar training is completed over 2 years tutored by a GP trainer including paediatric conditions in primary care.

2.9 Systems for re-accreditation or re-licensing of health professionals

The Irish health system does not collect information on staff numbers providing services specifically to children. With a few exceptions, for example consultant paediatricians, registered children's nurses, and the staff in the three specialist children hospitals, most health care staff who provide care to children also provide care to adults. It is not possible, yet, to measure how these staff divide their time between children and adults. Most groups of professionals now have specific requirements for maintaining registration, which usually include some form of continuing professional development. There are no systems for systematically monitoring the performance of health care staff.

2.10 Please give an indication of the number of hospital beds available for children

- What is the average length of stay, and what are the trends?
- What is the average bed occupancy rate?

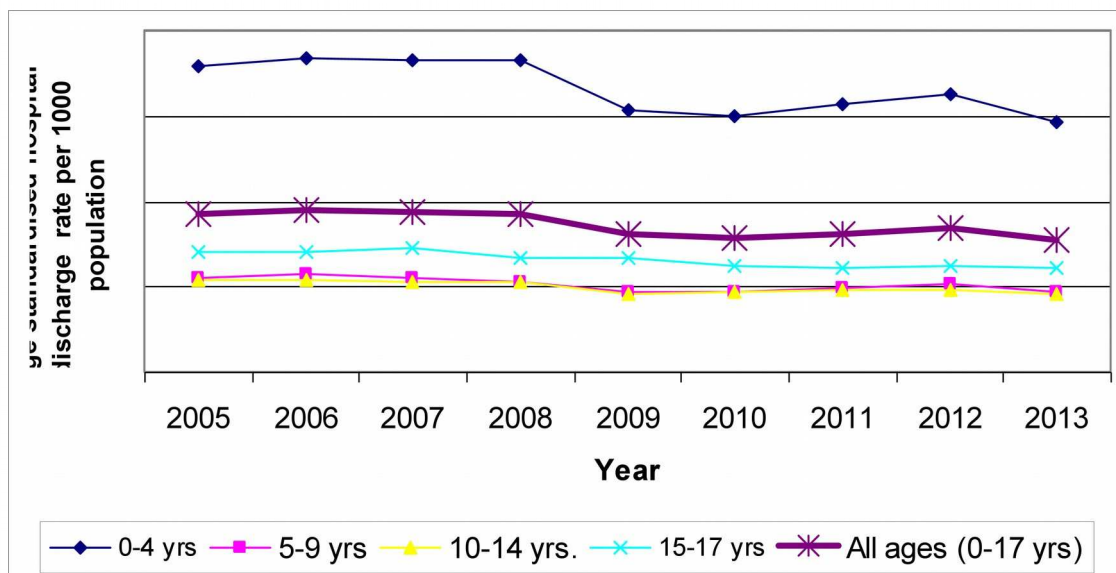
Pediatric average length of stay generally ranges from 2.8 to 3.2 days, range and the average bed occupancy rates often exceed 90% reflecting Ireland's position as the 4th highest in the OECD (13).

Introduction to acute public hospital use by children aged 0-17 years.

The Hospital In-patient Enquiry (HIPE) data system collects hospital discharge in-patient and day case data from 57 public acute hospitals including pediatric centers. Hospital in-patient admissions for children aged 0-17 years to acute hospitals in the HIPE system were analyzed for the period 2005 -13 inclusive.

During this time period there were 862,993 in-patient hospital admissions (i.e. emergency and elective admissions excluding day cases) for children aged 0-17 years to HIPE acute hospitals. This represents 20.9% of all in-patient admissions to HIPE acute hospitals. The age standardized rate of in-patient admission for children aged 0-17 years varied over the study period, as shown in Figure 1. The highest rates were observed in the 0-4 year age group. The rate of hospitalization has decreased for all age groups from 2008.

Figure 1 Age standardised rates of in-patient hospital admissions for children aged 0-17 years, 2005-13.



The average length of stay (LOS) for children in HIPE acute hospitals was 3.4 days ranging from 1-1230 days. Almost half of all children admitted as an in-patient to acute hospitals (47%) had a LOS of 1 day. There was no significant trend in LOS over the 9 year study period with average LOS ranging from 3.46 days in 2005 to 3.42 days in 2013.

The total number of bed days used by children aged 0-17 years in HIPE acute hospitals was almost 3 million (n=2,999,107) over the 9 year study period.

The majority (n=791,951, 91.8%) of children aged 0-17 years admitted as an in-patient to HIPE acute hospitals did not have an ICU admission during their in-patient stay. The total ICU bed days used by children (N= 71,042, 8.2%) during the study period was 575,871 bed days.

The majority were emergency admission (N= 591,588, 68.6%) and the majority (N=508,591, 58.9%) were admitted from the Emergency Department (ED).

The three most common principal diagnoses categories recorded for children aged 0-17 years admitted as an in-patient to HIPE acute hospitals were:

- J00-J99 Diseases of the respiratory system (N= 168,048, 19.5%).
- S00-T98 Injury, poisoning and certain other consequences of external causes (N= 119,556, 13.8%).
- A00-B99 Certain infectious and parasitic diseases (N= 103,975, 12.0%)

The majority (N=463,624, 54.2%) of children aged 0-17 years did not have any procedures during their in-patient stay. Of those who did have a procedure the most common procedure block code among this cohort was Pharmacotherapy.

2.11 Information for families on accessing and using health services

Parents make contact with their General Practitioner who is the key ‘gatekeeper’ to accessing health services. The Public Health Nurse (PHN), in the community, also guides the parents around the health system beginning with the 48 hour home visit, following birth or hospital discharge, and in subsequent child health development checks. Any concerns raised are assessed by the Public Health Nurse - some may result in referral to the Area Medical Officer/Community Doctor and or the Social and Health Care Professionals.

HSE provides some standardized health education and literacy resources beginning in the ante-natal period as all mothers are eligible for free combined GP/hospital care under the Maternity and Infant Scheme. Parents receive “*Caring for Your Child*” from their PHN- these booklets cover the 0-6 months, 6 month-2 years, and the 2-5 year age groups. Some on-line resources (particularly immunization, infectious disease, breastfeeding support and child screening and surveillance) are aimed at children and adolescents.

Over the last few years, the amount of information on service quality has increased greatly. Unfortunately, little information is available to anyone, inside or outside the services about the outcomes of care. HIQA and TUSLA inspection reports are now relatively freely available, but these focus on standards compliance. This is obviously very important, but it is not the whole story. The Paediatric Strategy (24) makes recommendations to further develop parental and child education via e.g. the Asthma Society Website; that advice leaflets about common conditions should be available and specific to children and their parents. As part of this work a children’s and Parents Reference Group was established to support it in developing models of best practice.

2.12 Patient choice of providers

There is considerable patient choice for some services and none at all for others. Patients can usually choose their own GP, either privately, or through the medical card scheme. GPs do not have defined catchment areas, although they usually set informal limits on how far away a patient can live from their surgery. Acute hospital services will usually see all comers, although some level of geographical catchment is emerging for public patients. Private patients can attend any hospital. Community service, including community mental health services are delivered on quite strict catchment area boundaries.

There is some competition between providers, especially in general practice and the private acute hospital sector. There is also some competition between health insurance providers. Private health insurance, which is community rated, primarily provides cover for hospital inpatient care, and for investigations. There are four suppliers, whose prices are similar. Each provides a wide range of options, mainly to drive market segmentation, and recruit younger people to their plans. To our knowledge the impact of these choices has not been evaluated.

