

Integrated Care Programme for the Prevention and Management of Chronic Disease



National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland 2020-2025

Integrated Care Programme for the Prevention and Management of Chronic Disease



Seirbhís Sláinte
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á Forbairt

Building a
Better Health
Service

Foreword

The population living in Ireland is ageing: we are living longer, but we are living with increased levels of chronic disease. The healthcare experience of individuals with chronic disease is often characterised by episodic, reactive care, culminating in repeated hospital admissions. This is neither patient-centred nor sustainable. Our health services need to evolve to meet our changing needs: a paradigm shift from a hospital-centred focus to a person-centred focus is now required.

'Integrated Care' for chronic disease is defined as healthcare provided at the lowest appropriate level of complexity, with responsive services built around patient need to support and empower individuals to optimise their health, actively address and minimise their risk factors for chronic disease and to live well with chronic disease.

The '*National Framework for the Integrated Prevention and Management of Chronic Disease*' builds on existing policies while also describing a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management and rehabilitation services that are coordinated across different healthcare providers and healthcare settings. It describes a new way of working together across the health continuum. There is strong evidence to support the positive impact of integrated care on the safety and healthcare experiences of patients, cost-efficiency of the health service and staff perceptions of the quality of care they are providing.

The COVID-19 pandemic has brought into sharp relief the need to re-think how we deliver our health services. We now have a unique opportunity to change our approach to the prevention and management of chronic disease, working together to provide a proactive and seamless healthcare service that emphasises patient empowerment and flexes to meet patient need. This National Framework, in partnership with the companion guide '*National Framework for the Integrated Prevention and Management of Chronic Disease: a ten-step guide to support local implementation*' speaks to these unmet needs and is intended to support the implementation of integrated care at both the national and local levels.

As we embark on a new way of working together, I hope that this Framework will support your journey towards achieving integrated care.

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Chair of the Integrated Care Programme for the Prevention and Management of Chronic Disease

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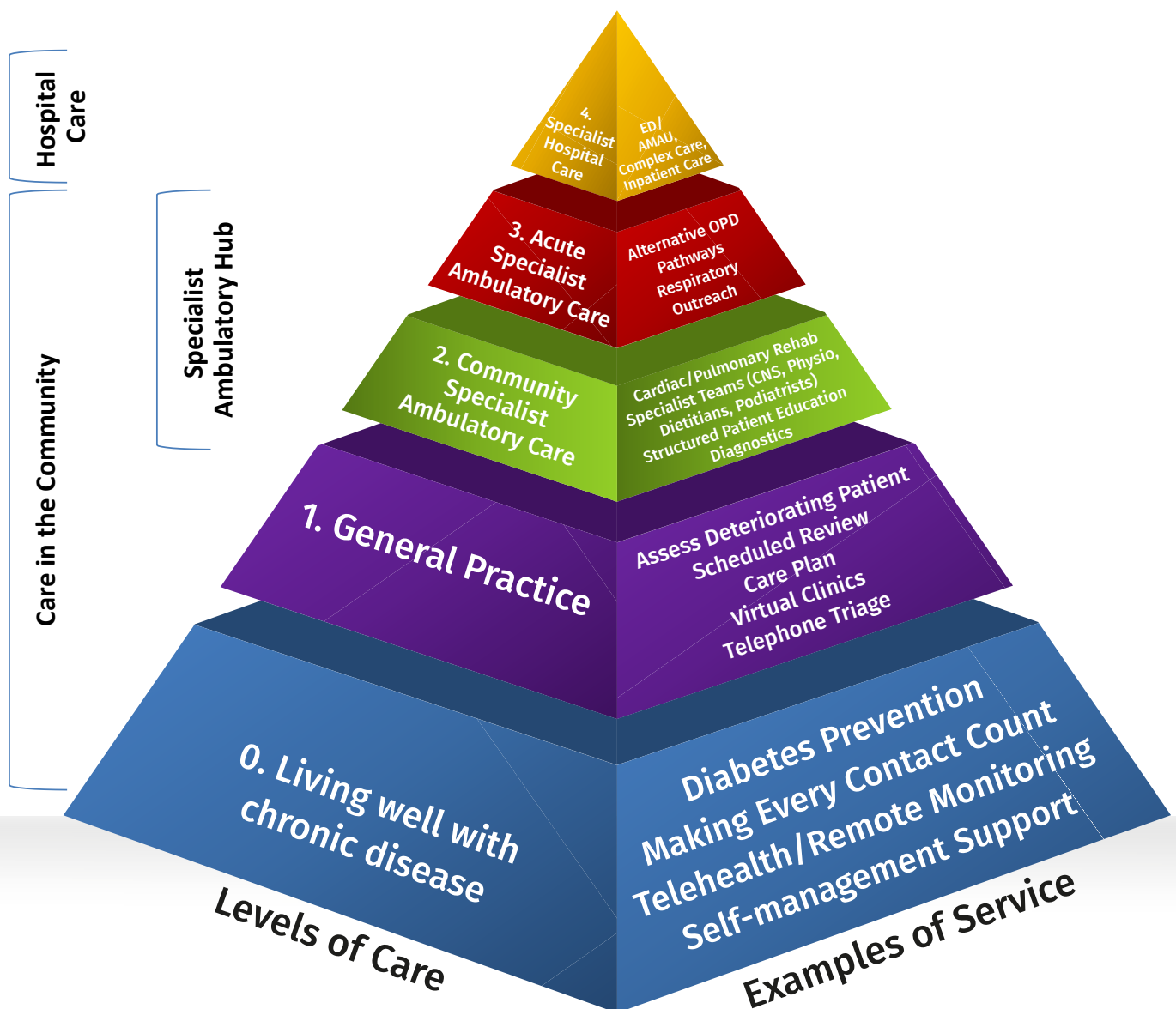
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At a glance: the Integrated Model of Care for the Prevention and Management of Chronic Disease

The ‘Integrated Model of Care for the Prevention and Management of Chronic Disease’ is at the heart of the ‘National Framework for the Integrated Prevention and Management of Chronic Disease’ and demonstrates how “end-to-end” care can be provided within the Irish health services.

