Integrated Healthcare in Ireland – A Critical Analysis and a Way Forward

An Adelaide Health Foundation Policy Paper



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THE ADELAIDE



HEALTH FOUNDATION



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Contents

Foreword			5	
Summary			6	
Recommendations			8	
Glossary of main terms			11	
Chapter 1	Intro	oduction	24	
Chapter 2	What is Integrated Care?			
	2.1	Levels of integration and stakeholders' perspectives		
	2.2	Breadth of integration		
	2.3	Degrees of integration		
Chapter 3	Heal	th policy and health service reforms in contemporary Ireland – an overview	29	
	3.1	Health policy reforms and their potential impact on integrated care		
		3.1.2 Recent changes on foot of a newly appointed Minister for Health		
	3.2	Health service reforms and their potential impact on integrated care		
Chapter 4	How	will integrated care help the Irish healthcare system?	37	
	4.1	'Future proofing' the system for the increasing demand for care		
	4.2	Bridging the gap between health and social care		
	4.3	Social integration of society's more vulnerable groups		
	4.4	Better system efficiency		
	4.5	Improvements in the quality, safety and continuity of care		
Chapter 5		is integrated care such a challenge? A key barrier to developing integrated in an Irish context	44	
	5.1	Policy-level: competing policy agendas. Integrating social care and healthcare		
Chapter 6	What evidence-based mechanisms are available to drive integrated care in Ireland? 47			
	6.1	Integrated care pathways		
	6.2	Funding models		



- 6.2.2 Commissioning of services
- 6.3 Organisational models
 - 6.3.1 Hospital groups
 - 6.3.2 Regionalisation of hospital, community and primary care services for geographic coverage
 - 6.3.3 Polyclinics
- 6.4 Strengthening of primary care services
- 6.5 Human capacity models
 - 6.5.1 Multi-disciplinary teams
 - 6.5.2 Physician integration
 - 6.5.3 Clinical leadership
- 6.6 Aligning system incentives
- 6.7 Developing information and communication technology

Chapter 7	What tools will help in adopting and mainstreaming integrated care 'at scale'?		68
	7.1	Plan, Do, Study, Act	
	7.2	Implementation science	

Chapter 8	How can success be defined and measured?	
	8.1 Tools to measure integration	
Chapter 9	Conclusion	76
References		81
Appendix: Search string		94

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Foreword

The Adelaide Health Foundation (AHF) is dedicated to the development of policies that facilitate the provision of the best possible healthcare, based on the best available evidence. It is one of the functions of the AHF to evaluate current policy and practice, through research and analysis. The lexicon of healthcare is full of wonderful jargon. Who could wish for anything but patient-centred care? And yet the term sometimes seems to be code for 'system-centred care', particularly when private medicine is involved. Surely it is in the patient's interest to get out of hospital as soon as possible - but is this because he/she is fit to go, or to save money by discharging a frail patient with expensive complications to make room for another fee-paying client, consumer, patient or whatever the preferred term is?

Integrated healthcare sounds so obvious, and as Dr Darker points out in this paper, who would wish for disintegrated care? Nevertheless of the, ouch, 175 definitions of integration in the context of healthcare, even the widely used World Health Organisation definition is entirely aspirational. Clinical, professional, organisational and functional integration have to relate to the needs of users and to the roles of front-line providers, managers and policy makers. Add in primary care, secondary care, hospital and community care and the need to co-ordinate payer and provider and it becomes evident how difficult it is to make an organisational chart to show how all these factors inter-relate, never mind inter-react.

Undaunted, Dr Darker endeavours to guide us through this maze. She discusses definitions and defines basic principles, the logic behind integrated care, and current proposals to develop better integration of healthcare in Ireland. She addresses integrated care pathways, the role of Universal Health Insurance and the debates about funding and organisational models. International examples are cited. Barriers are defined and, importantly, components for a successful integrated care strategy are outlined, concluding with twentyfour specific recommendations.

We live in an era of evidence-based medicine, underpinned by the randomised control trial. But the complexities of integrated care do not lend it to such easy scrutiny and it must be admitted that the logically hoped for improved outcomes may be hard to demonstrate, at least in the short term. Further research into the objective evaluation of healthcare reforms as opposed to the following of the shibboleths of healthcare fashionable thinking is needed.

We have been described as a country of talkers and one sometimes feels that we may be so crushed by the weight of policy documents, white papers, expert reports (often from accountancy firms instead of health experts for some reason) and so-forth that effective action will be impossible. Dr Darker has given us some (evidence-based!) help to climb out from under the comfort of soft opinions to move forward towards truly integrated healthcare.

Professor Ian M Graham FRCPI, FESC, FTCD Chair, Adelaide Health Foundation

Summary

- Patients using the Irish healthcare system have long been saying that the lack of integration is a major frustration for them.
 A challenging financial environment and demographic change resulting in rising demand and increasing numbers of people with complex needs means health and social care must be on the front foot. The focus must be on people's wants and needs rather than the organisations and structures that deliver care. We need to prevent ill health and support people to stay well rather than only intervening in a crisis. Never has there been a more pressing need to change the status quo.
- The Irish healthcare system is undergoing a period of radical reform as it moves towards a European social solidarity model underpinned by Universal Health Insurance (UHI). Internationally it is understood that integration within and between services is a vital component of any system to support continuity of care for patients, including effective chronic disease management. Reform of the Irish healthcare service is an opportunity to achieve this integration.
- The recent focus on the integration of health and social care, and its potential to provide better, more cost-effective services, is in direct response to three pressing issues. First, spending cuts and a need to deliver further efficiency savings. Secondly, demographic changes, with a predicted rise in demand for health and social care services due to an ageing population and a greater number of people living with long-term conditions. Thirdly, recognition that too many people are not getting the services they need, or not receiving them in the most suitable setting.

- No single 'best practice' model of integrated care exists. What matters most is clinical and service-level integration that focuses on how care can be better provided around the needs of individuals, especially where this care is being given by a number of different professionals and organisations. Moreover, integrated care is not needed for all patients or all forms of care but must be targeted at those who stand to benefit most.
- Integration is easy to talk about but difficult to achieve. The implementation of integrated care is complex with many factors facilitating and hampering reform. In the Irish context there are demand constraints due to demographic and epidemiological changes, rising patient expectations coupled with supply constraints such as staff shortages, and continuing cost escalations through the development of medical technology and equipment. Supply and demand characteristics are not independent and may interact in complex ways. Organisation and regulatory factors, such as health system governance and financing, can also influence demand and supply.
- Many barriers exist in Ireland to implementing integrated care, including policy (e.g., social care not being included in UHI) and organisational (e.g., persistent weakness of commissioning of services) barriers.
- Evidence based integrated care mechanisms are examined in this paper and how these may relate to an Irish context. There is a particular focus on care pathways, funding models (e.g., money follows the patient and commissioning of services), organisation models (e.g., Hospital Groups, regionalisation of hospital,

community and primary care services for geographic coverage and polyclinics), strengthening of primary care services, human capacity models (e.g., multi-disciplinary teams, physician integration and clinical leadership), aligning system incentives and finally developing information and communication technology as levers for integrated care within the Irish healthcare system.

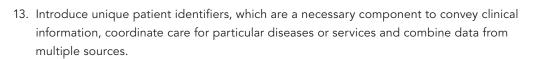
- In all of the successful integrated care projects we examined, additional and improved services outside hospital were required – shining a light on the lack of current capacity and capability in community services to deliver care coordination and more intensive care in the home environment.
- No country has a fully integrated healthcare system. However, Ireland can still learn from international examples, such as those in the UK, US, Germany and Denmark, the merits of which are discussed throughout the paper. Many integrated care systems can only be supported if there are appropriately functioning clinical information systems. A culture of organisational leadership is an ideal environment to foster integration alongside physician integration. Macro level issues relating to governance can also be a lever for integration and financial management systems.
- The application of evidence based largescale change mechanisms such as 'Plan-Do-Study-Act' models and those championed by implementation science are discussed.
- A key challenge for policy-makers and planners pursuing evaluation is to develop more suitable approaches to measuring and

assessing integrated care. Such work requires sound theoretical underpinnings in order to guide evaluation and measurement, and the use of both quantitative and qualitative methods. Such an approach might help measure integration, for instance, not only in relation to the impact on health outcomes, but also improved quality of care, service user satisfaction, and effective relationships and systems. Measurement and assessment of integrated care at patient and population level are outlined with a focus on key performance indicators and outcome measurement.

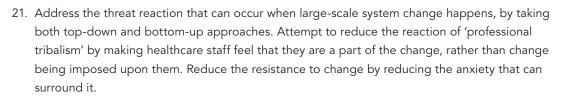
- Twenty-four recommendations are made for charting a way forward for integrated care in Ireland that will contribute to the rapid reforms of our health service.
- The benefits of integrated care to the individual will not be realised until significant efforts are made to develop capacity in primary and community care, to prioritise investment in social care to support rehabilitation and re-ablement, and to take forward the subsequent downsizing of activity undertaken in acute hospitals. In improving care for every person with complex health and social care needs, a population-based approach is therefore required that reaches out to local people and provides proactive care and support to meet their needs. The prize to be won is a health and social care system centred on the needs of individuals and patients and delivering the best possible outcomes.

Recommendations

- 1. Agree on a definition of integrated care. We advocate for the WHO definition: "The organization and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results and provide value for money".
- 2. Find the appropriate balance between user and provider integration. Policy makers and practitioners should ask themselves for whom care is integrated and be clear about which perspectives dominate in the way that care is organised and delivered.
- 3. Allow for horizontal as well as vertical integration. Hitherto the focus has been on integration between primary and secondary care, but the importance of integration within primary and community services and integration within hospital services should not be overlooked.
- 4. Shift historic behavioural and cultural attitudes in health and allied services to bring about integrated care to patients both within primary and secondary care and across services.
- 5. Allocate resources that support the development of balanced service systems rather than the favouring of acute healthcare at the expense of prevention, primary and community services.
- 6. Start improving the integration of care by strengthening and investing in primary care. Health systems built on the principles of primary care achieve better health and greater equity in health than systems with a speciality care orientation.
- 7. Promote parity between physical and mental health in practice, not just in rhetoric. Recognise and plan for the co-existence of physical and mental health morbidity in patients, and provide services that are in a position to respond to this typical complexity.
- 8. Recognise the potential importance of incentives and allow for flexibility for the future rather than getting tied into long-term contracts.
- 9. Consider budget pooling or special ring fenced funding for integrated services.
- 10. Consider incentives for providing comprehensive, coordinated and continuous care for the prevention and management of chronic illness. Currently funding systems continue to reward isolated activities and not joined up packages of care.
- Ameliorate the documented unintended consequences of the Disease Related Groupings system by an effective and transparent technical financial management of the payment system that underpins the "Money Follows the Patient" (MFTP) funding mechanism.
- 12. Put in place a well-resourced integrated Information and Communication Technology (ICT) system. Our hospitals have very poor availability of electronic medical records, while evidence indicates that primary care services are better equipped for ICT. Ultimately we need a mechanism to integrate the ICT between, within and across services.



- 14. Make social care a part of UHI. As long as health and social care are in different funding pools there will always be tensions around responsibility and where the money goes. Carry out a costbenefit analysis of the inclusion of social care services within the common basket of services within the UHI model.
- 15. Outline coherent regulatory and inspection systems for health and social care services that do not duplicate one another, and promote integrated practice and service models.
- 16. Re-establish responsible autonomy in clinical work. Policy authorities' efforts to overcome resistance to reforms by widening the scope and reach of 'top-down' performance management and regulation are self-defeating. Re-establishing 'responsible autonomy' as the primary organising principle of clinical work will empower health professionals to strike a balance between the clinical and resource dimensions of care and between clinical autonomy and transparent accountability.
- 17. Measure what matters. Ensuring integration is framed through the experience of patients. Include patient feedback into the measurement of how the healthcare system is performing, and place patient satisfaction with services in the context of overall quality improvement.
- 18. Consider carefully how we will measure success. Appropriate time is needed to assess whether reform is working. If it is determined that reform is not working, then the system needs to be allowed to change again in an iterative process.
- 19. Select a recognised tool to measure integration. There are three tools described to measure integration, the 'balanced score card', the 'clinical microsystem assessment tool' and the 'scale of functional integration' tool. Also indicators have been proposed to measure the extent to which an integrated health system has been achieved but these are limited in number, evidence of their implementation is scarce and they focus on integration within medical care or social care.
- 20. Form a multi-disciplinary group including primary and secondary healthcare professionals, patients, and stakeholders from public health, to design the Health Commission Agency (HCA), in order to reduce potential bias or favouritism. The HCA must also be given the power to de-commission.



- 22. Borrow ideas from abroad. When we look at success stories from health systems in other countries with a view to identifying and borrowing ideas for our own system, we need to look at what they started with (population size; population health status; quality of existing health service), the choices they made (policy, fiscal, clinical) and the time period within which we are assessing them have they just started the changes recently or have they well performing established systems? (e.g., Kaiser Permanente is 68 years old).
- 23. Argue the case for healthcare reform and the need for change with professionals, patients and the public. The benefits of integration to patients must be stressed and must not be drowned out by messages highlighting the benefits to the system in terms of costs. Public discourse is needed on the basic purpose of health reforms a sensible narrative is required that can distil the complexities of the reform and the ultimate goal of the reform otherwise the first experience of the reforms for many people will be an increase in their Universal Social Charge tax.
- 24. Future proof the health system. Plan for a healthcare service that is not just 'fit for purpose' now but that will be ready to meet the changing needs of the population of Ireland as it ages.

Glossary of main terms

Α

Access

The ability of an individual or a defined population to obtain or receive appropriate healthcare.

Acute Care

Healthcare that is generally provided for a short but severe episode of illness, such as emergency or other trauma, or during recovery from surgery. Acute care is usually provided in a hospital and it may involve intensive or emergency care.

В

Balanced Score Card

A tool, which can be used to track progress in completing actions or tasks required for implementation of integrated care and evidence of the impact of integration.

Basket of Services

The minimum health services that must be offered by health insurers.

Bundled Payment

A single payment for all services related to a specific treatment or condition, possibly spanning multiple providers in multiple settings.

Burden of Disease

The impact of a health problem as measured by financial cost, mortality, morbidity, or other indicators for society beyond the immediate cost of treatment.

С

Capitation Fee

A method of payment for health services in which the provider is paid a fixed, per capita amount.

Casemix

A method of quantifying hospital workload by describing the complexity and resource intensity of the services provided. This differs from a simple count of total patients treated or total bed days used.

Care Pathways

An agreed and explicit route an individual patient takes through health and social care services. Agreements between the various providers involved will typically cover the type of care and



treatment, which professional will be involved and their level of skills, and where treatment or care will take place.

Carte Vitale / Carte Vitale 2

The Carte Vitale is the health insurance card of the national health care system in France. It was introduced in 1998 to allow a direct settlement with the medical arm of the social insurance system. Since 2008, a second generation of smart cards is being introduced - the Carte Vitale 2 carries a picture for identification and the smart card has the additional functions of an electronic health insurance card to carry electronic documents of the treatment process.

Chronic Condition / Chronic Disease

A disease of long duration and generally slow progression. The four main types of chronic diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

Chronic Disease Management

A consistent definition of chronic disease management does not exist. We define chronic disease management in the clinical setting as an organised, proactive, multi-component, patient-centred approach to healthcare delivery. Care is focused on, and integrated across the entire spectrum of the disease and its complications, the prevention of multi-morbidities, and relevant aspects of the delivery system. Essential components include identification of the population with the conditions, implementation of clinical practice guidelines or other decision-making tools, implementation of additional patient, provider, or healthcare system-focused interventions, the use of clinical information systems, and the measurement and management of outcomes.

Clinical Information System (CIS)

An information system that collects, stores and transmits information that is used to support clinical applications (e.g. transmission of laboratory test results, radiology results, prescription drug orders). Electronic medical records are one method by which clinical information systems can be created.

Clinical microsystem assessment tool

A tool, which allows an organisation to compare its characteristics to those considered key to successful integration, such as integration of information.

Community Healthcare Organisations (CHOs)

A broad range of services that are provided outside of the acute hospital system and includes, primary care, social care, mental health and health and wellbeing services. The HSE have proposed nine CHOs nationally.

Continuity of Care

Linkage of components of individualised treatment and care across health service agencies, according to individual patient's needs.

Community Care / Community Services

Services and support to help people with healthcare and social care needs to live as independently as possible in their communities.

Coordinated Care

A collaborative process that promotes quality care, continuity of care and cost-effective outcomes, which enhance the physical, and psychosocial health of individuals. It includes assessing, planning, implementing, coordinating, monitoring and evaluating health-related service options.

D

Diagnosis Related Group (DRG)

A group of cases with similar clinical attributes and resource requirements.

Ε

Economic Evaluation

A series of analytical techniques that aim to ensure that the benefits from implemented healthcare programmes or interventions are greater than the implementing cost of the programme or intervention.

Economic Sustainability

Refers to the growth in healthcare spending as a proportion of national income.

Egalitarian

A principle that comes from the French word 'égal', meaning 'equal'. It is a philosophical perspective that maintain that all humans are equal in fundamental worth. In a healthcare context it relates to the view that people should have equal access to healthcare regardless of social, economic or other distinctions such as income, race or religious or political beliefs.

Electronic Medical Records (EMR)

Are records in digital format that are theoretically capable of being shared across different healthcare settings, such as between primary and secondary care services. In some cases this sharing can occur by way of network-connected, enterprise-wide information systems and other

information networks or exchanges. EMRs may include a range of data, including demographics medical history, medication and allergies, immunisation status, laboratory test results, radiology images, vital signs, personal statistics like age and weight, and insurance information.

Eligibility

Refers to whether or not an individual qualifies to avail of services.

Entitlement

A right to benefits or services granted by law or contract.

Euro Health Consumer Index

An index which allows for comparisons between healthcare systems amongst EU member states from the consumer's point of view, which assesses waiting times, range and reach of services.

Evidence Based Care

The conscientious, explicit and judicious use of current best evidence in making decisions about the care of patients arising from research and other sources.

F

Fee-For-Service

A method of provider payment where providers receive a payment for each item of service provided.

Funding Models

Types of ways to fund health and social care. Examples of these would be through taxation, universal health insurance, private health insurance and direct out-of-pocket payments.

Financial Management System

The method that an organisation uses to oversee and govern its income, expenses and assets with the objective of ensuring sustainability.

