To access the full report go to: www.hse.ie/eng/services/publications/planningforhealth.pdf

OVERVIEW

In Ireland we have successfully tackled certain diseases and improved health outcomes in the recent past, for example:

- Our life expectancy at birth is 83.1 years for a female and 79 years for a male, which is greater than the EU average (Department of Health, 2015).
- Mortality from circulatory system diseases has reduced by over 30% from 462.2/100,000 in 2005, to 316.5/100,000 in 2014 (Department of Health, 2015).
- National stroke thrombolysis rate of 12% is three percentage points above the National Stroke Programme target of 9%.
- Early childhood immunisation uptake rates are reaching the target and WHO recommendation of 95%.
- Our smoking rate has decreased from 28% in 2003 to 19% in 2015 (HSE, 2015).

Notwithstanding these achievements, our health system continues to face the challenges of lifestyle and age-related conditions which are inextricably linked with an increasing population. It is vital that our response anticipates the challenges of this growing need. Robust evidence-based epidemiological-oriented planning is the cornerstone of this process. This document outlines the health needs and demands of the Irish population, insofar as is possible, to support Service Planning 2017. It must be emphasised that all projections and underlying assumptions are based on demographic pressure only and do not take into account any changes in policy, models of care, medical inflation and/or eligibility.

HEALTH CHALLENGES

AGEING POPULATION

The number of people aged 65 years and over is growing by approximately 20,000 each year and will increase by over 110,000 people in the next five years. This is the most glaring statistic with regard to Health Service planning. Is our health system adequately prepared for this challenge? Service use by older populations differs significantly from use by younger healthier populations. A person aged 65 years and over attends a GP practice on average seven times a year (Department of Health, 2016). A person aged between 15 and 64 years attends on average between three and five times a year, with the number of consultations increasing with age. One in every two people 65 years and over attending ED is admitted. In comparison one in every five people aged 18-64 years is admitted. In 2017 it is projected that there will be an overall increase in adult inpatient discharges of almost 12,000 from 2015. This is largely as a result of predicted increases in adults 65 years and over and equates to approximately 344 additional adult hospital in-patient beds at 100% utilisation of seven day beds. At the beginning of 2016, we have a deficit of 2,485 short stay Nursing Home beds and this shortfall will increase to 2,653 in 2017. Overall we are experiencing an extremely resource intensive time and we are struggling to create appropriate quality infrastructure to provide healthcare for our ageing population. This is the most expensive period in terms of investment and will reap rewards in terms of quality and access if adequately funded.

PREVENTION

The economic impact of chronic diseases, many of which are avoidable, amounts to billions of euro per year. Nevertheless, European Governments currently spend on average 2.8% of their health sector budget on prevention (WHO, 2014). In the recent CSO publication 'System of Health Accounts' preventative care represents 1% of our total health care expenditure (CSO, 2016). This includes public and private spend on preventative care and is significantly less than our European counterparts. Prevention is the most cost-effective way to maintain the health of the population in a sustainable manner, and creating healthy populations benefits everyone.

CHILD HEALTH

Although our birth rate is decreasing, in 2017 our child population aged 0-17 will represent 26.2% (1,238,938/4,721,232) of our total population - 7.4% above the EU average of 18.8% (Department of Children and Youth Affairs, 2014). Infant mortality is a fundamental indicator of any health system. Our infant mortality rate has been marginally increasing from 3.3/100,000 in 2009 to 3.7/100,000 in 2014 (Department of Health, 2015). A healthy pregnancy and birth weight are positive predictors of good health throughout life. Although our rate of smoking during pregnancy has decreased to under 20%, low birth weight continues to affect approximately 1-in-17 births with a slight increase in prevalence from 2010 (5.3%) to 2014 (5.8%). Access to effective antenatal care remains important to securing the future health of children. Currently 26% of our nine year old population are either overweight or obese (Growing up in Ireland, 2011). Investing in the early years of life is an economically effective strategy in producing improved health, as evidenced by the first 1,000 days project (Black et al, 2013).