The Model of Care (Figure 1) describes the five levels of service, and examples of each service, that need to be provided for a population in order to deliver integrated end-to-end care for chronic disease. The services required to support the model of care are described in further detail within this framework document.

Figure 1. Model of care for the integrated prevention and management of chronic disease



This model of care supports people to live well within the community, with ready and equitable access to General Practitioner (GP) review, diagnostics, Health and Social Care Professional (HSCP) input and specialist opinion, as required. The focus is on keeping people well and on providing care as close to home as possible.

- **Level 0:** Living well with chronic disease. The Integrated Care Programme for the Prevention and Management of Chronic Disease is working to develop services to support and empower individuals living in the community to prevent and/or manage their chronic disease and associated complications. Such services include education sessions, goal-setting and the development of action plans to support chronic disease management at home.
- **Level 1:** General Practice care is provided at Community Healthcare Network (CHN) level. The new Chronic Disease Management Programme in General Practice will provide additional supports to GPs in caring for individuals living with chronic disease in the community.
- **Level 2:** Community specialist ambulatory care will provide a further layer of support to the GP to care for patients in the community through ready access to diagnostics, pulmonary and cardiac rehabilitation and diabetes structured patient education services which will be based in the ambulatory care hub in the community.
- **Level 3:** Acute specialist ambulatory care will offer specialist services such as outpatient services and respiratory outreach which will be delivered from the ambulatory care hub
- **Level 4:** Specialist hospital care may be required for the management of complex issues requiring hospital resources. However, an emphasis on early supported discharge home, with the appropriate supports in place in the community, will be a priority for the health services.

This model of care has been adapted by each of the National Clinical Programmes for Chronic Disease (The National Heart Programme and the National Clinical Programmes for Respiratory and Diabetes) to develop a model of care which details end-to-end care for heart failure, chronic obstructive pulmonary disease, asthma and type 2 diabetes mellitus. The Integrated Model of Care for the Prevention and Management of Chronic Disease is discussed in further detail in Section 4.3.

1.0 Background

1.1 Introduction

This document sets out a National Framework which will describe an integrated approach to the prevention and management of chronic disease in Ireland over the coming years (2020-2025). It describes a whole-system approach to integration that encompasses population health and wellbeing, preventive, acute, non-acute and community-based services. It aims to join together the various strands of Ireland’s health service with the ultimate goal of providing a person-centred service by ensuring that individuals receive “the right care, at the right time, by the right team and in the right place”¹

The ‘*Integrated Model of Care for the Prevention and Management of Chronic Disease*’ (Section 4.3) is at the heart of this framework and demonstrates how “end-to-end” care can be provided within a health service that offers a spectrum of preventive, diagnostic, care and support services which are integrated, collaborative, person-centred and provided as close to home as possible. The services required to support the model of care are also described as part of this framework. This model of care supports people to live well within the community, with ready and equitable access to General Practitioner (GP) review, diagnostics, Health and Social Care Professionals (HSCP) input and specialist opinion, as required. The focus is on keeping people well and on moving to provide the vast majority of health care to outside of the hospital setting.

1.2 Audience

This Framework has been developed to support decision-making in relation to the management of the four major chronic diseases (cardiovascular disease, chronic obstructive pulmonary disease (COPD), asthma and type 2 diabetes mellitus) at the national, regional (Regional Health Authority) and local (Community Health Organisation and Community Healthcare Network) levels. It may also serve as a resource for health and social care providers within the public and private sectors, people who care for individuals with chronic conditions, for the families of individuals who have chronic conditions and for the individuals themselves who are living with chronic conditions.

1.3 Setting the scene

Against the backdrop of an increasing prevalence of chronic disease, increasing public expectation, an ageing demographic and the influx of new medical technologies and innovations to the market, the current healthcare system in Ireland, with an over-reliance on the provision of hospital-based care, is unsustainable. The concomitant challenges of increasing multimorbidity and case complexity serve only to highlight the siloed approach to healthcare in Ireland and the resulting fragmentation of care that individuals with chronic disease often experience.^{1,2} This approach to healthcare is unsustainable and Sláintecare, Ireland’s ten-year plan for delivering a health and social care service that meets population need, provides the impetus for developing and implementing a chronic disease framework that is person-centred, holistic, proactive and preventive in its approach.¹

The delivery of healthcare in an adaptive system with autonomous actors is complex and it is widely accepted that no one approach to integrated care will fit all perfectly. However, some key elements need to be in place to facilitate the integration of care and to ensure equity and standardisation of services for people with chronic disease. The use of a well-designed generic model of care for the prevention and management of chronic disease, within an integrated approach to service delivery, such as this Framework describes, has been associated with positive health outcomes.³ The *'National Framework for the Integrated Prevention and Management of Chronic Disease: a 10-step guide to support local implementation'* is an accompanying step-by-step guide that aims to support implementation of this framework at the regional and local levels.⁴ It is recommended that it be read alongside this framework.

1.4 What is integrated care?

Sláintecare defines integrated care as:

*"Healthcare delivered at the lowest appropriate level of complexity through a health service that is well organised and managed to enable comprehensive care pathways that patients can easily access, and service providers can easily deliver. This is a service in which communication and information support positive decision-making, governance and accountability; where patients' needs come first in driving safety, quality and the coordination of care."*¹

Within an integrated health service, individuals receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation and palliative care services that are coordinated across different providers and healthcare sites, both within and without the health sector.⁵ Such an approach places people at the centre of care, with services planned around them according to need.

1.5 The Integrated Care Programme for the Prevention and Management of Chronic Disease

There are a number of Integrated Care Programmes in operation in Ireland which aim to design, implement and embed integrated models of care that treat individuals at the lowest level of complexity appropriate to their condition in a safe, timely and efficient manner.

The Integrated Care Programme for the Prevention and Management of Chronic Disease (ICPCD) focuses on improving the standard of care for four major chronic diseases that affect over one million people in Ireland: cardiovascular disease (CVD), diabetes, COPD and asthma.⁶ Underlining the need to move away from a siloed, disease-specific approach to healthcare, there are three National Clinical Programmes working closely together as part of the ICPCD, namely:



1. The National Heart Programme

Underpinned by a whole-system approach, the National Heart Programme aims to improve population health, reduce health inequalities, improve patient outcomes and reduce the burden of CVD in the population. The programme drives an integrated approach to prevention, early detection, slowing disease progression and providing optimal treatment for quality and quantity of life and supports the delivery of the right care, in the right place, at the right time.