2.13 How are children and families involved in decision making about health care?

The majority of this interaction is at the individual clinical level. There are many NGO's with a focus on child health, either that of children generally, that of children with specific conditions, or that of specific groups of children. There is an active children's ombudsman's office (<http://www.oco.ie/>) which has done a great deal of work with children, to elicit their views and perspectives on many issues, including health care. The Department of Children and Youth Affairs, and its predecessor, the Office of the Minister for Children, have also had a major focus on hearing the voices of children, see for example (26). It is still the case that many parents, particularly those of children with complex health and educational needs, struggle to get access to necessary services for their children.

3 Financing

3.1 What is your country's total expenditure on health?

These data are derived from the OECD. The Irish health care system has an unusually high proportion of social care expenditure in its budget. Although OECD seeks to correct for this, it is not clear that this can be fully adjusted for. Accordingly a note of caution is advised when comparing Irish data with those from other OECD member states.

Type	Unit	2000	2005	2010	2012
Current	per capita €	€1,925	€2,824	€3,182	€3,112
	per capita US\$	\$1,905	\$2,795	\$3,149	\$3,080
	% of GDP	5.71%	7.21%	8.87%	8.53%

Current + Capital	per capita €	€2,086	€2,969	€3,301	€3,237
	per capita US\$	\$2,065	\$2,939	\$3,268	\$3,204
	% of GDP	6.18%	7.58%	9.21%	8.87%

The Euro figures are adjusted to 2005 GDP price levels. The US dollar figures are purchasing power parity at 2005 price levels. Note that a static amount on this measure represents a real cut of 3 to 5% per annum in health care expenditure. Source: OECD Stat (27). There was a very large increase in expenditure from 2000 to 2009, when expenditure reached 9.95% of GDP, followed by very substantial reductions, which are continuing to the present. The OECD figures for 2013 are not yet available but are likely to be just under €3,000 per capita.

3.2 How much of your country's health budget is devoted to child health?

This is impossible to estimate. The data required do not exist in any accessible form. Our public health service has almost 60 separate finance systems, and few of these are linked to specific patient groups.

3.3 Physical and human resources

3.3.1 Please describe the number, location, size, and age of hospitals

Acute Paediatrics is mainly provided in pediatric departments in general hospitals with in-patient and out-patient care. There are 11 peripheral units, all in general hospitals, 5 regional pediatric units, and 3 specialist Pediatric Hospitals, all in the capital, Dublin(24). The latter provide general pediatric services for the population of Dublin and national tertiary pediatric services, such as management of cystic fibrosis. They are teaching hospitals, linked to academic institutions.

The hospitals vary greatly in age. Some of the hospitals, including one of the three specialist centers, are housed in buildings well over a hundred years old, and quite unsuitable for modern health care. There is a proposal to build a single national children's hospital in Dublin, but it is unclear when this will be completed.

3.3.2 Please describe the facilities for primary care (first-contact care) services for children

In Ireland, primary care is delivered in the community through a mix of national public health services and privately contracted general practice services. Recently A/E services in hospitals are providing more of what would fairly be described as primary care.

Primary care services are:

- The national Core Child Health Screening and Surveillance Service (CCHSSS) is provided free by the state to children from birth to 12 years. Public Health Nurses, Public Health

Doctors (Area Medical Officers (AMO)) and allied health professionals e.g. Speech and Language Therapists provide services in the local community.

- The Maternity and Infant Scheme which includes a neonatal child developmental check in the birth hospital (if applicable), and at 6 weeks from the contracted GP.
- Immunization services are also provided free to a national standardized schedule, either contracted out to general practitioners and/or or delivered by community health teams.

Screening clinics are usually provided in the local Primary Health Care Center. The model of care is based on multidisciplinary Primary Health Care Teams including Speech and Language Therapist, Occupational Therapist, Public Health Nurse and General Practitioner who through the CCHSS provide developmental assessments and address parental concerns. The provision of this model is quite variable. Referrals are made through the AMO to second tier services. Dental Health services are also provided. Educational psychologists, whose services are often not easy to access, are linked to the Department of Education.

3.4 Provision of services

3.4.1 Public Child Health Care Services

The public health service in Ireland is provided through a mix of publicly-provided services and services delivered by contracted private and community/voluntary providers, covering hospital, primary, community, continuing and social care. The mixture of provision varies by geographical area and is often based on historical arrangements.

Since the Primary Care Strategy was published in 2001, there has been a move towards delivering integrated primary care and community care services. In most areas of Ireland, community care services staff, such as speech and language therapists, occupational therapists and public health nurses, work in locally-based health centers, often co-located and working closely with GP surgeries. These groupings are called 'Primary Care teams' and their aim is to provide integrated care for their population across all age groups.

All mothers in Ireland are eligible for the Maternity and Infant Scheme, which provides for antenatal, delivery and postnatal care, shared between a GP contracted into the scheme and a maternity unit. All infants are entitled to free health care up until six weeks of age. After six weeks, primary care entitlement is dependent on parental means. However, under section 66 of the Health Act 1970, all children in primary school (i.e. up to the age of 12 years old) are entitled to free public provision of pre-school and school health services. Currently that is delivered according to the schedule in the national Core Child Health Screening and Surveillance services (originally Best Health for Children [[ii]]). This includes pre-school developmental assessments, school health services and a comprehensive program of immunizations. In addition, since 2010 TdP (tetanus, low-dose diphtheria and pertussis) booster (all children) and the HPV vaccination (girls only) and have been provided free of charge to post-primary children.

During the six-week post natal period as part of the Core Child Health program, babies have a variety of screening and surveillance interventions performed, starting with newborn blood-spot screening, a neonatal hearing check, hip screening and a general physical examination (usually done by the pediatric staff before they leave the postnatal ward) and ending at six weeks with the 'six

week check', which is usually performed by their mother's GP. Also BCG immunization is provided within the early weeks of life through community health service clinics. Also, in the first six weeks, a public health nurse will visit the mother and baby to support the mother, advise on health promotion, including breastfeeding and immunizations, assess any risk factors and ensure the 'mother and baby unit' is progressing satisfactorily. The core screening and surveillance contacts are recorded in a parent-held record, in certain pilot areas. In some areas the information from these contacts are also stored in a child health database, but currently there is no national child health information system.

From six weeks to school entry, children are seen for the core screening and surveillance checks by the public health nurse and/or the community medical services. The GP surgery provides the national primary immunization schedule. The 'pre-school' booster is either delivered by a school team to new entrants or by the child's GP.

During school years further checks, including of eyes and hearing, are carried out by the school teams that include school nurses, community medical officers (SMOs) and dental officers.

If a child needs further assessment or therapy, then they are referred to the appropriate services as required. Therapy services are provided through Primary care teams. For more complex neuro-disabilities children may be seen by specialized early intervention teams (pre-school) or school age teams for older children. Children born after June 2002 who are suspected of having a disability are entitled to a multi-disciplinary assessment of their health and educational needs under the Disability Act 2005. However, the Act does not provide an entitlement to them receiving services to meet those needs. Many areas provide disability services through voluntary providers, such as charities, with others using a mixture of HSE- delivered and voluntary body –delivered services. *Since 2010, a national coordinating group with representation from the Department of Health, the Department of Education and Skills, the HSE, the voluntary service providers and parents through their umbrella organizations has been implementing the 'Progressing Disability Services for Children and Young People' program.* This aims to provide services for children with disabilities and developmental delay as close to their home and school as possible. It will ensure that, regardless of care provider, there will be a national unified approach to delivering disability health services. There will be a clear pathway to the services they need for all children regardless of where they live, what school they go to or the nature of their disability or delay.