G

Gatekeeper

A health professional, typically a general practitioner, who has the first encounter with a patient and controls the patient's entry into the hospital system.

General Practitioner

A medical practitioner who treats acute and chronic illnesses and provides preventive and health education to patients, as well as referring them for further investigation or treatment.

Gezundes Kinzigtal

A population based integrated care initiative in Germany that covers all sectors and indications of care for a specified population.

Н

Health Commissioning Agency

A Healthcare Commissioning Agency (HCA) will be established from within the HSE and will be responsible for agreeing performance contracts and making payments to Hospital Groups.

Health Indicator

Quantifiable characteristics of an individual or population for describing the health of the individual or population.

Health Inequalities

Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes.

Health Information System

The generation and the use of appropriate electronic health information, to support decisionmaking, healthcare delivery and management of health services.

Health Policy

Refers to decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society. An explicit health policy can achieve several things: it defines a vision for the future which in turn helps to establish targets and points of reference for the short and medium term. It outlines priorities and the expected roles of different groups; and it builds consensus and informs people.

Health Promotion

The process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions.

Health Research Board (HRB)

Agency in Ireland supporting and funding health research.

Health Service Executive (HSE)

Provides all of Ireland's public health services, in hospitals and communities across the country.

Health Status

The level of health of the individual, group, or population as subjectively assessed by the individual or by more objective measures.

Health System

The people, institutions and resources, arranged together in accordance with established policies, to improve the health of the population they serve, while responding to people's legitimate expectations and protecting them against the cost of ill-health through a variety of activities, the primary intent of which is to improve health.

Hospital Groups

Individual hospitals will be 'grouped' to work together to provide single cohesive entities managed as one, to provide acute care for patients in their geographical area, integrating with primary and community care. Seven Hospital Groups have been formed – Dublin North East, Dublin Midlands, Dublin East, South/South West, West/North West, Midwest and the Children's Hospital Group. Each group will comprise between six and eleven hospitals and will include at least one major teaching hospital. Each grouping will also include a primary academic partner in order to stimulate a culture of learning and openness to change, within the hospital group.

Hospital

An institution the primary function of which is to provide inpatient diagnostic and therapeutic services for a variety of medical conditions, both surgical and nonsurgical. Most hospitals provide some outpatient services, particularly emergency care.

ICON

ICON (Integrating Care One Network) is a programme provided by the HSE to improve the coordination of services and to facilitate integrated care across primary, community and social care services.

Impact

The total, direct and indirect, affects of a programme, service or institution on health status and overall health and socioeconomic development.

Implementation Science

Implementation science is the study of methods to promote the integration of research findings and evidence into healthcare policy and practice.

Incentive

Something that encourages action or greater effort, such as a financial reward offered for increased productivity.

Inpatient

An individual who has been admitted to a hospital or other facility for diagnosis and/or treatment that requires at least an overnight stay.

Integration

A coherent set of methods and models, at funding, administrative, organisational, service delivery and clinical levels, designed to create connectivity, alignment and collaboration within the health sector.

Integrated Care

The organisation and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results and provide value for money.

Integrated Care Pathways (ICP)

An integrated care pathway is a multidisciplinary outline of anticipated care, placed in an appropriate timeframe' to help a patient with a specific condition or set of symptoms move progressively through a clinical experience to positive outcomes.

Integrated Delivery System

A network of organisations, usually including hospitals and general practitioners, that provides or arranges to provide a coordinated continuum of services to a defined population.

International Classification of Disease - 10 (ICD-10)

The International Classification of Diseases (ICD), developed by the World Health Organisation, is the standard diagnostic tool for epidemiology, health management and clinical purposes. This includes the analysis of the general health situation of population groups. It is used to monitor the incidence and prevalence of diseases and other health problems, providing a picture of the general health situation of countries and populations.

Intervention

An activity or set of activities aimed at modifying a process, course of action or sequence of events in order to change one or several of their characteristics, such as performance or expected outcome. For example, it is used in public health to describe a programme or policy designed to have an impact on an illness or disease.

Κ

Kaiser Permanente

An integrated managed care consortium, based in California, USA.

L

Lifestyle

The set of habits and customs that is influenced, modified, encouraged or constrained by the lifelong process of socialisation. These habits and customs include the use of substances, such as alcohol, tobacco, tea or coffee; dietary habits; and exercise. They have important implications for health.

Life Expectancy

The probable number of years remaining in the life of an individual determined statistically.

Local Health Integration Networks (LHIN)

LHINs are community-based, non-profit organisations in Canada, which fund and coordinate services delivered by hospitals, community care facilities and primary care.

Μ

Managed Care

A healthcare delivery system which entails interventions to control the price, volume, delivery site and intensity of health services provided to a covered population.

Managed Competition

A theory of healthcare delivery services that suggests that the quality and efficiency of such services would improve if, in a market controlled by the Government, independent health insurance groups had to compete for healthcare consumers.

Medicine Premier Hospital Quality Incentive Demonstration (HQID)

Hospital Quality Incentive Demonstration (HQID) is a pay-for-performance programme in the US designed to determine if financial incentives to hospitals are effective at improving the quality of in-patient care.

Money Follows The Patient (MFTP)

A payment system for individual public patients and a corresponding charging regime for individual private patients in public hospital care. MFTP is typically associated with funding of hospital care, although technically speaking it can be applied to primary and community care.

Morbidity / Morbidities

The incidence of disease within a population.

Multimorbidity / Multimorbidites

The co-existence of two or more long-term conditions in an individual.

Multidisciplinary Team (MDT)

The term used to describe professionals from more than one discipline working together in a co-ordinated way.

Multi-payer model

A system of compulsory private for profit health insurance. Typically individuals have a choice between insurance providers. The theory is that competition between insurers drives down costs.

Ν

National Health Service (NHS)

The system in the United Kingdom that provides free medical care and is paid for through taxes.

Ο

Organisation for Economic Cooperation and Development (OECD)

The OECD is an international economic organisation of 34 countries founded in 1961 to stimulate economic progress and world trade. Ireland is a member of the OECD.

Outcome

A measurable change in the health of an individual, or group of people or population, which is attributable to interventions or services.

Outcome measurement

System used to track treatment or care and responses. The methods for measuring outcomes are quite varied among providers. Much disagreement exists regarding the best practice or tools to measure outcomes.

Outpatient

A patient who attends a hospital clinic for treatment and is not admitted to the hospital.

Ρ

Patient Centered Care

An approach to care that consciously adopts a patient's perspective. This perspective can be characterised around dimensions such as respect for patients' values, preferences and expressed needs; coordination and integration of care; information, communication and education; involvement of family and friends.

Pay for Performance

In the context of provider payment, the payment of providers according to achievement on structure, process or outcomes of care.

Performance indicators

Measures of change in the health status of populations and in service delivery and clinical practice, collected in order to monitor and improve clinical, social and economic outcomes.

Plan, Do, Study, Act (PDSA)

A systematic series of steps for gaining valuable learning and knowledge during a reform cycle.

Polyclinic

A place where a wide range of healthcare services (including diagnostics) can be obtained without the need for an overnight stay. Polyclinics are sometimes co-located with a hospital.

Population

A group of individuals that share one or more characteristics from which data can be gathered and analysed.

Population Health Approach

An understanding that the influences on health are complex and occur in the events and settings of everyday life. A population health approach encourages a holistic approach to improving health and wellbeing and develops evidence based interventions that meet the identified needs of population groups and span the spectrum from prevention to recovery and relapse prevention across the lifespan.

Primary Care

An approach to care that includes a range of services designed to keep individuals well, from promotion of health and screening for disease to assessment, diagnosis, treatment and rehabilitation



as well as personal social services. The services are usually directly accessible by individuals and are generally their first point of contact with the health service.

Primary Care Networks

A new governance and organizational structure has been proposed by the HSE which entails the development of 90 Primary Care Networks of 50,000 average population across the country, with an average of 10 Networks per Community Healthcare Organisation.

Primary Care Team (PCT)

A multidisciplinary group of health and social care professionals who work together to deliver local accessible health and social services to a defined population of between 7,000-10,000 people at 'primary' or first point of contact with the health service. A typical primary care team consists of GPs, nurses, home helps, physiotherapists and occupational therapists. All the team's health care professionals work together to share information and their respective skills to ensure that patients with the greatest need receive services in a timely and coordinated way.

Private Health Insurance

For-profit business, providing insurance for individuals against the risk of incurring medical expenses.

Programme for Government

The Fine Gael/Labour programme for government is entitled 'Towards Recovery: Programme for a National Government 2011–2016'. The programme contains general and specific commitments across a range of areas including health and social care. In some cases there are specific time lines.

Protocol

A plan specifying the procedures to be followed in providing health and social care. Protocols specify who does what, when and how.

Provider

An individual healthcare professional, a group or an institution that delivers healthcare or social care services.

Purchaser / Provider Split (PPS)

The purchaser-provider split (PPS) is a health service delivery model in which services that provide healthcare services (i.e., hospitals) are kept organisationally separate from entities that purchase care (i.e., health insurance companies or Government).

Q

Quality of Life

It is an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological wellbeing, level of independence, social relationships, personal beliefs and their relationship to important features of their environment.

Quality and Outcomes Framework (QOF)

The Quality and Outcomes Framework (QOF) is a system for the performance management and payment of general practitioners (GPs) in the National Health Service (NHS) in England, Wales, Scotland and Northern Ireland. It was introduced as part of the new general medical services (GMS) contract in April 2004, replacing various other fee arrangements.

R

Risk Equalisation

A process that aims to neutralise equitably, differences in private health insurers' costs that arise due to variations in the age profile of the patients who have bought their health insurance plans. It involves transfer payments between health insurers to spread some of the claims cost of the high-risk older and less healthy members amongst all the private health insurers in the market in proportion to their market share.

S

Secondary Care

Specialist care provided on an ambulatory or inpatient basis within a hospital, usually following a referral from primary care.

Scale of functional integration

A tool, developed in Sweden, which allows organisations to analyse intraorganisational, interorganisational, horizontal and vertical integration.

Shared Care

Care provided collaboratively by general practitioners and specialist healthcare providers.

Single payer model

A single not-for-profit national fund which pays for healthcare. The fund holder is usually the State.

Socio Economic Status (SES)

An economic and sociological combined total measure of an individual's or family's economic and social position in relation to others, based on income, education, and occupation.

Statutory Health Insurance Modernisation Act

Legislation in Germany, which allows for sickness funds to spend a percentage of their overall expenditure on integrated care programmes.

System

A network of interdependent components that work together to attain the goals of the complex whole.

Systems Approach

A school of thought evolving from earlier systems analysis theory and propounding that virtually all outcomes are the result of healthcare systems rather than individuals. In practice, the systems approach is characterised by attempts to improve the quality and/or efficiency of a process through improvements to the system.

Systematic Review

A systematic review is a literature review focused on a research question that tries to identify, appraise, select and synthesise all high quality research evidence relevant to that question.

Т

Tertiary Care / Services

The provision of highly specialised services in hospital settings.

U

Universal Health Insurance

An insurance funding system for the health service, the aim of which is to deliver a single-tier health service, where access is based upon clinical need and not ability to pay.

Universal Primary Care (UPC)

Primary care services which are made universally accessible, free at the point of use, to individuals and families in the community.

Chapter 1 Introduction

The very term integrated care sounds positive; who could possibly want disintegrated care or fractured care? However, reviewing the topic reveals an intricate knot of such complexity that it significantly hampers systematic understanding, successful application and even evaluation of integrated care within any health system.

This paper explores the many definitions, concepts, underlying logic and methods found in healthcare systems and health service integration. In addition, the paper explores the main elements or building blocks of integrated care and suggests a way to address its various complexities and unknowns in an applied Irish context.

The integration of health services is a challenge to all healthcare systems. Integrated health systems assume the responsibility to plan for, provide/purchase and coordinate all core services along the continuum of health for the population served¹⁻³. This includes services from primary through tertiary care as well as cooperation between health and social care organisations⁴. A population health focus is considered essential by some authors to achieve a fully integrated health system⁵, with a people centred philosophy focused on population needs^{6–8}. The degree of integration is determined by factors such as the extent to which providers are assimilated into the larger system (reflected by similarities of goals, vision and mission) and the proportion of health services that are fully integrated in the system⁴.

Though strategies to achieve better integration may differ, the driving forces for the reform

process are similar in many countries. On the demand side, demographic and epidemiological changes, rising expectations of the population and patients' rights require a reform of the health system. Staff shortages, continuing cost inflation and service demand have intensified the call for more effective and efficient use of scarce resources through integrated service delivery models⁹. On the supply side, the development of medical technology and information systems and restrictions from economic pressures call for reforms to contain costs. Whereas demandrelated factors mainly threaten the integration of services, supply-related factors such as medical technology and information systems may facilitate it. Integrated health systems are widely considered to provide superior performance in terms of quality and safety as a result of effective communication and standardised protocols, although these outcomes have not been fully demonstrated¹⁰.

Recently, the European Commission has produced a compilation of good practices for integrated care from across the region with a focus on chronic disease management¹¹. Despite the growing enthusiasm for integration, information related to implementing and evaluating integration-related initiatives is dispersed and not easily accessible. There is little guidance for planners and decision-makers on how to plan and implement integrated health systems. With evidence-informed decision-making an expectation in healthcare management and policy¹², there is a need to seek out and apply current knowledge on health systems integration to advance effective

service delivery. Systematic reviews can serve as a tool for evidence-based decision-making for health planners and policy makers^{12–14}.

Based on these considerations, a review was conducted with the goal of summarising the current research literature on health systems integration. It focuses on definitions, processes and the impact of integrated health service delivery systems (see Appendix A for search string). Implementation of contemporary Irish health policy and recent health service reforms are critiqued against international evidence for integrated care.

Shaw et al¹⁵ in their report 'What is integration?' present four key lessons that can be used as guiding principles for those pursuing integrated care:

- 1. Integrated care is best understood as a strategy for improving patient care.
- 2. The service user (or population) is the organising principle of integrated care.
- 3. One form of integrated care does not fit all.
- 4. It is only possible to improve what you can measure.

Chapter 2 What is integrated care?

A recent review of the literature on integrated care revealed some 175 definitions and concepts¹⁶. The most common definition of integration comes from the World Health Organization: "The organization and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results and provide value for money." This reinforces the fact that integration is a means to an end, not an end in itself.

2.1 Levels of Integration and Stakeholder Perspectives

It is useful to look at integration from various perspectives, or levels: the individual user level; healthcare provider level; health sector policy and strategy level, and intersectoral policy level. To understand integrated care, it is essential to understand that integrated care means different things to different stakeholders. The different levels at which integration can occur can be expanded further¹⁷⁻²⁴:

Clinical integration acts at the micro level,

 i.e. by providing continuity, co-operation and
 coherence in the primary process of care
 delivery – integration is thus at the individual
 level of care. To the patient or service user,
 it means a process of care that is seamless,
 smooth, and easy to navigate. Users want a
 coordinated service, which minimises both the
 number of stages in an appointment and the
 number of separate visits required to a health
 facility. They want health workers to be aware
 of their health as a whole (not just one clinical
 aspect) and for the health workers from
 different levels of a system to communicate
 well. In short, patients want continuity of care.

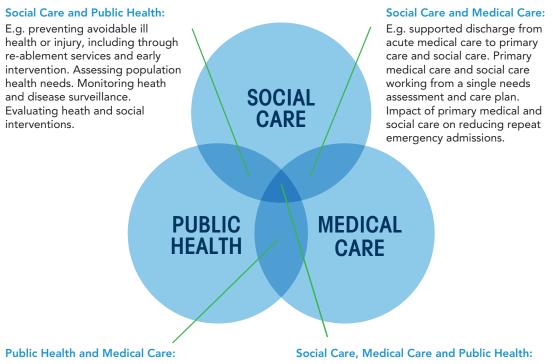
- Professional integration is at the meso level, e.g. in the form of contracting or strategic alliances between healthcare professionals. To the frontline provider, it means working with professionals from different fields and coordinating tasks and services across traditional professional boundaries. For providers, integration means that separate technical services, and their management support systems, are provided, managed, financed and evaluated either together, or in a closely coordinated way.
- Organisational integration also acts at the meso level of systems, e.g. in the form of contracting or strategic alliances between health and social care institutions. To the manager, it means merging or coordinating organisational targets and performance measures, and managing and directing a large and professionally diverse staff.
- Functional integration occurs at the macro level of the care system, i.e. through the mainstreaming of the financing and regulation of treatment, care, prevention, and social services. To the policymaker, it means merging budgets, and undertaking policy evaluations which recognise that interventions in one domain may have repercussions on those in other domains, and thus should be evaluated as part of a broader care package.

2.2 Breadth of Integration

Distinction can also be made between horizontal integration (linking similar levels of care, e.g., multi-professional teams) and vertical integration (linking different levels of care, e.g., primary and secondary levels of care). Different approaches have been used to integrate care, but the approaches can be grouped into three broad categories²³:

- Integration between primary care and secondary care. These efforts are usually designed to provide one stop shop services for patients; to improve care coordination, especially for people requiring long-term care including chronically ill and elderly patients; or to ensure more appropriate use of healthcare resources.
- Integration between healthcare and community care. These efforts coordinate a wider range of services, including social services and community services.
- Integration between payers and providers. These efforts are designed to coordinate care planning, commissioning, and delivery. Payer-provider integration also makes it easier to ensure that the incentives within the system encourage all providers to maximise care quality while minimising cost.

Figure 1. Interaction of social care, medical care and public health. Adapted from opportunities for healthcare integration²⁵



E.g. assessing population health needs. Preventing ill health and lifestyle diseases and tackling their determinants. Monitoring health and disease surveillance. Evaluating health interventions. E.g. maximising the health and well being of each individual and the population as a whole. Seamless health and social care for those service users who need it.

2.3 Degrees of Integration

Leutz²⁶ is the author of perhaps the most wellknown framework for health-related service integration. According to Leutz, there are three degrees of integration that are applied to services:

- Linkage entails healthcare providers working together on an ad-hoc basis to refer patients between services and communicate progress. The providers seek continuity of care within major system constraints. Policymaking and service planning changes are not required.
- Coordination is a structured response between organisations involving defined mechanisms to facilitate communication, information-sharing and collaboration while retaining separate eligibility criteria, service responsibilities and funding.
- Full integration, the most transformative approach, refers to the formation of a 'new' entity that consolidates responsibilities, resources and financing from two or more entities into one single organisation or system in order to deliver and pay for the specified continuum of care required.