2. The National Respiratory Programme (COPD and Asthma)

The National Clinical Programme for Respiratory uses an integrated approach to facilitate improvement in the care of people at risk from, and diagnosed with, respiratory disease. This is achieved through the promotion of best practice across all levels of care with a focus on primary prevention and health promotion, early diagnosis and early intervention and supporting management of disease within the primary care setting, or the secondary care setting, as appropriate.



3. The National Diabetes Clinical Programme (Type II Diabetes Mellitus)

The aim of the National Clinical Programme for Diabetes is to save the lives, eyes and limbs of people living with diabetes in Ireland by decreasing morbidity and mortality through accurate and early diagnosis and providing treatment based on best practice guidelines for treatment (self-management, community and secondary care).

Guided by this framework, the National Clinical Programme for Diabetes aims to influence positive change and improve care for people living with diabetes across the entire spectrum of healthcare delivery; self-management support; general practice; community specialist ambulatory care; acute specialist ambulatory care; and hospital inpatient specialist care.

The ICPCD and the Integrated Care Programme for Older People (ICPOP) are also working closely together to streamline care for older people with chronic disease. This is a vulnerable population group, as many older people have multiple chronic diseases. The ICPCD will support the implementation of this National Framework across 2020-2025.

1.6 Aim and objectives of the National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland 2020-2025

This Framework provides the overarching guidance for the implementation of existing models of care and the spectrum of services to prevent and manage chronic disease in an integrated manner. It will also inform the future development of policies, strategies, models of care and services to address chronic conditions and improve health outcomes. It is the blueprint to achieve the vision that all individuals living in Ireland are empowered to live well through the effective prevention and proactive management of chronic conditions. This Framework:

- provides a patient-centred focus;
- facilitates care in the community;
- moves away from a disease-specific approach;
- identifies the key principles for the effective prevention and management of chronic conditions;
- describes a model of care for the integrated prevention and management of chronic disease;
- describes a spectrum of services to support the implementation of “end-to-end” care;
- supports a stronger emphasis on coordinated care across the health sector; and,
- acknowledges and builds on work already in place that supports chronic conditions.

2.0 Epidemiology of chronic disease in Ireland: an overview

2.1 Ireland's ageing population

Demographic change is likely to have a profound effect on the number of people living with chronic disease in Ireland and, consequently, on health service utilisation and capacity.

Unlike other European countries, Ireland's population is growing, with the most significant growth in the older age groups. It is anticipated that this growth will continue for the next two decades (Table 1)⁷⁻¹⁰

Table 1 Projected increase in population aged 65 years and older living in Ireland 2020 - 2040

Age Group	2011	2016	2020 ⁽ⁱⁱⁱ⁾	2025 ⁽ⁱⁱⁱ⁾	2040 ⁽ⁱⁱⁱ⁾	2020–2040 ⁽ⁱⁱⁱ⁾
	n (% total population)	n (% total population)	n (% total population)	n (% total population)	n (% total population)	% change
Aged 65 years and over	535,393 (11.7)	637,567 (13.4)	719,912 (14.6)	840,805 (16.3)	1,253,099 (21.9)	174.1
Aged 85 years and over	58,416 (1.3)	67,555 (1.4)	78,855 (1.6)	97,822 (1.9)	206,437 (3.6)	261.8

Source: CSO

Notes

- (i) Projections are based on the Central Statistics Office's M2F2 assumption
- (ii) The projections should not be considered as forecasts
- (iii) Projections were produced using Census 2016 data as a starting point

In addition to demographic growth changes, the demand for healthcare is expected to grow significantly across the primary, acute and social care settings in the next 15 years as a result of non-demographic growth. Non-demographic growth is considered to be growth within activity levels outside of population-related changes (Table 2). Clearly, the impact of non-demographic factors can be either positive or negative on future demand and capacity requirements: to date, the trend has been upwards.

Table 2. Non-demographic factors

- Epidemiological trends (e.g. prevalence of chronic diseases)
- Lifestyle risk factors impacting health status (e.g. smoking, alcohol, physical inactivity)
- Changes to models of healthcare delivery (e.g. ambulatory emergency care reducing admissions from ED, shift to day case surgery)
- Technological developments (e.g. new drugs or operative technologies)
- Changes in the socio-economic structure of the population (education level, income, employment) and increased expectations

2.2 Epidemiological trends in Ireland

In 2020 it is estimated that 1.3 million people in Ireland live with one of the following major chronic diseases: CVD, COPD, asthma or diabetes. TILDA data from 2016 estimated that 778,000 people aged 50 and over live with one or more of these diseases.¹¹ Based on demographic change alone, this number will increase by 165,000 to over 943,000 people by 2024 (Table 3).

Table 3. Projected increase in number of people aged ≥50 years living with ≥1 of CVD, diabetes, COPD and/or asthma, 2016-2030

	One or more of the four chronic diseases	2016	2019	2024	2030
		Population ≥50 years = 1,446,460	Population ≥50 years = 1,543,662*	Population ≥50 years = 1,753,951*	Population ≥50 years = 2,025,828*
	% (95% CI)	n	n	n	n
Number affected	53.8 (52.6, 55.0)**	778,196	830,490	943,626	1,089,895

*Projected by CSO **Based on analysis of TILDA data, 2018

2.3 Prevalence of risk factors for chronic disease

Chronic diseases tend to arise from the interaction of a number of factors including genetic, physiological, environmental and behavioural factors.¹² The World Health Organization (WHO) differentiates between modifiable behavioural risk factors (tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets) and modifiable metabolic risk factors (raised blood pressure, hyperlipidaemia, obesity and hyperglycaemia) which contribute to chronic disease.¹² Table 4 provides an overview of the epidemiology of such risk factors in Ireland.