Other key services, such as autism services, are supported by Child and Adolescent Mental Health Services. Some areas also have a consultant community paediatrician, who works closely with the therapy teams to contribute to the assessment and support the medical needs of children with disabilities. The community medical officers also provide this in some areas.

School is a key setting for children. As with Health Services, Ireland has mixed education provision for children with special needs. In the last twenty years, the ethos has been for children with special needs to participate in mainstream schooling (and latterly, pre-school) with supports wherever possible. There are also schools specifically established to educate children who cannot be accommodated in mainstream schools. In some areas therapy services are delivered in the school setting.

School is also an important setting to educate children about health. HSE Health Promotion services provide a variety of health promotion interventions in schools, in addition to the services provided under the school health system. These include relationship programs and programs to prevent

obesity. The Health Promotion Unit of the Department of Health (<https://www.healthpromotion.ie/>) also provide national media support and run many initiatives aimed at children including FoodDudes; Immunization; Breastfeeding promotion and Parenting Programs e.g. Incredible Years. Health promotion, campaign to challenge childhood obesity (2013).

The main tool in communicable disease control is the comprehensive immunization program. The National Immunization Advisory Committee of the RCPI gives strategic guidance to the Department of Health and the National Immunization Office of the HSE supports program implementation (<http://www.immunisation.ie/en/>). The Health Protection Surveillance Centre (HPSC) monitors the effectiveness of the program. In addition, the HPSC is a key part of the surveillance and support to the operational control of communicable diseases, such as meningitis. Public Health departments are notified of communicable diseases and take appropriate steps, based on best-practice guidance, to control the spread.

3.5 Patient pathways

The Paediatrics and Neonatology Clinical Program has developed a number of algorithms to help standardize care and to help recall to the clinician the entire sequence of decisions commonly used in dealing with the condition.

The purpose of a clinical algorithm is to help clarify a doctor's or nurse's thinking when faced with a clinical problem. They provide a guide to solving practical problems systematically by using branching logic. They give a sense of flow and timeliness to a clinical activity. These algorithms are about doing things in the correct sequence, and in a timely fashion. Almost thirty have been developed so far, and the full list of these is now available on the national HSE website (<http://www.hse.ie/eng/about/Who/clinical/natclinprog/listofprogrammes.html>).

For example, a child diagnosed with asthma is generally seen in the first instance by their local general practitioner. Children may be referred by their general practitioner or go directly to hospital for urgent care. After triage a child will be seen by a doctor, who will either admit and refer the child within the hospital, or refer the child back to their general practitioner. These protocols do not vary across the country.

It is not known to what extent these protocols are being used, nor is there available data on the degree of standardization of care. Several of the primary care IT systems support such processes, and there is a program to embed these more fully in primary care, but this is in its early stages.

3.6 Primary/first contact care

The GP is the first port of call for most children with a medical need and many conditions are managed entirely by the GP and their surgery staff. If required, for a non-acute condition, the GP can refer to the allied primary care services as discussed above, or to pediatric out-patients or a specialty out-patient. For acute conditions requiring a specialist assessment and opinion, they can refer directly to acute care. Chronic conditions, such as asthma, can be managed in a variety of ways, although the GP will usually still be involved in the ongoing management. Increasingly, there are moves to provide specialist nurses to support children (and their parents) living with chronic conditions. Out of hours, GP care is usually provided by GP co-ops, where local GPs work together to provide on-call cover.

The Department of Health provides governance and funding to the Health Services Executive who implement and provide the national primary care services. Primary care is provided in the local community Health Centers through Primary Health Care Teams. Primary Health Care Teams are a mix of multi-disciplinary professionals.

Primary care providers are directly employed by the HSE and/or are contracted for services e.g. General Practitioners. The range of services typically provided in primary care includes the children's developmental checks and immunization services. There is a strong emphasis on public health role, screening, surveillance and health promotion.

The service providers follow a standard schedule of visits, mainly delivered in the Primary Health Care Center after the first visit in the home. Parents do not have a choice available to them, the local Public Health Nurse and the Primary Care Team provide the service. Parents may choose their General Practitioner. The service is free and available to all citizens in their local Primary Health Care Center.

GP referral to hospital, either as an emergency, or by referral to a clinic, is the usual way of accessing hospital services.. Parents do have direct access to hospital via the Emergency Department (ED), however this is discouraged, and there is a fee of €100, for those attending without a GP referral. Medical card holders are exempt from this charge.

Primary care, provided in the community Primary Care Health centers is conducted on week days only between the hours of 9am – 5pm, closed from 1pm – 2pm. There is little or no flexibility in these arrangements.

Overall, primary care, and secondary care are not well integrated in any formal sense. There are no electronic systems supporting care pathways, by linking clinical staff in the two areas, although these are beginning to be developed.

3.7 Outpatient hospital care

Outpatient care is provided in all of the pediatric centers, specialist, regional, and general. Pediatric sub-specialists do provide some clinics outside the hospital where they are based. There is a very small amount of such care provided outside hospitals in some of the more innovative shared care settings. There is limited national data collated about the quantity of patients seen in each clinic, and the proportion of those who are new referrals. No detail is available on the content, or the outcome, of these consultations.

3.8 Inpatient care

Ireland has a very high birth rate, as mentioned above. This poses demands on acute healthcare providers to deliver pediatric inpatient care for infants and children during periods of acute ill health. Inpatient Pediatric medical and surgical needs are catered for by a network of General and Regional Hospitals with its children's wards around the country as well as dedicated children's specialist tertiary referral centers.

3.8.1 Specialist Children's Hospitals

The three specialist children's hospitals in Ireland are in Dublin - Our Lady's Hospital for Sick Children in Crumlin (OLHSC), Children's University Hospital in Temple Street (CUH), which are

stand-alone facilities, and the National Children's Hospital which is attached to an adult teaching hospital in Tallaght. Currently a major infrastructural capital project is underway to amalgamate the three Dublin hospitals into one unified National Pediatric Hospital (NPH), proposed to be operational in 2018.

The three children's hospitals receive tertiary referrals from Regional and General Hospitals while also functioning as secondary care facilities for the local population of greater Dublin. Together the three facilities provide all Pediatric sub-specialties as well as surgical care of newborn infants and children (OLHSC and CUH). Dedicated Pediatric Intensive Care Units (PICU) are also located in OLHSC and CUH for the care of critically ill infants and children with a combined bed capacity of over 25. Dedicated access to these beds is provided by the health service executive (HSE) to referring clinicians from regional and general hospitals to access the beds after discussion with the pediatric intensivists in the tertiary units. More recently a web based patient data entry system to facilitate the transfer of critically ill has been developed as well – www.picu.ie - by the Pediatric Critical Care Network of HSE.

3.8.2 Regional / University Hospitals:

There are five band 4 hospitals in this category: Cork University Hospital, University Hospital Limerick, University Hospital Galway, Our Lady of Lourdes Hospital Drogheda, and Waterford Regional Hospital. These hospitals serve as the secondary care pediatric inpatient and outpatient facilities for a defined childhood population, and also receive referrals from nearby smaller pediatric units attached to the General hospitals as well. Pediatric departments of these hospitals have fully supported inpatient pediatric wards and have access to adult general intensive care units. Consultant level sub-specialty skill-mix is available, however somewhat variable in these units. Some of the Regional centers also provide limited pediatric acute general surgical care, pediatric high dependency unit (PHDU in Limerick) as well as regional support for children with Diabetes and Cystic Fibrosis.

