

# **Capital Investment in Health**

**Report of the Department of Health**

**to**

**the Department of Public Expenditure & Reform**

**(as part of the review of the planned public capital programme)**

*September 2011*

# 1 Introduction

The driving force for capital investment in health and personal social care facilities is to support the provision of the best possible service, in terms of effectiveness and quality, to patients. The key objective is to ensure that the right facilities are provided in a timely manner, that they are suitably located, efficiently designed and appropriately procured, to serve defined and prioritised needs.

A well designed and well maintained health estate impacts positively on patient recovery rates as well as staff morale and welfare. Suitable and appropriate facilities are required in order to provide safe and cost-effective care.

Government attaches a high priority to investment in health services (including capital infrastructure). The Programme for Government gives a specific commitment that

*“health capital spending will be a priority”.*

## **Challenges**

While there have been major medical and scientific advances, it is acknowledged that there remains many challenges facing the health system due to an ageing population, increased chronic disease, and modern lifestyle risks. The current economic climate, with scarcity of resources, is also putting pressure on the health system to reduce its cost while at the same time patient expectation is increasing.

In fact, capital spend on health is small relative to current expenditure. The construction capital percentage of the gross health expenditure allocation fell in every year since 2005 (4.3%) to 2.4% in 2011.

**Table 1.1**

HSE Vote 40 - Allocation only	Construction	2005 €m	2006 €m	2007 €m	2008 €m	2009 €m	2010 €m	2011 €m	Total €m
C1		491.524	485.517	487.411	544.181	370.724	344.253	334.711	3,058.321
C2		<u>2.539</u>	<u>2.539</u>	<u>2.539</u>	<u>2.539</u>	<u>2.539</u>	<u>2.539</u>	<u>2.539</u>	<u>17.773</u>
<b>Total</b>		<b>494.063</b>	<b>488.056</b>	<b>489.950</b>	<b>546.720</b>	<b>373.263</b>	<b>346.792</b>	<b>337.250</b>	<b>3,076.094</b>
Gross Health Allocation		11,539.544	12,388.657	13,977.418	14,931.320	15,009.851	14,583.431	13,794.487	96,224.708
Construction capital as a percentage of Gross Health Allocation		<b>4.3%</b>	<b>3.9%</b>	<b>3.5%</b>	<b>3.7%</b>	<b>2.5%</b>	<b>2.4%</b>	<b>2.4%</b>	<b>3.2%</b>

## **Health expenditure – an investment**

The view that health expenditure is solely a ‘cost’ to the State is being revisited as it does not address the benefits to individuals, society, and the economy as a whole.

Commissioner Dalli, European Commissioner for Health and Consumer Policy, stated that

*“We must look at our balance sheets differently. Spending money on health – in particular on prevention and on innovation in healthcare – should be seen as an investment in the future”<sup>1</sup>.*

Reflecting the re-assessment of health and its potential contribution to broader economic concerns, the EU Council Conclusion *“Towards modern, responsive and sustainable health systems”*<sup>2</sup> invites Member States to, inter alia, :-

- *ensure that health is adequately addressed in the National Reform Programmes submitted by Member States within the framework of the Europe 2020 Strategy;*
- *reposition the perception of health policy, making it more visible when macroeconomic issues are at stake and shifting it from being regarded as just an expenditure post to being an acknowledged contributor of economic growth.*

The Department of Finance’s Infrastructure Investment Priorities 2010-2016<sup>3</sup> states

*“In terms of the economic case for intervention in this sector, health investment can be viewed as a redistributive policy, as having positive spillovers to the economy and society and as having characteristics of a merit good. Alongside the very obvious social benefits, an improved stock of health capital can boost the performance of the health service and in turn can make a significant contribution to the economy.”*

The health capital infrastructure programme supports agreed Government health priorities and strategies. A sustained level of investment is required to deliver on these priorities to support a high performing health service that will deliver a significant contribution to the economy by:

- Ensuring value for money, thus limiting the resources that need to be deployed to address the population’s health care needs;
- Attracting and retaining a talented, internationally mobile workforce which considers access to health care for themselves and their families as a key part of the environment they wish to live and work in;
- Maintaining the productivity of the workforce through reducing the burden of illness and avoidable death;
- Reducing dependency levels caused by disability and early retirement due to illness;

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<sup>1</sup> John Dalli, European Commissioner for Health and Consumer Policy, addresses high-level representatives of the Finnish Government, Helsinki, Finland, 3 February 2011.

<sup>2</sup> 5<sup>th</sup> Employment, Social Policy, Health and Consumer Affairs, Luxembourg, 6 June 2011

<sup>3</sup> Infrastructure Investment Priorities 2010 – 2016, A Financial Framework, Department of Finance, July 2010

- Supporting the health care needs of an increasing and ageing population;
- Creating and supporting an appropriate environment for research and development in new products and services which a) improve health, and b) offer commercial potential for biopharmaceutical, medical device, ICT, and other companies.

### ***Investment in Health Research***

One of the three priorities of the Europe 2020 Strategy is

*smart growth: developing an economy based on knowledge and innovation.*

Health research is a key factor in promoting the health of the population, combating disease, reducing disability, and improving the quality of care. It is fundamental to the effective and efficient delivery of health services – it can be an important enabler of modernisation and reform of service delivery.

It also plays an important role in the knowledge economy, contributing to Ireland's competitiveness and growth. The economic benefits accruing to the country from the life sciences sector are very significant when it is considered that the sector employs some forty-seven thousand people in over 350 enterprises, and provides exports valued at almost €45 billion in 2009.

The Health Research Group, chaired by the Department of Health, is working to ensure that health research in Ireland is coordinated, prioritised and focussed, and that national policies and strategies for health research are framed strategically in the context of the wider science, technology, and innovation agenda. The *Action Plan for Health Research 2009-2013* details key policy direction in the area of health research. The Health Research Board (HRB) is the statutory body under the aegis of the Department of Health with a mission to improve health through research and information. It plays an important role in progressing the health research agenda and is supported by the Department of Health's capital budget.

### ***Investment in ICT***

ICT is a central and necessary presence in high performing, best practice health systems. Expansive development of ICT within the Irish health system is a necessary strategic, management and operational imperative with substantial improvements in efficiency, effectiveness and quality / safety of patient services as its key focus and driver.

## **1.1 Capital Spend**

In 2011 €337.25 is allocated to the HSE for capital investment, (excluding ICT). An additional €15m in proceeds of disposals from surplus assets has been approved for investment in mental health service infrastructure – modern residential accommodation is required for residents accommodated in old psychiatric institutions. Further information is provided in Part 2 of this report.

The Department of Health has been allocated €16m in 2011 to support health investment in agencies under its remit and capital projects in local and regional task force areas under the Drugs Initiative. The Health Research Board (HRB) will

receive capital grants of over €12m to meet its commitments in 2011. Further information is provided in Part 4 of this report.

### ***Recent Reductions in Budgets***

Since 2008 there has been a reduction of approximately 36% in the capital provision for the HSE. This has meant that there was very little discretionary spend available up to end 2014. It is essential that the allocation indicated for the years to 2014 is maintained if priority health projects are to continue to be progressed.

The next table shows the HSE’s annual Exchequer capital allocation and annual expenditure (including ICT) since 2005.

**Table 1.2**

HSE Vote 40	2005	2006	2007*	2008	2009**	2010***	2011*\$	Total
	€m	€m	€m	€m	€m	€m	€m	€m
Capital Allocation	564.063	574.556	524.951	593.720	442.763	367.370	392.250	3,459.673
Capital Expenditure	506.605	405.146	520.427	575.066	433.635	354.934		2,795.813

\* The 2007 allocation includes a reduction of €20.99m on Capital ICT made as part of the Supplementary Estimate.

\*\* The 2009 allocation includes an increase of €32.5m made as part of the Supplementary Estimate.

\*\*\* The 2010 allocation includes €3.578m proceeds of disposals and a reduction of €30m on Capital ICT made as part of the Supplementary Estimate

\*\$ The 2011 allocation includes €15m to be funded through proceeds from the sale of surplus assets

Source is Revised Estimates Version (REV)

The Department of Health’s capital budget allocation is now €16m<sup>4</sup>, down from its 2008 allocation of €20m.

The Department of Finance’s analysis of spending programmes acknowledges the reduction in health capital funding stating that

*“the Health and Children capital programme has already undergone significant downward adjustment”.*<sup>5</sup>

Furthermore it states that

*“while there has been very significant investment in this sector and an improvement in the quality and quantity of infrastructure, there is scope for further improvement in the stock of health capital”.*

Any further reductions in capital investment in health could impact significantly negatively on the operational integrity of health facilities and therefore health outcomes.

<sup>4</sup> includes €1m moved to the Department of Health with the transfer of funding for the Drugs Initiative, June 2011

<sup>5</sup> Infrastructure Investment Priorities 2010 – 2016, A Financial Framework, Department of Finance, July 2010

### ***HSE Capital Plan 2011-2015***

The HSE Capital Plan 2011-2015, which requires the Minister for Health's approval with the consent of the Minister for Public Expenditure and Reform, has been approved (subject to certain conditions).

HSE capital commitments in January 2011 amounted to €213m. In addition €40.4m will be required to equip and commission facilities already under construction.

Most of the spend under the Plan relates to existing contractual commitments and capital required to complete projects under construction, with a total of approx. €31m available for new projects in 2011 (with estimated expenditure of €277m to end 2015).

## **1.2 Capital Review**

This report, which can be read in conjunction with the Capital Plan 2011-2015, aims to address the questions put to Government Departments in the Department of Public Expenditure & Reform's letter of 28 April 2011.

In answering the questions posed by the Department of Public Expenditure and Review, this report refers to the main programme areas in health as follows<sup>6</sup>:-

***Part 2-*** HSE Capital (excluding ICT) - which supports provision for, inter alia,:

- primary care
- acute care
- mental health and disability services
- services for older people

***Part 3-*** HSE ICT

***Part 4-*** Agencies under the aegis of the Department, and the Drugs Initiative<sup>7</sup>

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<sup>6</sup> Office of the Minister for Children & Youth Affairs' spending will be reported on by the Department of Children & Youth Affairs.

<sup>7</sup> Transferred to the Department of Health, June 2011.

## **2 Responses to Questions posed by the Department of Public Expenditure & Review**

### **2.1 Objectives of, and rationale for, programmes/interventions**

- **Description of the high level objective to be achieved in relation to each programme**
- **Rationale for Government Intervention**

Government policy aims to maximise the health and social well-being of the population. A well designed healthcare environment can lead to faster recoveries, reduced suffering for patients, reduced risks of infection and greater patient satisfaction.

Modern health infrastructure ensures patient comfort and dignity, better delivery of medical care, reduced risk of infection, and flexibility of use over time. It provides the accommodation and equipment including diagnostic equipment that supports the delivery of modern health care that has supported improvements in population health in recent years.

There are significant demands on health capital budgets in terms of providing replacement facilities, maintaining existing stock and replacing major equipment.

Capital investment in the health sector has brought about a significant improvement in the standard of facilities across all care programmes. As the HSE's National Service & Capital Plans demonstrate, capital infrastructure projects are closely integrated with service delivery policies and support Government strategies.

The Government is embarking on a major reform programme for the health system. The aim of the reform process is to deliver a single-tier health system where access is based on need, not income. It will also provide for a more equitable and efficient health service where the appropriate care is delivered in the appropriate setting.

This Section of the Report outlines the main programme areas for capital investment including primary care, acute care, mental health services, services for older people, disability services, regulatory compliance, and maintenance of the existing health capital stock.

#### **2.1.1 Primary Care**

Primary care is central to the Government's objective to deliver an integrated and cost-effective healthcare system. It involves a move away from the old hospital-centred model where healthcare is episodic, reactive and fragmented, to a focus on delivering more care in the community/home including preventative care. Investment in enhanced, locally accessible health and social infrastructure will support easier access to modern, well-equipped public services. It will also have

an important immediate economic impact through support of construction activity throughout the country.

There are high costs associated with hospital-based health care. *‘International evidence indicates that Primary Care has shown to exert a positive influence on health costs, appropriateness of care, and outcomes for some of the most common medical problems’*<sup>8</sup>. The primary care model is widely believed to be less expensive than speciality medicine, partly because payments to primary care clinicians are lower and partly because primary care clinicians tend to use resources in a lean and efficient manner<sup>9</sup>.

### ***Capital Plan – addressing need***

Under the existing HSE Capital Plan, primary care centres are being delivered largely by lease agreement with a small amount of Exchequer funding to construct facilities in socially deprived urban, small rural towns and isolated areas.

## **2.1.2 Acute Care**

The objective of the acute capital programme is to deliver in a timely manner, adequate and appropriate health facilities that are suitably located, efficiently designed, and properly procured. Modern infrastructure will support the delivery of high quality and cost effective care which is patient-centred. The programme includes reorganisation of acute hospitals and associated development of the ambulance infrastructure, construction of the new Children’s Hospital and associated paediatric ambulatory and urgent care centre, the National Programme for Radiation Oncology and a variety of smaller projects such as MAUs, out-patient departments and endoscopy suites.

The programme is informed by the recommendations contained in the *Report of the National Acute Medicine Programme (2010)* which sets out the strategic approach to the organisation of hospitals and pre-hospital emergency care into defined hospital models within integrated networks. In addition, clinician-led clinical programmes are formulating a national, strategic and coordinated approach to the delivery of services, standardisation of access and delivery of high quality care. The clinical programmes developed by the HSE are vital in this regard. Capital projects, which support this structure and have input from the Quality Risk & and Clinical Care Directorates, are prioritised.

The reorganisation of the hospital and pre hospital emergency care service aims to organise hospitals into defined generic hospital models (Model 1-4) within integrated networks, as recommended by the Acute Medicine Programme Report, and to ensure that the ambulance services can respond to changing models of service. The HSE’s clinician-led Clinical Programmes are formulating a national, strategic and coordinated approach in a wide range of clinical services to achieve standardization of access to, and delivery of, high quality safe care.

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<sup>8</sup> Bindman et al. 1996; Engel et al. 1989; Kohn and White 1976; Moore 1992; Roos 1979 quoted in HSE Primary Care Teams – Update on the Development of Primary Care and their Operational Effectiveness (April 2011). Pages 6,7.

<sup>9</sup> Update on the Development of Primary Care and their Operational Effectiveness (April 2011). Page 7.

### ***New Children's Hospital***

The Children's Health First Report commissioned by the Health Service Executive indicated that the population and projected demands in this country can support only one world class tertiary paediatric hospital which should be in Dublin, and should ideally be co-located with a leading adult academic hospital bringing together all the medical and nursing expertise for complex conditions.

The Report of the Independent Review of the National Paediatric Hospital Project, commissioned by the Minister for Health and published on 6 July 2011, recommended unanimously and unequivocally that the development of the new hospital should proceed on the Mater Campus.

The Minister has confirmed the Government's acceptance of the recommendation of the Review Team and has now requested the National Paediatric Development Board to proceed with a planning application to An Bord Pleanála.

Briefly, Temple Street Children's Hospital comprises four amalgamated Georgian building with a large extension to the rear, together with some ancillary, portacabins and link corridors. Currently Temple Street deals with 45,000 attendances per year<sup>10</sup>. In the event of the New Children's Hospital not progressing due to capital funding cuts a capital investment programme in Temple St will have to commence with €10m required immediately. Given the description of the building contained at Appendix 1, such expenditure does not represent value for money. The vacated building could with modifications accommodate other health community health care services. The recent Independent Review states that

*'CUH has indicated that the Temple Street site would be made available to the NPHDB, if the development on the Mater campus goes ahead. If the NPH is developed in an alternative location this opportunity will also disappear.'*

### ***Crumlin***

Our Lady's Children's Hospital, Crumlin is over fifty years old. The hospital has expanded significantly since it opened with many of the later additions being undertaken on a piecemeal basis, often in the form of single storey modular buildings. The 2004 Outline Development Control Plan (ODCP) noted 'the large number of prefabricated building, overcrowded wards & outpatients .... and not fit for purpose when judged against current (2004) standards' It is important to note that standards have changed significantly since 2004. The existing accommodation will not in many cases comply with recently introduced standards relating particularly to infection prevention and control and space per bed for clinical care of the patient. Since 2004, the situation, with notable exceptions such as the new ICU and developments in radiology, has not improved appreciably. Please see Appendix 2.

The recent National Paediatric Hospital Independent Review states

*Our Lady's Hospital for Sick Children, Crumlin, and the Children's University Hospital, Temple Street provide excellent care but many of their facilities fall well below today's standards for the care of children and their families.*

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<sup>10</sup> National Paediatric Hospital Independent Review, Part 2 Clinical Analysis, Page 10

***Cancer Care – National Programme for Radiation Oncology (NPRO)***

The NPRO project was based on the Hollywood Report and approved by Government in 2005. The 2006 National Cancer Control Strategy also includes, among its recommendations, the establishment of a national network of radiation oncology services in accordance with the Hollywood Report.

Approximately 24,000 new cases of invasive cancer, including non-melanoma skin cancer, are diagnosed each year. The National Cancer Registry (NCR) has reported that the number of newly diagnosed cancers in Ireland is increasing by 6% - 7% annually and that, unless there is a major reversal of current trends, the number is likely to double in the next 20 years primarily due to the ageing of the population. This means that radiotherapy capacity must be expanded to meet growing needs, but equally as critical is the requirement for the continuation of existing levels of service.