Table 4. Summary of prevalence of risk factors for chronic disease in Ireland

Behavioural risk factors	Reported prevalence in Ireland
Tobacco	17% current smokers (14% daily)*
Alcohol	76% have drunk alcohol in last 12 months* 39% binge drink on a typical drinking occasion*
Unhealthy diet	35% eat unhealthy foods at least once daily ^a
Physical inactivity	46% are achieving the minimum level of physical activity ^b
Intermediate/metabolic risk factors	Reported prevalence in Ireland
Raised blood pressure (or hypertension)	13% of adults ^{*c} 43% of those aged 75+ ^{*c}
Atrial fibrillation	3.2% aged ≥50 years ^{**} 5.3% aged ≥65 years ^{**} 19.3% of men; 5.9% of women aged ≥80 years [†]
Raised cholesterol	50% aged 50-64 years [*]
Overweight/obesity	37% are overweight and 23% are obese ^{*d}
Raised blood glucose (pre-diabetes)	5.5% aged ≥50 years ^{***} 4.1% aged 50-59 years ^{***} 13.4% aged ≥80 years ^{***}

*Healthy Ireland Survey, 2019

**TILDA, 2011

***Leahy et al. Prevalence and correlates of diagnosed and undiagnosed type 2 diabetes mellitus and pre-diabetes in older adults: Findings from the Irish Longitudinal Study on Ageing (TILDA). *Diabetes Res Clin Pract.* 2015;110(3):241-9.

†Frewen J, Finucane C, Cronin H, Rice C, Kearney P, Harbison J et al. Atrial fibrillation in Ireland. *Age Ageing* 2013;42:ii4.

^aDefined as sweets, cakes and biscuits, salted snacks, pastries or fried foods

^bDefined as 30 minutes a day of moderate activity on 5 days a week (or 150 minutes a week)

^cSelf reported history of 'long-standing illness'

^dDefined as a BMI ≥30 kg/m² and a BMI 25-29.9 kg/m² for obesity and overweight, respectively

2.4 The impact of chronic disease on health service utilisation

Chronic diseases place a large and complex burden on the health and social care services in Ireland and account for 76% of all deaths annually.¹³ The impact on health service utilisation is particularly evident in the acute sector with chronic diseases accounting for 40% of admissions and 75% of bed days.¹³ More specifically, the four major chronic conditions accounted for 10% of all acute hospital discharges, either as the primary cause or as a contributory factor, and accounted for 21% of all acute hospital bed days in 2019.ⁱ

Age is a significant driver of service utilisation within the acute sector in Ireland with individuals aged 65 years and over accounting for the vast majority of bed days used.¹⁴ For example, in 2015, adults aged 65 years and over represented 13% of our population but accounted for 54% of total hospital in-patient bed days and approximately 37% of day case and same day bed days. Similarly, adults aged 85 years and over represented 1.4% of our total population but accounted for approximately 14% of the in-patient bed days.¹⁴ Furthermore, complexity profiles demonstrate that older patients generally have more multi-morbidity than younger cohorts and, as a result, the ageing of the population alone will accrue an average annual acute hospital cost increase of approximately 1.85% from 2015 to 2022.¹⁵

These statistics notwithstanding, Ireland has in fact seen substantial improvements in mortality from chronic disease in recent decades. Between 2007 and 2015, for example, rates of death from ischaemic heart disease and chronic lung disease reduced by 37% and 12%, respectively.⁹ What this means, however, is that more people are living longer with one or more chronic diseases.¹⁵

2.5 The case for change

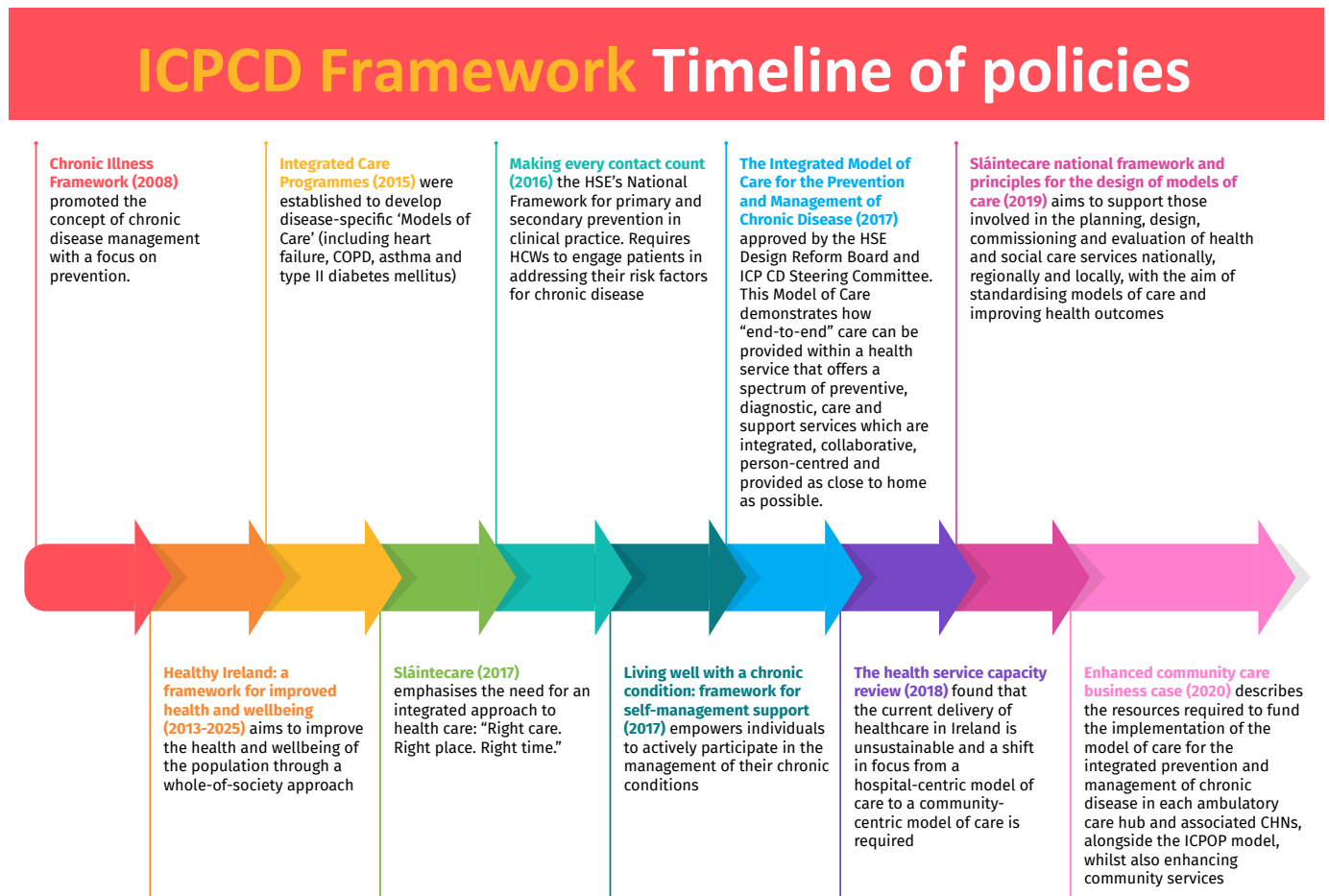
An ageing population, overlaid with high levels of risk factors for chronic disease, presents a challenging future for the healthcare services in Ireland as our health needs evolve. The time has come to make a change. Integrated care is essential in identifying and meeting the needs of individuals with multimorbidity and complex care needs, in identifying needs and improving the outcomes of vulnerable and at-risk populations and in building a sustainable health service with a focus on health improvement and disease prevention for the general population living in Ireland.^{1,3,5}