Chapter 3 Health policy and health service reforms in contemporary Ireland – an overview

What people want from their health service is clear - the best possible standard of care available to all. This takes a combination of resources, planning and reform. Over recent years funding for the health service in Ireland has declined, amidst the most severe economic crisis since the 1930s, while the demands for care and patient expectations have increased. The health system that managed 'to do more with less' from 2008 to 2012, achieved mostly by transferring the cost of care onto people and by significant resource cuts²⁷. From 2013, health system indicators show a system that has no choice but 'to do less with less' with diminishing returns from crude cuts. This is evident in declining numbers with free hospital care, and declining home care hours, combined with increased wait-times and expensive agency staffing. Alongside this there was a growing discourse in society to have a healthcare system that is accountable, effective, efficient and capable of responding to the emerging and on-going needs of the public. It is through this lens that system reforms in general and also integrated care in particular should be viewed.

3.1 Health Policy Reforms and their Potential Impact on Integrated Care

The Programme for Government entitled 'Towards Recovery, Programme for a National Government 2011-2016'²⁸ has committed to ending the "unfair, unequal and inefficient two-tier health system" by introducing universal health insurance (UHI). The Government favours universal healthcare through an insurance based system that draws on the model introduced in 2006 in the Netherlands, This is a system of compulsory private for-profit insurance with strong government regulation, with payments related to ability to pay and not to gender, age or health status. Health insurers will be obliged to provide the same basic package for all but may also have the option of providing supplementary packages. These supplementary packages will not be able to provide faster access to procedures already provided in the basic package. Risk equalisation will ensure that health insurers are unable to refuse any applicant. The Government will pay the premia for people on low or no income and subsidise those on middle incomes.

The common underlying principles that define UHI are the provision of access to care on the basis of need, and the payment for insurance on the basis of income or ability to pay. This contrasts with private insurance, which relates payment for insurance to the risk of the individual falling ill and excludes those who have not paid the premium. The key characteristics of the basic UHI model are:

- Insured persons pay a regular contribution based on income or wealth, and not on the cost of the services they are likely to use.
- Access to treatment and care is determined by clinical need and not ability to pay.
- Contributions to the social insurance fund (or funds) are kept separate from other government mandated taxes and charges.
- The fund finances care on behalf of the insured persons, and care may be delivered by public and private healthcare providers.

The Programme for Government states:

"Under this system there will be no discrimination between patients on the grounds of income or insurance status. The two-tier system of unequal access to hospital care will end." (p32).

The health reform plans outlined in the Programme represent nothing less than a commitment to a total transformation of our health service. The merits of a multipayer versus a single payer model have been debated²⁹ on both technical merits (i.e., efficiency, equity and fairness, transparency, effectiveness and social solidarity), as well as capacity and implementation challenges; and are not the focus of the current paper. Between 2006 and 2010, the Adelaide Hospital Society provided a clear, comprehensive and evidence-based pathway of providing equitable healthcare in Ireland, through UHI, ahead of the Governments plans to introduce UHI³⁰⁻³². Despite the evidence presented to Government about the best model of introducing UHI to Ireland, the Government look set to go ahead with the multi-payer model of UHI.

Many governments see provider competition as a stimulus for reform, efficiency and quality improvement. Services increasingly are being delivered by a mix of public, private and voluntary sector providers. This increased diversity of provision may potentially hinder and not facilitate the implementation of integrated care. The coordination challenges involved in delivering a complex set of services within a coherent integrated care package may increase. Choice and competition policy can appear at times to run contrary to the desire in many sites for more integrated care³³. The key issue here is the unit of competition and whether this is defined narrowly (e.g., for an annual foot check) or broadly (e.g., for a year of care to a diabetic). It also begs the question as to how competition should operate – should it be competition for the market (i.e., tendering to providers) or within the market (i.e., patient choice of location and caregiver). It may be more difficult to ensure equitable access for all users in a highly diversified quasi-market.

Where choice and competition policy is concerned Ireland has a history of having State owned monopolies within services such as electricity and telephone service provision. The reaction to this over time has been to allow competition to enter the market with the idea that competition will drive down prices. The Government is applying the same logic to the health insurance market and is one of the main reasons for choosing the Dutch system on which to base the reforms within the Irish health insurance market. However the evidence emerging from the 'managed competition' of health insurers within the Netherlands is sobering³⁴, highlighting the challenges of developing integrated services in a market-style healthcare system³⁵. Perhaps counter-intuitively, competition has resulted in expenditures continuing to outpace general inflation. The latter increased at an average annual rate of 5% since 2006, while over the same time, the total costs of health insurance for Dutch families, including premia and deductibles, increased by 41%³⁴.

Reforms aimed at increasing and managing competition produced high administrative costs and complexity. Administering premium subsidies for low-income people has proven expensive. More than 40% of Dutch families now receive such subsidies in a voucher based system — and the national tax department hired more than 600 extra staff members to check incomes each month and calculate the value of the vouchers. The expansion of consumer choice has not worked as envisioned. Discussions between GPs and social welfare providers on developing care plans and pathways for older adults were considered anti-competitive in the Netherlands and had to cease. Payments for primary and secondary care are also separated, which creates barriers to developing joint services³⁶. The Government had initially promised to publish a White Paper on UHI in early 2013 that would have outlined exactly how UHI would be financed. A White Paper³⁷ was published in April 2014 which was widely criticised for not having costs estimated on the standard basket of services to be covered under UHI. A public consultation phase ensued, the results of which are not yet available.

The Programme for Government provides for the VHI to remain in State ownership in order to ensure a publicly owned health insurance option within the new system of UHI. The insurers will have a lot of power under the new system, as the purchasing of healthcare will be largely devolved to insurers. Health insurers will commission care for their members from primary care providers, the forthcoming Hospital Trusts and private hospitals. However the insurers will not be allowed to operate outside of the UHI system and will not be able to sell faster access to services covered by UHI³⁸.

One of the tenets of the Government's argument favouring a managed competition model of UHI is that people will have a choice between insurers. While this is technically true, what is the evidence that people will actually utilise this choice? Individuals can change insurance companies once a year. In 2006, about 18% of Dutch people switched insurance plans but the following year less than 5% switched, and 80% of them did so as a result of changes made by their employers rather than individual decisions. Since 2007, only about 4% of the Dutch population, on average, has changed plans each year. Moreover, accelerating consolidation of the health insurance market has restricted meaningful choice of insurance plan. Currently, four insurance conglomerates control about 90% of the Dutch health insurance market. The Dutch experience provides a cautionary tale about the place of private insurance competition in healthcare reform. It would seem that if the Netherlands experienced a significant rise in costs when they introduced managed competition into their market, it is likely that the same would be true for Ireland. The fact that the Netherlands had a health service that was closer to universalisation to begin with means that we have further to travel down the equity road and therefore have more exposure to increased costs.

3.1.2 Recent changes on foot of a newly appointed Minister for Health

While UHI is still official Government policy, the change of Minister for Health in mid-2014 was associated with an appreciation that the planned timelines were not realistic and the implementation is likely to result in a more staged approach. When Minister Varadkar was given the Health portfolio, he was presented with a 300 page document prepared by the Department stating that the reform process is currently "an unworkable construct" and that "a more coherent approach" (page 22) is needed to stabilise the system"³⁹. On foot of this Minister Varadkar has indicated that the HSE will not be abolished until other elements of reform have stabilised. He also indicated that UHI would not be achieved by 2019 as previously indicated. However, many of the core elements of reforms were still being prioritised. For example, free GP will be provided to children under the age of six years and to adults over the age of 70 years. There is an expectation that this will then be extended to include the remaining age cohorts. However, full universalisation is now not expected until at least or beyond, 2019.

At a meeting held in September 2014 with key stakeholders in health, hosted by the Department of Health Ministers Varadkar and Lynch, ten priorities were outlined for the next 18 months bringing the current Government up to the General Election in 2016:

- 1. Setting a realistic budget for 2015 for the health service
- 2. Stabilising cost of health insurance

- 3. Reducing the cost of medicines
- 4. Retaining doctors and nurses
- 5. Universal primary care for children under 6 years of age and seniors over 70 years
- 6. Hospital Groups and Money Follows the Patient
- Five major capital costs, including amongst others, the new maternity hospital at the St Vincent's campus
- Speeding up of delayed discharges for the medically well
- 9. Universal patient registration, including a unique patient identifier
- 10. Establishing Healthy Ireland

Also during this meeting the language changed, there was less emphasis on 'universal health insurance' and more on 'universal healthcare'. While there is significant merit in focusing reform on key areas of the health service so as to not destabilise the system entirely, it is imperative that Government does not lose sight of the macro level purpose of universalisation – which is the end of the inequitable and unfair two-tiered health system that we currently have in Ireland.

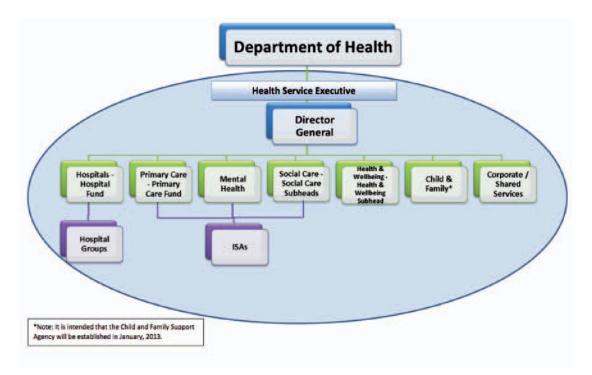
3.2 Health Service Reforms and their Potential Impact on Integrated Care

On foot of the Programme for Government, a paper outlining specific actions to be taken to reform the Irish health service were outlined in 'Future Health – A Strategic Framework for Reform of the Health Service 2012-2015'³⁸. Resulting from this the Integrated Care Agency has been established on an administrative basis, the Integrated Services Directorate has been mapped onto the four regions of the HSE and a major new initiative called 'Healthy Ireland', which may improve integration of services, has been established.

Integrated care features strongly in the Programme; "the integration of care in all settings is key to efficient healthcare delivery, in which the right care is delivered in the right place" (p 35)²⁸. Integration of care will be the responsibility of an Integrated Care Agency under the auspices of the Minister for Health and the "goal under UHI will be to create an integrated system of primary and hospital care" (p 32).

The Integrated Services Directorate, which is structured within the four regions of the HSE, has responsibility for the delivery of all health and personal social services across the country including hospital, primary, community and continuing care services. This also includes management of an overall budget of \in 14bn and a statutory and voluntary sector workforce of 110,000⁴⁰.





We will have seven new Directorates covering areas of care such as Hospitals, Primary Care, Social Care, Mental Health, Children, Health and Well-Being and Shared Services. The Directors of the Directorates will report to the Director General of the Health Service Executive³⁸. Evidence of strong governance with membership from all of these stakeholders will be needed to ensure this key component of health service integration.

Bringing together organisations and services into an integrated health system through contractual relationships or networks typically requires development of governance structures that promote coordination⁴¹. Governance must be diversified, ensuring representation from a variety of stakeholder groups that understand the delivery of healthcare along its continuum, including physicians and the community⁴¹⁻⁴³. A flatter, more responsive organisational structure⁴⁴ that fully uses the skills and talents of employees and is independent of, but accountable to government and the health organisation and providers^{2,3} facilitates integration. Strategic alliances between external stakeholders, government and the public are essential, as are financial incentives that influence providers' attentiveness to costs and quality of services rendered⁸. The complexity of these systems requires effective mechanisms for accountability and decision making⁴⁵.

'Future Health' has also outlined how the structures within the health system will be developed to support people to access care more easily, and also places health promotion and prevention of ill-health as core pillars of reform. A flexible, multi-skilled and teamoriented workforce is essential to deliver on health reforms.

Attempts to co-ordinate and integrate services across the Health Service Executive (HSE) are not new. For example, the HSE, through its ICON (Integrating Care One Network) programme, has previously piloted integrated care models across a range of different care groups and conditions such as disability community rehabilitation, respite care for older people and early intervention programmes for children, with mixed success⁴⁶. However, never in the history of the Irish state has there been proposed such radical reform of the healthcare service. This change brings new opportunities, and challenges, to promote the organisation and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results and provide value for money. It also demonstrates that Government recognises that integrated service delivery is required in order to respond to the challenges of a growing number of the population with chronic conditions and the increasing prevalence of co-morbidities.

An effective health system is a prerequisite for improved health and wellbeing and a competent, skilled and multi-disciplinary workforce is the most important resource for delivering health and wellbeing services. In early 2013, the Government published 'Healthy Ireland – a framework for improved health and wellbeing 2013-2025⁴⁷. 'Healthy Ireland' is a policy, which takes a population health approach, to improve the health and wellbeing of people living in Ireland over the coming generation. It sets out a wide framework of actions that will be undertaken by Government Departments, public sector organisations, businesses, communities and individuals to improve health and wellbeing and reduce the risks posed to future generations. The four high level goals of the framework are: increasing the proportion of Irish people who are healthy at all stages of life; reducing health inequalities; protecting the public from threats to health and wellbeing; and creating an environment where every sector of society can play its part. While 'Healthy Ireland' does not make reference to integrated care per se, it does state that an aim is to support a working culture within the health service that prioritises cross-sectoral partnerships and collaborations. While on the one hand, Healthy Ireland requires sectors working together across Government and society, it also requires highlevel partnerships and collaborations within the health sector itself. Healthy Ireland will need to be implemented through the new directorate structure in the health service. New structural arrangements, in the context of health reform, may result in enhanced and more effective co-operation and collaboration within the health sector. Supporting and monitoring collaboration between primary care, social and community care, mental health, hospitals, cancer screening, clinical programmes and the new Health and Wellbeing Directorate will be critical to the successful implementation of Healthy Ireland.

The Government's reform plans are ambitious and far-reaching. However, the reality is that

Ireland has an appalling track record for introducing and implementing effective reform. For example, the Government introduced 'Primary Care – A new Direction' in 2001⁴⁸ which should have seen the roll-out of primary care teams across the country. However, over ten years on there has been little progress. A recent national survey of Irish GPs found that only about one third felt that they were a part of a functioning primary care team^{49,50}. The Government has again reaffirmed its commitment to investing in primary care within Ireland²⁸ and recognises that building capacity in primary care is a key step to building service capacity and delivering integrated care.

Following on from this a recent report entitled 'Community Healthcare Organisations - Report and Recommendations of the Integrated Service Area Review Group', Chaired by Pat Healy, National Director of Social care services, published in October 2014⁵¹, sets out how health services, outside of acute hospitals, will be organised and managed. Known as Community Healthcare Organisations (CHOs), these services will include primary care, social care (services for older people and for persons with a disability), mental health and health and wellbeing. The Healy report provides a framework for new governance and organisational structures in order to improve service delivery and ensure that patients receive "the right service, at the right time, in the right place, by the right team".

In 2001 the National Health Strategy 'Quality and Fairness: A Health System for You'⁵² recognised that there was a need to update mental health policy and an Expert Group on Mental Health was formed. This group compiled 'A Vision for Change' in 2006 which was a comprehensive model of mental health service provision for Ireland⁵³. It described a framework for building and fostering positive mental health and recommended, amongst other things, that the mental health service should be organised nationally in catchment areas for populations of between 250,000 and 400,000. Organisation and management of services within each catchment should be coordinated locally by Mental Health Catchment Area Management Teams and managed nationally by a National Mental Health Service Directorate within the HSE. An analysis by the Mental Health Commission in 2009 found that progress by the Department in implementing many of the recommendations outlined within a Vision for Change was slow and disappointing⁵⁴. Within the Government's current reform programme there is the plan to establish a Mental Health Directorate³⁸, which will see the realisation of one of the core recommendations made in 2006.

Within the Government's reforms there is a number of options that could be utilised as pivotal mechanisms or drivers of integrated care, such as integrated care pathways, differing funding and organisational models, system incentives, information and communication technologies and strengthening of primary care services. The evidence for these as potential mechanisms to drive integration is considered during the course of this paper.

Chapter 4 How will integrated care help the Irish healthcare system?

Health services across the world are exploring how best to coordinate care around patients, with closer organisational integration of primary, secondary, community and acute care. The shared goal is to provide more accessible, higher quality patient care, often out of hospital and closer to home. Of particular importance is the need to allocate resources efficiently and effectively across care settings in way that best meets patient needs. Health delivery should be organised around the patient rather than the service. While the on-going reforms provide an important step in taking a national perspective to ensure greater focus to patients, the service must continue to evolve to meet the needs of the Irish population. Drawing on the context and opportunities described above, as well as lessons learned from other services internationally, the potential opportunities the reforms could present to improving coordination of care within Ireland are discussed.

4.1 'Future Proofing' the System for the Increasing Demand for Care

 Integrated care models can address the growing complexity of patient needs by responding to the multiple conditions of patients in a coordinated way.

Europe's population is ageing. By 2050, one-third of Europeans will be over the age of 60, as compared to a mere 13% who will be under the age of fifteen years old⁵⁵. The most recent Irish census conducted in 2011 found that the population of older people aged over 65 years increased by 14 per cent compared with the previous census conducted in 2006⁵⁶. In 2011 in Ireland, women at age 65 could expect to live for another 20.7 years, while men could expect to live another 17.6 years, putting Ireland on a par with 34 OECD countries⁵⁷ for average life expectancy. Typically with an increasingly ageing population, health expenditure increases. Older people are more likely to live with multiple chronic conditions that require either health or social care, or very often both. This will bring a significant shift in the demand for care, as many older people are more likely to suffer from several long-term chronic medical conditions at the same time and these multi-morbidities place significant demand on the system. Currently Ireland spends 8.9% of GDP on health expenditure, which is below the average of 9.3% GDP for OECD countries⁵⁷. With the predicted increase in the age of the population, Ireland will either have to spend more to cover increasing costs or improve efficiencies in the system. Reforms of the Irish healthcare system should be cognisant of these demographic changes and plan for the provision of effective chronic disease management. It has been estimated that 70% of the global disease burden in 2030 will be due to chronic diseases, with an increasing number of individuals having multiple chronic conditions in their lifetime⁵⁸. An Expert Group on Resource Allocation and Financing in the Health Sector, chaired by Prof Frances Ruane,⁵⁹ noted that one of the main challenges to developing integrated care is to change the provider behaviour towards the management of chronic conditions and away from episodes of acute care. Chronic diseases cause significant morbidity and mortality, and result in poorer quality of life for many people⁶⁰.