There is international evidence of the cost effectiveness and cost benefit of radiation oncology as a modality of treatment in cure and management of site specific cancers. To do nothing would be to ignore the fact that early access to radiotherapy can prevent the spread of certain tumours. Radiotherapy is used prior to surgery in management of some cancers. It is an essential element of treatment for others, e.g. breast cancers. It is also used in palliative care to help pain management and improve quality of life. If it is unavailable, or there is a delay in access due to cost containment, patients may still live, but survival outcomes and quality of life will be significantly reduced.

Failure to provide adequate radiotherapy can result in unacceptable delays in treatment and reduced opportunities for patient cure. Radiation oncology capacity must keep pace with increasing patient numbers. The NPRO Phase 2 is designed to achieve this, while at the same time sustaining a safe, efficient service.

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***Capital Plan – addressing need***

The HSE’s Capital Plan 2011-2015 provides for the completion of the new Children’s Hospital and Tallaght Paediatric Ambulatory & Urgent Care Centre over this period; with the final €xxm approximately Exchequer capital required after 2015. HSE has provided Temple Street with €xxm (over 2011/2012) for a four bed Transitional Care Unit in order to facilitate the discharge of patients. Emergency minor capital grants are also being provided to improve health and safety – such as the moving electrical panels from stairways.

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### 2.1.3 Mental Health Services

'*Vision for Change*' envisages a person-centred community-based mental health service with reduced reliance on in-patient care. It also describes a framework for building and fostering positive mental health across the entire community and for providing accessible, community-based, specialist services for people with mental illness. The Report recommends that the remaining psychiatric hospitals should close and that patients should be relocated to more appropriate community based settings. The development of community based facilities, which house both primary care and mental health professionals will be a huge benefit for the service user and their families

According to the HRB Census 2010 there are currently 1,186 long stay patients in psychiatric hospitals. The breakdown is as follows

▪	1 - < 5 years	494 (new long-stay)
▪	5 - < 10 years	260
▪	10 < 25 years	238
▪	25 years and over	194

There are approximately 2,790 people living in HSE community residences/beds, as follows

▪	High Support	1,613
▪	Medium Support	547
▪	Low Support	630

#### **Accommodation**

- There are approximately 1,200 acute mental health beds and a similar number of continuing care beds (excluding the independent sector).
- *A Vision for Change* estimates that the mental health services should provide in the order of 2,800 beds / places in total between acute and continuing care places.
- The 2009 VfM and Policy Review found that
  - about one-quarter of clients covered by the audit were inappropriately placed. Most of these could have had their needs met in lower supported accommodation and at lower cost;
  - almost two-thirds of those inappropriately placed in in-patient units (approximately 390 including 47 on acute in-patient units) would be more appropriately placed in community residences and
  - a third of those inappropriately placed in community residences (590) require lower support or independent accommodation.
  - The review recommends that inappropriately placed long-stay service users on acute in-patient units should be prioritised for placement in community based-services. The provision by the HSE of low and medium care support accommodation should be

discontinued. Instead, housing needs should be met by non-HSE agencies.

- The review confirmed that there are too many beds in the system at present, relative to the bed numbers recommended in 'A Vision for Change'. Implementing 'A Vision for Change' will entail reducing the number of long-stay beds from 4,709 to 1,852.
- The quality of the infrastructure is poor; only 335 of the 2,790 community beds are in units which are disability accessible and fit for purpose.
- The disposal of buildings which are no longer fit for purpose is recommended, with their proceeds being re-invested in the new infrastructure.

### ***Child and Adolescent Services***

The HSE states that the admission of children under 18 to adult mental health inpatient units should cease by 01 December 2011 save in exceptional circumstances. Good progress has been made in recent years in line with the recommendations of *Vision for Change*. Twenty beds each have been provided in Galway and Cork

### ***Central Mental Hospital***

There is an urgent need to replace the Central Mental Hospital. The existing hospital dates from 1850. The European Committee on the Prevention of Torture and Inhumane or Degrading Treatment or Punishment has been repeatedly critical of the facilities at Dundrum, specifically its unsatisfactory physical environment and sanitary conditions. The hospital is no longer an appropriate place for treating and caring for persons with mental illness and the replacement of the hospital is a priority. A site has now been identified for the new hospital and preliminary discussions have taken place between the HSE and the planning authority. The HSE is close to finalising a business case for the project which will include consideration of the funding options to deliver the new hospital.

### ***Capital Plan – addressing need***

The Capital Plan 2011-2015 contains a variety of accommodation projects which range from acute departments on acute hospital sites to hostels.

HSE's current estimate of the cost of replacing the CMH and associated facilities is €xxm. This €xxm is Exchequer funded and HSE has provided for these costs in its Capital Plan 2011-2015. The project is one of the projects (with an estimated cost of €xxm in 2011) scheduled to begin in 2011<sup>11</sup>.

### ***Disposal of Assets***

Department of Finance/Public Expenditure and Reform sanction that enables the HSE to dispose of surplus assets to fund the provision of appropriate mental health accommodation is enabling the HSE to begin the process of improving accommodation and providing a variety of accommodation for patients.

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<sup>11</sup> Capital Plan 2011-2015 - Page 42. This table shows how the HSE has cash profiled the CMH & associated facilities from Exchequer capital. The project is included in the table on Page 9 – line entry 'Additional projects to commence in 2011'.

#### 2.1.4 Services for Older People

Government Policy is to support older people to live in dignity and independence in their own homes and communities for as long as possible and, where this is not possible, to support access to quality long-term residential care. The overall target is that no more than 4.5% of older people should be in long term residential care, reducing to 4% by 2016.

Changing demographic factors and calls for quality services will place continuing demands on all services. The changing demographics will lead to increased demand for long term residential services. At present

- there are approx 500,000 (11% of total population) people over age 65;
- projected to rise to
  - 775,000 by 2021,
  - 909,000 by 2026 and
  - around 1.4m by 2041 (22%);
- the number over age 85 is expected to quadruple from approx. 60,000 in 2011 to 250,000 by 2041.

The future demand for residential accommodation is also contingent on the development of better community services to enable a greater proportion of people live at home. Developments in assistive technologies and improvements in medical and other diagnostic procedures will help to keep people well for longer.

#### ***Capital Plan – addressing need***

Between 2006 and 2010 approximately €442m Exchequer capital funding has been provided for Services for Older People including community nursing units. This funding delivered approximately 2,246 beds - comprising 879 additional and 1,367 replacement beds. Yet work commissioned by the HSE has shown that over 90% of its long term residential care facilities will have to be closed, refurbished, and/or replaced in order to comply with the National Quality Standards for Residential Care Settings for Older People in Ireland. In order to comply with regulatory requirements, the HSE is now concentrating on the refurbishment and upgrade of existing accommodation<sup>12</sup>.

HSE has allocated €xxm over the period 2012 – 2014 to refurbish existing accommodation. Residential accommodation that requires the least investment to comply with the regulatory standards will be refurbished first in order to achieve the greatest number of compliant beds for the available funding<sup>13</sup>.

#### 2.1.5 Palliative Care

Policy with regard to palliative care services, (both specialist and non-specialist) is that they should be available in all care settings, including acute hospitals and the community. This approach was, for example, reflected in the *Report of the National Council for Specialist Palliative Care (2001)* and carried through to the *Policy for Children with Life-Limiting Conditions (2009)*.

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<sup>12</sup> Capital Plan 2011-2015 – Page 43

<sup>13</sup> Ibid – Page 44

The following table (Table 2.1) indicates the numbers of patients receiving palliative care for the years 2008, 2009, 2010 and estimates for 2011.

**Table 2.1**

<b>Service Plan Monthly Averages</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011 (Expected monthly averages)</b>
No. of patients in receipt of specialist in patient units	330	292	379	326
No. of patients in receipt of day care.	260	280	315	277
No. of patients in receipt of palliative care in the community.	2,500	2,714	2,929	2,851
No. of patients in receipt of intermediate palliative care in community hospitals	80	82	103	125
<b>Totals</b>	<b>3,170</b>	<b>3,378</b>	<b>3,726</b>	<b>3,579</b>

***Capital Plan – addressing need***

One palliative care bed is provided in all new Community Nursing Units. Since 2011 the HSE agreed to co-fund the Hospice Friendly Hospitals Design & Dignity Grant Scheme. The Hospice Friendly Hospitals Programme will provide funding to match the HSE’s contribution. It will grant aid minor capital projects in acute hospital and non-acute residential settings which focus on improving end of life care<sup>14</sup>. The HSE has indented €xxm or €xxm each year for three years from 2011.

**2.1.6 Disability Services**

The residential services programme aims to

- provide the individual with a disability, to the greatest extent possible, the opportunity to live a full and independent life with their family and as part of their local community;
- ensure that the individual with a disability would, consistent with their needs and abilities, have access to appropriate health and personal social services.

Most disability services are provided by the voluntary or not-for-profit sector. These agencies provide a very significant and broad range of services in partnership with, and on behalf of, the HSE. The sector is diverse, ranging from small single-focus groups to large organisations employing several hundreds of people. It is estimated that not-for-profit organisations provide approximately 90% of all intellectual disability services and approximately 60% of physical and sensory disability services. The majority of disability service provision occurs in settings that cater for groups of people and which are separate from the rest of the community.

The Report of Disability Policy Review by the Expert Reference Group on Disability Policy was finalised in December 2010 and a summary of its proposals

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<sup>14</sup> Capital Plan 2011-2015 – Page 45

has been published on the Department’s website<sup>15</sup>. The Report acknowledges that in light of the legislation on equality, non-discrimination and the human rights emphasis of international instruments, it is neither possible nor desirable to dilute commitments to people with disabilities. The Expert Group is proposing a very significant reframing of disability services towards a model of individualised supports underpinned by mainstreaming of all public services. On this basis, State funding would be allocated based on an independent assessment of individual needs. xxx xxxx xxxxx xxxx xx xxxxxxxxxxxxxxxx xx xxx xxxxxx xx xxx xxxxxxxxxxxx xxxxxxxxxxxx xxxxxx xxxxxx xxxxxxxxxxxxxxxx xx xxxxxx xxxx xxxxx xxxxxxxxxxxx xxxxxxxx. xxxxxxxxxxxx xx xxxx xxxxxxxx xxxx xxxx xxxxxxxx xxxx xx xxxxx xx xxxxx xxxx.

**Accommodation needs**

In June 2011, the HSE published a ‘Review of Congregated Settings’ which are defined as settings providing 10 beds or more. Over 3,600 people with disabilities currently reside in congregated settings. People in residential care homes/centres are in the majority of cases, there on a voluntary basis with the approval of their families.

The report sets out a framework, based on best international practice and up-to-date research, to guide the transfer of identified individuals from congregated settings to a community based setting. As building capacity in the local community is critical to successful outcomes, the HSE and the Department of Health will work cooperatively with the Department of Environment, Community and Local Government and other Departments and State Agencies to determine a clear vision and policy statement on the relocation programme from congregated settings.

The Government approved the Housing Strategy for people with disabilities, developed by the Department of Environment Community and Local Government in July 2011. xxx xexex xxxx xxx xxx xx xxx xxxxxxxx xxxxxxxx xxxxx xxx xxxxxxxxxxx xxxxxxx xxx xxxxxxxxxxxxxx xx xxxxxx xx xxxxxxxxxxxx xx xxxxxxxxxxx xxxxxxxxxxx xxx xxxxxxxxxxxxxxxx xx xxxxxxx xx xxx xxxxxxxxxxx xxx xxxxxx xxxxxxxxxxxxxxxx xxx xxxxxxxxxxxxxxxx.

Under the Strategy people with mental health and or disabilities are eligible for assessment for local authority housing waiting list. It is intended that a high level implementation group will be set up under the Chair of the Department of Environment Community and Local Government with representation from the Department of Health, and HSE to oversee the preparation of an implementation plan to provide for the transitioning of (a) approximately 3,600 people with disabilities currently living in institutions and (b) approximately 1,600 people with mental health needs, into the community over time and within existing resources.

***Capital Plan – addressing need***

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<sup>15</sup> xxx xxxxxxxxxxx xxxxxxx xxx xxx xxx xxxxxxxxxxx xxx xxx xxx xxxxxxxxxxx xxxxxxx xxx xxxxxxxxxxx xxxxxxxxxxxxxxxx. Xxx xxxxx xxx xxxxxxxxxxxt xxxxxxxxxxx xxx xxxxx xxxxxxxxxxx.

Since 2009 considerable progress has been made with 127<sup>16</sup> beds provided.

### **2.1.7 Regulatory Compliance and Maintenance Programme**

Suitable and appropriate facilities are required in order to provide safe and cost-effective care. Recent capital investment has brought about a significant improvement in the standard of facilities across all care programmes. Nevertheless, a significant proportion of Irish health building stock is old, with some facilities dating back to the middle of the 19th century or earlier and, therefore, generally unsuitable for contemporary clinical use. Periods of relatively low capital investment in the 1970s and 1980s gave rise to issues and deficits that require attention now.

As a result of further reductions in its capital allocation since 2008, increasing percentages of the capital funding available will be required to maintain old and inefficient assets.

The HSE's Capital Plan 2011-2015 details the provision being made to support regulatory compliance and maintenance. Over the 2011-2015 period €xxm is allocated for the refurbishment and upgrade of the existing residential accommodation in order to comply with regulatory requirements. In addition up to €xxm each (€xxm in total) per year is allocated for both the acute and community care sectors for maintenance which addresses health and safety, critical life systems including medical gases, infection control and compliance with regulatory standards for hazardous substances, electrical safety and supply. Building fabric, plant and equipment must be upgraded and sustained, energy and waste management must be improved. The HSE states that allocation for regulatory compliance and maintenance must be increased if funds are not available to replace facilities. This level of funding is likely to increase if the capital allocation is further reduced.

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<sup>16</sup> There were seventeen beds in community residences in Castlepollard; 60 in 10 x 6 bed bungalows to replace accommodation in St Ita's, Portrane; thirty replacement beds at St Raphael's in Cork and twenty replacement beds were provided at St Dymphna's Carlow.

## 2.2 The consistency of the health infrastructure investment programme with the Programme for Government

The Government is embarking on a major reform programme for the health system. The aim of the reform process is to deliver a single-tier health system where access is based on need, not income. It will also provide for a more equitable and efficient health service where the appropriate care is delivered in the appropriate setting.

The Programme gives a clear commitment that

*“health capital spending will be a priority. Within the health capital budget, the immediate priority areas will be primary care centres, step down and long-term facilities and community care facilities such as day centres for older people”*<sup>17</sup>.

The Programme for Government also states that a new National Development Plan 2012-2019 will be drawn up and envisages that healthcare will be one of the priorities in the initial years<sup>18</sup>.

The Programme for Government states that universal design in planning legislation will be promoted and supported so that all environments can be used to the greatest extent possible by all people, regardless of age, ability or disability<sup>19</sup>.

### Primary Care

Primary Care is central to the Government’s objective to deliver an integrated and cost effective healthcare system. There are high costs associated with hospital-based health care. ‘International evidence indicates that Primary Care has been shown to exert a positive influence on health costs, appropriateness of care, and outcomes for some of the most common medical problems’<sup>20</sup>. The primary care model is widely believed to be less expensive than speciality medicine, partly because payments to primary care clinicians are lower and partly because primary care clinicians tend to use resources in a lean and efficient manner<sup>21</sup>.

### Acute care

The Programme for Government also commits to building the National Children’s Hospital and the new clinical building at St. Vincent’s Hospital which will deliver 100 single en-suite rooms including the cystic fibroses unit<sup>22</sup>. Public hospitals will be compensated for costs that they bear (that private hospitals do not) such as A&E, ambulances and training of health care professionals<sup>23</sup>.

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<sup>17</sup> Programme for Government – Page 37.

<sup>18</sup> Ibid – Page 14.

<sup>19</sup> Ibid – Page 55.

<sup>20</sup> Bindman et al. 1996; Engel et al. 1989; Kohn and White 1976; Moore 1992; Roos 1979 quoted in HSE Primary Care Teams – Update on the Development of Primary Care and their Operational Effectiveness (April 2011). Pages 6,7.

<sup>21</sup> Update on the Development of Primary Care and their Operational Effectiveness (April 2011). Page 7.

<sup>22</sup> Programme for Government – Page 37.

<sup>23</sup> Ibid – Page 34, 35.

**Mental health & disability services**

The Government’s policy on mental health incorporates the recommendations of *A Vision for Change*. Unsuitable psychiatric institutions will be closed and patients including those with intellectual disabilities and older people will be provided with more appropriate community based facilities. Children and Adolescents will be provided with appropriate residential accommodation<sup>24</sup>.

The Programme states that the quality of life of people with disabilities is enhanced and that resources allocated reach the people who need them. The National Standards for Residential Services for People with Disabilities will have a statutory basis and these services will be inspected by the Health Information and Quality Authority<sup>25</sup>.

**Services for Older People**

The Programme for Government states that ‘*Investment in the supply of more and better care for older people in the community and in residential settings will be a priority of this Government*’. It also states that additional funding will be provided each year for the care of older people and this funding will support more residential places ...’<sup>26</sup>.