i HIPE data from HIPE Open Portal. Accessed 2020 August 01.

3.0 Integrating care: what are we building on?

Figure 2 below summarises the pertinent health policy, strategy and model of care documents that have been published over the past twelve years which have underlined the need, and laid the foundations for integrated care.

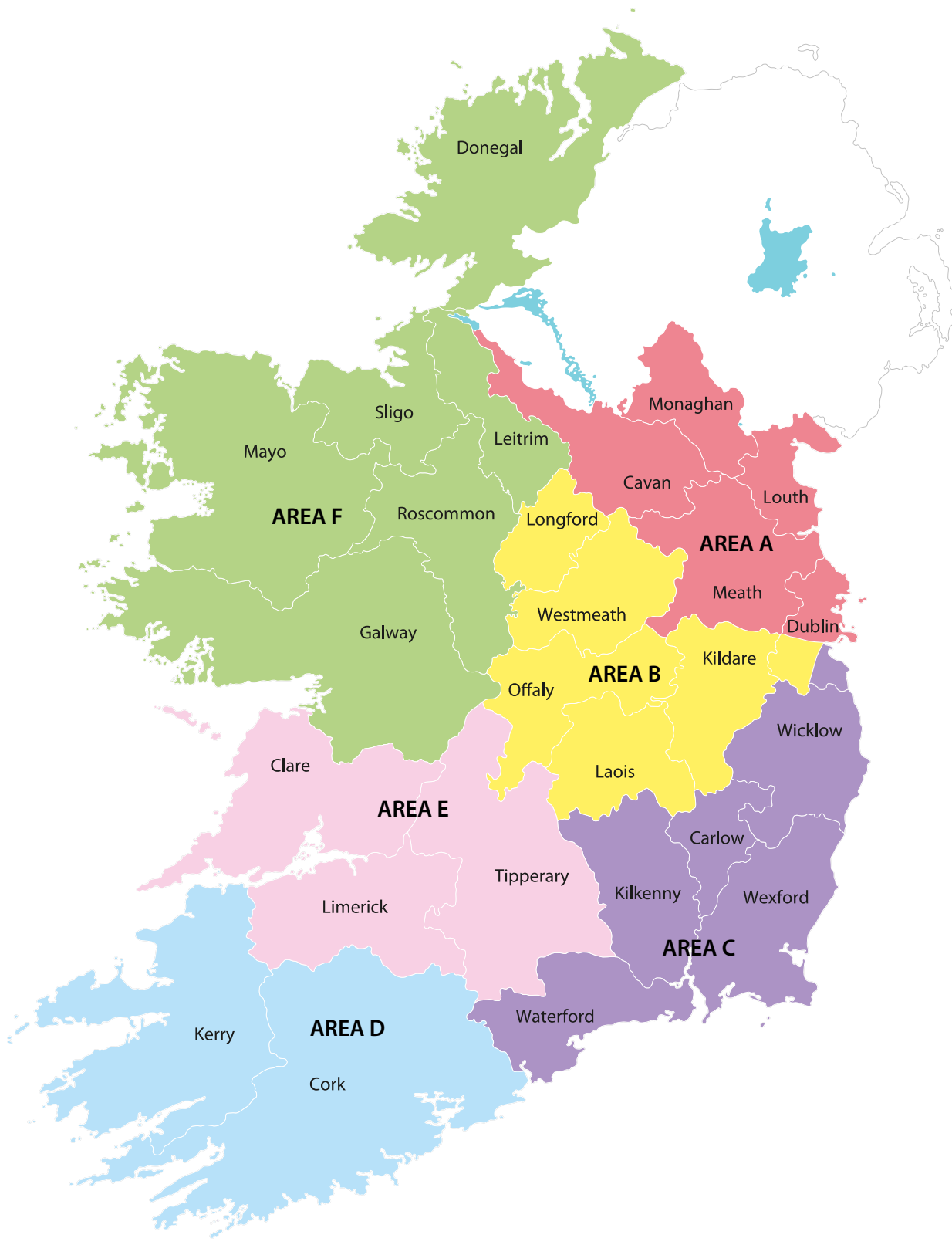
Figure 2. Timeline of policies that support integrated care



3.1 Regional Health Areas & Community Healthcare Networks

A key element of the Sláintecare vision is service re-design. Six new “Regional Health Areas” (RHA) will be established which will form the foundation for delivering care closer to home (Figure 3).¹⁶

Figure 3. Map of six new Regional Health Areas



These RHAs are further broken down into 96 Community Healthcare Networks (CHNs), which provide a framework for the delivery of integrated care at the local level.^{16,17} CHNs are geographically-based units which serve an average population of 50,000 each. Specialist ambulatory care hubs for chronic disease are to be established, each serving approximately three CHNs or a population of approximately 150,000. An ambulatory care hub, which will be a clinical site identified outside of the hospital setting, will support access to diagnostics, specialist services and specialist opinions in order to support early intervention and specialist care within the community, with a particular focus on chronic disease prevention and management. Within a CHN, it is expected that there will be an estimated population of 11,000 people with a chronic disease while within the area served by each hub, there will be an estimated population of 34,000 people with a chronic disease.