 Integrated care models can provide the appropriate combination of social and home care in the community that meet the needs of older users and their families.

More people are choosing to grow older in their own homes, creating a greater need for social care, particularly home care. With changing family patterns, there is a greater risk of older people living alone. In Ireland there was an increase of 11 per cent of older people aged 65 years living alone in 2011 compared with 2006⁵⁶.

 Integrated care models may allow for better integration of informal care into the care management process and provide appropriate respite and support for informal carers.

With the push towards providing care away from hospitals, informal care has become increasingly valuable to society to meet the growing demand for care in the community. In fact, friends and family provide the majority of social care informally. The recent census showed that a total of 187,112 persons or 4.1 per cent of the total population were providing unpaid assistance to others in April 2011⁶¹. Carers provided a total of 6,287,510 hours of care each week in Ireland, giving an average of 33.6 hours of unpaid help and assistance each⁶¹. Females provided almost two-thirds (66.1%) of all care hours. Children aged nine and under provided a total of 13,738 hours of care while the older age group of 10 to 14 year olds provided 24,758 hours⁶¹. In the SLÁN 07 survey⁶², 27.7 per cent of the general population reported themselves to have a very good quality of life whilst in a carers' survey⁶³ only 16.0 per cent did so. Two-in-five carers reported having experienced stress/ nervous tension and one in nine carers reported having their daily activity limited by ill-health or disability in the past twelve months⁶³.

Chronic conditions are responsible for a significant proportion of early deaths. They reduce quality of life in many of the adults living with them, represent substantial financial costs to patients and the health and social care systems, and cause a significant loss of productivity to the economy⁶⁴. Chronic diseases are on the rise in Ireland. A recent report from the Institute of Public Health⁶⁰ estimated that the number of adults with chronic conditions would increase by around 40% in the Republic of Ireland and by around 30% in Northern Ireland by 2020 due to an increasing and aging population and risk factors such as obesity becoming more common. Relatively more (compared to 2007) of the burden of these conditions will be borne by adults in the older age, the poor and the vulnerable⁶⁵. A range of interrelated factors including the social determinants of health such as poverty, unemployment and the environment, smoking, alcohol consumption, diet and physical activity are established risk factors for chronic conditions⁶⁶. These risk factors are distributed unevenly across society.

In 2008 the Department of Health and Children report entitled 'Tackling Chronic Disease – A Policy Framework for the Management of Chronic Disease⁷⁶⁶ was launched. It stressed the importance of "management of chronic disease at different levels through a reorientation towards primary care and the provision of integrated health services that are focused on prevention and returning individuals to health and a better quality of life" (p 7). This recommendation was echoed in the Ruane Report where it was noted that there is a need to move resources out of hospitals and into the community in the context of developing the appropriate infrastructure and governance to deliver effective chronic disease management⁵⁹.

It is clear that in the current climate we cannot afford to duplicate effort or run parallel systems. It is also a false economy to wait until people's needs are at their greatest before offering support. Both in health and social care the majority of our resources will always be spent on those with the highest needs and we must ensure that these people receive high quality, personalised care and support. However, we will not be able to afford this if we do not do everything we can to reduce the numbers in this high needs group. An understanding of demographic factors such as age, gender, location and local socio-economic status (SES) circumstances is an essential prerequisite for good planning and monitoring of chronic disease management and for developing appropriate models of integrated care within Ireland.

An issue for Ireland on the cusp of huge change, as outlined in the Programme for Government, is establishing the readiness of the current system to deliver the change but also bearing in mind projected trends and needs and future proofing the healthcare system by attempting to incorporate them in system planning. Accurate estimates and forecasts of the population prevalence of chronic diseases help us identify need, plan and develop disease prevention and management programmes, and monitor performance. Advocates for action against chronic diseases need to focus on health systems as part of an effective response. Efforts to scale up interventions for management of common chronic diseases in individual countries tend to focus on one disease and its causes, and are often fragmented and vertical. Evidence is emerging that chronic disease interventions could contribute to strengthening the capacity of health systems to deliver a comprehensive range of services, provided that such investments are planned to include the management of chronic disease⁵⁸. Because effective chronic disease programmes are highly dependent on well-functioning national health systems, chronic diseases should be a litmus test for health-systems strengthening. Therefore the measurement of chronic diseases is a way for us to measure the impact of reform within our health services here in Ireland.

4.2 Bridging the gap between health and social care

At the level of the individual, the divide between health and social needs is entirely artificial. The absence of a good interface between the health system and social services can allow patients to fall through the cracks because neither side understands the full extent of the patients' problems. Care fragmentation also frustrates patients, who find it difficult to navigate among the various providers and often feel that there is no one person who can help them get all essential services. The recent focus on the integration of health and social care, and its potential to provide better, more cost-effective services, is in direct response to three pressing issues. First, spending cuts and a need to deliver further efficiency savings. Secondly, demographic changes, with a predicted rise in demand for health and social care services due to an ageing population and a greater number of people living with long-term conditions. Thirdly, recognition that too many people are not getting the services they need, or not receiving them in the most suitable setting.

This call for coordinated working is not a uniquely Irish phenomenon as a number of countries see the integration of health and social care as a way to reduce costs, make more efficient use of resources and achieve better outcomes for the individual'67. A recent King's Fund report⁶⁸ highlights the growing interest in 'coordinated' and 'person centred' care in both the US and the UK, despite their significantly different systems of care; it also highlights how this approach is rapidly becoming the default option for the provision of care for ageing populations with complex needs. However, the challenge is more than just a policy debate on how to meet predicted future needs; it is also a pressing current issue. When services are duplicated or organisational boundaries prevent access to care, as is the case with the current health and social care systems in Ireland, patients' fundamental needs are not met and resources are wasted. The excessive assessment and eligibility arrangements that exist in both health and social care see most patients having to repeat

their histories to both sets of professionals. In order to avoid falling through the gaps of the fragmented systems, many are forced to become self-taught experts at navigating between the two care settings⁶⁹.

It is now increasingly recognised that individuals' SES have significant bearing on their health status and vice versa. The landmark work of Sir Michael Marmot has demonstrated that health inequalities follow a social gradient⁶⁵. People in lower SES groups are more likely to experience chronic ill-health and die earlier than those who are more advantaged⁷⁰⁻⁷⁹. In Ireland, as elsewhere, people within lower socioeconomic status (SES) groupings have worse health outcomes overall⁸⁰. Infant mortality is three times higher in lower SES groups⁸¹, the rate of hospitalisation for mental illness is six times higher in low SES groups⁸² and the prevalence of chronic disease is 47% in low SES groups compared with 23% in the general population⁸³.

As outlined in Future Health³⁸ primary and hospital care will be funded mainly via the UHI system, while specialised care services, public health services and social care services, including long-term care, will be funded separately through general taxation. There is therefore the danger that because social care services will fall outside of the UHI basic basket of services the Government is encouraging a fragmentation of these two services. How services falling outside the basic basket will be integrated around the needs of patients, particularly when these services are funded by different arms of the system, remains to be seen. With this in mind the Government requested that the Health Research Board (HRB) conduct a review of the evidence in relation to mechanism and structures used to integrate general health services and social care services around the needs of the individual and the population⁸⁴. It was beyond the brief of the HRB to make specific recommendations as to what strategies could be used by Government to integrate social and medical care services but rather just to outline the evidence as it stands.

We are, however, making the case in this paper for the need to integrate health and social care. The underlying issues within Ireland of an ageing population, increasing prevalence of complex chronic disease and ongoing budgetary constraints are not temporary. There is growing recognition that the system needs to deliver better value through improving outcomes and cost-effectiveness. One way to achieve this is to integrate. Aside from meeting the financial and demographic challenges identified, literature tells us that integration can also be beneficial for individual patients and service users. So it is easy to see why integration is not just a passing fad. It is also important to remember that certain groups have been identified as being most likely to benefit from integration, such as frail older people, people with multiple chronic and mental health illnesses and people with disabilities. Integrated care is not necessary for all forms of care and should be targeted at the patients and services from which users are most likely to benefit.

4.3 Social Integration of Society's More Vulnerable Groups

Integrating care can be particularly beneficial for the vulnerable members of society who have difficulty accessing care due to social isolation or other barriers¹⁹. This includes all socially disadvantaged groups - ethnic minorities, persons (of any age) with chronic disabling conditions and persons with mental health problems. Mental health accounts for almost 20% of the burden of disease in Europe⁸⁵. Mental health problems affect one in four citizens at some time in their lives. Many psychiatric conditions are chronic requiring long-term support and care. Census 2011 showed that 96,004 people (2.1%), had a psychological or emotional condition while 274,762 people (6%), had a disability connected with pain, breathing or another chronic illness or condition⁶¹. Health professionals, social services and family members are all typically involved in treatment. Social as well as medical care is essential to mental health treatment. Social services can promote healthier life-styles, help compliance with medication and treatment, and support family members who provide informal care. By preventing family members from falling ill with stress, anxiety or even depression, integrated care can avoid the premature use of residential care, resulting in significant benefits for families and society as a whole⁸⁶.

4.4 Better System Efficiency

Poor coordination and integration across health and social care can easily result in waste and inefficiency⁸⁷. An example commonly cited is the duplication of assessments, with no coherent approach among different service providers. Fragmented information systems that result in duplication and extra storage or administration costs, are another example of poorly integrated care models. Indeed, information technology plays a critical role in enabling health and social care systems to become integrated⁸⁸. For example, 'virtual integration' models, based on web-based user portals, may enable user integration across a complex system of multiple providers. They may also present a cheaper alternative to the high costs associated with organisational and provider integration.

Overall, integrated care may improve efficiency in several ways:

- Appropriately targeting care and resources.
- Preventing duplication of treatment or assessment by different professionals.
- Preventing costly bottlenecks and gaps in care pathways that may arise through poor coordination.
- Ensuring care decisions are taken with due regard to upstream capacity and resources, particularly in external organisations.
- Ensuring that the right professionals undertake care, for example, by preventing healthcare providers from being used for social care needs.

4.5 Improvements in the Quality, Safety and Continuity of Care

Possibly the most important benefit of integrated care models is their potential to provide a more seamless care experience for the patient, and the justification for integrated delivery systems should be to meet patients' needs rather than the needs of providers"⁸⁹. Organisations that fail to place the patient at the centre of their integration efforts are unlikely to succeed⁹⁰. Health services should demonstrate sensitivity and responsiveness to changing needs of the population⁹¹, ensuring the patient receives the "right care at the right place at the right time"⁴³. This requires a thorough understanding of the way in which patients move within and between different health and social care providers⁸⁹. Integrated health systems should be easy for patients to navigate⁹², and the importance of involving and being representative of the communities served is paramount². Patient engagement and participation in service design and delivery is desired, and patients should be presented with opportunities for input at various levels^{93,94}.

In Ireland the general principle of patient safety outlined in the 2008 report of the Commission on Patient Safety and Quality Assurance 'Building a Culture of Patient Safety' chaired by Dr Deirdre Madden, known as the 'Madden Report'⁹⁵ outlined that "providing patient-centred, seamless care requires robust integration mechanisms and strong governance arrangements which ensure that patients receive safe and high quality care where different aspects of their care are provided across different providers" (p 96). While the phrase 'patient centred care' has become hackneyed, we have an opportunity to place the patient truly at the centre of care during these ongoing reforms. The beginning of achieving this is the introduction of UHI, which will see each patient having equal access to healthcare based upon need and not income. However, by having social care services outside of the UHI basket this may lead to fracturing of the provision in care for complex patients who require both medical and social care. Expanding the UHI basket to include both social and healthcare services may yield even greater benefits for individuals and their carers⁹⁶ and a more integrated system overall.

Chapter 5

Why is integrated care such a challenge? A key barrier to developing integrated care in an Irish context

Significant international attention is currently being paid to the 'integrated care conundrum', typically expressed as a need to find much better ways of delivering well coordinated care to people living with complex conditions and multiple health needs (e.g., Canada⁹⁷; New Zealand⁹⁸; England⁹⁹; USA¹⁹; Australia¹⁰⁰). Even countries that are considered to have high performing enviable healthcare systems like the Scandinavian countries find it a struggle. Sweden and Denmark have both attempted to introduce better coordinated care, but between them have experienced similar barriers¹⁰¹. For example, lack of strategic commitment to integration in the services involved, poor information and communication technology systems to enable information sharing and monitoring of care, and poor use of financial incentives have made the clinical coordination of care difficult.

Experience of integrating care across both health and social care is still fairly recent and accordingly, we are still learning of the challenges associated with implementing integrated care models in that respect.

5.1 Policy-Level: Competing Policy Agendas. Integrating Social Care and Healthcare

In many countries, health and social care have traditionally been provided by entirely distinct bureaucratic systems at both national and local levels. The decision-making and analytical tools used in health and social care budgeting are different and separate.

The agenda for integrating health and social care exists alongside competing policy agendas that are shaping the future and development of health and social care provision. As a part of on-going reforms in Ireland, social care services will have its own Directorate under the Government's reform plan³⁸. However, social care will not come under the UHI payment system. Social care services such as disability and long-term care will be funded through general taxation. While funded separately, as stated in Future Health, these services 'will still be delivered in an integrated manner around the needs of the person' (p 5)³⁸. This is at odds with one of the core ambitions of the Government's reform plan to ensure equitable access to services based upon need and not ability to pay. Currently access to social care services within Ireland is a mixed system with some services being free, and some services charged for, based upon means testing. The Government has recognised the need for good relations between Hospital Groups and social care providers in the Higgins Report¹⁰² on the establishment of Hospital Groups. It is a welcome development that "the response of hospital groups to responding appropriately to individual social care plans will be a component of the evaluation of Hospital Groups' performance as part of the process of seeking Trust status" (p 41).

The recent Healy report ⁵¹ on Community Healthcare Organisations calls for a strengthening in the relationship between primary care and specialist social care and mental health services into a less centralised and more focused and integrated approach nationally. The report cites ongoing work at national level to ensure that patients receive a continuum of care and can navigate the system, however there is scant detail on how moving towards this new governance model will achieve an improvement between community care services and hospital services.

However, the Government has not embedded social care within the UHI funding reforms and the common basket of services. Systems that separate health and social care budgets tend to reduce the use of the more expensive health services but this separation, if not managed well, may impact on continuity of care⁵⁷. Failures of service co-ordination have been blamed for 'bed blocking' (a pejorative term for patients who have been medically discharged but 'block' acute beds because of the lack of social care services available to facilitate their discharge), wasting of resources due to duplication of assessments and services, and overuse of acute and residential care because of failure to invest in low level, preventive services^{103,104}.

The Swedish system has one organisation administering combined 'pooled' budgets for all health and social care as well as one service organisation combining management for all health and social care for the population¹⁰⁵. Swedish health policy has focused on developing a community-oriented primary care system, supported by adaptable hospital services, fitting the needs of a local population^{106,107}. There is a strong focus on integrating community services for the elderly¹⁰⁸. However, not all high functioning systems have combined budgets for health and social care. Currently, health and social care are funded differently in the NHS system in the UK. The NHS, broadly speaking, is paid for out of general taxation and operates with a ringfenced budget that has to be spent on health. Social care is funded through local authorities and the social care budget is not ring-fenced. Health and social care are commissioned separately. An independent commission on the future of health and social care in England has recently been established. In the commission's interim report¹⁰⁹ published recently, it has been stated that England must move towards a single ring fenced budget for health and social care, which is singly commissioned and within which entitlements are closely aligned.

The Scottish Government is preparing legislation to integrate adult health and social care services in 2013. This decision was based upon extensive consultation with patients, clinicians and policy makers, and is based upon the belief that integration of service planning and delivery is the most effective way to support person-centred care; "it is about improving outcomes for people who have a range of complex support needs, and for their carers and families as well" (p 2). Under the legislative framework different public bodies will be required to work together, thus removing unhelpful boundaries and using combined resources to achieve maximum benefit for patients. The policy impetus of integrating social and healthcare provision in the UK has been recently underscored by the National Institute of Health & Clinical Excellence that

requires the Institute to develop guidelines and performance metrics for social services, which is being hailed as a genuine step to improve the integration of health and social care services in the UK system¹¹⁰.

The emphasis in Scotland is moving towards integrating social and healthcare¹¹¹. The proposals include nationally agreed outcomes that will apply across health and social care – unlike the disjointed QOFs in England, a requirement to introduce integrated budgets will apply across health and social care, which will ensure new health and social care partnerships are jointly accountable to ministers, local authority leaders and the public for delivery of outcomes.

The Irish Government should watch with great interest whether the Scottish, in particular and UK reforms in general, elicit the expected improvements, with a view to possibly extending UHI cover in this country to include social care services.

Making a compelling case for integrated care, both as a national policy and in terms of local care redesign and delivery, is essential if people are to understand why it is being promoted as a priority. In our view, integrated care is necessary for any individual for whom a lack of care co-ordination leads to an adverse impact on care experiences and outcomes. It is an approach best suited to frail older people, children and adults with disabilities, people with addictions, and those with multiple chronic and mental health illnesses, for whom care quality is often poor and who consume the highest proportion of resources. It is also important for those requiring urgent care, such as for strokes and cancers, where a fast and well coordinated care response can significantly improve outcomes.

Without integration, all aspects of care can suffer. Patients can get lost in the system, needed services fail to be delivered or are delayed or duplicated, the quality of the care experience declines, and the potential for cost-effectiveness diminishes¹⁸. A key challenge facing today's health and social care system in Ireland is its ability to offer highvalue care in the face of a difficult financial and organisational environment. The task is especially daunting in the context of a population in which the burden of disease is growing and medical advances offer increasing opportunities to treat disease, but at a cost. The result, if nothing changes, will be significant unmet need and threats to the quality of care.

Chapter 6

What evidence-based mechanisms are available to drive integrated care in Ireland?

There is a number of mechanisms that have been used in different countries to support and progress integration. These mechanisms include integrated care pathways, funding models, organisational models, strengthening of primary care services, alignment of system incentives, and developments in communication and information technology. These are discussed in turn with reference to how they may be utilised within an Irish context.

6.1 Integrated Care Pathways

Integrated Care Pathways (ICPs) were developed in the late 1990s as a basis for plotting and agreeing pathways of care for particular conditions or procedures, and have long been advocated as a means to improve the continuity, quality and outcomes of care for patients.