**Regulatory Compliance and Maintenance Programme**

The Programme for Government states that capital funding for smaller projects that deal with specific immediate problems, are labour intensive and more likely to be carried out by local contractors will be prioritised Such investment priorities will include health <sup>27</sup>. The HSE’s minor capital programmes for acute and community care (up to €xxm each per year) and its proposal for the refurbishment of long term residential care through the allocation of €xxm over the years 2011-2014 for the refurbishment and upgrade of existing residential long term accommodation for older people demonstrates consistency with the Programme <sup>28</sup>.

***Shovel ready capital works***

The Programme for Government also states that certain capital works that are ‘shovel ready’ and labour intensive will be accelerated<sup>29</sup>.

Projects which are ready to proceed include

- xxxxx xxxxxx xxxxxx xxxsxxxxxxxxaxxx xxx xxxxx,xxxxxxxxxxxxxxxxxxx  
xx xxxxxxxx xxxxxxxx xxxxxx
- xxx xxxsxxxxxxxxaxxx xxxsxxxxxxxxaxxx xxxsxxxxxxxxaxxx
- xxxsxxxxxxxxaxxx
- xxxsxxxxxxxxaxxx
- xxxsxxxxxxxxaxxx
- xxxsxxxxxxxxaxxx
- xxxsxxxxxxxxaxxx

<sup>24</sup> Ibid – Pages 37, 38.

<sup>25</sup> Ibid – Page 54.

<sup>26</sup> Ibid – Page 36.

<sup>27</sup> Programme for Government - Page 16.

<sup>28</sup> HSE Capital Plan 2011-2015 - Pages 6, 36, 44, 46.

<sup>29</sup> Programme for Government - Page 8.

- xxxxxxxxxx
- xxxxxxxxxx
- xxxxxxxxxx
- Regulatory Compliance and Maintenance Programme

### **2.3 Health infrastructure programme supporting economic development and social infrastructure deficits**

- **Details of how health infrastructure investment will support economic recovery**
- **How the health infrastructure investment programme will support sustainable employment as well as employment in the immediate delivery phase**
- **How the health infrastructure investment programme will meet critical economic and social infrastructure deficits**

Part 1 of this report highlights in general terms the need to, and the benefits of, investing in health infrastructure.

In its *Jobs Initiative* the Government acknowledges that “*capital investment can stimulate economic activity as well as providing direct employment*”. It refers to the fact that an average of 8 to 12 direct jobs were being created per €1m of capital expenditure.

The Initiative states that investment must strike an appropriate balance between projects the purpose of which is to create new capacity and works whose purpose is to maintain the capacity of existing infrastructure by carrying out necessary repair and maintenance. It is acknowledged that the Initiative states that there was a case for tilting the balance for 2011 in the direction of what are called ‘minor’ capital works and away from ‘new build’ projects. The HSE plans for minor capital projects (maximum €0.5m expenditure per project) and the refurbishment of long term residential accommodation for Older People address this point. However, as this report demonstrates, there are health infrastructure requirements that must be addressed at all levels (minor refurbishment to major builds) over the coming years.

Over 160 major capital projects, ranging in value from €0.5m to €xxxm (NPH), are currently being progressed by the HSE. These are spread throughout the country and will provide an economic stimulus to all parts of the country. The minor capital, primary care, compliance with regulatory requirements (HIQA) mental health, Clár and Rapid investment programmes, spread this investment to the remotest rural areas, the smallest rural towns and the most deprived rural and urban areas and most disadvantaged areas of the community. Minor capital investment typically supports local contractors and sustains local employment in goods and services.

In the current economic climate these projects will support contractors in maintaining a skilled workforce and may assist in the recovery of support for apprentice training ensuring, inter alia, that some local areas would retain young male populations. The HSE is in discussions with FÁS on the employment and training of apprentices on health related construction projects.

The HSE Capital Plan 2011-2015 details projects proposed: large projects including NPH, NPRO, etc., medium-sized including mental health infrastructure CNU's (which will impact country-wide); and minor capital works which funds routine works required to maintain and sustain the asset (buildings, plant and equipment are replaced or refurbished) with priority given to projects that address patient, staff and public safety. The HSE states that capital expenditure increases for minor capital projects when its capital allocation is reduced. This increased minor capital expenditure is required to maintain facilities that are no longer fit for purpose.

### **2.3.1 Supporting economic development**

In partnership with two successful design / build contractors currently constructing a number of Mental Health Residential Units and Acute Hospital projects the HSE carried out an analysis of the employment created by the provision of these developments. Across a variety of project types it is estimated that each €1m of investment in health care projects will create approximately 12 man years of employment (The details of the analysis are available if required). This does not include the employment created by the equipping of the building, the transportation of the equipment and building supplies and is therefore a conservative estimate.

The above analysis is based on the Total Project Cost of the developments and not the construction cost alone. This ratio of **12 man years per €1m** is a slight increase in a similar analysis completed in 2009 and this can be explained by the reduction in tender prices and the change from off site modular construction to more labour intensive on site construction methods (block laying, etc). If this rationale is applied to the HSE's capital plan in 2011 as a whole it will result in the creation of **4,224 man years** of employment.

Smaller projects, including those funded from minor capital (projects costing up to €0.5m maximum) typically include a higher labour content. The figure is 20 person years per €1m investment and has not changed significantly since 2009..

#### ***Indirect Benefit to the economy***

Benefits accruing from investment in health infrastructure accrue in the first instance to the individual patient. There is an economic benefit if the population's health is maintained so that days at work are not lost. If patients can return to the workforce and be productive as a result of better clinical outcomes and shorter waiting times for treatment this produces economic dividend.

### **2.3.2 Supporting Sustainable Employment**

Sustainable employment is generated principally through the servicing of specialised health care plant and equipment for example MRI, PET scanners. The HSE supports energy efficient projects which sustain employment in this sector of the economy.

### **2.3.3 Addressing Social Infrastructure Deficits**

High quality public health care facilities contribute hugely to social inclusion, particularly for some socially vulnerable groups such as the elderly, those with a disability and with mental illness. Good health is a prerequisite for participation

in the social and economic life of society. There is a well observed relationship in Ireland and internationally between health status and income levels, especially for the most disadvantaged groups in society.

All health care infrastructure addresses social infrastructure deficits. All citizens must be able to access and utilise health services in a fair and equitable manner. Health care services must respond to the needs of this diverse population and appropriate health care infrastructure must be put in place to cater for this need. Investment in health care facilities provides employment and services in the remotest and most disadvantaged areas of the country.

Many health care programmes, particularly in the community care and primary care areas, address issues of social inclusion, provide addiction, mental health and disability services in a Primary Care setting. Also many of the Clár and Rapid projects which address issues of social inclusion are funded through the HSE's capital allocation. A small number of social inclusion specific projects are developed in partnership with local authorities. Community care and primary care programmes are fundamental to supporting sustainable communities.

Government recognizes access to health services as an important aspect of social inclusion and as one of the important aspects of reducing poverty and social exclusion. Construction of new health care facilities will help improve the physical facilities required to underpin access to a quality multi-disciplinary primary care service. Disadvantaged groups have greater requirements for the varying elements of such a service and potentially more to gain from it. These groups are also those most dependant on the public hospital system.

#### **2.3.4 Market Trends**

In addressing how the capital programme supports employment, local communities, etc., it is appropriate to highlight issues that are impacting on capital projects (and spend) in the current economic climate.

The Irish construction industry peaked in 2007 with an output of €38b, or 24% of GNP.<sup>30</sup> The industry has declined rapidly since then and in 2010 was €11b or 9% of GNP. Analysts are predicting an output of under €10b in 2011 for the industry.

The rate of the fall in the level of activity in the market has reduced and there are indications that it is bottoming out. Most 2011 projections, however, still predict a further small decrease in activity in 2011.

##### ***Tenders***

Irish construction tender prices peaked in 2007 and by the end of 2011 will have fallen by 35% leaving construction costs at 1997 levels. The fall in tender prices was most dramatic in 2008 and 2009 and continued to fall in 2010 by an

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<sup>30</sup> This analysis is based on industry reviews by the CIF, Bruce Shaw and Davis Langan. Provided by HSE.

additional 6%. Due to the low level of activity it is likely that tender prices will continue to fall in 2011 by 2% to 3% at most.

Construction costs, as distinct from tender prices, have only fallen by between 8% and 9% in the same period. This fact alone would suggest that tender prices are now at cost, if not below cost, in many cases.

The very competitive tenders reflect the reduction in activity and the resultant reduction in the number of tenders. However the downside is the failure of several major contractors and many sub-contractors. Over 40% of all business failures in recent years are construction related. The reduction in the number of companies able to tender for work will, sooner or later, impact on tender prices which will start to rise again.

### ***Impact on the HSE***

In general HSE tenders prices have reflected the national trend. Pricing continues to be competitive and most successful tenders are at, or below, the pre-tender estimates.

The failure of contractors had an impact in 2011. One major contract was disrupted by the failure of the main contractor. This project, Letterkenny Regional Hospital Emergency Dept and Ward Block Project, was in construction at the time and will now be completed by a contractor appointed by the Bond Holder, with a resulting delay of approximately 6 months. Other contractor failures have had less impact.

The greatest delays the HSE has encountered occur between receipt of tenders and commencement of works. These delays can be due to:

- tenderers getting into financial difficulties post invitation to tender;
- delays in receiving confirmation of the financial viability of contractors;
- delays encountered by contractors putting a bond in place;
- delays in main contractors appointment of sub-contractors.

## 2.4 Commitments and impact of potential cut

### 2.4.1 Full Allocation 2012-2016

The HSE 2011-2015 Capital Plan incorporates all of the projects planned to be in construction at the end of the year (Table 2.2 below) as well as incorporating the new Children's Hospital, CMH and Radiation Oncology projects.

**Table 2.2**

<b>Available Funding</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Totals</b>
		<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>
Capital Allocation	<b>337.25</b>	<b>333.85</b>	<b>337.95</b>	<b>334.25</b>	<b>334.25</b> *	<b>1,677.55</b>
HSE Contractual Commitments	212.92	59.24	4.96	0.20	0.00	<b>277.32</b>
Capital required to complete	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	<b>xx.xx</b>
Minor Capital, Contingency, Project Management	xx.xx	xx.xx	xx.xx	xx.xx	xx.xx	<b>xx.xx</b>
<b>Projects in Planning</b>						
<i>Additional projects to commence in 2011</i>	<b>30.90</b>	<b>81.91</b>	<b>89.63</b>	<b>71.50</b>	<b>3.79</b>	<b>277.73</b>
<i>Additional projects to commence in 2012/2013</i>		XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
<b>Unallocated funding</b>		XX.XX	XX.XX	XX.XX	XX.XX	XX.XX

\* 2015 allocation assumed

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These projects are cash flowed to completion (including NPRO unitary payments) and will absorb the allocated funding in 2012. There remains unallocated funding in 2013 to 2016 which will allow new priority projects to commence. Projects which will commence construction in the next 36 months and which are cash flowed in this programme include

- New Children's Hospital and the associated Paediatric Ambulatory & Urgent Care Centre.
- Radiation Oncology - enabling projects, VAT and professional fees.
- Central Mental Hospital and associated facilities.
- xxx xxxxxxxxxxxx xx xxx xxxx xxxxxxxx xxxxxxxxxxxxxxxxxxxx xxxxxxxx<sup>32</sup>.
- Priority mental health infrastructure including Special Care & High Support Residential facilities for children and adolescents, acute mental health units at Beaumont, Limerick MWRH, residential accommodation at St Loman's Mullingar & Wexford.
- Wexford General ED & Maternity Project.
- St Luke's Hospital Kilkenny ED, MAU & Day Unit.
- National Ambulance Control Centre and replacement ambulances.
- MWRH Nenagh Theatre Project.
- Coombe Maternity Hospital – Emergency Theatre.
- Ballinamore PCC & Residential Unit.

<sup>31</sup> HSE Capital Plan 2011-2015, Page 9.

<sup>32</sup> XXXXXXXXXXXX xxxxx xxxxxxxxi xxx xxx xxxxxxxxxxxxxxx xxx-xxxx, xxxxxxxxxxx, xxxxxxx.

The HSE's Capital Plan 2011-2015 is attached. This document provides greater detail on the capital programme.

The next table (Table 2.3) outlines in very general terms how the major projects will be accommodated in the HSE's Capital Programme 2012 – 2016. These figures are indicative at this time and are based on the most recent cost projections.

**Table 2.3**

<b>HSE Capital Programme 2012-2016</b>						
<b>Subhead</b>	<b>Description</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016 Grand Total</b>
		<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>
			<b>Allocation</b>			
<b>Total Capital Allocation</b>		<b>333.850</b>	<b>337.950</b>	<b>334.250</b>	<b>334.250</b>	<b>1,674.550</b>
<b>Gross Capital Commitments</b>		<b>185.370</b>	<b>46.170</b>	<b>10.200</b>	<b>5.000</b>	<b>246.740</b>
	Minor Capital/Project Management/HIQA compliance, equipping, etc	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	National Paediatric Hospital	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	NPH Ambulatory Care	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Radiation Oncology (as PPP)	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Central Mental Hospital	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Mental Health Programme	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Acute Hospital - Clinical Programmes	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Older People Care Group Projects	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Disability Projects	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Primary Care - Capital funded	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Contingency	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	<b>Total</b>	<b>333.850</b>	<b>337.950</b>	<b>334.250</b>	<b>334.250</b>	<b>1,674.550</b>
<b>Primary Care Leases</b>		xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx

The completion of the planning permission and tendering stages will enable the verification of the estimated construction costs of all the projects included above.

### ***Acute Hospital Clinical Programme***

The Acute Hospital Clinical Programme addresses (a) service needs, (b) enables the re-organisation of services (for example in the Mid-West, South and South East) and (c) ensures compliance with regulatory standards. This approach to service needs and reorganisation is demonstrated in the Capital Plan 2011-2015. For example there are nine new capital projects of varying sizes beginning in 2011 in Cork city hospitals. Two new 2011 projects which support the clinical programme will be funded by philanthropy. There is €xxm for the provision of three orthopaedic theatres at SIVUH and €xxm to deliver a project<sup>33</sup> supporting a number of service needs at the MWRH Limerick. While it cannot be proven that the Acute Hospital Clinical Programme can attract philanthropic funding these examples demonstrate how the HSE can make optimum use of philanthropic funding and the how this can assist in leveraging future philanthropic donations.

### ***New Children's Hospital***

Planning permission has been lodged. The HSE's Capital Plan 2011-2015 and Table 2.3 sets out the Exchequer cash profile for delivery of the new Children's

<sup>33</sup> Symptomatic breast, dermatology, acute stroke, CF inpatient & out-patient block; all future funding from 2011 will be provided by the Mid Western Hospitals Development Trust and others.

Hospital taking into account expenditure to date. It is estimated that a further €xxm Exchequer funding will be required to develop the education & training centre, research facilities and the hospital school. The NPH Review states

*‘Research and education are critical elements of the mission of a tertiary children’s hospital’<sup>34</sup>.*

***Central Mental Hospital and associated forensic facilities***

The estimated cost of replacing the Central Mental Hospital and providing the associated facilities is €xxm. The facilities are a replacement hospital, 4 x 30 bed Intensive Care Rehabilitation Units (ICRUs) and 1 x 10 beds each for intellectual and child & adolescent.

***Mental Health Infrastructure Programme***

The funding allocated will provide replacement accommodation in a variety of settings including hostels and acute departments on acute hospital campuses in line with the recommendations of *Vision for Change*.

***Primary Care***

The tables above shows the Exchequer capital funding to be provided for primary care centres to be provided in socially disadvantaged areas. The revenue funding required for leased PCCs is shown in the last line of the tables.

***Residential Accommodation (Older People, Disability & Mental Health)***

One of the main focuses of the capital programme 2012-2016 is to provide appropriate residential accommodation for the above care groups in appropriate settings. Funding of **€xxxm** (€xxxm + €xxm + €xxm) in total is allocated over the period 2012-2016. In addition each year a large proportion of the minor capital allocation is spent addressing specific regulatory and statutory requirements. All these new and refurbished facilities will meet HIQA requirements and will address the major deficits and achieve the greatest number of compliant beds for the funding allocated.

***NPRO – PPP- table above***

The estimates in the table above (Table 2.3) include Exchequer funding for xxxxxxxx xxxxx xx xxxxxx xxx xxxx xxxxxxxxxxxx, xxxxxxxxxxxxxx xxx, xxx xxx xxxxxxxx xxxxxxxx. xxx xxxxxxxxxxx xxxxxxxx xxxxxxxx xxx xxxxxxx xx xxxxxx ss ssss.

***NPRO - Exchequer funded – table below***

Since the NPRO PPP has not been offered for tender, the HSE has also considered the impact on its capital allocation if the National Programme for Radiation Oncology is not progressed by means of a PPP. Table 2.4 (next page) shows the estimated costs if the NPRO is to be delivered by traditional means, i.e. the Exchequer capital allocation.