The specialist ambulatory care hubs for chronic disease will be linked to local acute hospital sites. These hubs will provide specialist multidisciplinary teams and services that will support General Practices to provide a spectrum of care enabling people with chronic disease to be cared for in the community. Chronic disease specialist teams will be established in each hub and will take a multidisciplinary approach to the management of individuals with chronic disease. The chronic disease specialist teams will work in partnership with the ICPOP specialist teams who will also operate from the specialist ambulatory care hubs. This collaboration will support a truly integrated service for older people with complex chronic disease.

The implementation of the ICPCD framework will commence in tandem with the implementation and expansion of the ICPOP model of care, general CHN services and health promotion services.

3.2 The spectrum of services

Chronic disease management will primarily be provided at CHN level through GP-led Primary Care, via the GP Chronic Disease Contract (Level 1).¹⁸ However, these level one primary care services, while essential, will need to be supported by community specialist services (level 2), with access to acute specialist ambulatory care services (level 3) and inpatient services (level 4) as appropriate, in order to provide full end-to-end care. Level 2 and level 3 services will be provided by the specialist ambulatory care hubs in the community. In addition, self-management support services, such as cardiac rehabilitation, pulmonary rehabilitation, patient structured education and diabetes prevention programmes, as well as diagnostic services such as spirometry and potentially, echocardiography, will also be accessible in the specialist ambulatory care hubs.

Core elements of integrated care for people with chronic disease include primary and secondary prevention, early detection and intervention, efficient access to community diagnostics, patient-centred assessment and on-going comprehensive medical treatment, all to be provided in the most appropriate setting.³ Figure 4 shows the full spectrum of services required to provide end-to-end care in Ireland and the settings where they should occur. Important evidence-informed preventive activities include smoking cessation, dietary advice, referral to weight management services and the provision of self-management support ensure that all individuals who are at risk of, or who are living with, chronic disease are empowered to address their risk factors or manage their illness.¹⁹ These services will be provided through primary care to people in the CHNs. As shown in Figure 4, the bulk of services should be provided within the primary care setting.

Spectrum of Services for Chronic Disease Prevention and Management

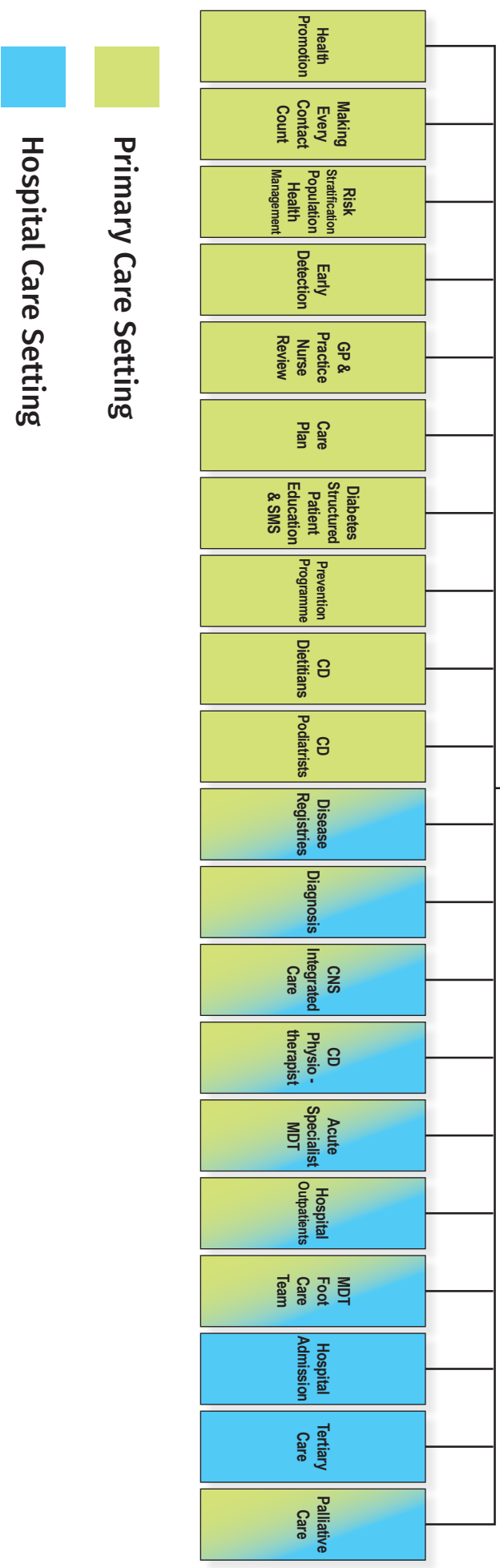


Figure 4. Spectrum of services provided to people living with, or at risk of, chronic disease

4.0 The National Framework for the Integrated Prevention and Management of Chronic Disease

4.1 The Vision

All individuals living in Ireland are empowered to live well through the effective prevention and proactive management of chronic conditions.

4.2 The Principles

The development of this Framework, which reflects a number of policy and service themes and priorities (Section 1.3), and builds on the individual models of care developed for the four chronic conditions, has been guided by the following Sláintecare Model of Care.