3.8.3 General Hospitals:

There are 14 hospitals in Ireland in this category serving as the secondary care provider for pediatric inpatient and outpatient care for the local population. A considerable proportion of secondary care of children with acute illness is provided through the Pediatric departments of General hospitals spread around the country.

3.8.4 Staffing and service provision:

Pediatric acute care in Ireland is provided by a dedicated and skilled workforce comprising medical, nursing and allied health professionals managed by the location-specific management structures.

The structure of pediatric services is outlined in HSE (24) and this source provides some useful data with which to estimate staffing numbers for children's care by nurses and doctors. There are:

- 11 peripheral hospitals which have pediatric units: Ballinasloe, Castlebar, Cavan, Clonmel, Kilkenny, Letterkenny, Mullingar, Portlaoise, Sligo, Tralee and Wexford.

- The typical manpower profile is stated to be three consultant paediatricians, 10 NCHDs, 22 pediatric nurse WTEs, giving a total of approximately 110 WTE NCHDs, 33 paediatricians, 242 RCNs in these settings overall
- There are 5 regional units one each in Cork (biggest service), Drogheda, Galway, Limerick and Waterford.
 - On average these regional units are staffed by: 7 pediatric consultants, 8 registrars, 8 SHOs, 39.7 Pediatric nurse WTEs. Cork University Hospital is larger with 10 pediatric consultants, 2 registrars, 7 SHOs, 1 intern and 70 Pediatric nurses. This suggests a total of approximately 35 WTE consultant paediatricians, 40 registrars, 40 SHOs, and 200 RCNs in these services.
- There are (currently) 3 Dublin pediatric hospitals: from individual hospital reports (24).
 - These are staffed by approximately 116 WTE RCNs; 137 WTE Consultant paediatricians and 215 WTE NCHDs

There are also 19 neonatal units, attached to maternity hospitals, or to maternity units in general hospitals. Of these 11 are at Level 1, 4 are at Level 2 and 4 are at Level 3, staffed by approximately 25 consultants, 107 registrars, 111 SHOS and 512 nurses (24).

Specialist Pediatric surgical care is provided by the designated tertiary units attached to OLHSC and CUH in Dublin. However, general acute surgical provision for children such as appendicectomy is continuing to be provided in the Regional hospitals, and many of the general hospitals based on the skill-mix of Consultant Surgeons and Anesthetists. A considerable proportion of routine ENT surgical procedures such as adenoid-tonsillectomy are also offered through the Regional and General Hospitals. A few of the Regional centers participate in the provision of Pediatric Orthopedic surgery, Urological surgery and Dental surgery on the basis of the local expertise of individual surgeons with sub-specialty experience in Paediatrics or a special interest.

Pediatric nursing is pivotal in the inpatient care of sick children and based on the type and complexity of care various units have General Nurses, Registered Children's nurses, Clinical Nurse Managers (CNM), Clinical Nurse Specialists (CNS) and Advanced Nurse Practitioners (ANP). Pediatric inpatient care also receives support from Physiotherapy, Dietetics, Speech and Language therapy and Pharmacy in addition to the excellent 24/7 support from Laboratory and Diagnostics including advanced imaging facilities. The majority of the Pediatric units in Ireland are also accredited for the teaching of Medical Students from the attached Universities.

3.8.5 Patient flow and inpatient care

It is the norm in Irish Pediatric units to have consultant-led ward rounds on a daily basis and in addition to the medical and nursing contribution, many units are now following multi-disciplinary rounds as well as clinical handover systems such as ISBAR⁷. The majority of the pediatric inpatients at secondary care level are admitted to children's wards through the ED following acute clinical deterioration. Both community based GP referrals, and self referrals (by parents) are seen in the Pediatric section of ED or in a dedicated Pediatric ED in acute hospitals, usually by Pediatric doctors in training with appropriate supervision by ED Consultants / Pediatric Consultants and those deemed necessary for inpatient care are admitted. In many of the regional and general hospitals, out 25 to 30% of the children attending the pediatric section of ED, with an acute illness, are admitted. A limited number of children are also admitted from Pediatric Day Units, outpatient clinics, as well as on an elective basis, often for surgical procedures or for advanced diagnostics.

3.8.6 Occupancy rates & transfer of care

The majority of inpatient pediatric population only require care in a general pediatric ward. Those who warrant advanced care in PICU, Specialist Pediatric Surgical care, Cardiac intervention, Pediatric oncology and others who needs sub-specialty multidisciplinary assessments, will be transferred in a timely manner to one of the tertiary centers. Currently there is a dedicated 24/7 neonatal national transport service (catering for neonates and young infants up to 6 weeks of age), but a centralized pediatric critical transport system is only being developed. Pediatric average length of stay generally ranges from 2.8 to 3.2 days, range and the average bed occupancy rates often exceed 90% reflecting Ireland's position as the 4th highest in OECD bed occupancy rates (13). Pediatric inpatient bed occupancy and acute care contact in ED are both influenced by seasonal factors with much higher occupancy during the winter months.

Care categories and future perspectives:

Pediatric inpatient care in Ireland is provided mostly through public or voluntary (government funded) hospitals, with only a limited number of private providers. Both public and private patients (those with additional private health insurance) are cared for in publicly funded hospitals following a public-private-partnership (PPP) model. Consultants in Paediatrics usually spend most of their time in the hospitals, and some of them also provide a private service in their 'rooms' (offices), usually for half a day or less per week. All pediatric inpatient facilities in the country have resident doctors in training on a 24/7 basis with Consultant Paediatricians providing on-call service during out of hours as well.

During the last 2 years Hospital groups with single governance structure have begun to be developed in Ireland, each serving a defined population (28). Each hospital group with Pediatric and Maternity services has clinical leadership provided by an appointed Clinical Director. The HSE's national model of care for Paediatrics and Neonatology is to be finalized later this year by the clinical program leads with structured links between the National Pediatric Hospital (NPH) and the Regional centers in Cork, Limerick and Galway as well as satellite centers on a hub-and-spoke basis. The three national children's hospitals are independently run, although the vast majority of their funding comes from the HSE. Charity and private funding sources also contribute to their work.

3.9 Emergency care

Ireland uses the International Federation for Emergency Medicine definition: “Emergency medicine is a field of practice based on the knowledge and skills required for the prevention, diagnosis and management of acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioral disorders. It further encompasses an understanding of the development of pre-hospital and in-hospital emergency medical systems and the skills necessary for this development.”

There are currently over 23 hospitals in Ireland where acutely ill or injured children are seen. Nearly all of those hospitals admit children acutely, while others see children within the Emergency Department but do not admit. There are three Pediatric Emergency Departments in Dublin that treat 110,000 attendances each year. Emergency Departments that see both adults and children are typically outside Dublin and approximately 20-25% of all attendances are children. In June 2012, there were almost 70 Consultants in Emergency Medicine in Ireland, but only five Consultants in Pediatric Emergency Medicine, all of whom were based in the three Pediatric Emergency Departments in Dublin (29).