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<sup>34</sup> The National Paediatric Review part Two – Clinical Analysis

**Table 2.4**

**HSE Capital Programme 2012-2016 - Exchequer Funding of NPRO**

Subhead	Description	2012	2013	2014	2015	2016	Grand Total
		€m	€m	€m	€m	€m	
		<b>Allocation</b>					
<b>Total Capital Allocation</b>		<b>333.850</b>	<b>337.950</b>	<b>334.250</b>	<b>334.250</b>	<b>334.250</b>	<b>1,674.550</b>
<b>Gross Capital Commitments</b>		<b>185.370</b>	<b>46.170</b>	<b>10.200</b>	<b>5.000</b>	<b>0.000</b>	<b>246.740</b>
	Minor Capital/Project Management/HIQA compliance, equipping, etc	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	National Paediatric Hospital	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	NPH Ambulatory Care	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Radiation Oncology - Exchequer	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Central Mental Hospital	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Mental Health Programme	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Acute Hospital - Clinical Programmes	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Older People Care Group Projects	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Disability Projects	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Primary Care - Capital funded	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	Contingency	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx
	<b>Total</b>	<b>333.850</b>	<b>337.950</b>	<b>334.250</b>	<b>334.250</b>	<b>334.250</b>	<b>1,674.550</b>
<b>Primary Care Leases</b>		xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx	xx.xxx

This table demonstrates that funding can be provided from the existing capital envelope and within a similar timeframe. However, provision would have to be made in future years for equipment replacement during the lifetime of the facilities. Within a PPP project this funding provision is made up front – included in all unitary payments and is paid for over the lifetime of the PPP. The table immediately below profiles €xxm Exchequer capital which is an increase of €xxm on the PPP profile over the period 2012-2016. This additional expenditure might be at the expense of other care categories.

## 2.4.2 Contractual Commitments

A schedule of all committed capital projects over €4m is attached as Appendix 3 – electronic copy provided.

The next table (Table 2.5) summarises the HSE's estimated contractual commitments at the end of 2011.

**Table 2.5**

**HSE Vote 40 - Projected HSE Capital Commitments at end of 2011**

Subhead	Description	2012	2013	2014	2015	2016	Grand Total
		€m	€m	€m	€m	€m	€m
<b>Allocation</b>							
<b>C1 &amp; C2</b>	Building, Equipping Furnishing Health Facilities & Higher Ed Nursing	333.850	337.950	334.250	334.250	334.250	<b>1,674.550</b>
<b>C4</b>	Building & Equipping Mental Health and Other Health facilities (funded from disposal of surplus assets)	0.000	0.000	0.000	0.000	0.000	<b>0.000</b>
<b>Total Capital Allocation</b>		<b>333.850</b>	<b>337.950</b>	<b>334.250</b>	<b>334.250</b>	<b>334.250</b>	<b>1,674.550</b>
<b>C1 &amp; C2</b>	Capital commitments	177.870	46.170	10.200	5.000	0.000	<b>239.240</b>
<b>C4</b>	Capital commitments	7.500	0.000	0.000	0.000	0.000	<b>7.500</b>
<b>Gross Capital Commitments</b>		<b>185.370</b>	<b>46.170</b>	<b>10.200</b>	<b>5.000</b>	<b>0.000</b>	<b>246.740</b>
<b>DoF Commitment Threshold</b>		187.000	150.000	112.000	112.000	75.000	<b>636.000</b>

2015 & 2016 allocations assumed

At the year end (2011) the projects which will be in construction and as a consequence are contractual commitments will include;

- Mater Adult Redevelopment Project
- St Vincent's University Hospital Phase 2 Development <sup>35</sup>
- MWRH Limerick Critical Care Block
- Waterford Regional Hospital ED Department
- Kerry General Hospital ED Department
- Ennis General Ward Block
- NIMIS
- UH Galway Clinical Research Unit
- Wexford General ED & Maternity Project
- St Luke's Hospital Kilkenny ED, MAU & Day Unit
- National Ambulance Control Centre
- Thurles & Nenagh Ambulance Bases
- Acute mental health units at Beaumont & Limerick and refurbishment of the Waterford acute mental health unit.
- Priority mental health residential accommodation at St Loman's Mullingar, Grangegorman and Wexford, various hostels
- Ballyfermot, Glenties PCCs
- Kenmare Community Nursing Unit
- HSE South acute hospital reorganisation projects
- And many others.

<sup>35</sup> This project will provide 100 single rooms including provision for cystic fibrosis isolation facilities. Please see PfG, page 37.

### 2.4.3 Reduced allocation 2012-2016 - impact of a 30% reduction on thresholds

The following table (Table 2.6) shows the

- HSE approved and assumed capital allocation;
- the approved level of commitments for 2012 and future years and
- the impact of a 30% cut on both commitments and the capital allocation.

**Table 2.6**

	2012	2013	2014	2015	2016	Total
<b>HSE's notified and assumed allocation (2015 &amp; 2016)</b>	333.850	337.950	334.250	334.250	334.250	1,674.550
less 30 % reduction	<u>100.155</u>	<u>101.385</u>	<u>100.275</u>	<u>100.275</u>	<u>100.275</u>	<u>502.365</u>
<b>remaining 70%</b>	<b>233.695</b>	<b>236.565</b>	<b>233.975</b>	<b>233.975</b>	<b>233.975</b>	<b>1,172.185</b>
<b>Approved level of commitments for 2012 &amp; future years</b>	187.000	150.000	112.000	112.000		
less 30 % reduction	<u>56.100</u>	<u>45.000</u>	<u>33.600</u>	<u>33.600</u>		
<b>remaining 70%</b>	<b>130.900</b>	<b>105.000</b>	<b>78.400</b>	<b>78.400</b>		

#### *Impact of reduced commitment thresholds*

As a consequence of any reduced allocation, it is assumed that the DPER would also reduce the HSE's approved thresholds for commitments. This would constitute a double penalty making it impossible to progress any projects until the HSE capital commitments were reduced below the **€130m** threshold. This means that no additional commitments / new projects could be undertaken in 2012. Please see Table 2.6 above.

The HSE cannot exceed or plan to exceed these approved thresholds. The impact of the reductions in the approved threshold for commitments means that project progress is slowed further. In the Capital Plan 2011-2015<sup>36</sup>, the HSE sets out clearly the implication of the new Children's Hospital for its notified capital allocation (before a 30% reduction).

*'The implications of a project of the scale of the National Paediatric Hospital are that when the main contract is signed .. progress will be restricted on other acute and community care projects as HSE cannot enter into other commitments unless the Department of Finance authorises increased thresholds'.*

For example, in the Capital Plan 2011-2015, the Mater redevelopment project xxxxx xx €xxx xx xxxx xxxxxx xxx xxxx xx xxx xxx xxxxxxxx xxxxxxxx has been cash flowed for approximately €xxin 2011. This project demonstrates the impact a large project has on the capital allocation, approved commitment thresholds and HSE's ability to progress large essential projects while that the same time ensuring that equally urgent smaller projects are delivered.

### 2.4.4. Impact of 30% reduction on health services delivery

A 30% cut over the period 2012-2016 represents a reduction of €502m on an allocation of €1,670m and with consequent reductions in approved thresholds for

<sup>36</sup> HSE Capital Plan 2011-2015, Pages 7, 8

commitments would have very serious consequences for the acute and community care infrastructure programmes. Please see Table 2.6 above.

A 30% reduction (€502m - table below) represents a project greater than that for  
xxx xxx xxxxxxxxxxx xxxxxxxl xxx xxx xxxxxxxxxxx xxxxxxxxxxxc xxxxxxxxxxx  
xxxxxxxx xxx xxxxxxx xx xxxxxxxxxxx xxxxx xx xxx xxxxxxx xxxxxxx xx xxx  
xxxxx xxxxxxx xxxxxxxxxxx xxxxx - xxx.

In effect €502m represents costs of delivering

- xxxnxxxx xxxxxxxxxxx xxxxxxx - €xxxxm,
- xxx xxxxx xxxxx – €xxm xxx
- xxx xxxxxxx xxxxx x xxxxxxxxxxx xxxxx xxx xxx xxx xxx - €xxm

A 30% reduction in the HSE’s capital allocation in 2012 would result in €xx.xxm being available for allocation after the contractual commitments are honoured. €xx.xxm would be required for the acute & community care maintenance and regulatory compliance programme funded through minor capital grants leaving only €xxm

While the capital programme is designed to support an increase in the number of people assessed and treated at community level (in line with Government policy) there is a pressing need to replace and upgrade hospital infrastructure and equipment for patients who require to be treated in local or regional hospitals, or hospitals providing national specialties (e.g. the developments underway or planned under the National Cancer Control Programme and to support the implementation of the HSE Clinical Programmes initiative).

***New Children’s Hospital***

The recent independent review has recommended that the new Children’s Hospital be developed. It is widely accepted that the main children’s hospitals (Crumlin and Temple St) are no longer fit for purpose and are in poor structural condition. In this regard both hospitals submitted proposals to rebuild almost 10 years ago and have been struggling to continue providing services. The combined cost of rebuilding just these two hospitals without the advantage of relocation with an adult hospital is very similar to the cost of building the new hospital.

It is Government policy that paediatric services at these two hospitals should be consolidated with Tallaght children’s hospital onto the Mater site. This policy is supported by a number of reports (McKinsey, RKW etc) which clearly indicate the ongoing clinical risk deriving from the stand-alone nature of these hospitals in addition to their physical infrastructure.

There are ongoing revenue costs deriving from the inefficiencies of having three children’s hospitals operating in the city. These costs are estimated at €23 million per year. While it is accepted that steps must be taken to ensure greater cohesion and reduction in these costs they are unlikely to be effectively tackled without the impetus of the hospitals having to work together in advance of the move to the new hospital.



XXXX XXX XXXXXXXX, XX XXXXXXXXXXXX XXXXXXXX XXX, XXX XXX XXXXXXXXXXXX XX  
 XXXXXXXX XXX. In section 2.1.2, details are provided which demonstrate the need  
 for replacement facilities. XXXXXXXX XXXXXXXX XX XXXXXXXXXXXX XX XXX XXXXXXXXXXXX  
 XXX XXXXXXXXXXXX.

The over-riding issue for the State is that if capacity is not expanded, the HSE  
 will fail in its duty of care to patients who will require radiotherapy provision in  
 a timely fashion as part of their care pathway.

## CONCLUSION

In addition to projects under construction and those in planning, the HSE Capital  
 Plan 2011-2015 states that there are previously approved projects with an  
 estimated cost of **€1,265m** which were paused as a consequence of the  
 reductions in the HSE's capital allocation since 2008. Many of these projects  
 have been progressed to detailed design and planning application stage (the next  
 stage is to advertise for tenders). If a 30% reduction is applied to the 2012-2016  
 period the value of paused / deferred projects will increase by **40%** to **€1,765m**

It is widely accepted that construction costs are at their lowest point (please see  
 section 2.3.4 Market Trends) and any delay to the construction of major  
 construction projects could lead to an increased costs from construction industry  
 inflation, reworking design etc.

**Table 2.7**

HSE Vote 40 - Construction Allocation only	2005 €m	2006 €m	2007 €m	2008 €m	2009 €m	2010 €m	2011 €m	2012 €m	Total €m
C1	491.524	485.517	487.411	544.181	370.724	344.253	334.711	234.298	3,292.619
C2	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>20,312</u>
<b>Total</b>	<b>494.063</b>	<b>488.056</b>	<b>489.950</b>	<b>546.720</b>	<b>373.263</b>	<b>346.792</b>	<b>337.250</b>	<b>236.837</b>	<b>3,312.931</b>
Allocation as a percentage of 2008 Allocation					68%	63%	62%	43%	
Reduction as a percentage of 2008 allocation					32%	37%	38%	57%	

Source = REV

- The table above (Table 2.8) demonstrates how the HSE's construction capital allocation has fallen since 2008.
- It shows that following a further 30% reduction in 2012, the HSE's capital allocation would be **43%** of its 2008 construction allocation.
- In 2012, this would represent a reduction of **57%** in its construction allocation since 2008 and would have significant and negative impact on the operational integrity of health facilities and the health service generally.
- An allocation of **€234.3m** in 2012 is less than the current redevelopment of the Mater<sup>39</sup> estimated at **€xxxm**.

While much has been achieved in the last number of years there has been a history of under-investment in the area of health care facilities and there remains

<sup>39</sup> The Mater redevelopment project includes - new A&E with 12 observation beds, OPD, ICU/HDU (36 beds), 12 new theatres, radiology, CSSD, catering, and 120 replacement beds. Total replacement beds = 168.

a significant legacy of poor and unsuitable building stock which needs to be addressed.

The current health estate in Ireland spans from the early nineteenth century to the present day. Many of the buildings dating from the 1800s are workhouse type facilities which have limited value as accommodation for modern healthcare services; due to their age, configuration and structural constraints. They, typically, are inflexible in design with many load bearing walls and narrow floor plans which restrict their ability to comply with clinical practice, Health Standards, Building Regulations and technological requirements. These older healthcare facilities pose many problems when maintenance and running costs are taken into consideration. The poor levels of insulation, the type of building fabric, out dated heating and water systems and poorly maintained roofs have a negative impact on their ongoing viability. Consideration has to be given to whether it is more economically advantageous to refurbish an existing facility or build a new purpose briefed, designed and constructed facility incorporating the latest technology, space standards, infection prevention and control as well as incorporating energy efficient systems.

The rate of change within the health service, including the type and complexity of treatments that are developed is ever increasing and with this change comes further demands for bespoke solutions for the incorporation of the infrastructure required to support these services. Typically an acute hospital building may have a relatively short life span before requiring alterations to account for these changes; although every effort is made to ensure the briefing of projects anticipates this need as far as possible. There continues to be a significant need to sustain investment to ensure the development a modern, sustainable, efficient platform from which to deliver modern healthcare.

Currently philanthropic donations will fully finance two projects at SIVUH and MWRH Limerick (€xx.xm). In addition Atlantic Philanthropies is to provide €xx.xm (of €xx.xm) for the Centre of Excellence for Ageing at St James's Hospital. The St Patrick's / Marymount Hospice Project, Cork currently underway has an estimated cost about €xxm of which €xxm is philanthropic funding. It has been widely advertised that considerable philanthropic funding is required for the construction of the Children's Hospital. These examples demonstrate how philanthropic funding can be used to add value to targeted care programmes as opposed to such funding being provided for projects dictated by bodies other than the HSE.

A further reduction would not take into account the substantial costs already incurred in developing projects, the costs of deferral or the costs of the opportunities lost. Capital Investment for Health – Case Studies from Europe states –

*'A major challenge in designing hospitals – or indeed any large-scale investment project – to be sustainable in the long term is the long time periods involved in planning, financing, construction and operation. The interval between concept and commissioning of major hospitals can range from 5 to 10 years, while several more years are needed to construct the hospital. This can mean that many*

*hospitals, when beginning to operate, do not meet the current (or future) health needs of their population.*<sup>40</sup>,

Table 2.3 and (Table 2.4 – Exchequer funded NPRO) – shows the HSE’s estimates of its cash flow projections for its current allocation and demonstrates how it proposes to deliver its priority projects.

- ***Children’s Hospital & Paediatric Ambulatory & Urgent Care Centre – €xxxm***<sup>41</sup> including education & training centre, research facilities and hospital school. The decision to provide one world class tertiary paediatric hospital co-located with a leading adult academic hospital is widely accepted and much anticipated. This document provides detail on the structural defects of Crumlin and Temples Street hospitals and the consequent poor standards of services (air-handling, ventilation, heating and electrical) and patient accommodation. It also states that substantial funding will be required immediately should construction of the new hospital not progress. Such capital expenditure in an effort to meet the most basic of regulatory standards would not represent value for money. The recent Independent Review confirmed the considerable savings on current funding that a new hospital would deliver.
- ***NPRO – €xxxm – PPP.*** The National Cancer Registry is reporting that newly diagnosed cancer is likely to double in the next twenty years primarily due to our ageing population. This document summarises the ‘do-nothing option’. Failure to provide adequate services will reduce patient survival outcomes and quality of life. The HSE has provided capital projections for both PPP and Exchequer funded options.
- ***Acute Hospital – clinical programmes - €xxm***  
This programme provides a structured approach to the re-organisation of services through the delivery of acute services in the most appropriate location, supports the reorganisation of acute hospital services, delivery of service needs.
- ***Residential Accommodation (Older People, Disability & Mental Health Services) – €xxxm.*** The level of need is set out in detail in pages 11 to 17. Considerable capital expenditure has been invested in long term residential accommodation for older people (between 2006 & 2010 - €442m for 2,246 beds) yet depending on the number of public beds required – the HSE estimates that these costs will be over **€600m**. Reports published over the summer months set out the accommodation needs for people with disabilities living in congregated settings. The Department supports assistance for the Department of Environment in meeting these needs.  
*Vision for Change* set of the accommodation needs which are being addressed slowly and partially dependent on proceeds from disposals. The CMH has been repeatedly criticised for its unsatisfactory physical

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<sup>40</sup> European Observatory on Health Systems and Politics, Observatory Studies Series No 18, Page 2.

<sup>41</sup> The €xxx comprises €xxxm + €xxm (tables 2.3 & 2.4 Pages 25 & 27) and €xxm (Pages 25, 26 – paragraph New Children’s Hospital).

environment and sanitary conditions. Replacing the CMH and the provision of associated facilities remains a priority.

- ***Primary Care - €xxm capital & €xxm revenue***  
Delivery of a primary care structure which enables the transfer of appropriate care in the community as opposed to the increasingly unsustainable acute based model is essential if the Government's objective of delivering a cost efficient and cost effective healthcare system.
  
- ***Regulatory Compliance and Maintenance Programme (minor capital projects) - €xxx.xxm***  
The allocation will enable the HSE to comply with statutory & regulatory standards, provide necessary equipping and refurbish and upgrade accommodation.