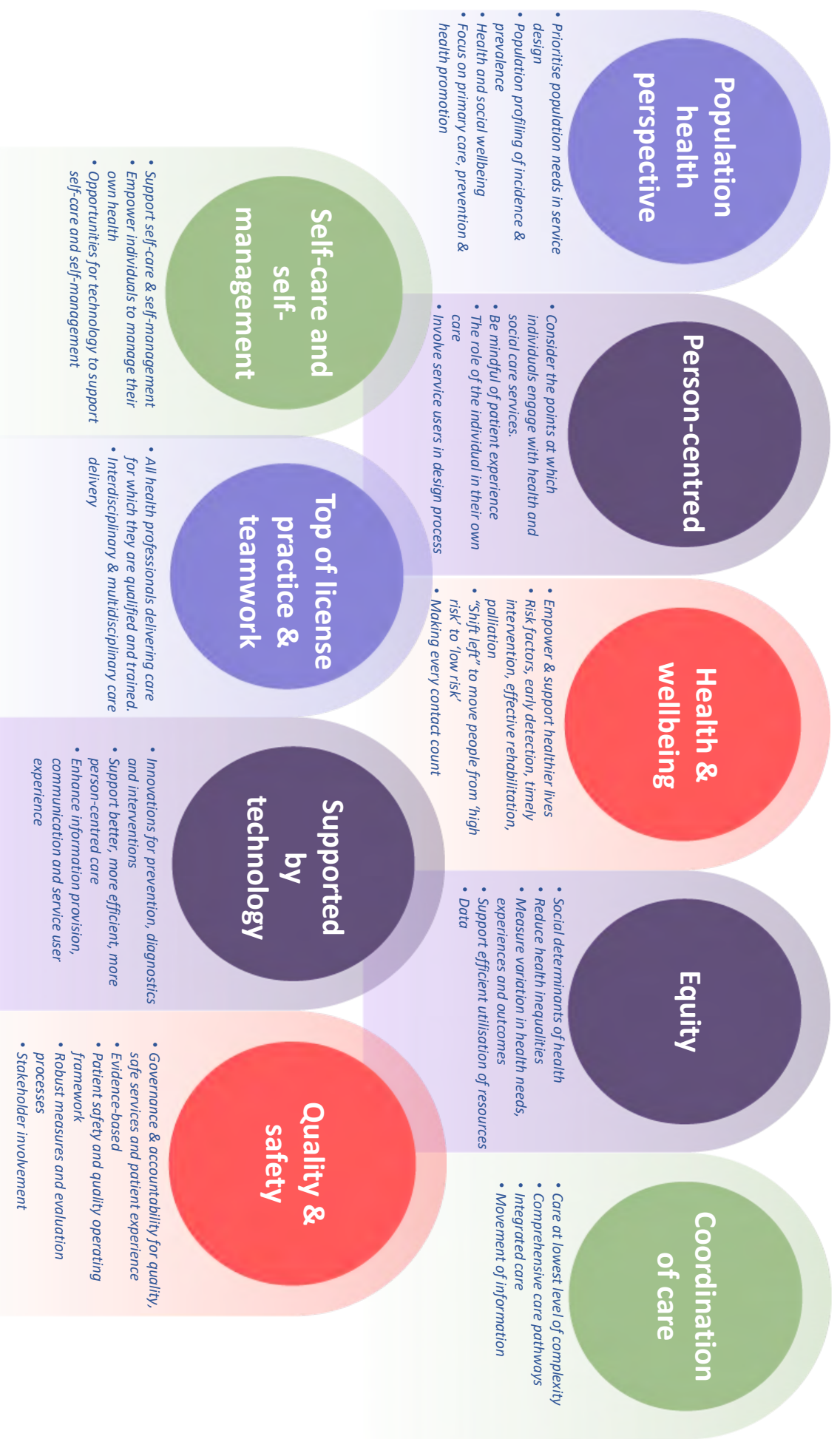


Figure 5. Sláintecare Model of Care principles²⁰

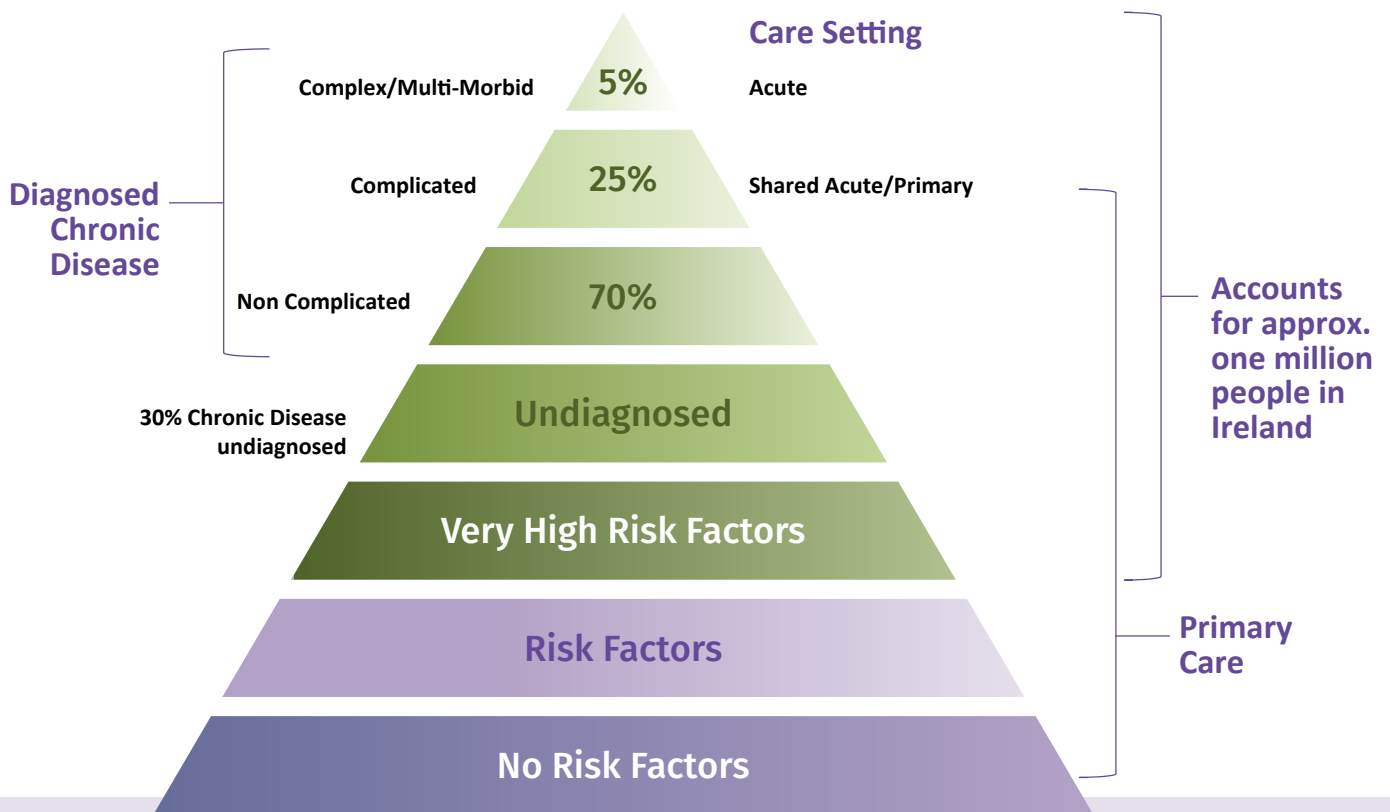
Population health perspective

Population health profiling is an essential aspect of identifying and developing services to meet population need.²¹ Such profiling requires a reliable method of population risk stratification.