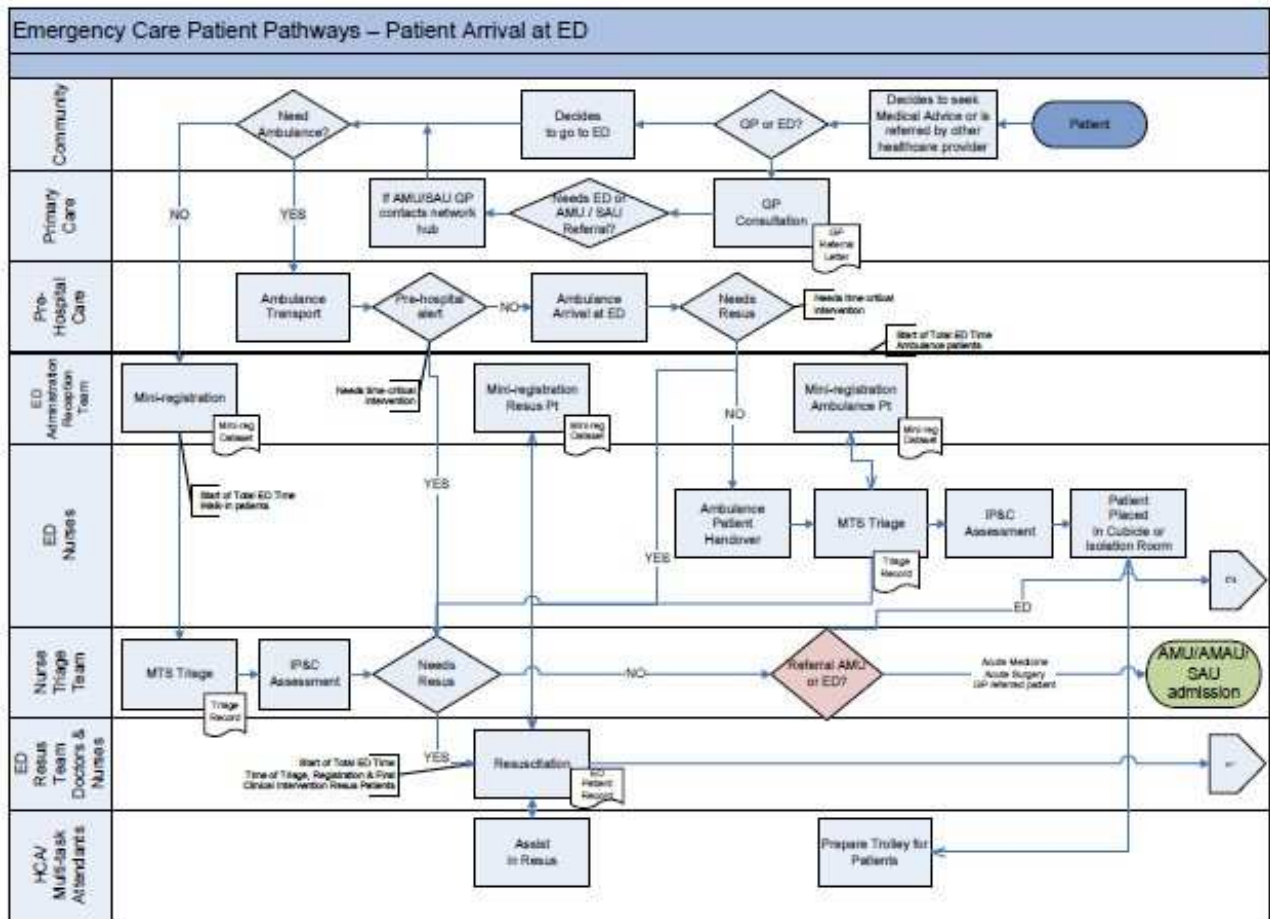
The National Emergency Medicine Program identified the following challenges in Pediatric Emergency Medicine services in Ireland:

- Constraints in Pediatric Emergency Medicine -trained clinicians (medical, nursing and Therapy Professionals and Medical Social Workers) in Emergency Departments
- Infrastructural deficits within Emergency Departments that preclude child and family-friendly care, as well as audio-visual separation from adults.
- Developing appropriate and rationalized location and configuration of services for acutely unwell or injured children.

To improve quality and access for both children and adults, the National Emergency Medicine Program recommends standardized, evidence-based processes for patient assessment in all Emergency Departments with an emphasis on effective patient streaming and minimization of delays for patients. National Clinical Guidelines are being implemented and quality indicators developed from these guidelines. Patient experience of emergency care is a key component of quality management. Key Performance Indicators have been developed to measure and improve the timeliness of care for both children and adults:

- 95% of Emergency Department patients to be admitted or discharged within 6 hours of arrival and no patient should be in an Emergency Department for more than 9 hours
- 95% of patients transported to an Emergency Department by ambulance to be handed over to Emergency Department staff within 20 minutes of arrival
- Fewer than 5% of people who attend Emergency Departments to leave before completion of treatment.

A generic patient pathway for an arrival at an Emergency Department is shown below :



3.10 Chronic diseases and conditions

3.10.1 Chronic diseases

Although there is no national child health information system that integrates existing sources of child health data such as public health nurse visits, surveillance and screening, the 'Growing Up in Ireland' (GUI) a National Longitudinal Study of Children (30), is one of a number of national research and information initiatives that documents carer-reported long-standing health conditions among Irish children in 2011. The IPH has prepared an analysis of data from the second wave of the infant cohort of the 'Growing Up In Ireland' study looking at the prevalence of certain carer reported chronic diseases (31). The estimated 2011 population prevalence of the more common long-standing conditions are shown in the table.

Long-standing health condition	Estimated prevalence among 3 year old children in 2011
A “long-standing illness, condition or disability”	15.8%; 95% CI = (14.9%, 16.6%)
Diagnosed asthma or asthma symptoms	9.5%; 95% CI = (8.8%, 10.2%) This consisted of: <ul style="list-style-type: none"> 3.2%; 95% CI = (2.8%, 3.6%) with diagnosed and controlled asthma 2.5%; 95% CI = (2.1%, 2.9%) with diagnosed and uncontrolled asthma 3.8%; 95% CI = (3.3%, 4.2%) with undiagnosed

	asthma symptoms. The findings suggest that almost two in five cases of carer-reported asthma/asthma symptoms among three-year old children were undiagnosed.
Diagnosed eczema/any kind of skin allergy	4.0%; 95% CI = (3.6%, 4.5%)
Sight problem that required correction	5.9%; 95% CI = (5.3%, 6.5%)
Hearing problem that required correction.	3.9%; 95% CI = (3.4%, 4.3%)

There are a few other conditions where Irish morbidity data have been collated, usually for special purposes. For example, the incidence of VTEC in Ireland has risen steadily since 2002, with an incidence of 15.2/100,000 in 2013. Ireland now has the highest rate of VTEC in Europe, and it has risen from 2.1/100,000 in 2002 (10). This high rate is attributed to intensive agricultural practice and an unusually high level of use of private unregulated water supplies compared to other European countries. Over half of the cases recorded are in children under 10. The prevalence of cystic fibrosis is also very high in Ireland. The mean prevalence in Europe is 0.73/10,000, close to that in the US. The prevalence in Ireland is far higher at 2.6/10,000 (11).

3.10.2 Complex needs and Disability

Approximately 6% of all children in Ireland have a disability (32) with 1 in 3 children on the Irish National Physical and Sensory Disability Database registered as having multiple disabilities (33). Children and young person with complex physical healthcare needs are those who require a range of additional supports beyond the type and amount required by children generally and those provided to children with impairments and long-term illness (34). Children with a complex illness are first and foremost children, with the same needs and rights as their peers (35). On a day to day basis this means ensuring that children with complex and continuing healthcare needs can do the things that are important to them and that the appropriate support is available to achieve what matters as perceived by them (36). The DOH&C (37) emphasized the importance of a whole child/whole system approach to meeting the needs of children with a focus on improved outcomes for children and their families.