## **2.5 Information on programmes primarily delivered by the HSE (including planning, procurement, and project management).**

The Minister for Health sets policy priorities informed by, inter alia, the HSE. These in turn determines current and capital spending priorities. The HSE prepares a Capital Plan each year which is submitted to the Minister for Health to approve (with the consent of the Minister for Public Expenditure and Reform). Once the capital plan is approved by the Minister procurement and project management is a matter primarily for the HSE. The Department of Health (and the Department of Public Expenditure and Reform) monitors expenditure and progress.

Details of the HSE's management and monitoring of the Capital Programme is provided in the Capital Plan 2011-2015 (pages 25-27). Copy of Plan provided.

While the HSE funds the development of the new Children's Hospital, the National Paediatric Hospital Development Board is responsible for the delivery of this hospital. The Board was established under SI 246/2007 - The National Paediatric Hospital Development Board (Establishment) Order, 2007. This SI was amended by the Health (Miscellaneous Provisions) Act 2007 (No 42 2007).

## 2.6 Current expenditure implications of proposed future capital investment

The HSE advises that the majority of projects do not show any obvious revenue or staffing implications and are progressed on the basis of providing the existing level of service.<sup>42</sup> Projects may also be approved with the proviso that no additional revenue and/or staffing will be provided.

Projects with revenue implications are only approved after they have been signed off by the HSE Regional Director of Operations who confirms that they are in line with service needs; that the increased revenue has been approved, or is committed by the HSE.

Details of revenue implications for the capital investment programme 2011-2015 are shown in the following table. These costs are modest and pertain to both new projects and projects already in progress. These tables do not represent the HSE's requirement for additional revenue in any given year; they represent the revenue estimated for the approval process for specific projects and services.

**Table 2.8**

	2011	2012	2013	2014	2015	Total
	€m	€m	€m	€m	€m	€m
<b>Acute</b>	10.25	3.32	0.38			13.95
<b>Community Care</b>	0.99	5.00	1.31			7.30
<b>Prof. Education &amp; Training</b>						
<b>Corporate</b>						
<b>Totals</b>	<b>11.24</b>	<b>8.32</b>	<b>1.69</b>			<b>21.26</b>

43

While there may be some implications for the current budget, this must be examined with regard to the savings possible through the use of modern buildings which enable modern heating systems and energy management, modern transport. Modern equipment including ICT (NIMIS) improves patient outcomes and impact positively on service delivery. Although these examples are not measured in the Capital Programme, their saving to the health services cannot be discounted.

### *New Children's Hospital*

Potential revenue savings are estimated at €23m per year.

### *NPRO*

The development of the NPRO has revenue implications which include staffing costs. The current estimate is approximately €xxm. x xxxxxxxx €xxm xxxx xx xxxxxxxxxx xxxx xxx xxxxxxxxxxxxxx xxxxxxxxxxxx xx xxxxxxxxxxxxxx.

### *Primary Care Centres*

The revenue cost of leased primary care centres is estimated at €xxm over the period 2012 – 2016.

<sup>42</sup> Capital Plan 2011-2015, page 24

<sup>43</sup> Ibid, page 21

## 2.7 Outputs and outcomes expected from proposed health capital investment

Section 2.1 outlines the Government/Department of Health objectives in relation to each care programme area.

The driving force for capital investment in health and personal social care facilities will be to support the provision of the best possible service, in terms of effectiveness and quality, to patients. A central aim will be to ensure that high-quality and cost effective care is delivered in the most appropriate settings.

This increased level of investment in health capital in recent years has, through the completion of projects large and small in all care programmes, right across the country, transformed service provision from what was in some cases 19th century facilities to those of the 21st century. The new facilities that have opened have brought huge improvements for clients, staff and the public alike. A wide range of new acute and non-acute facilities have been brought on-stream which meet modern day standards for quality patient care. These new infrastructure projects are designed to deliver improvements in all aspects of health and personal social service provision for a modern, high quality healthcare system. These have also led to significant improvements in our health services which have seen people living longer and healthier lives and getting faster access to an ever widening range of specialist treatment.

The following table shows that the HSE's annual Exchequer capital allocation has been significantly reduced since 2008.

**Table 2.9**

HSE Vote 40 - Construction	2005	2006	2007	2008	2009	2010	2011	2012	Total
Allocation only	€m	€m	€m	€m	€m	€m	€m	€m	€m
C1	491.524	485.517	487.411	544.181	370.724	344.253	334.711	234.298	3,292.619
C2	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>2,539</u>	<u>20,312</u>
<b>Total</b>	<b>494.063</b>	<b>488.056</b>	<b>489.950</b>	<b>546.720</b>	<b>373.263</b>	<b>346.792</b>	<b>337.250</b>	<b>236.837</b>	<b>3,312.931</b>
Allocation as a percentage of 2008 Allocation					68%	63%	62%	43%	
Reduction as a percentage of 2008 allocation					32%	37%	38%	57%	

Source = REV

Government attaches a high priority to investment in health services, including capital infrastructure. It is paramount that the improvements in population health demonstrated over recent years continue. The rate of improvement has been remarkable by reference to previous decades and trends in other countries as evidenced by the following statistics

- Infant mortality was 3.2 deaths per 1,000 births in 2009, which is lower than the EU 27 average of 4.3.
- Between 1999 and 2008 mortality rates in Ireland have fallen by 29% whereas mortality rates in EU countries have fallen by 18% over the same period.
- Deaths from circulatory system diseases in Ireland have fallen by 41%, compared with a decline of 27% across EU 27 countries for the same period. In 2008, Ireland was 19% below the EU 27 average. Over the last 30 years, there has been a 66% decrease in deaths from circulatory system diseases in Ireland.
- In 2008, life expectancy at birth in Ireland stood at 80 years of age. This is almost one year above the EU27 average life expectancy.
- Ireland continues to have the highest levels of self-perceived health amongst EU27 countries, with over 83% of people rating their health as being good or very good.

An additional reduction of 30% would reduce the 2012 construction allocation to **43%** of the 2008 allocation. Such a reduction would have a major impact on the key objectives of capital investment and the HSE's ability to deliver the appropriate facilities in a timely manner, suitably located, efficiently designed and appropriately procured, to serve defined and prioritised needs. In the present economic climate maintaining the current capital allocations will demonstrate the Government's commitments set out in the Programme for Government.

### **3 Responses to Questions posed by the Department of Public Expenditure & Review – HSE ICT.**

#### **Introduction**

Information, Communications and Telecommunications (ICT) is a support function within the Health Service providing the necessary systems, applications, hardware and telecommunications infrastructure required to provide a safe and efficient health service.

The ICT capital envelope has been of the order of €40m in recent years compared with an overall expenditure of up to €14 billion for the HSE as a whole. Ireland compares unfavourably with other western countries in terms of investment in ICT for Healthcare Services. Comparable countries typically spend 4% of their total health budget on ICT. In Ireland this figure (including revenue expenditure) is less than 1%. Whilst many health sites have made significant efforts to improve this position, the level of penetration in terms of depth or breadth is low. The capacity to link these systems laterally, providing the connectivity to enable the health system to provide clinicians with patient data, irrespective of where they are receiving treatment, does not exist.

There is need for a continued commitment to the necessary capital funding required for ICT in healthcare. ICT is a central and necessary presence in high performing, best practice health systems; indeed the enabling role that ICT can play in transforming service provision is widely recognised.

With regard to the level of discretion that exists regarding ICT capital expenditure each year, the following points are fundamental and are worthy of note:

- Once a decision has been made to incur general capital expenditure, effectively a decision has also been made to incur a corresponding ICT expenditure. Every new building or refit requires ICT infrastructure and systems as part of the fit out; there is an obligation to incur ICT capital expenditure associated with commissioning. The most obvious example of this is the new National Paediatric Hospital.
- Another area where there is very little discretionary spend with regard to ICT capital investment is in regard to the replacement of major, critical business applications and systems. The Health Services have over 1000 applications plus a significant ICT technical infrastructure in place. Many of systems are business critical, core, in many cases clinical, applications that are embedded into critical operational processes. Typically these systems require a major refresh / upgrade every 5 to 10 years to remain current and to ensure vendor support. By virtue of having invested in these systems, the HSE is committed to further capital investments in the future.
- It would be incorrect to state there were no areas where critical upgrades will be required over the coming four years. Some examples of need in this regard include the urgent requirement to replace old, legacy Patient Administration Systems (PAS) at all three of the Dublin Maternity Hospitals and an equally urgent requirement to execute a major upgrade to the core Electronic Patient Record (EPR) system at St James's Hospital. This is the largest hospital in Ireland and now requires a major upgrade to the core system that manages its Electronic Patient Records.

- The remaining capital expenditure relates to the delivery of systems, infrastructure and applications to support the core business of the HSE. In the majority of cases, the ICT capital investment is only one part of a larger business initiative. Any decision to reduce ICT capital investment in these areas therefore prevents the delivery of the associated larger business initiative.

These are not easy decisions as the business initiatives encompass a range of projects ranging from purely management/ administrative e.g. the requirement for a National Financial & Procurement System to clinical systems such as ICU systems.

All ICT capital expenditure within the Health Service is subject to Department of Finance (CMOD) Circular 02/11 (and previously 02/09 and 16/97). Each project is reviewed individually. Combined with the internal HSE approvals process that precedes it, these processes are designed to ensure only projects that have a robust case, clear benefits and an agreed approach technically, receive sanction to proceed.

The 02/11 process provides the Department of Finance with an overview and control of ICT related capital expenditure. It provides for a more engaged and informed approach with regard to investment decisions and associated capital funding requirements for ICT on a year by year basis than is possible via multi annual capital planning and forecasting.

### **3.1 Objectives of and Rationale for programmes/interventions**

- **Description of the high level objective to be achieved in relation to each programme**
- **Rationale for Government Intervention**
- **The consistency of the health infrastructure investment programme with the Programme for Government**

Within the Programme for Government a commitment was made to

*‘establish a Service Delivery Unit (SDU) to assist the Minister for Health in reducing waiting lists and introducing a major upgrade in the IT capabilities of the health system’.*

A major upgrade in IT capabilities for the health system is specifically included within the Programme for Government because it is recognised and universally accepted that ICT is a key enabler to transforming (health) service provision.

The need to invest in ICT over the next two terms of Government can be illustrated by reference to some simple but nonetheless fundamental examples. It is the stated intention of the Government that in the future *Money Must Follow the Patient*, which itself is required in order to deliver *Universal Health Insurance*. It is also stated that there must be a greater shift from provision of health care services from the acute to the non acute sector and that with the countries demographics, a failure to achieve this goal will lead to an even more expensive and totally unsustainable health service.

Clearly, new processes, ICT systems, applications and technologies will be required to bring about this transformation in health services and these systems will require significant capital funding. Failure to invest the necessary resources in ICT will prevent the objectives of transformation from being achieved.

There are many other areas of the health services that will change dramatically during the next two terms of Government. The SDU in particular is charged with

- Reducing waiting lists e.g. to see a consultant or specialist
- Reducing waiting times e.g. in A&E and Outpatient Departments
- Reducing costs in the delivery of both public and private health care and in the administration of the health care system.
- Establishing Universal Health Insurance (UHI).

ICT in turn will need to respond quickly to these changes which in turn will create a corresponding demand for investment.

#### ***ICT Strategy***

An ICT Strategy has been developed that underpins the areas where ICT capital investment will be required in the coming years, along with the likely funding requirement. Whilst it is possible that some changes may be required as the SDU is established and business requirements start to translate into ICT requirements, the HSE expects that the fundamentals of the strategy will remain unchanged and can be summarised as follows:

- ***ICT capital expenditure required as a result of general capital investments***  
The objective and rationale for Government intervention in this case is to facilitate the commissioning of new and refurbished facilities so as to provide fit for purpose facilities where patients can be treated effectively, safely and efficiently.
- ***Renewal of existing Systems***  
The objective and rationale for Government intervention in this case is to ensure continuity in the provision of safe health services whilst minimising clinical and operation risk.
- ***Business Driven Clinical and Operational Initiatives***  
These initiatives are very well articulated within the ICT Strategy and a corresponding milestone plan has been submitted for inclusion in the HSE 2011 – 2014 Corporate Plan. The HSE’s capital projections have been generated on the basis that each of these items are required by the Health Service in coming years:
  1. Acute Hospitals - Core Hospital Systems
    - a) Patient Administration System (PAS)
    - b) Order Communications
    - c) NIMIS
    - d) Laboratory Information Systems
    - e) Medication Management
  2. ICT support for the Clinical Care Programme
  3. Initiatives in e-Health / e-Gov/ Electronic Health Record
  4. Ambulance Service – Reorganisation
  5. Improvements in Primary Care
  6. National Child Care Information System
  7. Environmental Health Information System
  8. Clinical Systems
  9. ICT for Public Health, Mental Health, Older Persons, Disabilities and Social Inclusion
  10. Corporate Systems
  11. Enabling ICT Technical Infrastructure

The objective and rationale for Government intervention in the delivery of these Business Driven Clinical and Operational Initiatives are numerous and diverse. At the highest level they provide the ability to manage the health service more effectively, more safely. Furthermore they will facilitate the integration of services and the shift in the provision of healthcare services from the acute to the primary care domain, which is recognised as the only sustainable way to provide such services in the future.

Capital investment in ICT within the health services in coming years will deliver the following outputs that directly support the **Programme for Government**:

- Greater integration of the primary care domain with the acute hospital sector so that patients can receive more of their treatment in the primary care setting rather than in the (significantly) more expensive acute hospital setting. This will be made possible via increased levels of ICT infrastructure and application within the primary care domain along with more and better electronic communication links between primary and acute sectors. Examples of this include the widespread deployment of electronic referrals,

secure email to facilitate easier communications between those in the primary care domain with those in the acute sector – and wider deployment of Healthlink. Together, these services will facilitate *a shift in the provision of care from the acute to the primary care sector.*

- National Core systems deployed within all acute hospitals to provide the *essential building key blocks required to enable money to follow the patient – a pre cursor to the delivery of universal health insurance.*
- National Systems that capture and facilitate *management of clinical risks, support quality assurance and improve safety*
- National and Regional Operational systems to support the *streamlined processes necessary to maintain service levels with fewer resources, leading to improved efficiency and effectiveness*
- Delivery of National systems and National System frameworks that support all *National Clinical Care Programmes, including the National Cancer Control Programme.*
- *ICT infrastructure required to deliver on key hospital building projects such as the National Paediatric Hospital.*

### **3.2 Health infrastructure programme supporting economic development and social infrastructure deficits**

- **Details of how health infrastructure investment will support economic recovery**
- **How the health infrastructure investment programme will support sustainable employment as well as employment in the immediate delivery phase**
- **How the health infrastructure investment programme will meet critical economic and social infrastructure deficits**

Whilst the majority of health systems and applications are developed internationally because the Irish market alone is not large enough to sustain the companies providing such systems, local resources are normally engaged by these multinationals for system implementation and subsequent production support. In this regard, the capital investment will provide local employment and also importantly, develop the skill base of those engaged locally by the multinationals.

In many cases the multinationals are major employers in Ireland because they also have non-healthcare related business here and/or because they have chosen to locate their European operations in Ireland. These companies are typically providers of high quality, high value jobs.

Supporting an improved and equitable health service through the implementation of the Government's ambitious health reform programme by way of continued investment in ICT will address economic as well as social deficits.

### 3.3 Commitments and impact of potential cut

The following table describes HSE planned ICT capital investment for the next four years.

#### 3.3.1 ICT Capital Projections 2012 to 2016

Category	2012 Projection	2013 Projection	2014 Projection	2015 Projection	Total
Projects already approved and in-progress	16,417,917	10,032,044	8,020,000	5,250,000	39,719,961
Renewal of Major Existing Systems	xxx	xxx	xxx	xxx	xxx
Strategic Projects – Business Driven Clinical & Operational Initiatives	xxx	xxx	xxx	xxx	xxx
Strategic ICT Infrastructure Investments	xxx	xxx	xxx	xxx	xxx
ICT expenditure arising from General Capital Investment Decisions	xxx	xxx	xxx	xxx	xxx
Emerging Projects that will require ICT capital	xxx	xxx	xxx	xxx	xxx
National Paediatric Hospital**	xxx	xxx	xxx	xxx	xxx
<b>Grand Total</b>	<b>xxx</b>	<b>xxx</b>	<b>xxx</b>	<b>xxx</b>	<b>xxx</b>

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##### 3.3.1.1 Projects already approved and in-progress

Of the total number of projects currently in progress, the HSE currently has 40 projects with contractual commitments of €11.5m in total. Of those projects with capital commitments, most are relatively small commitments and will complete within the next 12 months.

##### 3.3.1.2 Renewal of Major Existing Systems

This is another area where there is very little discretionary spend with regard to ICT capital investment. The Health Services have over 1,000 applications already in place, many of which are clinical systems and/or embedded into critical operational processes.

By virtue of having invested in these systems such systems must receive major upgrades to stay current and ensure vendor support and maintenance. Many vendors are multi-national operators.

It would be inaccurate to state there were no areas where critical upgrades will be required over the coming four years. Some simple examples of this include the urgent requirement to replace old, legacy Patient Administration Systems (PAS) at all three of the Dublin Maternity Hospitals and an equally urgent requirement to deliver a major upgrade to the core Electronic Patient Record (EPR) system at St James’s Hospital.

