

HEALTH SERVICE CAPACITY

SUBMISSION TO THE DEPARTMENT OF HEALTH
BY IBM IRELAND

SEPTEMBER 2017

IBM is the longest-established IT multinational in Ireland, having opened our first office here in 1956. We are one of Ireland's largest employers, with a broad range of operations. In addition to sales and services for our Irish customers, we provide several international missions including services, digital sales, research and software development. While the majority of our staff is based in Dublin we also have sizeable software development teams in Cork and Galway.

IBM is a global technology and innovation company headquartered in Armonk, New York. It is the largest technology and consulting employer in the world, with 380,000 employees serving clients in 175 countries. IBM's expertise is in the intersection of technology and business, providing cognitive computing and cloud-based solutions that are changing the way the world works.

INTRODUCTION

IBM Ireland welcomes the opportunity to contribute to the Department of Health's consultation on the Health Services Capacity Review aiming to determine capacity requirement in the Irish health service to the year 2030.

IBM has decades of experience in procuring healthcare services for hundreds of thousands of our employees and retirees in the US. Alongside our work with healthcare systems around the world, that experience has convinced us of the central importance of population health and the role of primary care in pursuit of the quadruple aim of better outcomes, lower costs, higher patient satisfaction and lower clinical burnout. Capacity planning across the health delivery system is critical to the continued transformation of healthcare in Ireland and to achieving the quadruple aim.

In the sections below we have set out our views on the questions raised in the consultation document. If you would like further information on any aspect of this submission please contact Barry O'Brien, Government and Regulatory Affairs Executive at IBM Ireland.

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POLICY CONTEXT AND IBM'S POINT OF VIEW

The Programme for a Partnership Government states that one of the key ambitions for healthcare is to create a '*decisive shift to primary care*'. Implied in this ambition is additional capacity, which we believe should be built around GP-led team-based care. In the recent Sláintecare report from the Oireachtas Committee on the Future of Healthcare the issue of capacity is widely addressed, and there is a significant focus on the need for an integrated care approach, which we strongly endorse.

Based on our international experience, IBM believes that population health and an increased role for primary care within an integrated system, are the most effective ways to pursue the quadruple aim of better outcomes, lower costs, higher patient satisfaction and lower clinical burnout.

Both process redesign and technology have a major role to play in achieving those aims and in making the most effective use of available capacity. Given the challenges currently facing the Irish healthcare system, we believe that a focused programme to integrate primary and acute care for particular patient cohorts would deliver short-term benefits, help to optimise the available capacity, and pave the way for a comprehensive approach to population health management.

We expand on these ideas below, in response to the questions posed in the consultation document.

1. WHAT CHANGES IN MODELS OF CARE AND IN THE WAY WE DELIVER CARE ARE (A) MOST URGENT, AND (B) WHAT IMPLICATIONS WILL THIS HAVE ON CAPACITY REQUIREMENTS?

An integrated population health approach is most the most urgent of the changes required to care models. This should be GP-led, team-based care that uses technology and clinical evidence to guide the appropriate level of intervention.

In terms of the capacity requirement to deliver this, our experience and international models suggest that a team of one primary care physician and three clinical support staff would be needed for an average managed patient population of 1,200 persons. This figure would need to be adjusted based on the risk profile of the patients, and to recognise the unique characteristics of the Irish health system, but should be considered as a benchmark.

2. HOW CAN CURRENT CAPACITY BE MORE EFFECTIVELY USED?

In attempting to utilise current capacity more effectively, and at the same time putting in place the foundations for a sustainable system in the future, we suggest the following steps.

(i) Start Deploying Population Health

We recommend that a population health technology platform be put in place to enhance the capacity of primary care providers and to start implementing the ‘*decisive shift to primary care*’, consistent with the following recommendation from Sláintecare around the role of technology for population health (page 101).

‘The Committee recommends: A population health approach to HTA to aid evidence based decision making for funding medical technology use in the public system.’

As a first step, a focused programme to integrate primary and acute care for particular patient cohorts would deliver short-term benefits, help to optimise the available capacity, and pave the way for a comprehensive approach to population health management over the coming years.