3.10.3 Residential care services

In Ireland most children and young people with complex and ongoing healthcare needs are cared for at home, with their parents and families as their main carers. Where support, in the form of respite and residential care services in the community are required for these children and their families, referral is either through the acute hospital services, or from community care services. In Ireland the Health Service Executive (HSE) provides a limited co-ordination and direct delivery role in the ongoing provision of care for these children at home in the community. Support for these children and their families in the form of in-the-home respite care and out-of-home respite care is provided through a combination of public agencies and voluntary organizations. The Disability Act (2005) was extended in June 2007 to include provision for the needs of children with a disability under the age of 5 years. This Act provides for an ‘assessment of need’ process that focuses on the disability and education needs of the child and has helped families to access a range of services that meet the specific needs of the child and their family.

3.10.4 School health provision

Children and young people with chronic/complex illness often experience frequent and extended absence from school due to exacerbations of their condition and may also have a degree of intellectual disability associated with their condition. All children in Ireland, including children with disabilities and complex illness, are entitled to free primary education up to the age of 18 years. Most children in Ireland with chronic/complex illness are in mainstream school (primary and post-primary) with help from a learning support and resource teacher and care support from a special needs assistant (SNA). The Education for Persons with Special Education Needs Act (2004) provides that children with special educational needs are educated in an inclusive setting unless this would not be in the best interests of the child or the effective education of other children in the school. In addition to mainstream schools there are over 140 special schools in Ireland catering for particular disabilities and special needs.

In the acute children's hospital setting in Ireland the hospital school is funded by the Department of Education and Skills. The school has a pupil teacher ratio of 10:1 and on a day to day basis children can attend the child-centered classrooms, or if the child is not well enough ward teaching can take place.

3.11 Safeguarding

The primary legislation regulating child care policy in Ireland is the Child Care Act 1991 which brought in considerable changes in relation to children in care. The Act underpinned the basic principle that the welfare of the child is of paramount importance.

In April 2014, the Department of Children and Youth Affairs (DCYA) published Better Outcomes, Brighter Futures: the National Policy Framework for Children and Young People 2014 -2020 (12). This is the first national policy framework for children and young people in Ireland, aged from birth to 24 years. It establishes a shared set of national outcomes, one of which is that children and young people are Safe and Protected from Harm.

Children First, published by the Department of Children and Youth Affairs (38), is a national guidance document that promotes the protection of children from abuse and neglect. It states what organizations need to do to keep children safe, and what different bodies and the general public should do if they are concerned about a child's safety and welfare. The Guidance sets out definitions and signs for recognizing abuse. Children First emphasizes the importance of multi-disciplinary, inter agency working in the management of concerns about children's safety and welfare. Key to this is the sharing of information between agencies and disciplines in the best interests of children and the need for full co-operation to ensure better outcomes.

DCYA is leading an initiative to develop and implement a planning model for national and local inter agency working to improve outcomes for children. This is collectively known as the Working Together for Children initiative, the purpose of which is to secure better developmental outcomes for children through more effective integration of policies and services in particular through the Children's Services Committees (CSC's). Better coordination of agencies in local areas can bring about better safety for children.

Garda vetting is conducted in respect of personnel working in a position through which they have unsupervised access to children and/or vulnerable adults. The National Vetting Bureau (Children

and Vulnerable Persons) Act 2012 strengthens child protection and makes it mandatory for persons working with children or vulnerable adults to be vetted by the Gardaí.

In January 2014 the Child and Family Agency (TUSLA) became an independent legal entity, comprising of the Health Service Executive Children & Family Services, Family Support Agency and the National Educational Welfare Board as well as incorporating some psychological services and a range of services responding to domestic, sexual and gender based violence. The agency, operating under the Child and Family Agency Act 2013, is now the dedicated State agency responsible for improving well-being and outcomes for children including child protection(39).

3.12 Palliative care

Children's palliative care is an evolving specialty in its own right in Ireland. Palliative care for children differs from adult palliative care in many ways including the presence of extremely rare conditions specific to childhood that may be familial and extend over many years, the need to embrace the needs of the entire family and to meet the evolving needs of the child through their developmental transitions. There are approximately 1400 children living with a life-limiting illness at any given time in Ireland and in the region of 490 childhood deaths per annum, approximately 350 of them from a life limiting illness (40). Life-limiting conditions in children can be classified into four categories including those where treatment is prolonged and fails to cure, progressive disease where there is no curative option or non-progressive conditions causing severe disability and the likelihood of premature death (41). The home is considered, generally, to be the best environment in order to deliver family-centered palliative care to the child and their family (42), however a choice between hospital, hospice and home should be provided in order to meet the needs of all families (43).

Palliative care for children with a life-limiting condition should involve an active and total approach to care, beginning at the point of diagnosis or recognition of the condition, throughout the child's life, death and even beyond. It should embrace physical, emotional, social and spiritual elements of their life and its focus on the enhancement of quality of life for the child and the family. It should include the management of distressing symptoms, provision of short breaks or respite care and care through death and bereavement (ACT 2009, P. 7).

The plight of palliative services for children in Ireland was highlighted in a 2001 report from the National Advisory Committee on Palliative Care (44). Following on from this an Assessment of the palliative needs of children in Ireland took place in 2005 (45). This needs assessment was undertaken to provide a referenced report on the existing palliative care services available to children under 18 years old and to identify the projected needs for the next ten years. Subsequent to this a new national policy, Palliative care for children with life-limiting conditions in Ireland- a national policy (40) was published. This policy sets out guidelines and recommendations for the future provision of palliative care services for children with life-limiting conditions in Ireland. As part of the implementation of the Palliative Care for Children with Life-Limiting Conditions in Ireland- a National Policy (40), Ireland's first Consultant Paediatrician with a special interest in children's palliative medicine was appointed, and a national team of eight children's outreach nurses for children with a life-limiting illness were also appointed in 2011.

The majority of children with a life-limiting illness in Ireland are cared for at home by their parents. Respite care, in-home and out-of-home, is an essential part of palliative care services. In Ireland the

provision of respite care for children with a life-limiting illness is provided through statutory and voluntary organizations with the Health Service Executive (HSE) providing a limited co-ordination and direct delivery role in the ongoing provision of care for these children. In 2011 Ireland's first Children's Hospice, the Laura Lynn House, was opened. The Laura Lynn house provides services to children and their families with a life limiting illness including transitional care from the maternity and acute care setting; home support; respite and crisis care and end of life care (46). In 2012, 145 children and their families availed of the services of the Laura Lynn Children's Hospice.

3.13 Mental health care

Mental Health Services provision in Ireland is provided by the Health Service Executive, the statutory provider of public health services in Ireland. Mental health service provision is guided by national policy as set out in 'Vision for Change' (47). At the center of the policy on children and adolescents is a commitment to Article 24 of the United Nations Convention on the Rights of the Child specifying that 'the State will recognize the rights of children to the highest attainable standard of health and the facilities and the facilities for the treatment and rehabilitation of health, shall strive to ensure that no child is deprived of his or her right of access to such health care services'. It made a number of key recommendations for mental health care for children and adolescents in line with this commitment. Broad recommendations emphasized improved mental health promotion and primary prevention through to specialist mental health service provision. Specific recommendations included norms for the numbers of CAMHS teams nationally (two per 100, 000), one team each per 300, 000 for pediatric liaison services and day hospital services. Additionally there are national recommendations for one specialist eating disorder team, four substance misuse teams, two forensic mental health teams and 15 mental health teams for individuals with intellectual disability. One hundred inpatient beds are recommended nationally, 10% of which within a forensic or secure facility. Additionally 6-8 beds are for inpatient treatment of eating disorders. Recommended multidisciplinary staffing on teams included psychiatry, nursing, psychology, speech and language therapy, occupational therapy, social work, child-care workers and administrative supports. adolescents with intellectual disabilities.