Specifically:

- Patients and carers are no longer required to coordinate different treatments and steer themselves across different providers of care.
- Treatment is no longer 'stop-start' in nature.
- A disruption in the relationship between patient and healthcare professionals is minimised.

An ICP determines locally agreed multidisciplinary and multi-agency practice, based on guidelines and evidence where available for a specific patient group. An ICP can be described as a preoperative, operative and postoperative time line protocol of a disease process that involves services and personnel responsible for the patient's care. Depending on the condition this can include the general practitioner (GP), hospital based Consultants, clinic resources, community and hospital nursing, physiotherapy, occupational therapy, laboratory, radiology and facilities to which the patient may be transferred following complete or partial recovery. It forms all or part of the clinical record, documents the care given, and facilitates the evaluation of outcomes for continuous quality improvement¹¹². ICPs require continuous review because they become a method of evaluating practice for continuous quality improvement¹¹³. A survey of clinical pathways in 17 European countries found that while respondents reported that ICPs were important and were becoming increasingly widely used, a significant constraint emerged among doctors that ICPs could interfere with medical autonomy¹¹⁴.

ICPs have been implemented worldwide but the evidence about their impact from single trials is contradictory, so evidence from systematic reviews is important to distil the utility of ICP. ICPs have been found to reduce in-patient hospital stays and improve documentation for a variety of different conditions¹¹⁵. ICPs for treatment of heart failure decreased mortality rates and length of hospital stay, but no statistically significant difference was observed in the readmission rates and hospitalisation costs¹¹⁶. A review found that there was very poor evidence for the utility of end-of-life ICPs in caring for dying people¹¹⁷. A review of in-patient ICPs for stroke found that patients treated within a care pathway may be less likely to suffer some complications (e.g. urine infections), and more likely to have certain

tests (e.g. brain scans)¹¹⁸. However, the use of ICPs may also reduce the patient's likelihood of functioning independently when discharged from hospital, their quality of life, and their satisfaction with hospital care. A recent systematic review of ICPs in the UK found that while ICPs are most effective in contexts where patient care trajectories are predictable; their value in settings in which recovery pathways are more variable is less clear. Also none of the studies reviewed included an economic evaluation and thus it is not known whether their benefits justify the costs of their implementation¹¹⁹.

Clinical Care Programmes (CCPs) have been launched in Ireland to standardise models of care for delivering integrated clinical care. There are currently over 30 CCPs at various stages of development covering diverse areas such as obstetrics and gynaecology, asthma, diabetes, heart failure, mental health, palliative care and stroke³⁸. There are Clinical Leaders associated with each CCP and there is an identified National Lead of Clinical Leaders. Guidelines are being developed for priority programmes relevant to primary care such as stroke, heart failure, asthma, diabetes and COPD. The National Diabetes Programme is the Government's flagship integrated care programme, which is being rolled out on a phased basis, is expected to take approximately three years to fully roll out, with a National Diabetes Register pledged.

The CCP main objective is to improve the quality of care, improve access to all services and to improve cost effectiveness. There is no mention within the CCP's objectives regarding the need to improve coordination of care between services. Many patients may be under the care of a number of physicians due to a combination of morbidities such as diabetes, depression and COPD. There is no clarity about how services and CCPs will be coordinated under the new Directorate structure, which will operate as a transitional structure, and how it will be carried forward.

As in other countries worldwide Irish healthcare providers are increasingly under pressure to balance the demands on the service with the resources available while maintaining patient safety and quality of care. Hence Irish health services are beginning to embrace the notion of developing and using ICPs across its care settings to help deliver these objectives. However, health policy makers and clinicians should be cautious with overall conclusions of either the effectiveness or ineffectiveness of ICPs: what works for one organisation may not work for another because of the subtle differences in processes, barriers and facilitative factors. Evaluation and evidence is needed from well-designed trials within Irish settings to determine the utility of ICPs for improving integrated care. At best, an ICP should result in better clinical outcomes with added value in terms of administrative and financial efficiencies.

6.2 Funding Models

New integrated care models need to be financially sustainable. Policymakers need to ensure that sufficient investment takes place to enable the provision of integrated care, recognising that in the short-term the costs of implementing integrated care

may exceed the economic future benefits. Financial transparency must be ensured within integrated care models to ensure that costshifting and adverse selection of users and patients do not occur. Cost control was one of the major original incentives for health systems integration in the United States. It was believed that integrated health systems would result in economic benefits because of economies of scale and cost reductions in both administrative and clinical areas¹²⁰. Many authors claim, however, that integration processes may result in increased costs before they provide savings¹²⁰. The way services are funded is therefore an important consideration of integrated models¹. There are two funding models that warrant examination for the Irish context - money follows the patient and commissioning of services.

6.2.1 Money Follows The Patient (MFTP)

At the moment in Ireland we have a complex mixture of payments, such as capitation, salary, fee-for-service, and block budgets. Historically Irish hospitals have been given block annual grants, which have been deemed an inefficient method of funding for secondary care services. With the introduction of a new 'Money Follows the Patient' (MFTP) funding model¹²¹, hospitals will be funded based upon the quantity and quality of the services they deliver to patients. The MFTP policy is considered a mechanism to integrate "payment systems which support integrated, patient-centered delivery of an episode of care across different settings" (p65)¹²¹, and to create incentives that encourage treatment at the lowest level of complexity that is safe, timely, efficient, and is delivered as close to home as possible¹²¹. According to Government the basis of the MFTP funding model is:

- To support the move to an equitable singletier system where every patient is insured and has their care financed on the same basis.
- To have a fairer system of resource allocation whereby hospitals are paid for the quality of care they deliver.
- To drive efficiency in the provision of high quality hospital services.
- To increase transparency in the provision of hospital services.

A case based funding model using Diagnosis Related Groups (DRGs) will underscore the MFTP mechanism. DRGs are a method of classifying patients into clinically meaningful and economically homogenous groups. This is intended to enable a transparent comparison of hospital costs, quality and efficiency. The DRG classification system can be mapped onto the International Classification of Disease-10 (ICD-10) codes, which has been divided into organ system groups. The payment will be calculated using nationally collected data on hospital costs. The DRG system is not new to Ireland. The system has been used since 1993 to adjust acute hospitals' budgetary allocations for the complexity of their casemix and their relative performance following a recommendation by the Commission on Health Funding, which occurred in 1989¹²². Data on day cases and inpatient activity for the DRG system and the

National Casemix Programme is obtained from the Hospital In-Patient Enquiry (HIPE) system, which is the only national source of administrative, demographic and clinical information on discharges from acute public hospitals. In relation to allocation and financing, the Ruane report recommended a mix of hospital payment mechanisms, incorporating DRG based case payment and lump sum payments⁵⁹. According to 'Future Health' a new National Information and Pricing Office will be established which will use cost and activity data to set national prices for ratification and publication by the Minister³⁸.

The use of DRGs has been the focus of a major review within Europe¹²³. Since the introduction of DRGs for hospital payment there have been discussions regarding both the positive and intended consequences and also the negative or unintended consequences of these systems^{124–126}. These resource allocation mechanisms can generate perverse and conflicting financial incentives for providers.

The positive or intended consequences of DRGs include:

- Optimisation of internal care pathways.
- Improved integration with other providers.
- Substitution of high costs services with low cost alternatives.
- Improved coding of diagnosis and procedures.
- Reduced waiting list times.
- Improved quality of services.

The negative or unintended consequence of DRGs include:

- Transferring or avoiding unprofitable cases ('dumping' or 'cost-shifting').
- Inappropriate early discharge ('bloody discharge').
- Withholding necessary services ('skimping/ under treatment').
- Selecting low cost patients within DRGs ('cream' skimming').
- Fraudulently reclassifying patients, e.g., by adding nonexistent secondary diagnoses ('up-coding').
- Providing services that lead to reclassification of patients into higher paying DRGs ('gaming/overtreatment' or 'DRG creep') in which patents are re-assigned to a more remunerative diagnosis - for example by categorising TIAs as strokes. Alternatively, patients may be re-assigned to groups such as palliative care to conceal bad outcomes.
- Admitting patients for unnecessary services ('supplier induced demand').

There are several policy measures that the Government has suggested will ameliorate these unintended consequences of DRGs¹²¹. This includes an integrated performance management system, auditing, contracting process and structured consultation and updating of the system. Many healthcare systems have struggled with the delicate balance of both the intended and unintended consequences of DRGs. Effective technical financial management of the payment system and good governance is crucial to supporting

the DRG system and MFTP. A recent economic analysis of MFTP suggested that investment in coding and classification, ICT, contracting, commissioning, auditing and performance monitoring systems would be necessary also, but that if the downsides of MFTP are managed, there is potential for MFTP to confer significant benefits to Irish hospital care¹²⁷. Healthcare providers will be under greater pressure than ever to account for their actions. Such accountability may be a bitter pill for many practitioners and hospital managers to swallow. There is some evidence that healthcare professionals resist the implementation of DRGs as they see no real benefits to patients and do not believe that it will cut costs¹²⁸. In basic DRG based hospital payment systems, healthcare providers are not explicitly rewarded for improving quality. Therefore, these schemes need to refine in order to integrate direct incentives for improving quality. An option for integrating quality into DRG-based hospital payment systems is to extend the treatment episode for which a DRG-based payment is granted; that is, by including outpatient visits, readmissions and so on. In England and Germany, hospitals do not receive a second DRG payment if a patient is readmitted for the same condition within 30 days after discharge. Ideally, it is desirable to extend the payment for an integrated set of treatments, including outpatient visits, rehabilitation and so on but this is challenging and requires a sophisticated integrated system¹²⁹.

While the MFTP model of financing care may rationalise the acute hospital sector there is a need to strengthen the wider healthcare system to integrate care for patients as they move between primary, secondary and community care. The Government's focus is primarily on the financial reorganisation of our hospital system with the intention to "develop policy in relation to integrated payment systems which support integrated, patient-centred delivery of an episode of care across different settings" (p 65)¹²¹. This would suggest that over time the MFTP payment system would be applied as patients move within the system between providers of care, so in theory money would follow the patient out of the hospital system and into primary care and community care. The Ruane report noted that this complex system of financing providers can actually promote fragmentation and discourage treatment in appropriate settings⁵⁹. Perhaps hospitals will offer outpatient services onsite, so that the hospital would not be penalised for having an increase in admissions but would still keep the money within their budget. What provisions will be made to stop this form of gaming the system? There are also no suggested timelines for this aspect of financial policy development to take place.

6.2.2 Commissioning of Services

The recent NHS Health & Social Care Act 2012 has seen the move away from Primary Care Trusts (PCTs) and towards Clinical Commissioning Groups (CCGs), which will be led by GPs and other clinicians who will take on responsibility for combining care. This move will replace 151 PCTs with 211 CCGs across England. Commissioners in the NHS and local authority will develop shared vision, plans and budgets (where appropriate). Commissioners across sectors collaborate with providers to design coherent, reliable and efficient patient pathways, and ensure the incentives are right for providers to provide services that operate in a coordinated way within these pathways. This move is seen as a pivotal policy for structural reform of the NHS to improve integration of services¹³⁰.

The persistent weakness of commissioning means the HSE has struggled to use its power as 'paymaster' to exert changes in how providers deliver services that might avoid fragmentation and duplication⁹⁹. Particular weaknesses are found in the lack of active clinical involvement, an approach to procuring care services that focuses on individual hospitals as opposed to partnerships across the healthcare system and payment based on episodic hospital-based care⁹⁹. One of the anomalies of the health services as currently configured is that the HSE both provides and purchases health services. This basic anomaly is an impediment to the effective development of safe, efficient services. The Government has committed to the creation of a formal purchaser/provider split within the health sector. A Healthcare Commissioning Agency (HCA) will be established from within the HSE and will be responsible for agreeing performance contracts and making payments to Hospital Groups (stages 2 and 3). Within the Agency, the transitional primary and hospital care funds will transform into a health insurance fund. The HCA will also continue to finance certain health and social care costs directly via the other funds. As such, it will retain a central strategic role in terms of managing the flow of funds between different arms of the health system and in working with health insurers to support the delivery of high quality, integrated care.

The seven Directorates involved in performance contracting and financing of services will be subsumed into this new body, the Healthcare Commissioning Agency³⁸. It will be tasked with driving performance through purchasing contracts for services. The Healthcare Commissioning Agency will therefore encompass the funds previously managed by the HSE. It will be subject to the instructions of the Department of Health and will have service targets set by the Minister into detailed performance contracts with healthcare providers. It will manage all payments to providers and performance contracts will explicitly link payment with the achievement of targets across the spectrum of quality, access and activity. Healthcare systems have to balance the need to make efficiency savings whilst also maintaining high-quality care, and this creates challenges for those responsible for planning or commissioning services. As well as implementing new interventions and services, attention has increasingly turned to the need to cease performing activities that are no longer deemed essential or effective. The power to commission a service also suggests that there is a power to decommission a service - will there be the will and the leadership within the Healthcare Commissioning Agency to do this?

6.3 Organisational Models

There are three organisational models that warrant review as drivers for integrated care within the Irish context – Hospital Groups, Regionalisation of services for geographic coverage, and polyclinics.

6.3.1 Hospital Groups

Ireland has forty-nine hospitals and these hospitals have been recently organised into six independent Hospital Groups under plans to reform Ireland's acute hospital system. The report on 'The Establishment of Hospital Groups as a transition to Independent Hospital Trusts'¹⁰² from the Hospital Group Strategic Board, chaired by Professor John Higgins, paves the way for the establishment of Hospital Trusts. Key details suggest, "the integration between primary and hospital care is vital in the implementation of hospital groups. Groups should be managed so that they enable and encourage movement, working in close synergy with their colleagues in primary care as well as within and between hospital groups. How they are managed and run must acknowledge the direction of travel for healthcare across the developed word, where in the future most healthcare will be delivered outside traditional hospital settings" (p 11).

Each Hospital Group will have between six and 11 hospitals, depending on population and needs. Each Group must have at least one major university teaching hospital known as the 'academic partner', a National Cancer Control Programme centre and a maternity service. For example, in Dublin Midlands the Hospital Grouping will consist of amongst others St James's Hospital, Tallaght Hospital and the Coombe Women & Infant University Hospital with the academic partner of Trinity College Dublin. This move may create 'academic health centres' in Ireland providing alliances of educational and healthcare institutions that combine three major activities: health professional education, research, and patient

care. This organisational restructure would have the potential to benefit healthcare by integrating quality patient care and research excellence, which points towards joint training, joint standards, shared roles and the potential for greater permeability between different professional groupings. Each group will have a CEO and a Board responsible for its own governance and management. Hospital Groups will be required to develop strategic plans for the services they will offer within the first year of operation. It is planned to convert them into independent Hospital Trusts in 2015, but this will require legislation and may be a somewhat overambitious plan.

Grouping hospitals provides for greater specialisation with complex services concentrated at particular hospitals to ensure quality outcomes. Grouping hospitals together to share a regional workload should, in theory, improve the integration of care for patients. It may also lessen the need for hospitals to compete at regional level. The change to a Group structure will mean that administrative and other services will eventually be shared between all members of a Group, and there will be greater movement of staff and specialties between hospitals.

However, the Government has been clear that it will not be closing any hospitals as a part of health services reforms, despite the recommendations of two reports. The Fitzgerald Report in 1968¹³¹ and the Hanly Report in 2003¹³² were two previous attempts to rationalise the acute hospital sector. The failure to modernise for over 40 years is the result of local politics foundering on intense grassroots opposition consistently trumping best medical practice. Under 'The Framework for Development – Securing the Future of Smaller Hospitals¹³³, the Government has made assurances that the future of smaller hospitals is safe, by stating that "no acute hospital will close" (p 1) under the scheme. This goes against the recommendations from both Fitzgerald and Hanly to rationalise the acute hospital sector.

A key priority area within the 2014 National Service Plan for the HSE is to integrate care through strategic reform within the acute hospital services through implementation of the Hospital Groups constructs¹³⁴. Action is now required to implement the recommendations of the Higgins Report so to test whether the reconfiguration leads to the desired outcomes of improvements in patient safety, rationalisation of services and integration of services within the secondary care sector and across community and primary care. Any reconfiguration of the hospital sector in Ireland however, faces a serious hurdle in the form of a severely under-developed primary care system.

6.3.2 Regionalisation of hospital, community and primary care services for geographic coverage

Many integrated health systems, including the Canadian system, provide geographic coverage to maximise patient access to the services they provide and to minimise duplication^{1–3,90}. This means that the system takes responsibility for an identified population in a geographic area and delivers care to patients who live within that geographic catchment area; however,

in certain circumstances patients retain the right to exit that catchment area if they wish to seek services from other providers^{1,3}. The rationale for regionalisation in most provinces in Canada was predicated on this concept of geographic coverage. For example, Ontario, the most populous province in Canada, introduced a novel governance model in 2006 with the development of the Local Health Integration Networks (LHINs)¹³⁵. LHINs are communitybased, non-profit organisations funded by the Ministry of Health and Long Term Care to plan, fund and coordinate services delivered by hospitals, community care facilities and primary care. The fourteen geographically defined LHINs were mandated by the Ontario Ministry of Health and Long-Term Care better to integrate healthcare services using integrated health service plans developed collaboratively with local healthcare providers and community members¹³⁶. With the advent of the LHINs, health service providers in Ontario are challenged to select and manage partnerships that optimise the delivery of high quality, cost effective, patient-centred care¹³⁷. This sounds fine in theory, but recent reports on healthcare reform have reinforced the view that Canada's current healthcare system is not sustainable in its present form^{138–141}. Integrated health systems are considered at least in part a solution to the challenge of sustainability. More than five years have passed since the LHINs took on their full authority, and "serious problems with how patients move through the healthcare system, from the emergency department to hospital to long-term care" persist¹⁴². Even though Ontario has experienced some notable successes in improving integration and the patient care

experience with initiatives such as the Aging at Home Strategy¹⁴³ and the Regional Cancer Program¹⁴⁴ the reactions of providers and patients, and the results of on going monitoring and measurement, reveal that the healthcare system continues to function in silos, falling short of expectations. Further research on geographic coverage is needed to understand better how it works in the Canadian context.

However, Canada's relatively small, widely dispersed population has often been viewed as a barrier to the implementation of fully integrated delivery systems in all regions. Studies in the United States suggest that a minimum of 1,000,000 patients are needed to support the development of efficient integrated delivery systems¹⁴⁵. Only in Canada's most populous areas is this patient base achievable; this type of integration is difficult or indeed impossible to achieve in the rural and remote northern areas¹⁴⁶.