We believe that a suitable cohort to begin with would be the over 70s with comorbidities, and that the initial focus should be on avoidance of admission/readmission to the acute sector. This should be based on clinical best practice and supported by technology that enhances the effectiveness of existing capacity. This should leverage the existing GP capacity but may require some re-balancing within the nursing capacity that currently exists. Risk stratification, clinical decision support and care coordination are key attributes of the technology solution that should underpin this reorientation of existing capacity with an overall emphasis of bringing care closer to the patient. This will have a direct impact on ED attendances and have downstream impacts on acute capacity to deal with wait lists.

(ii) Integrated Process Re-design across the Primary and Acute Sectors

Given the Government’s ambition to make a decisive shift to primary care we recommend that a programme of ‘best in class’ process re-design should be undertaken to enable integrated care across both the primary and acute sectors, and based on clear metrics of desired outcomes based on clinical evidence. In our work in the US it is clear that process redesign across the care continuum supported by technology has had a positive impact on readmission rates.

In particular the programme should redesign how primary care teams operate in the community. This should cover all funded capacity and not just direct HSE employees. Specifically it should address the staffing of physician’s offices to provide additional support from an extended team of professionals, including for example pharmacists to reconcile medications, case managers to help reduce readmissions, and behavioural health providers to manage psycho-social issues. This will allow clinicians to operate at the top of their license and if properly implemented will increase capacity. In terms of funded capacity the redesign should consider the broader care system including NGOs. We would also draw your attention to the State of Vermont’s approach to utilising all capacities to drive outcome for patients.

(iii) Benchmarking of Patient Outcomes

Patient outcomes should be benchmarked across all hospitals (public and private), in order to provide evidence to support optimal funding allocation to maximise output from existing capacities in the acute sector.

(iv) Clinical Burnout avoidance strategy

A key risk to the existing capacity is staff leaving their professions. While there are many contributing factors including the global competitive market for such skills, we believe it is important that due consideration be given to the factors that lead to clinical burnout¹. The Department should have policies that help lower clinical burnout as it is a key determinant of capacity in a healthcare system.

3. WHAT DO YOU CONSIDER TO BE THE PRIORITIES FOR CAPITAL INVESTMENT OVER THE NEXT 15 YEARS?

(i) A Platform for Population Health

ICT investment should focus on population health initially, leveraging existing Electronic Medical Record data in that care continuum. This should focus on a central platform utilising both primary care and acute data that can drive risk stratification of the population, identify evidence based care gaps and provide team based collaboration to allow these care gaps to be closed.

(ii) Cognitive / AI Decision Support Solutions

Investment in Cognitive / Artificial Intelligence (AI) should be considered as a decision support tool for clinicians and care providers, particularly in knowledge/time intense areas of clinical decision making. For example AI-based solutions are available that provide clinicians with insights and supporting evidence from structured and unstructured patient record data (including images such as CT scans), from the ever-growing corpus of medical literature and

¹ IBM's Deputy Chief Health Officer, Dr. Paul DeChant has specialised in the area of clinical burnout and how it impacts service delivery and capacity in multifaceted ways:
<http://www.pauldechantmd.com/category/quadruple-aim/>

from approved clinical guidelines. The use of such tools can improve the speed and consistency of decision-making and provide important evidence to back up the decisions made.

(iii) Process Redesign alongside Capital Investment

Over the medium term investment in the acute sector is critical to ensure it is efficient, safe and adheres to best clinical practice. We note the recent significant capital investment programme in primary care centres and the major capital investment plans in the acute sector that have been announced. Without process redesign and supporting technologies the potential of these investments to support the growing demands on capacity will remain sub-optimal. In this context the business case for capital expenditure should not be considered in isolation and appropriate current expenditure should be provided simultaneously for process redesign and supporting technologies.

ADDITIONAL COMMENTS

Finally, we would like to provide the Department with the results of a survey conducted with our clients in the United States that have used population health management technology. Their feedback clearly shows the positive impacts not only on costs and effectiveness, but on patient outcomes and engagement.