The objective and rationale for Government intervention in this case therefore is to ensure continuity in the provision of safe health services whilst minimising clinical and operation risk.

### **3.3.1.3 Strategic Projects – Business Driven Clinical & Operational Initiatives**

These are very well articulated within the ICT Strategy. Clearly as the ICT implications of the work being carried out by the SDU on behalf of the Minister are understood, the strategy, along with the corresponding capital plan, will need to be revised accordingly.

The following items are set out within the ICT strategy and a corresponding milestone plan has been submitted for inclusion in the HSE 2011 – 2014 Corporate Plan. The HSE's capital projections have been generated on the basis that each of these key items are required by the Health Service in coming years:

- *Acute Hospitals - Core Hospital Systems*  
Deployment of these systems is fundamental to the safe and efficient operation of acute hospitals in the future.
  1. Patient Administration Systems
  2. Order Communications (electronic ordering of tests and electronic receipt of test results)
  3. NIMIS
  4. Laboratory Information Systems
  5. Medication Management
- *Clinical Care Programmes*  
Development/ deployment of the necessary ICT systems and solutions required to facilitate the successful execution of the National Clinical Care Programmes
- *e-Health / e-Gov/ Electronic Health Record*  
This investment includes the development and deployment of key enabling components for provision of Universal Health Insurance and integration of health services. Items include the Unique Health Identifier, Summary Care Records, Electronic Health records etc.

Internationally (OECD and EU), Ireland is scored bi-annually in relation to its performance in e-health. Capital investment is required to support the e-Gov and e-Health agendas.

The e-health area also includes technology initiatives that facilitate older patients being cared for in the community rather than in hospitals / nursing homes but decisions regarding capital investment in these areas are still outstanding as the solution mature and costs become more manageable.

- *Reorganisation - Ambulance Service*  
The ambulance service is going through a significant re-configuration programme currently so that it can provide the services that enable re-configuration of hospital services. Recent examples such as the closure of the 24 hour emergency department at Roscommon General illustrate the critical dependency on changes to how ambulance services are provided in response to how and where hospital services are provided. One item of significant capital expense here is the delivery of the national digital communication systems to the ambulance service. This is a programme being led by the

Department of Finance via its Government Networks Unit (within CMOD) to provide a common, digital communication system for all emergency services. This is not an area where the HSE has discretion over the planned capital expenditure.

- *Improvements in Primary Care*

ICT has a significant role to play in efforts to shift the paradigm of care from the acute sector to the primary care domain. Already the HSE is seeing the benefits of using electronic referrals between GPs and hospital consultants. The consultants get better information to triage patient - and GPs and their patients typically get a speedier response and better access for appointments. The HSE plans to pursue the rollout of electronic referrals nationally and are dependent on ICT to deliver such solutions. It also plans to pursue the provision of electronic discharge summaries from hospitals, continue support for adoption of practice management systems with GP surgeries, provide ICT infrastructure to primary care teams and the introduction of a secure email solution to enable GPs to communicate freely with their counterparts elsewhere in the health service. Currently there is no method for GPs to communicate unstructured, patient clinical information with other GPs, primary care teams, hospitals or consultants – and clearly this must be addressed as a matter of some urgency.

- *Child Care*

Working with the Department of Children & Youth Affairs, the HSE is introducing structural and operational changes to address many of the issues related to child care that have been highlighted by recent reports and media attention.

There is a consequent requirement for an ICT system that will support the implementation of these changes. The National Child Care Information System (NCCIS) is currently in peer review and the HSE has been approved to advertise for Expressions of Interest as the first step towards delivering this system. Capital funding is necessary to fund the timely procurement and deployment of the NCCIS.

- *Environmental Health*

Traditionally environmental health services were provided by each former health board. Each board procured its own ICT system to support the work of the environmental health officers (EHOs). These legacy systems are no longer supported and are currently being replaced by a single national solution. Some limited capital is required to complete this task.

- *Clinical Systems*

There is a broad range of clinical systems typically required by individual departments within the acute hospitals. These would include for example ICU systems currently being deployed at various hospitals throughout the country. These systems are critical for the safe clinical management of patients. As with all other ICT related capital projects, submissions for sanction for clinical systems are made on an individual basis to CMOD at the Department of Finance.

- *Public Health*

There are limited specific demands for ICT capital investment for public health. One area that has been identified and needs to be addressed is the provision of a national immunisation system to ensure central visibility and management of coverage of national immunisation programmes – particularly in relation to children.

- *Older Persons*  
There is a need to improve the methods by which assessment of need is carried out in order to ensure decisions regarding the level of care and support provided for older people is consistent, regardless of where these people live. ICT will assist via the provision of a single assessment tool, provided the current pilot is successful.

Other areas where ICT capital investment is required relate mainly to the delivery long term residential and day care facilities.

- *Mental Health*  
In line with the recommendations of the expert working group on mental health ‘*A Vision for Change*’ there is a requirement to establish a national mental health system to support the clinical and operations changes currently being pursued.

Other areas where ICT capital investment is required relate mainly to mental health facilities themselves, the most significant one being the new Central Mental Health Hospital and other new complementary mental health facilities.

- *Disability*  
No ICT specific capital funding requirements have yet been identified.

- *Social Inclusion*  
No ICT specific capital funding requirements have yet been identified.

- *Corporate Systems*  
A range of initiatives currently being pursued, many of which will bring considerable improvements in terms of management information and the corresponding opportunity to manage and reduce costs. One such system, which illustrates this point and would require capital funding, is the Electronic Insurance Claims System. This system has proven ability to reduce average debtor days between hospitals and the health insurance companies from 160 to 60. Deployment of this system to just the largest 11 acute hospitals could provide a once off collection of up to €62m.

Other corporate systems that need to be deployed and require capital funding are

- National Finance and Procurement System
- National Performance Management System (replacement for Healthstat)
- Payroll Systems
- e-Rostering
- Various minor initiatives

#### **3.3.1.4 Strategic ICT Infrastructure Investments**

In order to deliver any of the aforementioned systems there is a requirement to put in place the underlying technical ICT infrastructure upon which the various systems rely. Investment in this area will also serve to streamline the provision of health services and the integration of services generally. The HSE is still not at the point where clinicians and others can access data and systems irrespective of location.

Future capital investment is required to

- Complete the single National Health Network (NHN)

- Single Sign On (active Directory) - to enable health staff to log on once from any health services site – then, subject to permissions, access all systems irrespective of where they are located.
- Rationalise IP addressing so that systems from legacy health boards can be uniquely identified as they come onto the single national health network.
- Rationalisation of existing Servers to reduce total cost of ownership and achieve higher productivity from existing infrastructure.
- Rationalisation of existing applications to reduce total cost of ownership and provide more effective application support.
- Rationalisation of data centres. Servers are still stored in numerous locations throughout former health board sites – security and fire risk.
- Rationalisation of PABX systems. Consolidation of existing PABX systems will require short term capital investment but, combined with the NHN, will significantly reduce total cost whilst improving quality and reducing maintenance overhead.
- Investment in Storage Area Networks (SAN), Network Attached Storage (NAS), Virtualised Server Infrastructure, Local Area Networks (LAN) and Wide Area Networks (WAN) and other critical infrastructure components that support the exponential growth in demand for data transmission and storage.

#### ***3.3.1.5 ICT expenditure arising from General Capital Investment Decisions***

Once it has been decided to make the general capital investment, there is a commitment to make the corresponding ICT investment. Therefore the HSE does not have expenditure discretion.

The ICT expenditure relates to the technical fit out (data networks, phones, PCs, servers, applications etc.) required when a new building is completed or when an existing building is extended or refurbished. The ICT capital investment can range from as little as €10k - for example in the case of the refurbishment of a local health facility - to tens of millions of Euro, which is likely to be the case if the National Paediatric Hospital is to be ‘paperless’.

The objective and rationale for Government intervention in this case therefore is to facilitate the commissioning of new and refurbished facilities so as to provide fit for purpose facilities where patients can be treated effectively, safely and efficiently.

#### ***3.3.1.6 Emerging Projects that will require ICT capital (yet to be defined)***

It is not possible to predict all demands for ICT arising from business initiatives over a four year horizon. At this point in time for instance, the full ICT implications to be determined by the SDU key deliverables, is not yet certain. Based on past experiences, the HSE includes contingency provision for new and emerging projects.

A practical example of an emerging project could be - a requirement to implement an ICT projects resulting from the NPRO (National Plan for Radiation Oncology) programme that was not foreseen within the Business Driven Clinical & Operational Initiatives.

#### ***3.3.1.7 National Paediatric Hospital (NPH)***

Funding for a major capital investment project such as the NPH has never been assumed within the base ICT capital envelope. For completeness it has been included in this report; the HSE is of the view that it would be a once off investment and would require additional funding.

### **3.3.2 Capital Commitments**

There are a total of 108 capital funded ICT projects currently approved. The corresponding sanction for 2011 is €24.45m. Of this, there are 40 projects which have contractual commitments which total €11.5m. Of those projects with capital commitments, most are relatively small commitments and will be completed within the next 12 months.

### **3.3.3 Impact of Potential Cuts**

The demands on ICT over the coming years combined with the need to deliver the NPH will result in a demand for increased capital funding post 2012. Assuming significant savings need to be achieved the HSE would recommend prioritising projects that can provide the savings necessary to fund future growth. Any reduction to the capital envelope post 2012 is likely to impact on the commissioning of the NPH, will jeopardise efforts to shift the provision of care from acute hospitals to the primary care setting, will further delay the deployment of national financial system that provides the ability to manage the vote cost effectively and finally will prevent the development of the building blocks necessary to facilitate Universal Health Care.

### 3.4 Information on programmes (including planning, procurement, and project management)

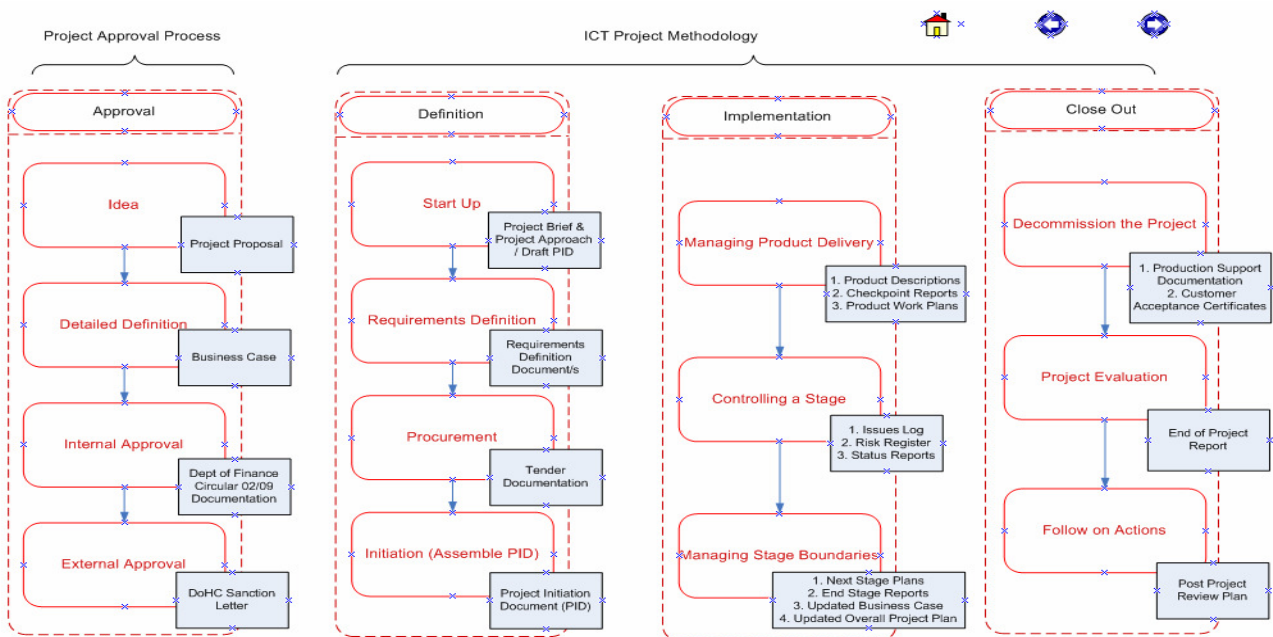
#### 3.4.1 Planning and Project Management

The ICT Directorate has developed a standard Project Management Methodology that covers project initiation, execution and close out. The purpose of the methodology is to support safe and consistent delivery of projects.

The methodology is

- Based on an industry standard ('Prince2')
- Scalable
- Integrates with the ICT Project Approval Framework process
- Integrates with the HSE Programme Delivery Systems
- Simple, practical and straight forward to use.

The following is a detailed view of the project management methodology process with the corresponding templates associated with each step in the process:



An ICT programme office was established in 2008 and maintains a register of all projects from initial proposal through to final delivery. A projects dashboard is in place to provide visibility of the status of each capital funded ICT project.

### **3.4.2 Procurement**

All procurements are executed in accordance with the requisite financial and procurement guidelines and only proceed once specific approval is given on a case by case basis (CMOD and DoH). In line with government policy (DoF circular 10/10), the ICT procurements are generally run as open competitions with additional justification required where a restricted tender is proposed. Whilst open procurements are more onerous to manage they do provide additional opportunities to indigenous business and in doing so, go some way towards aiding national recovery.

## **3.5 Current expenditure implications of proposed future capital investment**

### **3.5.1 HSE ICT**

There is real potential to save on revenue expenditure based on capital expenditure.

Practical examples of this include:

- a) Deploying new technology to reduce telephony and data communication costs;
- b) Implementing claims management systems to reduce debtor days between hospitals and health insurers and provide a once off collection from health insurers. Recent analysis indicates that if applied to the 11 largest hospitals it could provide a once off collection of up to €62m;
- c) Building links between Primary Care Reimbursement System (PCRS) and pharmacies to reduce the cost of providing drugs to patients.

For projects not related to value for money initiatives, on average there is approximately a 10% current expenditure implication for ICT capital investments. Hardware support post year 1 typically costs 8% to 10% of the initial cost of the equipment whilst software support typically costs between 10% and 15%. Suppliers are now starting to offer hardware including 5 years support for very modest additional up front cost. Software support costs typically do not offer such options. In accordance with DoF circular 02/11, all ICT investment decisions are now made on the basis of 'total cost of ownership' looking at the initial capital outlay plus the cost of supporting that systems for 5 years.

## **3.6 Outputs and outcomes expected from proposed health capital investment**

### **3.6.1 HSE ICT**

Capital investment in ICT within the health services in coming years will provide the following outputs and outcomes:

- Enable a shift in the provision of care from the acute to the primary care sector.
- Provide the essential building blocks required to enable money to follow the patient – and ultimately delivery of universal health insurance.
- Establish the systems required to implement the National Clinical Care Programmes, including the National Cancer Control Programme. Such systems will facilitate the management of clinical risks, provide quality assurance, improve safety and will be necessary to enable the health service providers to meet legislative and HIQA standards.
- Provide the Management Information Systems required to implement the streamlined processes necessary to maintain service levels with fewer resources, leading to improved efficiency and effectiveness
- Provide the ICT infrastructure and Systems necessary to commission the National Paediatric Hospital

## **CONCLUSION**

In recent years the HSE has incurred an underspend on its ICT allocation. With an ICT strategy in place to support the Government's reform programme, the situation will change dramatically. There are considerable opportunities for investment in ICT capital to reduce recurring costs elsewhere. Some practical examples are provided in section 3.5.

A 30% reduction in ICT capital funding from 2012 would

- Delay the delivery of core hospital systems
- Jeopardise the national hospital reorganisation programme
- Frustrate efforts to shift the provision of care from acute hospitals to the primary care settings
- Prevent the deployment of corporate systems that provide management visibility which enable management to control costs and operations

- Will delay the development of the building blocks necessary to facilitate Universal Health Insurance
- Render it almost impossible to commission the NPH ICT element unless the majority of other ICT investments are stopped.

## **4 Responses to Questions posed by the Department of Public Expenditure & Review – Agencies under the aegis of the Department of Health and the Drugs Initiative.**

This part of the report details capital investment in the following areas:-

- capital grants to agencies of the Department<sup>44</sup> including
  - the Health Research Board (HRB)
  - the Health Information & Quality Authority (HIQA)
  - National Cancer Registry Ireland (NCRI)
  - Food Safety Authority of Ireland (FSAI)
  - Coru (Health and Social Care Professional Council (HSPCP));
- capital expenditure on the Drugs Initiative.

### **4.1 Objectives of and Rationale for programmes/interventions**

- **Description of the high level objective to be achieved in relation to each programme**
- **Rationale for Government Intervention**
- **Outputs and outcomes expected from proposed health capital investment**

#### **4.1.1 Health Research**

The Health Research Board's (HRB) mission is to improve people's health, patient care and health service delivery by leading and supporting excellent research by outstanding people within a coherent health research system, supported by a functioning clinical research infrastructure. The increasing technical sophistication of health service delivery means that a well-developed research capacity is integral to the consistent delivery of high quality care and the attraction and retention of professional expertise.