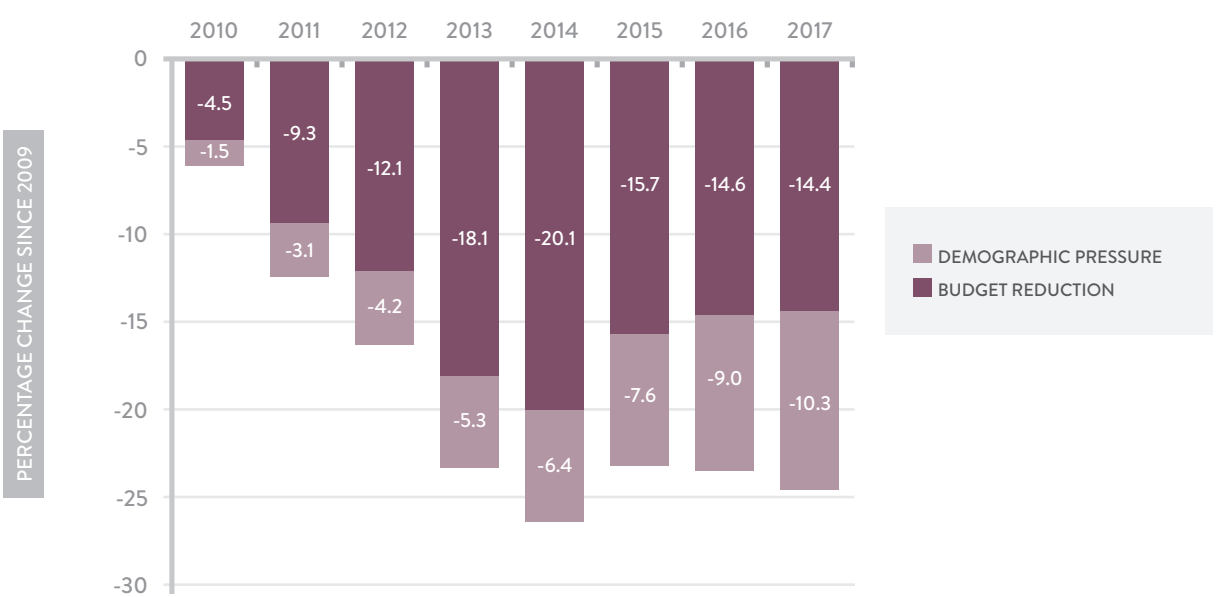
CHRONIC DISEASE

In 2017, 559,620 people will have at least one chronic disease. Three quarters of the 29,095 deaths in 2014 were due to four chronic diseases - cancer, cardiovascular, respiratory and diabetes (Dept Health, 2015). 17% of all hospitalisations in 2015 occurred due to these four chronic conditions. The mounting burden of chronic disease is largely attributed to a well described set of modifiable risk factors. This is compounded by our ageing population, with increasingly complex health needs. Although smoking rates have declined from 28% in 2003 to 19% in 2015, we have a long way to go to reach our target of less than 5% smoking by 2025. Adult obesity is rising at an alarming rate. By 2030, 57% of women and 48% of men are projected to be obese according to the WHO, leading to the increasing incidence of diabetes and accompanying complications. Meanwhile, the prevalence of age-related diseases, such as dementia, is also increasing. By 2017 it is projected that there will be as many as 53,000 living with this condition. (Pierce et al, 2014).

DEMOGRAPHIC CHANGE & COST

Our cumulative budget reductions and demographic pressure, combined from 2009 to 2016, is almost 24%. This is simply unsustainable. Estimating our healthcare costs for 2017 using a top down approach indicates an upward adjustment of 1.4% from 2015 to 2016, and 1.4% from 2016 to 2017 is required to provide the same service to our growing population. This adjustment will not provide investment for improved models of care, new medicines, technologies or unmet demand.