In contrast to Canada, Ireland is a relatively small landmass with a population less than that of greater Manchester so the challenge of geographic coverage should be less of an issue. However, a recent study on the distribution of GPs in Ireland relative to deprivation found that while distribution was relatively equitable, practices in the most deprived areas have high workloads, and incentives may need to be provided to increase service provision in these areas¹⁴⁷. The HSE through its Public Service Agreement has, in theory, the capacity to deploy staff resources where they are needed most. The Irish health sector's key priorities include a systematic review of rosters, skill mix and staffing levels, increased use of redeployment, further productivity increases and a particular focus on reducing absenteeism.

The recent Healy report⁵¹ on Community Healthcare Organisations (CHOs) recommends the establishment of nine CHOs across Ireland. These changes will involve a reduction from the current 17 Integrated Service Areas (ISAs) to the nine new CHOs. The focus of the CHOs will be on integrating social and mental healthcare services. There is limited reference to how CHOs will liaise with secondary care facilities. The recommendations outlined in the Healy report do not include how these changes will be financed, but rather intimate that the reduction from 17 ISAs to nine CHOs will be achieved within existing resources. A detailed financial plan is not provided to support this suggestion. While the focus on improving the integration of social and mental healthcare services is welcome, it remains unclear as to how the proposed changes within the Healy report will be funded and how services will be exactly coordinated around the patient as they move between the hospital and community sector.

6.3.3 Polyclinics

Another method that has been used to improve integration of services within the community is the 'polyclinic'. Many parts of the world have developed variations of the polyclinic concept, which co-locate a number of services within the community with the aim of improving patient access and encouraging collaboration between health teams and professionals¹⁴⁸. The central ambition is to avoid hospital admissions, and professional barriers are minimised to provide the most effective service for the patient. In Finland, health centres often have their own x-ray, in-patient beds, pharmacist and laboratory or they may purchase diagnostics and specialist services from hospitals¹⁴⁹. Some view polyclinics as extended primary care services, with GPs remaining as the main focal point but increasing the availability of diagnostic services within the same centre. One recent innovation is a system of e-consultation that allows GPs to receive advice from hospital based specialists within two days¹⁵⁰.

Recent developments in England have stimulated an interest in the polyclinic model but the move is challenged by some^{151–153}. The Royal College of General Practitioners raises several concerns about this model¹⁵⁴. Not only could moving services to one location result in some patients travelling further, impacting patients with mobility difficulties the most, it could also break down the unique relationship between the patient and GP and disrupt continuity of care for people with long-term and complex conditions. It is clear that this proposal could work in England but with a warning that new developments must be in the hands of current GP practices and patients; that the end result must maintain the focus on personal and continuous care which is built on a registered list and that it is important not to deliver care in disease specific streams. The King's Fund warns co-location of services does not, in itself, result in better integrated services: "The primary focus should be on developing new pathways, technologies and ways of working rather than new buildings. Co-location alone is not sufficient to generate co working between

different teams and professionals. Investment in change management and strong clinical and managerial leadership will be required" (p3) ¹⁵⁵.

In terms of quality, closer integration of care and greater localisation of services may bring improvements and may lead to better chronic disease management, although placing multiple levels of expertise at a single site is no guarantee of closer integration. We have learnt this already from large hospital sites. Also we would have to be careful to ensure that specialist services do not deteriorate in a non-hospital setting. Within an Irish context, a polyclinic model may improve access to specialist services, but access to GPs - many of whom may be required to move from small local practices to larger polyclinics covering a wider geographical area - may worsen for many patients.

6.4 Strengthening of Primary Care Services

Primary care is considered the corner stone of any health system^{156–158} and has a central role in integrating care within a health system¹⁵⁹. Health systems built on the principles of primary care (first contact, continuous, comprehensive, and coordinated care) achieve better health and greater equity in health than systems with a specialty care orientation^{158,160}. The philosophy of primary care goes beyond the realm of healthcare and requires inter-sectoral linkages between health and social policies^{156,157}. Primary care assumes an integrated view with the rest of the health system and this philosophy contains a number of different concepts, namely: equity on the basis of need, first level of care usually encountered by the population, a philosophy underpinning service delivery and a broad inter-sectoral collaboration in dealing with community problems. The functions of primary care make it possible to accomplish the integrated philosophy^{160,161}, with services spanning curative, rehabilitative and supportive care as well as health promotion and disease prevention. All together, these functions give primary care a central role in coordinating and integrating care.

In Denmark, for example, the GP is totally responsible for chronic care of a patient, from the diagnosis to the follow-up. The implementation period is still on-going and the incentive scheme has not been appropriately evaluated¹⁶². Moreover, Danish GP takes the responsibility of activating, coordinating and monitoring the multidisciplinary teams¹⁶³. However, while the primary care sector has traditionally been quite strong with the role of the GP as a gatekeeper and coordinator, patient pathways across primary and secondary care have been criticised for lack of coherence and continuity, due to the lack of appropriate communication systems among providers¹⁶⁴. The fragmentation of the Danish healthcare system and the lack of appropriate communication systems among providers pose some challenges to the programme's success. A fee for a type 2 diabetes management programme was introduced in Denmark following major healthcare reforms in 2007. The main objective of the scheme was to improve integration of care in chronic conditions and coordination of care by strengthening the role of GPs.

The Irish Government states that it is "committed to reforming our model of delivering healthcare, so that more care is delivered in the community. The first point of contact for a person needing healthcare will be primary care, which should meet 90-95% of people's health and personal social care needs" (p 30)³⁸. The vision for primary care in Ireland is one where...

- no one must pay fees for GP care;
- GPs work in teams with other primary care professionals;
- the focus is on the prevention of illness and structured care for people with chronic conditions;
- primary care teams work from dedicated facilities;
- staffing and resourcing of primary care is allocated rationally to meet regularly assessed needs.

Structurally, primary care in Ireland remains highly fragmented. It involves a mixture of public and private patients, which is not an efficient or equitable way of arranging healthcare. It also provides no base for integrated service development or a focus on the needs of populations. The readiness of the primary care service is an essential prerequisite for the introduction of the UHI system, which underpins the Governments central reform plans.

The Universal Primary Care (UPC) Project Team has been set up in the Department of Health, reporting to the Minister for Primary Care. It is responsible for planning, costing and legislative preparation for free-at-point-of-care general practice. Preparations are underway for a new GP contract. What is planned for the new GP contract includes compulsory cooperation with the primary care team, and universal patient registration with a team. For chronic disease management there will be structured reviews, individual care plans, and call and recall systems, along with mechanisms to audit and report on outcomes. The new contract will focus on prevention and health promotion and development of physical and IT infrastructure in general practice. The intention is to plan recruitment in primary care in advance, so that allocation of posts will be governed by a consistent transparent method, to supply staff where most needed and in the most deprived areas.

Further organisation and governance changes for primary care in Ireland have been proposed in the recent Healy report⁵¹. Alongside the establishment of nine new Community Healthcare Organisations, previously discussed, is the establishment of 90 Primary Care Networks. It is proposed that each Network would serve an average population of 50,000 people, with an average of 10 Networks per CHO. Each of the 90 Primary Care Networks will be led by a person, working with a GP Lead and a team of professionals, responsible for ensuring the delivery of primary care services and integration with the other services provided in the Network. Considering that it is estimated that only 36% of GPs believe that their practice is functioning as a part of a Primary Care Team⁴⁹ proposing the addition of a further tier of governance seems premature. What is needed to improve the readiness of primary care to deliver effective community led services, is greater investment in primary care. Barbara Starfield's research demonstrated that investing in primary care will pay dividends, as primary care is the bedrock of the healthcare service^{160,161,165–169}. Evidence of the health promoting influence of primary care has been accumulating ever since researchers have been able to distinguish primary care from other aspects of the health services delivery system. This evidence from three large systematic reviews shows that primary care helps prevent illness and death, is associated with a more equitable distribution of health in populations, a finding that holds in both cross-national and within-national studies^{170–172}. The means by which primary care improves health have been identified, thus suggesting ways to improve overall health and reduce differences in health across major population subgroups. GPs are best placed to deliver on many of the main components of the Government's reforms such as better chronic disease management, health promotion and disease prevention strategies but this is only possible if there is the capacity within the primary care system to meet these challenges. In making this commitment to primary care, the government was rightly acknowledging comparative international research showing that the cost-effectiveness of any national health care system is strongly correlated with the strength and position of primary care within that system. Lack of effective primary care is associated with spiraling healthcare costs and decreasing value for money from public expenditure on healthcare. While we welcome the Irish Government's commitment to primary care services as a cornerstone

to on-going reform, what is really needed is an increase in manpower resources and capital expenditure to improve primary care services nationally. Primary care is first-contact, continuous, comprehensive, and coordinated care provided to populations undifferentiated by gender, disease, or organ system. It has an inherent community and family focus. It could be the linchpin in coordinating and integrating services around the complex patient with multimorbidities but only if there is the political will to see primary care services resourced properly within Ireland. If the Government achieved just one of its multiple reforms within its current or even second term of office and if universal primary care was this one success - then we would have a sound foundational bedrock to our healthcare service.

6.5 Human capacity models

Viewing healthcare staff and clinicians as positive forces for change can be an important aspect of harnessing human capacity within the system. Multi-disciplinary teams, physician integration and clinical leadership are considered in turn as potential mechanisms to drive integrated care in Ireland.

There has been a lack of communication from Government relating to UHI. The theory of organisational and system change is well developed, and the importance of investing in consultation and communication with key stakeholders in terms of effecting change in an efficient manner is very well understood, both at a micro and a macro level. A recent stakeholder study investigating insights, concerns and expectations of GPs and patients relating to UHI found that 83% of GPs' and patients' understanding of what UHI is and how it will be implemented was 'poor' or 'very poor'¹⁷³. It is clear that there is a deficit of communication regarding the changes and the Government needs to inform key stakeholders better regarding current reforms. One method that may help to achieve this is to have open public consultation forums where staff can pitch ideas. This could utilise the intellectual capacity of the current staff better by listening to innovative ideas from people who are actually working on the frontline. It would also communicate a powerful message to staff if they feel that they are a part of the change, rather than the change being inflicted upon them. If healthcare staff are asked for their ideas for change in a sincere way and they see that some of the ideas are implemented, then this will go part way to reducing the threat of change and therefore reducing the resistance to change. If members of the general public and patients do not understand UHI then the first introduction most people will have to the reform will be an additional tax. This will represent a significant lost opportunity to promote the foundational arguments of UHI, which are based on a social solidarity egalitarian argument.

6.5.1 Multi-Disciplinary Teams

Standardised care delivered by multidisciplinary teams (MDTs) promotes continuity of the care process^{6,7}. Within effective multidisciplinary teams, all professionals are considered equal members; professional autonomy is maintained, and incentives are provided to meet performance and efficiency

standards¹⁷⁴. Roles and responsibilities of all team members are clearly identified to ensure smooth transitions of patients from one type of care to another¹⁷⁴. Shared protocols based on evidence, such as best practice guidelines, clinical care pathways and decision-making tools, are essential to the functioning of MDTs and help to standardise care across services and sites, thus enhancing quality of care. While an MDT approach is considered a basic tenet of integration⁹⁰, barriers to team collaboration are plentiful. Confusion or lack of role clarity^{175,176}, professional self-interest, competing ideologies and values, lack of mutual trust and conflicting views about clients' interests and roles¹⁷⁷⁻¹⁷⁹ challenge the collaborative process. For the MDT to function effectively, there must be clarity about who is responsible for what. If possible, a single person should have ultimate accountability for each patient; this helps ensure that all appropriate services are delivered but no duplicate or unnecessary services are ordered^{25,180}. However, a single point of accountability may not always be possible, especially when integration is virtual and not concrete. In such cases, all care providers need to understand what they are accountable for, develop and agree to follow care protocols, and communicate regularly with other team members. Closely related to the issue of multi-disciplinary team collaboration is communication^{120,175,176,181}, with emphasis on the importance of a structure with diverse communication channels that efficiently transfer information across organisational boundaries^{8,25,100,180}. Co-location of services^{120,175,182}, with full co-location of teams^{6,100}, frequent team meetings¹⁸³ and

the use of electronic information systems facilitate effective communication^{42,44,120,184}. The 2001 Primary Care Strategy has had limited success in delivering on the promised spread of Primary Care Teams (PCT), with two thirds of GPs indicating that they are not a part of a functioning PCT¹⁸⁵ eleven years after the Strategy was launched.

6.5.2 Physician integration

The USA healthcare system is generally characterised as a highly fragmented system of competing providers operating on a fee-for-service basis, which has led to high levels of service usage⁸⁷. In response to this situation a number of high performing models of integrated care have been developed. Kaiser Permanente is probably one of the most referenced examples of a coordinated, cost effective, integrated healthcare system for a whole population. Key features of the Kaiser system include contractual partnerships between commissioners and providers¹⁸⁶. These partnerships have to work together to deliver services within budget. Another Kaiser Permanente model involves integrated medical groups being able to 'make or buy', which means they can provide as well as being able to purchase additional services as required. Sometimes contracts are made whereby integrated medical groups and providers work exclusively for one another or a specific commissioner. In other situations, integrated medical groups may have a range of contracts with providers to offer patient choice.

Physicians need to be effectively integrated at all levels of the system and play leadership roles in the design, implementation and operation of an integrated health system^{41,175,187}. If changes in healthcare delivery are to succeed, it is crucial that clinicians (especially physicians) play a prominent role. They must learn to see themselves not only as the professionals who deliver patient care but also as partners inand, ideally, leaders of-the change effort. For this to occur, they will have to be convinced of the need for integrated care and accept responsibility for seeing that the necessary changes are implemented. Once this attitudinal shift takes place, the clinicians should be encouraged to act as role models for others. Several challenges have been highlighted in the literature reporting experiences with physician integration. The perceived loss of power, prestige, income or change in practice style can result in physician discontent, resentment and resistance to change^{41,106,175,187,188}. For some physicians, working in a multi-disciplinary, integrated care system with shared decisionmaking responsibility was "unpalatable"⁴¹. It is clear that healthcare professional groupings take different stances as to whether reforms should be systematised or individualistic in nature¹⁸⁹. Taking advantage of existing networks, informal linkages among practitioners and a strong patient focus has been reported to facilitate physician integration^{190,191}. Despite the number of barriers documented, it is believed "stronger physician-system alignment is desirable and worthy of time, attention, and resources"¹⁹⁰. There is willingness from both GPs⁴⁹ and hospital based Consultants¹⁸⁵ to see more shared care initiatives between hospitals

and GPs in Ireland. A recent national survey of GPs and Hospital Consultants¹⁸⁵ noted that currently there is no effective regional model for local co-operation between hospitals and primary care. The authors recommended that the Irish College of General Practitioners (ICGP), The Royal College of Physicians of Ireland and The Royal College of Surgeons immediately agree a clear blueprint for such regional models, where each Hospital and the neighbouring ICGP Faculties commence and maintain a process of reflection and co-operation, focused on the evolving needs of patients, which should include the collection of local data judged to be relevant by local health professionals, planners and patient representatives. If this new model was effective the authors noted that this would improve on local strengths and address weaknesses in the regional provision of services to patients.

6.5.3 Clinical Leadership

The failure of radical solutions stems in part from their limited effect on clinical practice. Improvement of the performance of health care depends first and foremost on making a difference to the experience of patients and service users, which in turn hinges on changing the day-today decisions of doctors, nurses, and other staff. Reforms based on ideas like managed competition and integrated care might have some effect on clinical decisions, but in professional organisations like hospitals and primary-care practices, many more effects on decision-making exist. In these organisations, policies initiated by healthcare reformers have to compete for attention with established ways of working and other imperatives, which may result in a gap between policy intent on the one hand and delivery on the other. Thus, ways have to be found of generating change bottom-up, not just top-down, especially by engaging professionals in the reform process.

Implementation and operation of an integrated health system requires leadership with vision as well as an organisational culture that is congruent with the vision^{8,192}. For example, there may be joint ownership, management contracts and joint executive committees to promote collaboration across the system. Clashing cultures, such as differences between providers of medical services and long-term care services^{120,179}, or between physicians and other service providers^{41,45}, are amongst the reasons named for failed integration efforts. Another cultural barrier to integration is an acute care mindset, which places the hospital at the centre of the integration process¹⁹³. This runs counter to the concept of integrated, population-based healthcare delivery^{24,194}. Bringing different cultures together demands committed and visible leadership with clear communication processes^{94,195}. Leaders need to promote the new vision and mission of integration among their staff to help them take ownership of the process^{43,45,196}. Successful leaders recognise the importance of learning and how it contributes to the overall integration goal¹⁹⁷. They ensure opportunities, resources, incentives and rewards for staff learning and enable providers to take the time to obtain additional training⁴⁴.

Recognising the importance of staff having good leadership qualities the Irish Government established a quality improvement and training programme for clinical and managerial leaders to foster leadership skills within frontline staff³⁸. Clinical Care Programmes, previously discussed, should see improved clinical leadership commensurate with the requirements of a modern healthcare system here in Ireland. In professional organisations like hospitals and primary care service, conditions for change include engagement of clinicians to bring about changes, development and strengthening of clinical leadership, and provision of professionals with the time, resources, information, and skills needed to achieve change. In view of this evidence, the role of Government is less to search for the next eye-catching idea than to build the capacity for change and innovation to occur from within healthcare organisations. Building the capacity of people and organisations to bring about improvements might be slow and unglamorous work, but in the long term it is likely to have a bigger effect than further bold policy strokes. Policymakers and managers also have a role in provision of systems and institutional leadership and in framing the agenda for reform. The task that has to be accomplished is to harness the energies of clinicians and reformers in the quest for improvements in performance that benefit patients. Succeeding with this task needs Government to develop a better appreciation of the organisations they are striving to change, and clinicians to acknowledge that change is needed. The importance of linking top-down and bottom-up approaches to performance

improvement has never been greater. On this link, nothing less than the future of organised health-care systems depends.