Based on a 2012-13 national audit of CAMHS activity and staffing (48), 60 outpatient CAMHS teams are grouped into 11 geographical services; eight are directly provided by the HSE and three are provided through other agencies under service provision agreements with the HSE. In this period the provision of services, relative to the recommendations of 'Vision for Change', were CAMHS teams (65%), Day Hospitals (20%), Hospital Liaison Services (20%). Staffing levels on these teams were approximately 42% of recommended levels. Nationally there are currently 44% of the recommended number of inpatient beds provided by four publicly funded Inpatient units. Additionally there are two private providers providing inpatient care in Dublin that are accessible to young people through private health insurance.

Community CAMHS teams provide outpatient services that include assessment emergency, urgent and routine referrals from primary care. In line with Vision for Change, and in keeping with the Mental Health Act, 2001 the upper age has been extended from 16 to 18 years for both inpatient and outpatient services, although implementation is variable. Referrals are processed directly by the team and triaged at MDT meetings based on level of clinical need. The majority of CAMHS teams (79%) have a referral protocol and around half of teams have a referral form. It is the role of the CAMHS teams to evaluate the need for referral to specialist inpatient or day patient services and

engage in assertive outreach to families. CAMHS teams liaise closely with other community-based agencies. Direct consultation to educational settings relating to the management of mental health difficulties is frequently provided. CAMHS teams also engage in inter-agency meetings and provide written reports to the education, social care and legal systems relating to the mental health needs of young people. Treatment services are provided to moderate to severe mental health presentations. Referrals with milder presentations are typically referred back to community-based services, where available. A range of mental health treatments and interventions are offered in a group-based and on an individual basis. Initiatives are commonly offered to reduce waiting times. CAMHS teams are accommodated in a range of settings, although the majority were rated very good (64%), some are considered unsuitable (9%). Three out of four inpatient units are accommodated in purpose built unit while the fourth is in temporary accommodation pending the completion of a new unit. A proportion of CAMHS services are university affiliated and engaged in teaching of undergraduate and postgraduate students and in research and audit.

Nationally there were over 12, 000 referrals to CAMHS outpatient teams in 2012-2013 which was an increase of 19% on the previous year (48). Fifty percent of new referrals were seen within one month, 71% within three months and 4% of new referrals had waited more than a year. Common presentations included hyperkinetic disorders (31.6%), anxiety disorders (18.3%), depressive problems (10.4%), autism spectrum disorders (10.3%), conduct problems (6.2%), deliberate self-harm (5.1%), eating disorders (2.6%), psychosis (1.5%) in addition to a range of less frequent problems.

Young people with milder mental health and behavioral presentations are normally supported through community based primary care services, which may be provided directly by the HSE or through non-statutory agencies contracted by the HSE. Co-morbid mental health problems and chronic illness may be provided either through community based CAMHS services and/ or hospital based paediatric liaison services. Support for these children in the school setting is typically arranged through the education system such as the provision of a special needs assistant to meet their care needs. This has been scaled back considerably in recent years due to the changing economic climate.

Those with intellectual disabilities and autism spectrum disorders are typically supported through paediatrics and separate disability services.

Disability Services are currently being reconfigured under the title of Progressing Disability (PD) (49) to address historically fragmented service provision. The aim of PD will be the provision of accessible disability services through geographical network multidisciplinary teams (MDTs). Network MDTs will service a wide range of needs including intellectual disability, physical disability, sensory disability and autism spectrum disorders and sub-specialist teams have also been proposed regionally. Community paediatricians are frequently involved in the assessment and diagnosis of complex behavioral presentations including autism and medical treatment of some associated behavioral problems, e.g. sleep and feeding difficulties. Vision for Change recommended the provision of community based mental health teams to treat co-morbid mental health difficulties in young people with intellectual disabilities. This has not been implemented broadly. There are a very small number of child and adolescent psychiatrists with expertise in mental health of intellectual disability and training requirements for this have not yet been finalized. The creation of additional child and adolescent mental health posts in intellectual disability is in the process of being implemented.

In January 2014, a newly established child and family agency (Tusla) took on the responsibility for child protection, family and community support, early intervention and psychological services, educational welfare. Extensive inter-agency working occurs between this service and mental health services.

3.14 Dental care

The most widely used preventive dental service in the Republic of Ireland is the fluoridation of water supplies serving an estimated 73% of the population. In 2007 the target level was lowered from 0.8-1.0 parts per million (ppm) to between 0.6-0.8 ppm in response to increasing levels of dental fluorosis. Use of fluoridated toothpaste is widespread and to avoid fluorosis parents are advised not to use fluoridated toothpaste for their children until age two and then to use a pea sized amount and supervise twice daily brushing until age seven and to spit out toothpaste after brushing (50,51).

There are two sources of professional dental care for children: The salaried public dental service (SPDS) and private care covered by insurance or paid out of pocket.

The Health Service Executive (HSE) is the national body with statutory responsibility to make free dental services available to all children up to the age of 16 years. These services are largely provided by the SPDS. However, the service is constrained by staffing levels as there are insufficient numbers of staff to provide comprehensive dental services to all children. Thus, the SPDS concentrates on providing services to special needs children and children in specific classes in primary school each year for dental screening/assessment and treatment. There is no nationwide agreement on which classes should be targeted. In most areas, the choice of target class is influenced by the time of emergence of the first and second permanent molar teeth, and the most common combination of primary school classes targeted is 1st or 2nd class and 6th class (corresponding to age 7 or 8 and 12 years respectively). In addition, the SPDS also provides an emergency service for all eligible children. Emergency treatment is generally the only public dental service available for preschool children, because, with the exception of children with special needs, this age group is not prioritized for service delivery. There are however some pilot schemes operating for pre-school children and some children receive their dental care from private practitioners on a fee per item of treatment basis.

In addition many school dental programs include fissure sealing as part as the preventive strategy adopted with Dental Hygienists being employed in some areas to provide this services. Dental services for children are delivered by dentists, dental hygienists (as prescribed), dental health educators and dental nurses.

3.15 Specific vulnerable child populations

There is little specific information about child health in vulnerable populations in Ireland. The 'Our Geels' study on the health of the Irish Traveller Population (52), has reported some results on the health of traveller newborns and infants (53), showing a very high prevalence of low birth weight, and an infant mortality rate four times that of the general population. Anecdotal evidence suggests that the health of the small population of Roma children in Ireland is also very poor.

The IPH have recently published work on how the population prevalence of long-standing health conditions among 3 year-olds in 2011 varied with a large number of child, carer, household and

neighborhood characteristics (31). In this study eight characteristics were identified as having independent effects on population prevalence that were not explained by the other characteristics. The following groups of three year-old children were more likely to have each of the five long-standing conditions:

	A “long-standing illness, condition or disability”	Diagnosed asthma or asthma symptoms	Diagnosed eczema/skin allergy	Sight problem that required correction	Hearing problem that required correction
Sex	Boys		Boys		Boys (particularly if they were born with low birth-weight)
Primary carer health status	Children whose primary carer is ill	Children whose primary carer is ill (only if the children do not have an allergy)	Children whose primary carer is ill (only if the children do not have a non-skin allergy)		Children whose primary carer is ill
Household social class	Children in lowest social class households			Children in lowest social class households	
Allergies		Children who have an allergy (particularly if their primary carer is well)	Children who have a non-skin allergy (particularly if their primary carer is well)		
Number of parents in household		Children from one parent households			
Private health insurance					Children in households with private health insurance
Birth-weight				Children born with low birth-weight	Children born with low birth-weight (only if they were boys)
Maternal smoking during pregnancy				Children whose mother smoked during pregnancy	

The conditions are more common among boys, children from poorer socio-economic circumstances, children whose carer has a chronic condition and children with poorer birth circumstances (low birth weight and mothers who smoked during pregnancy). Because the effects are independent of all other characteristics; the risks of having the conditions accumulate and prevalence is very large among children with several risk factors. For example the population prevalence of asthma/asthma symptoms ranged from 6.4% among 3 year-old children who had none

of the three risk factors identified to 53.9% among 3 year-old children who had all three risk factors (those with an allergy, living in a one parent household and whose primary carer had a chronic condition). The inequalities identified among these 3 year-old children reflect those found in mortality and morbidity in adult life.