FIGURE 1: CUMULATIVE BUDGET REDUCTIONS AND DEMOGRAPHIC PRESSURES COMBINED 2010-2017



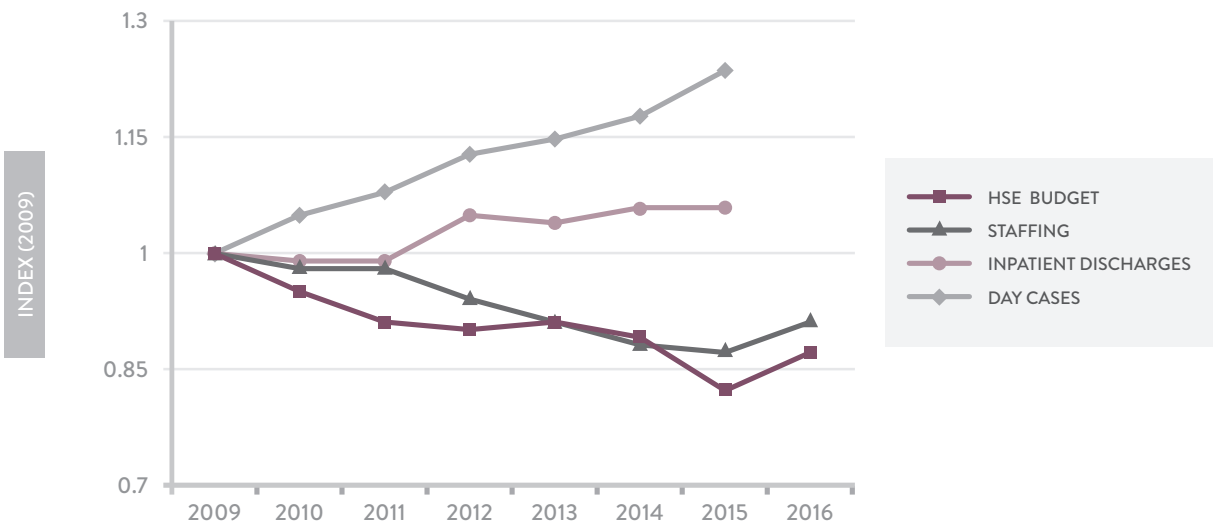
Source: Finance Unit, Department of Health for budget data, CSO and EC Ageing Report 2015 for demographic effect

ARE WE DOING MORE WITH LESS? YES WE ARE.

Since 2009, HSE budget and staffing have witnessed a steady decline. Our total budget was reduced by 14.6% and staff numbers reduced by 15,006 (13%). Day cases have increased by 18%. Hospital bed days reduced by 227,157 which is the equivalent of 622 inpatient beds removed from the system. The average length of hospital stay (AvLOS) has decreased from 6.63 days to 6 days and the numbers of medical cards have increased by 256,300 in the same period.

In recent years, increased hospital activity is largely related to increased day case activity. Day cases have been increasing annually, by approximately 3-4% since 2009. This large increase in day case activity is evidence of the acute system continuing to manage increased demand by delivering care in lower cost settings. At this incremental rate of increase, it is possible that we will reach maximum efficiency gain in the near future. Prediction of the timeline of this saturation point will benefit from further evaluation of current caseload and demographic profiling.

FIGURE 2: HSE BUDGET, STAFFING, IN-PATIENT DISCHARGES AND DAY CASES 2009-2016



Source: HSE Service Plans 2009-2016, HPO

IMPACT OF POLICY CHANGE

UNDER 6s

In July 2015 access to 'General Practice (GP) care without fees at the point of use', was introduced for all children under 6 years. This is the first phase in providing access to 'GP care without fees at the point of use' to the entire population of the Republic of Ireland. The impact of the introduction of this policy is visible, though not measurable, across our services. In 2015, there was almost a 22 fold increase (€1,896,603) in fees for GP Visit Card Capitation for 0-4 year olds. Since the introduction of the free GPVC there has been a 2.4 fold increase (€524,581) in fees for out-of-hours attendances for 0-4 year olds. However, there is no routine national data available to evaluate the impact this policy has had on the rate of GP consultations during normal working hours. This is a significant information gap and highlights the need to ensure information systems are in place which enables key policy interventions to be evaluated to inform future planning.