6.6 Aligning System Incentives

The Ruane Report on Resource Allocation & Financing in the Health Sector⁵⁹ noted that ensuring financial incentives to providers to support the provision of integrated healthcare is crucial. In many countries, current payment systems do not reward or support the spread of delivery systems that provide a continuum of preventative, acute and chronic care (e.g. time spent co-ordinating records is generally not reimbursed). Providers are not incentivised to provide many of the less intensive services (lifestyle advice, appointment reminders, medication reviews) that are crucial to population health¹⁹⁸. The Ruane report notes that despite the growing need for co-ordination, healthcare services are primarily paid for on an episodic visit-related basis with few, if any, incentives for providing comprehensive, co-ordinated and continuous care for the prevention and management of chronic illness.

It has been widely suggested that a scaled payment system for physicians would improve 'quality' and 'performance' in healthcare, especially in the era of evidence-based medicine where it is considered best practice to have uniform care throughout a health service based on most recent and compelling evidence. Several countries have introduced financial incentives for providers to strengthen care co-ordination. One of the most frequently cited incentive schemes is the UK 'Quality and Outcomes Framework' (QOF). QOF was introduced in the UK in 2004 as part of the General Medical Services Contract. The QOF is a voluntary incentive scheme for GP practices, rewarding them for how well they care for patients. The QOF contains groups of indicators, against which practices score points according to their level of achievement. Practices aim to deliver high quality care across a range of areas, for which they score points, and the higher the score, the higher the financial reward for the practice. The final payment is adjusted to take account of the practice list size. The results are published annually.

A recent paper looked at over 470,000 patients with hypertension in the UK to assess the effect that QOF has had on their management ¹⁹⁹. The design of the study meant that patient data prior to the introduction of QOF was included in the analysis to detect trends that may have existed before QOF was introduced. The study showed no change in blood pressure monitoring or treatment intensity after accounting for secular trends already existing. Cholesterol was not examined. Pay for performance was found to have no effect on cumulative incidence of heart failure, myocardial infarction, stroke, renal failure, or all-cause mortality over the study period. As hypertension is a leading cause of morbidity and mortality, and treatment has a very strong evidence base, this can be seen as a failure of the QOF system in achieving better outcomes. Overall, the evidence base for the impact of the QOF remains patchy and inconclusive. Major challenges include the financial sustainability of

the QOF and ensuring it represents value for money; vigilance against potential gaming; and ensuring that non-incentivised disease areas are not neglected by GP practices²⁰⁰.

A recent Cochrane review²⁰¹ looked at seven studies on financial incentives in healthcare. The authors found that the evidence base for their implementation was not sound enough yet and noted problems of bias (especially selection bias) in the way many of the studies were carried out. Six of the seven studies showed positive but modest results in some of the parameters measured. For example, three smoking-based incentives systems improved recording of smoking status of patients with referrals noted, but not cessation rates. One RCT showed a significantly higher referral rate versus control (11.4% vs. 4.2%), which may be of concern if incentives are designed to take the strain off the acute and tertiary services. Overall the authors were wary of such schemes and recommended that the implementation of financial incentive schemes should proceed with caution, noting that they should be 'carefully designed and evaluated'. They were also concerned with the poor quality of studies in the area, especially considering costs involved, and suggested that future studies look more closely at the specifics of the payment system, including the baseline payment system, how payments are distributed, and the size of payments as a percentage of total revenue.

Pay for performance is also incorporated into acute settings, for example the Medicare Premier Hospital Quality Incentive Demonstration (HQID)²⁰² in the US. A 2012 study looked at over 6 million patients in 252 HQID hospitals and 3363 control hospitals. Illnesses looked at were acute myocardial infarction, congestive heart failure, pneumonia, as well as coronary artery bypass grafting, while the outcome focused on was 30-day mortality. No differences were found in any of the conditions between HQID hospitals and controls, this can be seen as a failure of the pay-for-performance type incentives to achieve improvements in outcomes.

Bundled payments have been approved nationwide for implementation for diabetes care, chronic obstructive pulmonary disease (COPD) care and vascular risk management in the Netherlands. Under the bundled payment scheme, health insurers are able to purchase all of the health care services needed to manage, for instance, diabetes, through the payment of a single fee to care groups. Preliminary evaluation of bundled payments for diabetes care indicates that bundled payment patients had higher cost increases than patients not enrolled in a disease management programme²⁰³. Nevertheless, it is still too early to draw definitive conclusions about the long-term impact of these schemes on the costs and quality of diabetes care.

In an effort to encourage greater integration of care and to lower healthcare costs, the Statutory Health Insurance Modernisation Act (2004) allowed German sickness funds to spend 1% of their overall expenditure on integrated care programmes. Contrary to the expectations of health policy-makers, however, most of the integrated care programmes that were established focused on specific indications (e.g. knee surgery) and usually integrated only two sectors (e.g. rehabilitation and in patient care). The 'Gesundes Kinzigtal' Integrated Care initiative is one of the few population-based integrated care systems in Germany that covers all sectors and indications of care for a specified population²⁰⁴. Actively enrolled members receive enhanced care coordination across all sectors, access to physicians outside normal hours, and discounts for gym memberships among other benefits. Profit is derived solely from realised savings relative to the average costs of care, which is then shared between the management company and the sickness funds on the basis of a negotiated shared savings contract. Healthcare providers receive additional pay-for-performance reimbursement and are given a share of the company's profit on the basis of individual provider performance.

Incentivisation appears entirely logical but the evidence base for its effectiveness remains weak. Despite this, the Irish Government has committed to using incentives to drive performance, "Incentives should be aligned throughout the health system to support the efficient use of resources and the elimination of waste and to drive continuous performance improvement and co-ordination across different providers" (p 4)²⁰⁵ and to aligning system incentives to "support good health outcomes across the whole population" (p 15)²⁰⁵. The issue of performance management arises with regard to the new GP contracts, "improved chronic disease management and a renewed focus on prevention in primary care will be reflected in the GP contract" (p 32)³⁸. Whether we develop a Quality and Outcomes

Framework similar to that in the UK remains to be seen but certainly the reform policy is moving us in that direction.

6.7 Developing Information and Communication Technology

Many of the processes previously discussed are only possible with the support of stateof-the-art system-wide information and communication technology (ICT) systems including computerised clinical information systems (CIS) that allow data management and effective tracking of utilisation and outcomes. CIS can be used to collect, track and report inputs, activity, process (timeliness and user experience, adverse events), outcomes (quality of care), and impact for each patient as well as the population⁸. CIS also enhance communication capacity and information flow across integrated pathways^{1,94,187,195}. Electronic medical records (EMRs) link patients, payers and providers across the continuum of care and provide relevant information to these stakeholder groups. It is essential that information can be accessed from anywhere in the health system, even in remote locations, to facilitate seamless communication between care providers. The CIS should also enable system wide patient registration and scheduling coordination as well as management of clinical data. The ability to integrate clinical and financial information is viewed as important for monitoring cost-effectiveness and facilitating service planning^{2,3}. Developing and implementing integrated electronic systems is time-consuming, complex and costly. Poorly designed electronic information systems,

systems that are not used by providers, lack of a clear business plan, lack of common standards, fear of diminished personal privacy, inadequate training and incentives for providers to participate, poor technology solutions and ineffective leadership all contribute to failure of information integration^{44,196,206}.

France's Carte Vitale has long been hailed as the front-runner in pioneering of an efficient smart card. The card is used to track all the expenses that are incurred when using the French healthcare system. A person is required to present it at each visit to a general practitioner or specialist, and when collecting prescriptions at a pharmacy. The second generation or "Carte Vitale 2" carries a picture for identification and the smart card has additional functions of an electronic health insurance card to carry electronic documents of the treatment process. It has administrative functions such as identifying the health insurance scheme to which the person belongs, the organisation that administers this scheme and their right to universal healthcare coverage. Everyone aged 16+ years of age in France is required to have one. Children under 16 years are included on the card of their parent or guardian. The card itself is not a means of payment, but a means of easier reimbursement. Ireland could learn a lot from France as how to adopt and implement this large-scale efficient form of health technology.

EMRs and CIS are seen as critical components of a high functioning health system. EMRs convey clinical information, coordinate care for particular diseases or services and pull data from multiple sources. Despite this a recent review of the prevalence of adoption of EMRs in acute US hospitals found very low levels of adoption due to substantial obstacles such as a lack of financial support and training²⁰⁷.

In the UK a review of a centrally stored electronic summary of patients' medical records over a three year period supported better quality care and increased clinician confidence in some encounters²⁰⁸. There was no direct evidence of improved safety, but findings were consistent with a rare but important positive impact on preventing medication errors. There are systematic reviews on the use of EMRs in primary care and general practice settings. These reviews covered topics in diabetes management²⁰⁹, patient record quality^{210,211}, decision support tools²¹², electronic communication²¹³, and provider performance and patient outcomes^{214,215}. While there is some evidence of improved quality many challenges have been reported²¹²⁻²¹⁴, including variable consistency and accuracy of patient record content^{210,211}, lack of time and funding to cope with change, and the need for adequate training and support²⁰⁹.

The absence, in Ireland, of a robust shared EMR accessible to and used by all those involved in providing care to people with complex conditions is a major drawback to supporting a more appropriate and integrated response to people's needs. There is a stark difference with regard to the use of EMRs within primary and secondary care services in Ireland. A recent national survey of hospital based Consultants found that a total 138 (60.8%) of respondents



indicated that they do not routinely use EMRs in their service¹⁸⁵. This compares unfavourably with the use of EMRs within primary care, with a total of 301 (82%) of GP respondents indicating that they do use EMRs in their practices^{49,50}. The current deficit in the use of EMRs in our hospital services will present a significant challenge.

In Ireland, successive Governments have failed to tackle the issue of a poorly funded ICT infrastructure. The current Government acknowledges that "central elements of the reform programme, including MFTP, UHI and integrated care, will depend on having a fit-forpurpose information and ICT infrastructure in place" (p 43)³⁸. An 'eHealth' strategic approach is proposed by the Government whereby patient data would extend across the full range of care settings and not just within traditional hospital computing environments. The governance of patient data will be guided by the provisions in the long-awaited Health Information Bill³⁸. This Bill should provide a legal framework for the better governance of health related information and the necessary legal framework for a number of initiatives including health identifiers and population level registers of health information. The objective of the Bill is to create an integrated system whereby personal health information is available across many care settings and transferable between clinicians and hospitals, both public and private. This should see an end to the paper mountain that occurs currently within our health service. A move towards shared EMRs in Ireland will require effective project management spanning periods of several years and involving high investments.

Chapter 7 What tools will help in adopting and mainstreaming integrated care 'at scale'?

There is very little concrete understanding as to how to adopt integrated care initiatives 'at scale'. Many examples from the literature relate to pilot studies or theoretical frameworks that have not been tested. One downside of pilot studies is that if there is anything special or particular about the pilot site that facilitated the intervention to work, then it might not necessarily also work when the initiative transfers to a different hospital site, a different primary care team, or a different county. How does a system replicate pilot success and adapt that success to different locations? How does a system ensure that a small scale success becomes a mainstream success?

7.1 Plan Do Study Act

Plan, Do, Study, Act (PDSA) is a tool for use by health professionals in the workplace to deliver and test changes to clinical care²¹⁶. The four phases in the Plan-Do-Study-Act cycle involve:

- Plan identifying and analysing the problem
- Do developing and testing a potential solution
- Study measuring how effective the test solution was, and analysing whether it could be improved in any way
- Act implementing the improved solution fully

The rapid cycle change aspect is the incremental build up of small cycles of PDSA activity into larger scale systems and process improvements. PDSA advocates users to start small. Use of this tool requires a change in the way a team, department or organisation thinks about improvement. Training and support in the PDSA approach is needed to make clinical staff and management aware of the implications and repercussions of making a change. Local agreement on the use of the PDSA approach to quality improvement is required for its successful implementation.

Sir John Oldham in 1998 utilised the PDSA tool to great effect when preparing and launching the NHS National Primary Care Development Team in the UK. The PDSA model was used for collaborative improvement and credited with creating an infrastructure for spreading and 'up-scaling' ideas in multiple locations at once which delivered large scale system change across the NHS²¹⁷. The model focused on leadership and organisational development. Primary care teams were encouraged to collaborate, to share ideas for change and problem solve at local level. The collaborations were the vehicle for change and Oldham says "a treasure chest for talent" (p 43)²¹⁷. The PDSA initiative is credited with the largest improvement programme in the world, covering 32 million patients in 40 months and delivering 72% improvement in access to GPs and substantial reductions in mortality to patients with coronary heart disease. Use of the PDSA tool has been a feature of the Institute of Health Improvement 'Safer Patient Initiative' piloted in Scotland by NHS Tayside²¹⁸. The political landscape in Ireland is recognising that primary care is crucial to a high functioning healthcare system that can respond particularly to complex patients with multimorbidites. With adequate resourcing and buy-in from primary care teams nationally, the PDSA model could be applied to develop primary care further within Ireland.

7.2 Implementation Science

The implementation of evidence-based treatments to deliver high-quality care is essential to meet the healthcare demands of ageing populations. However, the sustainable application of recommended practice is difficult to achieve and variable outcomes well recognised. Irish healthcare policy has a chequered past regarding the implementation of key healthcare policy directives. Lack of implementation of policy can frustrate system change in general and create cynicism in stakeholders as to future changes. The field of implementation science has developed a framework of the three over-arching drivers in implementation²¹⁹. First, effective leadership, the capacity to provide direction, vision and the 'right' leadership approach; secondly, competency drivers, such as staff capacity to support patients with the evidence based practices; thirdly, organisational drivers, such as organisational capacity to support staff in implementing best practice with fidelity. When these three core components are in place they provide the support to establish and maintain the successful implementation of a programme or approach²²⁰.

The roll-out of the Government's UHI plan will commence with Universal Primary Care (UPC)²⁰⁵, promising 'free GP' visits to all citizens, although the 'free' concept is misleading as costs will have to be met through increased taxation. More important however, is the shrinking of Primary Care services to just GP services. A well functioning Primary Care service encompasses many allied healthcare professions including medical, nursing, physiotherapy, dietician, pharmacy etc. While GPs may retain their gatekeeper role within the service the focus of service and contractual reform should not centre around GPs only.

The utility of the models within implementation science compliments that of the PDSA model²²¹. The HSE should apply the tenets of these models to support the transformation of the Irish health service at a local and national scale.

Chapter 8 How can success be defined and measured?

An essential component of any integrated care programme is the ability to demonstrate its impact. Measuring the success of an integrated health system depends on well-developed performance monitoring systems that include health indicators to measure outcomes at different levels. Tools that help measure the outcomes of treatment can enable staff to see the relevance of entering data if this knowledge is used to improve patient care⁹⁴. There are protocols and procedures that reflect the importance of measuring care processes and outcomes and using the information for service improvement. The focus is often on cost effectiveness. Ongoing measurement of care outcomes and reporting are important parts of the quality improvement process. Some integrated health systems have mechanisms in place that link compensation to indicatorbased performance; reward systems may be redesigned to identify, measure and reinforce achievement of organisational priorities and promote the delivery of cost-effective highquality care^{1,42}.

No agreed definitions of measures of integrated care exist. So how does a country measure whether integrated care is working? For example, the extent to which health and social care are integrated may be measured in terms of budgets, organisations or levels of user integration. Policymakers keen to encourage 'patient choice' need to ensure that the substitution of providers does not disrupt service delivery and undermine the equity of access to integrated care. Unified measurement tools and indicators are needed to measure levels of integration across health and social care systems. The introduction of integrated care implies the introduction of integrated care performance indicators or measures. However, the creation of such measures is complex: for example, professionals from health and social care may have very different notions of what constitutes 'quality'. Providers may resent being subject to integrated performance measures when outcomes are dependent on services provided by other organisations. The quality systems of social services are typically less comprehensive than healthcare quality measurement systems. Social care outcomes are comparatively more difficult to measure. Performance measures are only useful when agreed upon by all participants. It is unclear whether the different professions involved in providing integrated care would be able to agree on satisfactory performance measures of integrated care. Beyond measurement, it is important to monitor and regulate the quality of integrated care. This also is likely to be complicated given the mixture of providers. In particular, identifying which agent will take responsibility for gathering user feedback and making the necessary changes is a key challenge. The absence of a robust shared electronic medical record that is accessible to and used by all those involved in providing care to people with complex conditions is a major drawback to supporting a more appropriate and integrated response to people's needs^{22,222}.

Meaningful and credible performance measures need to be developed to allow for the evaluation of integrated care. The lack of time and sustained project management support accorded to pilot sites means that integrated care has often been restricted to short-term pilot projects. Without the time and resources to demonstrate change, research results often report that integrated care has failed to achieve its desired goals²²³. Policy makers need to develop tools and systems for regulating the quality of health and social care delivered as part of an integrated care package and for involving providers from mixed sectors in the development and implementation process, e.g., incentive, partnerships and contracts.

When you introduce a change in a treatment or service, how do you know there has been a benefit to patient care? Routine collection and monitoring of patient data are part of good practice. The direct opinions of patients as consumers of health services are also a valuable measure of health service planning and performance. The Madden Report⁹⁵ on patient safety in the Irish healthcare system recommended that patient and service user involvement measures should be used in relation to the development of policy for service delivery, development and evaluation.

The timing of when to evaluate is also a key consideration. Integration must have had an adequate time period to allow the process to take place^{6,180,224}. Measuring health system integration involves monitoring and evaluating to determine first, whether the process of integration was implemented as intended and that integrated care has been achieved, and secondly, the impact of integration on various components of the health system including: patient, provider, organisation, funding and

policy-maker, that is, how well the integrated system has performed. Actual empirical evidence on outcomes and impact of integrated health systems is scarce.

Data and information about outcomes have to be translated into meaningful evidence that can inform decision making at local and management level if they are to be used to implement good practice. Performance indicators are targets set by a team, department or service. They may be specific to achievement of standards, reduction in waiting times or patient discharge. For example the Institute for Healthcare Improvement in the US advocates a balanced set of three performance measures for improvement:

- Outcome Measures (voice of the patient)
 - How is the system performing? What is the result?
- Process Measures (voice of the workings of the system)
 - Are the parts or steps in the system performing as planned?
- Balancing Measures (looking at a system from different directions/dimensions)
 - Are changes designed to improve one part of the system causing new problems in other parts of the system?

Typically, methods of measurement of integrated care focus on organisational and administrative integration (that is on structures and processes), with little assessment of outcomes. Indeed, few studies clearly describe the measurement tools and indicators that can be used to assess both the implementation and impact of integrated care^{16,225}. In addition, many evaluations of specific integrated care interventions fail to describe the previous model of service delivery and hence are unable to describe fully the potential additional benefits of integration.