3.16 *Maternity and neonatal care*

There continues to be a strong demand for the maternity services in Ireland because it has the highest fertility rate in the European Union. In addition, about one in five women who deliver were born outside the country due to the fact that Ireland was one of three countries to open up its labor market to all the Accession States. Ireland has the most centralized maternity services in the European Union with almost 70,000 births per annum taking place in 19 maternity units. Over four of the maternity units deliver nearly 9,000 births per annum and no unit delivers less than 1,000 births per annum. More than 99% of the births take place in a hospital setting with a falling demand for home births. All 19 units are publicly funded and the last independent private maternity hospital closed at the start of 2014. About one fifth of the mothers book for private maternity care but this number is decreasing due to the financial impact of austerity on couples in their 20' and 30's.

Four of the large maternity units are stand-alone hospitals but the other 15 are co-located with a general hospital. The six large academic maternity hospitals have a neonatal intensive care unit and the other 13 have a special care baby unit. There is, however, a national neonatal transport system which facilitates in-utero transfers and neonatal transfers from the smaller units to the tertiary referral units.

The case load complexity in the maternity hospitals is also increasing. There has been an increase in the number of first-time mothers and more Irish women are choosing to defer having their first baby until their 30's. Approximately one in six women are now obese at the time of their first antenatal visit. There has been an increase in the number of multiple births due to an increase in artificial reproduction. Like other European countries, the Cesarean section rate continues to escalate.

In the maternity units a high proportion of services are delivered by midwives. This includes not only the traditional delivery suites and theaters, but also obstetric ultrasound services, and more recently established services such as early pregnancy assessment units (EPAU). All 19 maternity units now have, 24/7, an obstetrician, an anesthetist and a neonatologist in training, who are resident in the hospital. Consultants in Obstetrics, Neonatology / Paediatrics and Anesthetics are in-house during regular hours and provide an on-call service during out of hours as well. Irish breastfeeding rate remains low among the developed countries despite programs such as baby friendly health initiatives (BFHI), however more recently exposure of premature infants to breast milk has significantly improved in neonatal units (54). While the resources invested in the maternity services in Ireland is modest by OECD standards, Ireland continues to have a low perinatal mortality and maternal mortality rate.

The overall responsibility for the management for the Health Services rests with the Health Services Executive (HSE) with the Chief Executive Officer reporting directly to the Minister for Health. It is planned that in the near future all acute hospitals in Ireland will be grouped into six large trusts. All 19 maternity units will be linked in to these trusts. In 2010 the HSE established a series of Clinical Care Programs to increase clinical input into the health services which included the establishment of a national Program for Obstetrics and Gynecology.

4 Major health system reforms

The Irish health system is, and remains, a prisoner of its past. Many parts of the system have hardly changed since the first Health Act in 1947, and many more have been in essentially their present forms since the recent Health Act in 1970. The 2004 Health Act, which established the HSE, paid disappointingly little attention to care delivery. As the care delivered within the system has changed out of all recognition since then, neither the delivery system, nor the funding system is fit for purpose. The most recent Government health policy, 'Future Health' (55) which builds on 20 years of largely unimplemented policies, including 'Shaping a Healthier Futures (56), 'Quality and Fairness, a Health System for you' (57), the national primary care strategy (14), 'Vision for Change' (47), has already been substantially amended. The new public health strategy 'Healthy Ireland' (18), while very admirable in content, and taking a life-course approach to health, and with a focus on early intervention in child health, will require substantial resources, and structures in place, to make it happen. It is unclear that these can be, or will be provided.

There is clear public and political recognition that the service is in crisis. There are very considerable health gains, not to mention political gains, to be had, if the more fundamental problems of the service can be dealt with. The key objectives identified in Future Health are :-

- Improved health and well-being
- Faster, fairer access to hospital care:
- Free access to GP care
- Better management of chronic illness
- More people cared for in their homes
- Improved quality and safety
- Affordability

To achieve these it is proposed to use a combination of :-

1. A new focus on health and well-being
2. Service reform
3. Structural reform
4. Financial reform

These seem like reasonable approaches to improve the system, although many of the details are more debatable. There is no particular focus on child health, which is not unexpected, given the objectives of the document. Health inequalities are implied, especially, in the discussion of access and affordability, but are not a specific target.

4.1 Health system assessment

Like many other health systems, the Irish health system does not systematically collect information on its outcomes. Taking the evidence presented above as a whole, the system does provide access to reasonable care for most children. Immunization rates have risen significantly over the last 20 years, and rates of teenage pregnancy have fallen. The quality of acute care appears to be on a par with that in other wealthy countries. A very considerable effort has gone into taking the voices and

values of children into account in health care, and while there is still much to do, successive initiatives by the Department of Children and Youth Affairs, and its predecessors seem to have improved matters.

On the other hand, some groups of children, notably Irish Travellers, and, to a much lesser extent, the children of poorer families, have worse outcomes. It's not clear how much the Irish health system can, or intends to, reduce health inequalities. The system has had a very severe reduction in its budget over the last five years (13), and while Ireland has coped with this better than might have been expected (58,59), there has been an impact on many parts of the service. It is likely that poorer and more vulnerable children have suffered more from this than their wealthier peers (for example, some of the first cuts in education services were to specific extra services for Traveller children).

5 Conclusions

The Irish health system is coping with a severe economic crisis. How much longer it will continue to do so cannot be known. There have been considerable changes in resources, but few changes in structures or care systems. The introduction of a centralized management system, the health services executive, now almost 10 years old, has had some impact on child health services, which are much better developed, and more consistent than formerly. However, provision of services remains patchy, and there are quite severe problems with access to services for children with complex needs. Primary care for children is being actively developed, but there is little investment in general practice services.

The establishment of an effective Ombudsman for children, and what started as the 'Office of the Minister for Children', and is now the 'Department of Children and Youth Affairs', with a full cabinet minister in charge, have all been very beneficial. Their focus has been more on education, justice and child protection, than on child health *per se*, but there has been a much stronger focus on the needs of the child, and on listening to children, in the health services over the last decade. The new national children's strategy 'Better Outcomes – Brighter Futures' (12), reflects a new focus on children in the Government.

Pressing issues in child health, as already described, include obesity, alcohol use, and mental health. It would be fair to say that adolescent health is under-developed in Ireland, with few adolescent-specific services in place. Public narrative about adolescence, and adolescents, too often focuses on them as a perceived threat, or at least, a nuisance. If the serious mental health issues are to be addressed, significant resources, and some cultural change will be required.

A final challenge for the health services specifically, is to improve communication. There are very few electronic records in the Irish health system, outside general practice. Most communication relies on the post, fax machines, or telephones. Part of the Government policy on health care is to introduce more integrated care between primary care and the acute hospitals sector. Without large scale investment in ICT, this seems unlikely to be possible.

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7 Tables

Please see attached spreadsheet