Key elements in developing this research culture include:

- Capacity and leadership development within hospitals and the wider healthcare service to promote, conduct, support and absorb research for the benefit of patients.
- The provision of high-cost shared technology platforms, ICT and other infrastructure to assist in translating research from bench to bedside. Key initiatives include the development of three Clinical Research Facilities on the campuses of major hospitals in Dublin, Galway and Cork and implementation of a coordinated national system for clinical research support and biobanking.
- Coordination of funding and activities with other relevant bodies such as the Higher Education Authority, Department of Agriculture, Fisheries and Food, Enterprise Ireland, IDA, EPA, HSE and Science Foundation Ireland (SFI).

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<sup>44</sup> Vote 39 directly funded agencies are listed in the REV 2011 Page 181.

- Building national capacity to conduct high-quality research in under-developed areas such as primary care, population health and health services research.

There are clear and compelling health arguments for the continued development of a stronger health research capability and these will only increase in the years ahead, with an increase in those living with chronic conditions, an ageing population and a shift required into models of primary and community care. Investment in health research has been shown internationally to be inextricably linked to a high-performing health service with more informed decisions made in areas such as prevention, quality and patient safety, transformation of systems and new models of patient care and healthcare financing.

In addition to the resultant health and social benefits, there are compelling economic reasons to continue to prioritise this area. Forfás, which is currently charged with managing the Research Prioritisation Project Steering Group established by the Government in September 2010, has identified that a well functioning health research system would both attract FDI and form a basis for the development of indigenous industry. Investment in health research can deliver benefits to the Exchequer through direct and indirect savings and through better reallocation of existing resources.

This group has concluded that national investment in creating a coherent clinical and translational research enterprise, and investment in population health sciences and health services research is crucial if Ireland is to reap the dividends and exploit opportunities arising out of parallel investment in drugs, devices and diagnostics and if Ireland is to maximise the translation of this investment into health, social and economic benefits. Maintaining a high quality health research enterprise provides opportunities for engagement with private enterprise in areas such as services science, e-health, food and health and assisted living technologies.

In 2009 the life sciences sector employed some forty-seven thousand people in over 350 enterprises, and provided exports valued at almost €45bn euro.

An important component of the translation of research into innovative products and services is a strong partnership with a research-focused health service. This requires investment in research leadership roles and programmes spanning the healthcare system and academia, and the development of an R&D capacity and culture within the health services.

The investment required to develop a coherent clinical research infrastructure in Ireland is unlikely to be provided by the private sector, and as such, the HRB was identified in the Action Plan for Health Research (2009) as the lead agency responsible for delivering on this priority. The initiatives supported by the HRB are integral to achieving a functioning clinical research system that enables enterprise development and health care improvement. Some of these initiatives address various capacity problems (Clinician Scientist Awards, Translational Research Awards, PhD Scholar programmes, Clinical Research Facilities) but all come with the expectation of creating excellent research outputs and outcomes of relevance to the health system, to patients and to service users. In addition,

those initiatives addressing clinical research capacity contribute to create an environment where industry wants to carry out clinical research in Ireland. They remove some of the barriers to clinical research previously present. More work will be needed in this context. No single initiative will achieve a vibrant clinical research landscape; a range of different initiatives need to come together to create the overall picture. Government support is essential for a vibrant health research network which supports indigenous industry attracts foreign direct investment.

***Outcome expected***

Government intervention through capital grants enables the HRB to provide joint funding for national strategic research initiatives and to further leverage funding from international organisations such as the Wellcome Trust and from the EU Framework 7 programme.

Investment by the HRB aims to support, inter alia, collaborative networks between hospital-based clinical researchers and university-based scientists and between clinical departments, increased post-graduate education and training of clinicians and other health professionals, and a vibrant R&D sector within the health services underpinned by technology-based, high quality clinical research in well-functioning Clinical Research Facilities, in which research is made ‘investment ready’.

Clinician Scientists (often working through the CRFs) provide research leadership as well as contact points for industry into the clinical system. ICORG (the cancer clinical trials network) has many active industry collaborations, and can offer a single contact point for Ireland covering all cancer centres and some additional hospitals. Clinical trials are an essential element of a successful cancer control programme. It is hoped that this model can be replicated in other fields.

Furthermore, the HRB, in conjunction with the main funders of research in Ireland, is co-ordinating a policy for the development of a national system for biobanking, where specific consideration will be given to investment in nationally and internationally relevant collections of biospecimens, bio-data and linked epidemiological data that will yield strategic competitive advantage to Ireland in clinical and population health research.

Investment in structured PhD training will ensure that our clinical and applied research workforce is fit-for-purpose for a modern and evidence-based healthcare system. It will place an emphasis on delivering a broader education for young researchers and with greater focus on transferable skills. It will ensure that investment in research training is aligned with national skills needs, and will build capacity in areas such as quality improvement, organisation and delivery of care, health informatics, health promotion and healthcare financing.

The current climate of reforms in the health services and the public service as a whole necessitates new and innovative ways of delivering a better service with less resources. Joint appointments in population health and health services research between academia and healthcare organisations represents a creative

approach to sharing evidence and research skills and to improving the quality of healthcare.

This drive for translation of research outcomes is further enhanced by the Translational Research Awards, funded by the HRB (in collaboration with SFI), which specifically targets milestone-driven application of knowledge into products, technologies or systems, making it an attractive scheme to industry.

Investment in a collaborative research programme with DAFF is placing Ireland as a centre for world class research in Food and Health and is contributing to the knowledge-based bio-economy in Europe. There are numerous benefits for consumers, the food industry and food and health agencies involved in policy and regulatory activities.

#### **4.1.2 Blood Policy – Munster Regional Transfusion Centre**

The objective of intervention in this area (with capital funding) is to provide an adequate supply of blood products to the health services and to procure and supply these in accordance with the regulatory requirements (Irish Medicines Board) for blood products, comply with current Good Manufacturing Practice (cGMP) and provide contingency for the Dublin centre for component manufacture, by way of construction of a new Munster Regional Transfusion Centre (MRTC).

With the ever-present threat of infection or contamination of the national blood supply, it is imperative that the Irish Blood Transfusion Service (IBTS) centres operate to the highest international standards of quality and safety. Contamination of blood stocks in the past have resulted in substantial compensation payments.

The IBTS has two major centres – the National Blood Centre (NBC) adjacent to St James’s Hospital Dublin and an old smaller facility in the grounds of St Finbarr’s Hospital Cork (Munster Regional Transfusion Centre). The MRTC provides approximately 30% of the national blood supply.

A second centre other than the National Blood Centre in Dublin is required to provide

- a) a collection/donor facility
- b) processing of blood and blood component
- c) a quality control laboratory.

In the event of major disruption at the NBC the IBTS would be forced to seek blood stocks from outside Ireland<sup>45</sup> if the second centre did not exist in Cork. This would constitute a very high risk to blood stocks, without a guarantee that such stocks would be available from another jurisdiction, as all countries struggle to keep adequate blood stocks.

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<sup>45</sup> Europe rather than UK & NI - vCJD threat.

The Cork facility requires replacement and Government approved the business case and funding of up to €xxm for this development in 2008. The estimated present day cost of replacing the Cork centre is up to €xxm of which €xm Exchequer funding will be required. The bulk of this capital grant will be required in 2013. The Department's Vote will require increased funding to meet these construction costs as the current allocation of €15m is not sufficient. The IBTS will provide €xm from its reserves.

The IBTS carried out refurbishment in 2004 to enable the MRTC to meet cGMP requirements in the short term but the facility is now reaching the end of its design life.

The Irish Medicines Board (IMB), which is the competent authority for authorising blood establishment under EU Directives on blood quality and safety, in its annual inspection reports on the IBTS, has repeatedly expressed its concerns regarding the premises. It has consistently recorded through its inspection reports that full cGMP compliance can only be achieved by MRTC through the provision of a new purpose built facility in Cork and it renews the licence on this basis. The HSE Board approved the proposed location for the new Centre on the CUH campus at its meeting on 14 July 2011.

***Outcome expected*** – investment in this area aims to ensure that Ireland has an appropriate safe and sufficient blood supply which meets appropriate national and international standards.

#### **4.1.3 Other Directly Funded Agencies**

Small capital grants are provided to agencies including HIQA, National Cancer Registry, Coru (HSPCP), FSAI. These grants support the agencies in delivering their functions. Grants fund office fit-out, furniture, office equipment and ICT infrastructure.

#### **4.1.4 Drugs Initiative**

The objective of the National Drugs Strategy is to tackle the harm caused to individuals and society through a concerted focus on the five pillars of supply reduction, prevention, treatment, rehabilitation, and research. The Government supports the principles and objectives of the Strategy and is committed to providing renewed impetus to the fight against drugs, as is clear from the Programme for Government.

€1m capital funding has been provided in 2011 to help meet the accommodation needs of community-based drugs specific projects in the 24 Drugs Task Force Areas which provide drugs services to drug users, former drug users, recovering drug users and their families.

The type of projects range from delivering services such as advice and support for drug misusers and their families; community drug teams offering treatment, outreach and crisis intervention services and drug training programmes for community groups. Structured programmes and formal training programmes for drugs users/recovering drugs users need to be delivered in an organised, formal

manner in appropriate accommodation that respects confidentiality and privacy. This would provide them with a regular routine and skills to gain future employment.

***Outcomes expected*** – the investment has been invaluable in supporting services in terms of providing quality facilities and has become one of the key supports to the ongoing work of the DTFs. It will support interagency work in delivering services and supports to those seeking vital assistance, many of whom live chaotic lives and are amongst the most vulnerable drug users.

## **4.2 The consistency of the health infrastructure investment programme with the Programme for Government**

### **4.2.1 Health Research**

The HRB Strategy directly contributes to two key Government objectives

- a commitment to science and technology research as drivers of innovation and economic development
- reform of healthcare delivery to the community in an equitable and cost effective way

The work of the HRB is critical to achieving these aims, through its role in creating a functioning clinical research infrastructure that can support enterprise and academic engagement, and bridge the critical gap, identified in the Programme for Government, in translating research into commercial opportunity for investors<sup>46</sup>. An overview of HRB supported activities is provided in 4.1.1.

It is recognised that there is potential for deeper engagement between Ireland's enterprise sector and the health services. xxxxxxxxxxx x xxxxxxx xxx xxxxxxx xxxxxxx x xxxxx xxxxxxx xx xxx xxxxxxxxxxx xxx xxxxxxxxxxxxxxxxxx xxx xxx, xxx, xxx, xxx, xxx, xxxxx xx xxxxx xxxxxxxxxxx xx xxx xxxxxxxxxxx xxx xxxxxx xxx xxx xxxxxxxxxx xxx xxxxxxxxxxx xxxxx xxx xxx. x xxxxx xxxxxxxxxxx xx xxx xxxxx xx xxxxx xxxxxxxxxxx xx xxx xxxxxxxxxxx xxx xxxxxx xxx xxx xxxxxxxxxx xxx xxxxxxxxxxx xxxxx xxx xxxxxxxxxxx

The work of the HRB in building capacity to conduct high quality population health and health services research will ensure that evidence-based products, services and interventions designed to meet healthcare needs have maximal impact through exploring issues such as relevance, feasibility, quality, behaviours, compliance, skill-mix and reimbursement models.

### **4.2.2 Blood Policy - Munster Regional Transfusion Centre**

The new facility will support patient care in Munster and nationally. It will ensure that the IBTS facilities meet Good Manufacturing Practice (cGMP) Standards. There is no specific reference to this initiative in the Programme for Government but with the ever-present threat of infection or contamination of the national blood supply, it is imperative that the IBTS centres operate to the highest international standards of quality and safety.

### **4.2.3 Drugs Initiative**

The Programme for Government states that the first step in implementing a successful Drugs strategy will be to outline key priorities for short-term implementation, underpinned by a realistic timeframe and targets<sup>47</sup>. Inter alia, it will expand rehabilitation services at local level in line with need and subject to available resources, target resources to increase the number of needle exchange programmes and rehabilitation places and assist drug users in rehabilitation through participation in suitable local community employment schemes.

<sup>46</sup> Programme for Government, Page 10.

<sup>47</sup> Ibid, Page 49

Investment in the provision and enhancement of facilities that accommodate community-based drugs specific services are consistent with the priorities of Government in relation to the implementation of the National Drugs Strategy.

#### **4.3 Health infrastructure programme supporting economic development and social infrastructure deficits – Department of Health Vote 39**

- **Details of how health infrastructure investment will support economic recovery**
- **How the health infrastructure investment programme will support sustainable employment as well as employment in the immediate delivery phase**
- **How the health infrastructure investment programme will meet critical economic and social infrastructure deficits**

Part 1 of this report highlights in general terms the need to, and benefits of, investing in health research infrastructure. Section 4.3 outlines the main objectives of each of the programmes/interventions.

##### **4.3.1. Health Research (and the HRB)**

Health research plays an important role in the knowledge economy, contributing to Ireland's international competitiveness and economic growth. *'Building Ireland's Smart Economy – A Framework for Sustainable Economic Renewal'*, outlined a programme for medium-term economic recovery based around the concept of the Smart Economy. One of the commitments therein was that

*“an Action Plan for Health Research would be developed in order to exploit the opportunities for stronger linkages between our health sciences and related Foreign Direct Investment and indigenous sectors such as medical devices and bio-pharma”.*

The Action Plan for Health Research 2009 -2013, the on-going reconfiguration of the health services and higher education sectors, the government's 'Innovation Economy' strategy, and the planned reform of national scientific research funding, all represent opportunities to address the critical role of a coherent clinical research infrastructure in increasing the quality and productivity of the Irish health system and in supporting growth in the economy.

Historically, Ireland was not been seen as a good place to carry out clinical research, and hence some of the higher-value research work is done elsewhere. The HRB is addressing this issue through the development of clinical research capacity and capability, infrastructure, well-qualified and highly motivated people, and networking of clinicians. In collaboration with other players, e.g. Wellcome Trust and SFI, the HRB can provide the conditions to attract high-value industry-led clinical research to Ireland.

Capital grants assist the HRB in funding a number of awards, and various equipment and construction projects including:-

- A second Clinical Research Facility will be constructed on the UCHG campus. This facility is part funded by the HRB through its capital grants. The CRF provides the accommodation and equipment, the

experts, expertise and culture needed to optimally support patient-focused research studies and clinical studies aimed at understanding a range of diseases. The goal is to speed up the translation of scientific advances into benefits for healthcare and the economy as quickly as possible. They provide the accommodation where clinicians, the healthcare industry and other key partners can test and translate innovations into new products, technologies, diagnostics, and improved patient care.

- The PhD Scholar Programmes awards aim to improve the quality of PhD training in health research by facilitating a broader education for young researchers, enhancing co-operation between post-graduate students in different research groups and encouraging/ supporting institutions to establish a critical mass of students in specific areas. The HRB considers the appointment of world-class researchers from the health professions and from non-clinical backgrounds as critical to making Ireland internationally competitive in applied health research and strengthening links between the universities, research hospitals and the healthcare industry. In support of this objective the HRB grant funds a number of research awards, generally over a five year period e.g. Clinical Research Awards and Translational Research Awards.

***HRB investment - supporting employment***

HRB infrastructure investments are aimed at supporting the development of a robust clinical research infrastructure and clinical research capacity within the health system. Other than the employment created directly from these programmes (generally funded on a five year basis) it is not possible to estimate future sustainable employment.

**Table 4.1**

Awards	DCCR	TRA	CSA	PhD	IMA	HRC Diet and Health	SDMO
staff/students numbers over the lifetime of the award	12	48	26	139	14	26	8

Clinical research infrastructure, established with seed funding from the HRB, will continue to play an important role in the research landscape. CRFs are open to both investigator-led research and also to industry-led research. Income generated from industry-led studies will support posts, enabling the CRF to retain necessary expertise. Investigator-led studies funded from Exchequer and non-Exchequer sources are also charged for use of the facilities, and contribute to the sustainability of the facility and of the employment they generate.

Research carried out in the CRFs is designed to comply with the regulatory requirements for the approval of medicinal products or medical devices. Clinical trials in particular are an essential step in the approval for any such products, and

any employment generated in the retail manufacturing of the product can only commence once regulatory approval has been granted.

Translational Research Awards (TRA) are designed specifically for the conversion of basic research findings into innovative strategies, devices, products or services. Intellectual property (IP) generation is one of the key outcomes of these awards, and a number of them have already protected IP or are working towards this goal. This opens new commercial opportunities, generating employment either through spin outs or through licensing agreements.

***HRB investment – economic and social infrastructure deficits***

There is a critical gap in the translation of research into practice and into commercial products, technologies and services. Gaps exist in two key stages in the innovation pathway: firstly in translating new fundamental discoveries into new treatments for patients; and secondly in evaluating promising ideas to drive routine clinical practice. All the initiatives in the HRB's capital programme are designed to develop the infrastructure and resources to address these gaps including:

- Facilities and resources to undertake clinical research and trials in hospitals and amongst clinical communities.
- The research leadership amongst clinicians currently engaged in clinical practice and service delivery.
- Specialist equipment to support and maximise research translation.
- Training of cohorts of skilled health professionals and applied researchers to undertake timely and relevant health research linked to national priorities.
- The creation of specialist research groups to address substantive policy and practices gaps.

By investing in clinical and translational research and by building capacity in population health and health services research, some of the projected economic and social outcomes arising include:

- Direct cost savings and/or re-allocation of resources.
- Improved cost effectiveness and comparative effectiveness of services.
- Robust evidence base for disinvestment strategies.
- Increased productivity through improved human capital (e.g. decreased absenteeism).
  