Further work is needed to develop appropriate measures, tools and approaches. Drawing on the work of a number of commentators^{16,18,26,225,226}, this includes:

- Approaches to evaluating integrated care that situate it within wider health and care systems; acknowledging the level and combination of strategies used based on the challenges faced in obtaining appropriate quality care for local communities and user groups; considering the contextual factors that affect development and delivery.
- Standardised, validated tools and indicators that measure integration across different settings relative to a set of models, structures and processes.
- Focused, 'off-the-shelf measures' that suit a specific purpose or aspect of integrated care, which can be applied by decision-makers and planners across diverse healthcare systems and settings.
- Qualitative and mixed methods approaches (such as comparative case study research and/or realistic evaluation) that facilitate understanding of which integrative processes work, for whom, and in what circumstances.
- Longitudinal methods that move beyond simple snapshots of integrated care and follow integrative processes through time, allowing evaluators to assess not only

the long-term implications for integrated delivery, organisation and outcomes, but also the way in which planned change is actually experienced for those with longterm conditions.

Ongoing healthcare reforms within Ireland will need to be cognisant of how best to align system incentives so they are embedded within an integrated care framework. For example, further work and guidance needs to be undertaken on defining and measuring outcomes routinely. Some of these will need to be embedded into clinical and social work practice whilst others should be available from routine data. Also, it is not clear how patient experience will be measured and by whom, or who will deal with complaints in the new system. These are important measures of performance and governance. Will social service, and health performance measures be aligned in the new system? An example of where objective alignment would be of benefit is in the reduction of health inequalities, which requires a partnership approach. Performance measures across the different agencies need to support joint working rather than present competing priorities. There will need to be a balance between locally agreed standards and quality measures, and those required for external validation. We will need a set of nationally consistent indicators. Currently there is a lack of routinely collected outcome data in healthcare within Ireland.

Implementation of Healthy Ireland's 64 actions will be subject to rigorous planning, reporting and evaluation. This will be managed through an Outcomes Framework with key health indicators and measurable targets. Health indicators will be set to measure improvements in population health and "will be informed by efforts by international agencies to measure and set targets for wellbeing and public health outcomes, e.g., OECD, EU Commission, and the WHO Regional Office for Europe" (p 32)⁴⁷. These will include health status, weight, diet and activity levels. It will also include indicators to measure health inequalities and the broader determinants of health, such as the proportion of young people completing second level education, access to green spaces and other environmental influences; and indicators that measure how we are protecting the health of the population e.g. uptake of immunisation programmes. However what is lacking in Healthy Ireland is the understanding that health indicators do not operate independently of each other but rather interact with each other to form a 'pattern of determinants'²²⁷. Methods of evaluation will need to be sought to examine systematic differences in outcomes across populations, complexity of interactions among determinants, biological pathways linking determinants to population health outcomes, and the influence of different determinants over time and throughout the life cycle.

8.1 Tools to Measure Integration

A key element of measurement is to operationalise the unit of measurement and the proposed outcome. There is a major difference between assessing the success of a care pathway for a specific disease grouping and assessing an improvement in the population's health as a whole. A framework to determine changes in population health would require an operational measure of population health in order to determine and assess improvements.

There are three tools identified in the literature to measure integration¹⁶:

- The balanced score card measures the implementation and impact of integration.
- Clinical microsystem assessment tool allows the organisation to compare it's characteristics to those considered key to successful integration.
- The scale of functional integration is used to analyse intra-organisational, interorganisational, horizontal and vertical integration.

According to the authors the balanced scorecard is appropriate for evaluating both the implementation of integration and the impact of integration. It was originally developed by Kaplan and Norton²²⁸ in response to organisational performance measurements that were based on financial performance alone and adapted by Devers²²⁹. The degree of integration implementation at baseline can be determined by a survey administered to organisation managers^{229–231}. To determine the impact of integration, the organisation must^{23,229,230,232}:

- Analyse the system-wide relationships with respect to whether integration is required or not.
- Choose the components appropriate for integration.
- Assess the current level of integration.

- Decide the future levels of integration by component and the time line to achieve the maximum desired level (per cent) of integration.
- For each integrated component, identify goals, actions or tasks and their associated indicators of achievement.
- Assign responsibility for achievement.
- Measure as required, for example on a weekly, monthly or quarterly basis.
- Review achievement each year and learn from successes and failures.
- Set new baselines at the beginning of the next year until the desired targets (outcomes) are reached.

The balanced scorecard is used to track progress in completing actions or tasks required and evidence of achievement for goals²²⁹.

The second tool identified by Armitage et al¹⁶ was the clinical microsystem assessment tool, which was developed through the systematic analysis of twenty high performing clinical microsystems in North America²²². Eight characteristics, shared across the 20 microsystems, were consistently related to high success rates with respect to high quality and cost effective health services. These characteristics were used to create a selfassessment tool, which allows an organisation to compare its characteristics to those considered key to successful integration. The survey questionnaire was tested for content and face validity²³⁴. The Calgary Health Region has used this tool to measure integration of a new community health centre²³⁵. The

eight characteristics of effective clinical microsystems were²³³:

- Integration of information.
- Measurement to determine progress and effect.
- Interdependence of the care and cure team.
- Supportiveness of the larger system (including policy makers, service planners, organisations).
- Constancy of purpose.
- Connection to the population and public.
- Investment in improvement.
- Alignment of role and training.

The third tool of interest was the scale of functional integration²²⁶, which can be used to analyse intraorganisational, inter-organisational, horizontal, and vertical integration. The scale was tested in a Swedish Local Health Care Network. The authors were able to establish the tool's validity and reliability. The scale is comprised of a continuum from full segregation to full integration within several categories in-between such as linkage and co-operation. Different professional groups rank their perception of their unit's integration with other units. Within the categories of integration there are activities that are expected to take place such as shared clinical guidelines under the linkage category. These rankings are then compared with the optimum rank as determined by each unit.

A Euro Health Consumer Index (EHCI), conducted by the Health Consumer Powerhouse, has been developed which is



In 'Future Health' the Government explicitly states that the aim of increasing integration is consistent with initiatives in other countries that seek to shift the emphasis from episodic reactive care to care based on need, which is evaluated as to its impact on outcomes³⁸. A rigorous performance management process will be put in place with defined national outcomes. Providers will be measured regularly against the achievement of these outcomes and the results published. Performance against outcomes will be used, in turn, to inform the commissioning process. Just how this will be done and what outcomes will be measured remains to be seen.

Chapter 9 Conclusion

A new culture of healthcare delivery

Health service systems are perhaps the most complex knowledge systems in modern societies. All services, including health and social care, should provide the best possible opportunity for people to lead the lives they want, whatever their age. However, poor co-ordination between and within different services, both at times of episodic events and in the long-term, are currently failing to meet adequately the needs of many people. Fragmented and unbalanced service systems can result in bottlenecks and gaps, which put pressure on existing services and can prevent the development of preventive and rehabilitation services that are so crucial to maintaining the population's health and wellbeing. Ireland is undergoing a period of radical reform within the health service. Implementing integrated care in Ireland will mean devising new budgeting formulae, tools and procedures at a national and local level. The fragmentation of social and healthcare planning, financing and organisation must be overcome. Incorporation of the user perspective will be particularly important. Integrated care requires that professionals from different sectors and backgrounds work cooperatively and implies a movement away from the disassociated social care or healthcare culture towards a new culture and ethos of care.

Defining integrated care

As is often the case with emerging models, especially those with a strongly multidimensional character, the defining concepts and boundaries lack specificity and clarity. Thus, the definitions, which are commonly used, tend to be vague and confusing. This makes it difficult to develop the knowledge base so essential to refine and move the field ahead. We advocate that the WHO definition of integrated care "The organization and management of health services so that people get the care they need, when they need it, in ways that are user friendly, achieve the desired results and provide value for money"; is adopted and used by the Government in considering integrated healthcare policy. We believe that this particular frame of reference is especially useful. It endows the term 'integrated care' with a logic and meaning of greatest relevance to patients with serious chronic and disabling conditions.

Health and social care inextricably linked

Integrated care blurs the distinction between health and social care. It is now understood that many of the determinants of health and ill health are not medical but rather are socially constructed. In Future Health³⁸ the Government has indicated that social care services will be outside the UHI system. This could pave the way for a significant divide between primary and secondary care and between health and social care. When social care and healthcare are not integrated this adds a further degree of complexity that all too often results in overlapping or missing services; and a failing of continuity of patient care.

Potential barriers

There is a number of principles for organising a healthcare system to deliver integrated care. To assist with focusing and guiding

integration efforts decision-makers may use these principles, but much more needs to be learned about specific structures and mechanisms for success. Consideration also needs to be given to the multitude of barriers to integrated care such as social, economic and political contexts that affect funding streams and broader integrating mechanisms, as they constitute significant determinants of the success of integrated service delivery models. Many countries are already addressing different barriers to integration, and some examples of their approaches have been included in this paper to illustrate these challenges. These barriers are well documented, and include separate funding systems for health and social care, cultural differences and problems relating to organisational, structural and professional boundaries. Given these considerable challenges, it is important that integration is not seen as the answer to every issue but, instead, that it focuses on resolving those problems for which a coordinated response is essential. Some problems can be hard to define and have unclear causal chains and complex interdependencies. However, the complexity of the system should not deter policy makers and health service planners from improving the system by organising care around the patient.

Using available resources

Resource allocation is a key factor in ensuring a good balance of services and a well functioning integrated system. Ireland has recently undergone a period of sustained economic constriction, which has impacted on the healthcare budget. While many countries are working within resource constraints, effective integration of services around the individual patient depends on an adequate 'menu' of local services. Lack of capacity in one sector is likely to cause problems in another. For example, poorly funded home care services may delay hospital discharges and lead to unnecessary admission of older people to residential care; poorly resourced primary and community care services may lead to unnecessary admissions to acute care.

Multi-disciplinary approach

Integration of services requires considerable financial investment in the resources required for successful implementation of integrated care teams, as well as meeting the needs of service users. International evidence indicates that it is best to use a continuum of strategies from the macro to the micro that span funding, administration, organisational, service delivery and clinical areas. While the proposed strategies or mechanisms to deliver integrated care differ, there is consensus that multiple processes are necessary to ensure successful integration. Strategies to assist integration should target communication and access; culture, values and teamwork; and commitments and incentives to deliver integrated care. However, differences in staff contracts, employment arrangements, funding approaches, and approaches to service provision build allegiances to the needs of specific organisations that make it difficult for multidisciplinary teamwork to happen. International experience recommends the need for a focus on the management of multidisciplinary teams and the strengthening of primary care services.

Evidence based choices

It is urgent that scientific knowledge and evidence be utilised in taking action on issues relating to health service reorganisation. Evidence and knowledge should be used to inform and support health policy and be an asset to decision makers, which in turn should facilitate the health service to operate more effectively. By basing reform choices on sound evidence, decision makers are also acting within the realms of fiscal responsibility by using valuable resources in a considered and measured way.

Health policy support

Support for implementation is crucial. Policy can set the direction for change but it needs to allow for experimentation, innovation and learning. Processes and strategies must be implemented that align with and support these guiding principles and integration structures (such as co-location of services, information systems); otherwise the desired outcomes may not be achieved. Government health policy should have common interrelated themes, such as clarifying the vision for the reforms; underpinning principles and values; setting the criteria for operational success; a coherence with other policies across departments; active promotion and incentives for integrated care; evaluation and monitoring; regulation, inspection and support and strong leadership to implement policy. The Government's policy manifesto suggests that there is some recognition that significant innovation is required to modernise the health service, which has the potential to result in a better quality, evidence based health service. Ireland's

political landscape is also not helpful with electioneering occurring routinely throughout the short five-year political cycle. In the life course of the current Government we have seen two changes in the Minister for Health and three for the Junior Minister.

Drivers for change

There is a number of levers or drivers of integration that have been analysed for their evidence base as potential drivers for change within Ireland. There is mixed evidence for integrated care pathways (ICPs) and evaluation is needed from well-designed trials within Irish settings to determine the utility of ICPs for improving integrated care. Along similar lines the Clinical Care Programmes (CCPs) have the potential to standardise care across services by setting national standards. However to date there is no move within the CCPs' objectives to improve coordination of care between services. This may emerge as the CCPs mature. The emerging evidence seems to indicate that incentive-based schemes in their current form are not doing effectively what they set out to do. Outcomes either do not appreciably improve or only improve in some parameters. The lack of high quality evidence to support such systems is disappointing, especially as the QOF is nearly ten years old and there have been many schemes running in the US for a long time. At best, pay for performance systems need to be reformed to be more evidence and audit based, as well as being more cost-effective. At worst they may need to be scrapped altogether, as some UK political parties suggest. A macro level organisational change in Ireland is the move towards Hospital

Groups. Grouping hospitals provides for greater specialisation with complex services concentrated within particular hospitals to ensure quality outcomes. Grouping hospitals together to share a regional workload should, in theory, improve integration of care for patients. Strengthening of the primary care sector should see the biggest set of evidence based improvements in the coordination of care especially with regard to complex patients with multimorbidity. Primary care is the first point of contact for most people with the health service and it has at its core an inherent family and community focus. Primary care could be the focal point of the coordination of care of complex patients but only if there is the political will to resource it financially.

ICT

Integrated care entails those professionals from different sectors within the health system to work together in a team-oriented way to provide high-quality care for a patient. This requires that healthcare professionals share information about and with patients at appropriate points in the care or treatment process. The necessary infrastructural arrangements, such as electronic medical records (EMRs) must be in place. It is increasingly hard to imagine integrative initiatives without a strong information management and technology component. Generally, patient records are available on stand-alone systems or more likely on paper, and the systems used in different sectors are generally autonomous and incompatible. Increasingly the EMR is being considered essential technology for healthcare settings. Yet, our hospitals have very poor availability of EMRs, while evidence indicates that primary care services are better equipped for ICT. Ultimately we need a mechanism to integrate the ICT between, within and across services. Investment in quality ICT and EMR functioning across the entire health sector within Ireland is a priority. Alongside this investment is the need to introduce a unique patient identifier, which is an essential component to convey clinical information, coordinate care for particular diseases or services and pull data from multiple sources.

There is a need for clear standards for monitoring the success and failure of integrated teams including validated measurement tools, comprehensive case studies and comparative analysis of different approaches to integration.

There are several implications that arise from our views. In closing, we would like to sketch some of the more salient points:

- Patient benefit. What is needed are more detailed insights with respect to the successful impact of integrated care on specific patient groups (e.g. the frail elderly), including the level, type, and combination of strategies involved in successful initiatives.
- Barriers. There are numerous macro and micro barriers to integrated care. Major contextual, institutional and professional factors were briefly described in this paper.
- Costs. Integrated care is supposed to be more efficient. The total costs, including outlays for staff and support systems, services, and start-up, must be carefully defined, tracked and calculated before we can make pronouncements on the strategy's

cost-effectiveness.

- Patient and family involvement. Successful integrated care (i.e. models that are effective in meeting patient needs) demands the ongoing involvement of patients and family carers in programme planning, implementation and oversight. This will ensure that user needs and expectations are reflected where it counts, and that consumer satisfaction issues can be realistically addressed.
- Research and evaluation. Integrated care is a complicated process. We must not only systematically examine the interventions themselves, but also a wide range of outcomes including health, psychosocial, and economic measures. Equally important, studies should focus on the experience of patients served by such approaches. This makes it incumbent on researchers and evaluators to employ an array of quantitative and qualitative methods and techniques to answer the many efficiency and effectiveness questions that various stakeholders are likely to pose. Finally, a shared research agenda—national and local in scope—would be helpful in theory, model, and evidence building.

Integrated care is at the heart of the Government's health service reform plans with a focus on accessibility, quality and economic sustainability. However, these reforms must not be considered as end goals in themselves, but rather as a means to achieving overall healthcare reform. The end goal must be the measurable and real improvements in health and well being for all the people of Ireland.

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Appendix A: Search string

A wide variety of electronic sources, including MEDLINE®, CINAHL, Cochrane databases, and PsychINFO were performed. The electronic searches were performed between May 2012 and August 2014), and included English language articles from 1950 to the present. The main search strategy included an extensive list of terms intended to identify all research publications associated with the domain of collaborative or integrated care. Medical subject heading (MeSH) terms as well as key words relevant to the domain formed the search basis.

Medline® Database Search

#1: Targets articles addressing care coordination

"Coordinated care" OR "care coordination" OR "collaborative care" OR "integrated care" OR "shared care" OR "transitional care" OR "comanagement" OR "case management" OR "synchronized care" OR "interdisciplinary care" OR "disease management" OR "Progressive Patient Care" [MeSH] OR "Continuity of Patient Care" [MeSH] OR "Patient-Centered Care" [MeSH] OR "Patient Care Planning" [MeSH] OR "Disease Management" [MeSH] OR "Delivery of Health Care, Integrated" [MeSH] OR (care AND (integrat* OR collaborat* OR coordinat* OR transition* OR interdisciplin* OR shared OR comanagement OR cooperat* OR aftercare OR interinstitution* OR synchron* OR harmon* OR manage*))

#2: Targets systematic reviews

((meta-analysis [pt] OR meta-analysis [tw] OR metanalysis [tw]) OR ((review [pt] OR guideline [pt] OR consensus [ti] OR guideline* [ti] OR literature [ti] OR overview [ti] OR review [ti] OR Decision Support Techniques [mh]) AND ((Cochrane [tw] OR Medline [tw] OR CINAHL [tw] OR (National [tw] AND Library [tw])) OR (handsearch* [tw] OR search* [tw] OR searching [tw]) AND (hand [tw] OR manual [tw] OR electronic [tw] OR bibliographi* [tw] OR database* OR (Cochrane [tw] OR Medline [tw] OR CINAHL [tw] OR (National [tw] AND Library [tw])))) OR (synthesis [ti] OR overview [ti] OR review [ti] OR survey [ti]) AND (systematic [ti] OR critical [ti] OR methodologic [ti] OR quantitative [ti] OR qualitative [ti] OR literature [ti] OR evidence [ti] OR evidence-based [ti]))) BUTNOT (case report [mh] OR case* [ti] OR report [ti] OR editorial [pt] OR comment [pt] OR letter [pt])

#3: Targets systematic reviews addressing care coordination

#1 and #2

#4: Limits articles found through search #3 to humans and English Language

#3 limited to English, Human

OBSERVE, COMMENT, CONTRIBUTE