INTEGRATED CARE

Integrating health and social services is a major focus of European policymakers. Integrated services can be powerful tools in preventative care. Older people need help not only with their disease or medical problem, but also with activities of daily living and this in turn may help slow the deterioration in the medical condition. These two elements are inter-related and there's a preventative element in social care. For example, the Torbay Care Trust, a health care organisation based in South Devon, has pooled budgets for health and social care and established integrated care teams that work closely with general clinicians. As a result, the use of hospital beds, care homes and emergency services has fallen for people over the age of 65 years. HSE Clinical Strategies and Programmes have identified integrated care as the direction of travel with the establishment of five integrated care programmes: Children;

Maternity; Prevention and Management of Chronic Disease; Older Persons; and Patient Flow. Our health system is synergistic and interdependencies exist across the divisions. Essential factors considered necessary for integrated care include: defined clinical and social care pathways, integrated funding models and, most importantly, moving gradually towards outcomes based healthcare budgeting. Continuous care and efficiently managed resources depend on effective communication, collaboration and joint responsibility for patient care across our services, ultimately facilitating flow of patient care, services and funding. These fundamental principles will be pre-requisites in the imminent commissioning funding model based on strategic purchasing of programmes of care.

RESEARCH AND DATA

The consistent application of evidence to prioritise interventions and programmes of care positively impacts health behaviours, health service redesign, and health outcomes. Quality research and robust data plays a very important integral part of the continuous improvement cycle. As an organisation, the HSE requires a research and data framework identifying priority data gaps and research questions in the short, medium and long term. It is essential that ongoing health service data and research needs of the HSE are fulfilled in a timely fashion, so that results and evidence generated are an integral part of the population health needs assessment cycle. Many areas of our service would benefit greatly from quality data and research programmes to support specific research questions. Our long term residential facilities (nursing homes and residential disability services) consume 20% (€3.6 billion) of the total healthcare expenditure (CSO, System of Health Accounts). However, we have no data describing the variation or complexity of care in these facilities. Research is required to assist in the development of a dataset to facilitate the exploration of a quantitative index to describe this variation and complexity. PCRS collects vast amounts of data from Primary Care, nevertheless as a service delivery unit there is no resource dedicated to mine this data as part of a continuous improvement cycle. Economic evaluation is of paramount importance and many unit costs-per-service provided particularly in Primary Care, need to be explored. This would assist the creation of a standardised resource allocation model at a population level. Research needs for service planning can be identified as part of a yearly cycle, so that focused exploration of phenomena may be progressed in a timely manner and relevant outcomes integrated into service improvement and re-design.

HEALTH INEQUALITIES

Evidence identifies that deaths and ill health caused by health inequalities account for up to 20% of total healthcare costs (Mackenbach et al., 2011). Addressing health Inequalities is one of the leading priorities of Healthy Ireland. As a Health Service are we prioritising health inequalities within each element of our service delivery? Currently this is not possible to measure. There is no coding of data that allows measurement of health inequalities in our hospital data (HIPE) or our performance data across all divisions. The number of medical card holders is the only indication of deprivation and inequality currently collected. This is a data gap that needs to be addressed immediately to initiate a meaningful commitment to addressing health inequalities within our Health Service.

NEXT STEPS

Robust health information and intelligence is the foundation of evidence-based population health service planning. This paper encompasses a standardised approach to the interrogation of all current and relevant health service and population datasets to inform Health Service planning using consistent methodologies across all areas of service at a national level. This is essential for equity based planning. It is necessary to further develop this analysis from a national perspective to regional analysis by CHO Area and Hospital group. Utilising a national template, standardisation of regional assessments using consistent methodologies, will be imperative to allow for inter group/area analysis. Equity, transparency and accountability will improve with this analytical architecture in place. Meaningful partnerships will be required to develop relevant data capture and needs assessment structures. Moreover, this in turn will produce strategic benefits to facilitate commissioning at area level.