- Better health outcomes for individual groups, communities or populations.
- Concrete and objective information on access, quality, cost and outcomes.
- Evidence showing potential versus actual impacts of new products/services/interventions.
- Quality assurance and quality improvement studies.
- Evidence that problems are being addressed through trend and/or longitudinal analysis.
- Innovative models for delivery and financing of healthcare.
- Implementation and evaluations of new interventions and technologies.

#### **4.3.2 Blood Policy – Munster Regional Transfusion Centre**

The programme of spend in this instance relates to construction (Section 2.3 is relevant). Employment will be provided during the design, construction and fit out phases.

The new Cork facility will provide a blood transfusion service for the Munster region, providing the facilities necessary for the public to donate and engage with the service. The MRTC project is vital from a national perspective given its role in maintaining a consistent and safe blood supply.

#### **4.3.3 Other Agencies**

Exchequer funding for Department of Health agencies provides employment principally in the ICT sector where agencies such as HIQA and Coru require ICT infrastructure (e.g. enabling on-line registration for health care facilities and health professionals).

The agencies concerned have regulatory functions, for example HIQA, Coru, FSPB, FSAI, Mental Health Commission. As a consequence, standards in health care are monitored and improved in line with internationally recognised standards and practice. Not only are improved standards in health care and regulation essential for patients, they also assist in presenting Ireland as a good place to live, work, and set up business/establish business partnerships (supporting a regulatory and ethical framework that compares favourably with international norms and standards).

#### **4.3.4 Drugs Initiative**

Exchequer funding supports the purchase of equipment, goods and use of local services in local communities. Suitable accommodation provides a local base. Also, drug treatment and rehabilitation projects have the potential to enhance significantly the economic productivity of clients of the services.

Exchequer funding will provide employment during the construction, refurbishment, fit-out phases etc. of the various projects undertaken. The investment will provide facilities/enhanced facilities for clients to engage with the services delivering the various interventions. The investment will facilitate safe, confidential and appropriate facilities and accommodation to cater for vulnerable client base. It will also enable delivery of expanded programmes and capacity to accommodate more clients. In this context, the investment has the capacity to sustain existing employment and can create new jobs in the long term.

The investment in new facilities for the delivery of community-based services, in particular, in areas affected by disadvantage and drug issues, will also result in a “community” dividend. New facilities provide more meeting space for local community organisations, which in turn can facilitate more involvement by the community in local initiatives, including responses to the drugs problem. Development of facilities in disadvantaged areas also improves the environment of local areas, making them more attractive for local residents.

## 4.4 Commitments and impact of potential cut

### 4.4.1 Allocation 2012 – 2016

The Department of Health’s capital allocation is €15m<sup>48</sup> which is **75%** of its 2008 allocation of €20m.

The HRB’s allocation in recent years has varied from 50% to 80% of the Department’s allocation.

The balance of the allocation, which is shared between agencies such as HIQA, NCRI, NTPF, FSAI, FSPB and Coru (HSPCP), is used for ICT hardware and software, office fit-out, equipment and furniture.

**Table 4.2**

Department of Health - Vote 39					
	2012	2013	2014	2015	2016
	€m	€m	€m	€m	€m
Allocation	15.000	15.000	15.000	15.000	15.000
30% reduction	4.500	4.500	4.500	4.500	4.500
<b>70% remaining</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>

### 4.4.2 Contractual Commitments

As at end 2010, three agencies held legally binding commitments. These were the HRB, HIQA and Coru. HIQA’s and Coru’s commitments (€xxm and an estimated €xx respectively) related to ICT systems. By end 2011 it is expected that of these only HRB will have substantial legally binding commitments.

The IBTS is currently engaged in developing a replacement facility for the Munster Regional Transfusion Centre. The estimated cost of this facility is up to €xxm of which €xm is required from exchequer funds. An increased allocation will be required in 2013 to fund the construction and equipping of the facility. The cash profile shown below is a *best estimate* for Subhead H only. The cash profile for the Galway CRF and Cork facility may vary depending on the construction contracts.

**HRB** - the HRB legally binding commitments figures include **€x.xm** in respect of HRB’s contribution to the construction of the Galway Clinical Research Facility. The original construction company went into liquidation in late 2010 and as a consequence it was necessary for NUI Galway to tender the contract again. The HRB states that it is expected that the contract will be in place by early September 2011 with on-site works expected to start by early November 2011 at the latest<sup>49</sup>. xxx xxx xxxxx xxx xxx xxxxxxxx xx xxxxxxxxxx, x xxxxx xxx xx €x.xm xxx xx xxxxxxxx xxxxxxxxxx xx xxx.

<sup>48</sup> Drugs initiative - €1m excluded - transferred to the Department of Health in June 2011.

<sup>49</sup> xxx xxxxxxx (xx xxxxxx xxx) xx x xxxxxxxxxx xx xxx xxxxx xx xxx xxxxxxxxxx xxx xxx xxxxxxx xxx. xxx xxx xxxxxxxxxx xxx x xxxxx xxxxxxxxxx, xxxxxxxxxx xxx xx xxxxxxx xxxxxxx.

**Legally binding commitments:-**

**Table 4.3**

		<b>Department of Health - Vote 39</b>				
		<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
		<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>
Legally binding commitments	HRB	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
	Other Agencies	x.xxx	x.xxx	x.xxx		
	<b>SubTotal</b>	<b>x.xxx</b>	<b>x.xxx</b>	<b>x.xxx</b>		
Commitments but not legally binding	HRB	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
	IBTS best estimate	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
	Other Agencies	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
	<b>SubTotal</b>	<b>x.xxx</b>	<b>x.xxx</b>	<b>x.xxx</b>	<b>x.xxx</b>	<b>x.xxx</b>
<b>Grand Total</b>		<b>14.381</b>	<b>18.215</b>	<b>14.292</b>	<b>10.400</b>	<b>11.150</b>

**IBTS** - while there are no legally binding commitments or agreements at this time, there are service exigencies that necessitate the construction, namely the construction of the new Munster Regional Transfusion Centre. Without an increase in the Vote 30 allocations (currently at €15m per year), it will not be possible to fund the project. There is a precedent for increasing the Department's capital allocation for essential projects. In 2007 the capital allocation was €41m for the construction by the National Cancer Screening Service of BreastCheck units at Cork and Galway. This represented a doubling of the 2007 allocation of €20m.

**Drugs Initiative** - there is currently one legally binding commitment which relates to the construction of new premises to accommodate community based addiction services in Finglas. The estimated cost of the project is €xx.xm (€xxm in 2011). The estimated completion date is November 2011. The channel of funding for the project is Dublin City Council. There is no funding available for any other capital projects in 2011.

**4.4.3 Reduced Allocation 2012-2016 – impact of a 30% reduction on the overall budget**

The Department of Health's capital allocation is modest at €15m. If this was to be reduced by 30% it would result in a cut of €4.5m per year (or €22.5m over the period 2012 to 2016). This would follow the 25% reduction applied since 2009 and would represent a **47.5% (€9.5m) reduction on the 2008 allocation of €20m.**

Given that the HRB's legally binding commitments for 2012 are already at €xxm, it is difficult to see how only €xx.xm would be sufficient to cater for the remaining agencies' requirements, contingencies, and any construction on the Munster Regional Transfusion Centre. The following table illustrates the impact of (a) the reduction and (b) the consequent reduction on approved levels of commitments. As approved levels of commitments shown below roll forward each year, this severely limits HRB's ability to develop health research,

complete its element of the Galway CRF and makes construction of the Cork facility impossible.

**Table 4.4**

<b>Department of Health - Vote 39</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>	<b>€m</b>
Allocation	15.000	15.000	15.000	15.000	15.000
30% reduction	4.500	4.500	4.500	4.500	4.500
<b>70% remaining</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>	<b>10.500</b>
Notified Commitment Threshold	7.500	6.000	4.500		
30% reduction	2.250	1.800	1.350		
<b>70% remaining</b>	<b>5.250</b>	<b>4.200</b>	<b>3.150</b>		
Legally binding & non legally binding commitments	<b>14.381</b>	<b>18.215</b>	<b>14.292</b>	<b>10.400</b>	<b>11.150</b>

For 2013 - 2016 the ability of the *HRB* to support the Government’s objectives with regard to investment in health research would be curtailed, including a significant reduction in the Awards possible for 2012 and 2013 (all of which are 3-5 year awards). The new pension levy on funded research will further impact on the amount of funding available to research leaders.

***Blood***

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While there are no legally binding commitments or agreements now, there is a Government decision to proceed and there are exigencies that necessitate the construction.

The MRTC project is vital from a national perspective given its role in maintaining a consistent and safe blood supply.

***Other Agencies***

In the event of a further cut to the Department’s vote, the modest funding currently available for these agencies would be further reduced. These agencies provide an important regulatory role and framework for Ireland’s health service.

<sup>50</sup> XX XXXXX XXXX XXXXXXX.

### ***Drugs Initiative***

Applications were not sought for the *Drugs Initiative* capital programme for 2011 given that the funding was already committed. As a result, there are no commitments in relation to 2012 to 2016. The Department is aware that there is an ongoing demand for capital funding for refurbishment works and equipment in the context of the expansion of the treatment and rehabilitation services to tackle the spread of problem drug use across the country. As well as demand from community-based services in Local and Regional Drugs Task Force areas, there is also demand for the set up of new facilities by the voluntary sector, which is a major provider of drugs services.

### **Conclusion**

As the above illustrates, it is not practicable that the Department's Vote 39 be reduced in any way. Indeed there will be a need to increase the allocation, within the overall Vote Group allocation, to facilitate the construction of the new Munster Regional Transfusion Centre and to sustain and improve Government support for to the health research agenda.

## **4.5 Information on programmes (including planning, procurement, and project management)**

The Department of Health is not involved in the delivery of research projects or the construction of health care facilities. Its role is monitoring and in this regard issues guidelines – General conditions attaching to sanction of capital grants to directly funded agencies – with each letter of sanction.

### **4.5.1 Health Research**

The HRB's function with regard to research programmes and infrastructures funded by it are:

- Managing of the award process from call design to contract issue;
- Implementation of governance arrangements where applicable;
- Reporting and monitoring – at least annually through written reports, but for larger awards through regular meetings with the coordinator, six-monthly written reports and interim reviews;
- General award management around meeting conditions of the award such as ethical approval, animal license or specific conditions, staff forms, any variations to the contract regarding start and end dates, budget reallocations, etc.

The HRB awards funding for research following a process of open competition and international peer review. All funding schemes are openly advertised with clear criteria for eligibility and assessment. Applications for funding are reviewed by up to five international experts in the specific field of research. A panel of national and international experts is then convened to assess applications, taking into account the criteria for the scheme and the peer review process. The HRB monitors the progress of the awards on an on-going basis.

Procurement of the Galway CRF is managed by NUI Galway with input from HSE West and the HRB. All parties to the project have quantity surveyors in place.

### **4.5.2 Blood Policy**

The planning will be managed by the IBTS but a specialist project management and design team will be purchased through the public tendering process. These are skills and expertise that IBTS (and the Department) do not have and are essential to the successful delivery of the project.

### **4.5.3 Drugs Initiative**

Funding proposals are drawn up by the project, approved by the relevant DTF, submitted by the DTF to the Department which, if satisfied, recommends approvals to the Minister. Funding in this instance is not paid directly by the Department to the project but through a funding agency, known as the Channel of Funding, for example the HSE, Local Authorities, FAS or VECs. All

contractual, financial and monitoring aspects are addressed by the Channel of Funding. The Channel of Funding accounts to the Department for the project expenditure, submits claims to the Department for funding required and the Department pays the Channel of Funding on receipt of timely and appropriate claims.

Some projects, particularly those with a broader or national focus may apply directly to the Department rather than through a DTF. In this case organisations who are approved for funding submit claims for payment to the Department on the basis of invoices in respect of work carried out.

## 4.6 Current expenditure implications of proposed future capital investment

### 4.6.1 Health Research

All HRB capital investments are for a fixed purpose and a finite period and there are no current expenditure implications. Funding under the schemes is awarded on a peer reviewed competitive basis. In addition all recipients of HRB awards are encouraged to obtain funding to continue their research (beyond the 'award' period) from the Irish, EU and overseas public and private sectors.

### 4.6.2 Blood Policy - IBTS

The estimated cost of the project including on site costs and contingency is €xxm. The IBTS can provide €xxm. The remaining €xxm is to be funded from Vote 39. IBTS funds will be expended first followed by Vote 39 capital grants. It is estimated that the capital grant from the Department of Health would not be required early 2013 as the capital set aside by the IBTS should be sufficient to meet the costs to that date. However, it is considered prudent to profile €xxm as a contingency for 2012.

It is expected that the new facility will be cheaper to operate. xx xx  
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### 4.6.3 Other Agencies

Capital grant to agencies are in respect of office fit-out, equipping and furniture and ICT infrastructure. Where agency functions are increased and additional staff approved by the DPER (e.g. HIQA), office furnishing and ICT equipment is required.

### 4.6.4 Drugs Initiative

The investment for 2011 relates to the construction of premises to house existing services and has no current expenditure implications.

### Temple Street

The group of structures (4 houses) comprising of the main terrace to the Temple Street Children's Hospital date from the Victorian period but the 4 buildings are known locally as 'Georgian Buildings'. The four houses have been altered many times over the years with large portions of the external walls rebuilt in 1916. A double return extension located to the rear the hospital was originally No's 10 & 11 before they were incorporated with the rest of the Hospital in the early years of the 20th century.

Essentially, the hospital comprises of four amalgamated Georgian buildings with a large extension to the rear (that was once two old houses itself) and together with some ancillary buildings, porta-cabins, and link-corridors they all form what is now known as 'the Children's Hospital'.

All of the main buildings date back to the late 1800s whilst other extensions have been added on in an ad-hoc fashion over time. The piece-meal development of the site has culminated in a mostly dilapidated, unfit for purpose, unwieldy, poorly laid-out, aging infrastructural edifice that constantly needs to be maintained and repaired. -In short, the buildings are old, crumbling in nature, sprawling, departmentally disconnected and in constant need of upgrading and repair just to maintain basic standards. The buildings services (air handling, ventilation, heating, electrical) and of a similar poor quality: they are antiquated; unable to meet present day regulations and standards and they are regularly identified as patient risk issues.

If one were to build a children's hospital from scratch Temple Street would be a perfect example of what not to do.

Some examples of dilapidations & poor infrastructure:

1. The existing operating theatres:
  - Leaks coming through ceilings (safety and infection hazard)
  - Tiles falling off walls (modern theatres do not have tiles)
  - Theatre department does not meet current infection control standards.
2. Lifts  
Quite simple there is no lift installation to some floors and until and recent reconfiguration of beds, some patients (children) had to be carried up stairs to their bed (say, after going to the EGC Room for a scan).
3. Fire Hazard  
The fire alarm system is old and does not meet current standards. In parts it is a non-addressable system and is past its normal life-span.
4. Lay-out  
The sheer volume of patients in the place means the hospital is always 'fire-fighting' for space. At present there is a boiler in the main corridor (screened by hoarding) until it can be re-located elsewhere.
5. Roofs  
Nearly all the flat roofs (there are many) are leaking or failing in some way. Every one of them is over 30 years old (the recommended life-span is 15-10yrs).

There are a huge number of other issues that can be detailed with a costing for each if required.

## Appendix 2

### **Our Lady's Children's Hospital, Crumlin**

Our Lady's Children's Hospital, Crumlin, was founded in 1956, based on designs prepared some years earlier. It occupies a site of approximately 12.4 acres, located in a largely 2 storey residential area in Crumlin.

The hospital has expanded significantly since it opened, especially in more recent years, but a significant portion of the building stock is that which was originally designed in 1951, with many of the later additions being undertaken on a piecemeal basis, often in the form of single storey modular buildings.

An Outline Development Control Plan (ODCP) for the Crumlin campus was prepared in 2004. The brief for this exercise noted, inter alia, that:

- 'there are a very large number of prefabricated buildings, some 30 years old, covering a substantial area';
- 'in most instances the wards and outpatients departments are overcrowded, in poor condition, and not fit for purpose when judged against current (2004) standards'; and
- 'a large portion of the estate needs considerable works to achieve target conditions'.

It also recognised that a significant portion of the existing estate did not meet contemporary environmental and space standards, especially in non-patient areas such as the accommodation block and the administration block. It is important to note that standards have changed significantly since 2004, and that the existing accommodation will not in many cases comply with recently introduced standards relating particularly to single room provision; infection prevention and control; and space per bed for clinical care of the patient.

In terms of functional suitability the ODCP brief concluded that 'a significant proportion of the estate is not suitable for the use it is being put to', and in terms of space utilisation, that the 'vast majority of the site is overcrowded'.

In addition it should be noted that there are significant problems with car parking on the Crumlin campus. Facilities for people with disabilities are inadequate. There is little by way of provision for parents of sick children, many of whom are obliged to sleep on the floor beside their child at night. Mechanical and electrical systems are largely running close to maximum capacity.

The hospital, in its ODCP, recognised the need for comprehensive renewal of the hospital, involving the replacement of almost all buildings, in order to achieve the necessary tangible impact for patients and their families. This plan was published in 2004. The situation, with notable exceptions such as the new ICU and developments in radiology, has not improved appreciably since then.

## **Appendix 3**

Spreadsheet – schedule of projects each with a value of €4m or more.  
Electronic copy provided