Population risk stratification is about understanding population healthcare needs and providing appropriate services to meet the population needs. Understanding the layers of need within a population helps us understand the level of complexity, quantum and mix of services required.²²

An important concept underpinning the population approach to chronic disease management is the ‘Population Health Triangle’ set out in Figure 6.

Figure 6. Population health approach for chronic disease



There are different levels of risk of progression of chronic illness in the population which range from:

- People with no risk factors
- People with risk factors
- People with high risk profiles
- People with major chronic diseases who are not yet diagnosed (30% of people with chronic diseases are not yet diagnosed)
- People with diagnosed chronic disease who can be fully managed in primary care (70% of people with chronic disease)
- People with chronic disease who can be managed between primary and secondary care (25% of people with chronic disease)
- Small number (5%) of people with complex chronic disease or multiple morbidities who need to be managed by ambulatory secondary care.

Any of the population can require acute secondary care for exacerbations of their already diagnosed chronic disease or indeed for other reasons. People will progress up the pyramid unless actively managed. With good management some will improve their profile. Of the approximate one million people in the top five levels, the vast majority (80 to 95%) could be managed in an appropriately resourced primary care setting.²³

The different chronic diseases covered by this Framework have internationally recognised methods of clinical severity stratification which are used in developing clinical pathways for these different cohorts of patients.²³ Non-complicated patients are managed almost exclusively in primary care with occasional referral for specific services to the specialist ambulatory care hub. Complicated patients may require several referrals per year or, in some cases, ongoing involvement by specialist staff. Complex patients, who are often multimorbid, very elderly or frail will require higher, often ongoing support from specialist ambulatory care staff. This population of chronic disease patients would also be part of the ICPOP pathways.

Currently risk stratification is done by clinicians using standard definitions.²³ Systematic risk stratification for future hospital admission can also be carried out using computerised algorithms. This would be a worthwhile development for the Irish health service.

Coordination of care

Care should focus on providing care at the lowest level of complexity, with a focus on disease prevention and health promotion.¹

The full spectrum of care services are required and need to be provided in an integrated way through agreed clinical pathways between community, ambulatory care hubs and hospitals. For true integration of services to occur, information must be shared across the services in a timely and secure manner.^{3,20}

Person-centred

Person-centred care involves building care around the needs of the individual.²⁰ The *'Integrated Model of Care for the Prevention and Management of Chronic Disease'* describes a continuum of services from self-management to care in the community, the specialist ambulatory care hub for chronic disease and care in the acute setting. Case management is an intervention that identifies subsets of particularly vulnerable individuals who have complex care needs and who are at high risk of adverse outcomes. Following a comprehensive assessment, a bespoke care plan may be developed in partnership with the individual, their carer or family that can anticipate and inform on future care needs.¹⁹ Patient-reported outcome measures will also be an important element of the monitoring and evaluation process.

Health and wellbeing

As per the Sláintecare Model of Care principles, a model of care that will have the greatest impact is one that supports a “shift left” where particular interventions can move patients from a ‘high risk’ category to a ‘low risk’ category.²⁰ This means taking actions and providing supports to keep people well, to address risk factors, to detect diseases early and intervene early or to support rehabilitation or palliation in order to prevent or reduce the impact of the disease. The HSE’s Self-Management Support Framework and the Making Every Contact Count Framework are two essential elements of the ICPCD’s model of care for the prevention and management of chronic disease.^{19,24}

Equity

Addressing health inequity is a core focus for the ICPCD and the National Clinical Programmes. The model of care for the prevention and management of chronic disease is addressing this challenge by focusing services on vulnerable populations such as individuals from lower socioeconomic groups and older people as these populations are known to have a higher prevalence of risk factors, chronic disease diagnoses, multimorbidity and poorer outcomes.^{25,26} An example of one element of the framework that will address inequity is the GP Chronic Disease Management Contract which has been rolled out to all individuals who have a General Medical Scheme (GMS) or Doctor Visit card who are over the age of 70.¹⁸ It will be expanded to include further age groups over the coming years. This model of care will aim to reduce health inequity, and to measure variation in needs, experience outcomes and resourcing.

Self-care and self-management

A model of care should include supports to enable individuals to self-care and self-manage their risk factors and/or conditions at home.¹⁹ Patients should be empowered to manage their own health and be provided with the necessary skills and supports to do so.¹⁹ This integrated model of care places the Self-Management Support Framework and the Making Every Contact Count Framework at the base of the pyramid, thus highlighting it as one of the foundations for the prevention and management of chronic disease.^{19,24} These frameworks have robust implementation plans, which include important interventions such as education and training for HSCPs and patients alike, which are in progress across Ireland. Self-management support services should be prioritised and technological solutions for self-management developed.

Top of license practice and team work

The services for chronic disease will develop specialist multidisciplinary teams which will provide specialist level support to General Practice to enable patients to be managed in the community. For care to be truly integrated, all HSCPs will be required to work together, placing the needs of the patient to the forefront.²⁰ This will involve new ways of working together across different sites.

Supported by technology

Chronic disease services will require technological support to enable clinical data sets to be collected, analysed and fed back for quality improvement and planning. Technology enabled information, communication and self-management support is necessary for patients.¹⁹ Technology, particularly as we adjust to living alongside COVID-19, is an essential component of the model of care. Examples of this include virtual consultations and the “Attend Anywhere” model which allow for remote consultations between Consultants and GPs and Consultants and patients, respectively.^{27,28} This approach has proved essential in reducing face-to-face consultations and footfall in the hospitals during the COVID-19 pandemic.^{27,29}

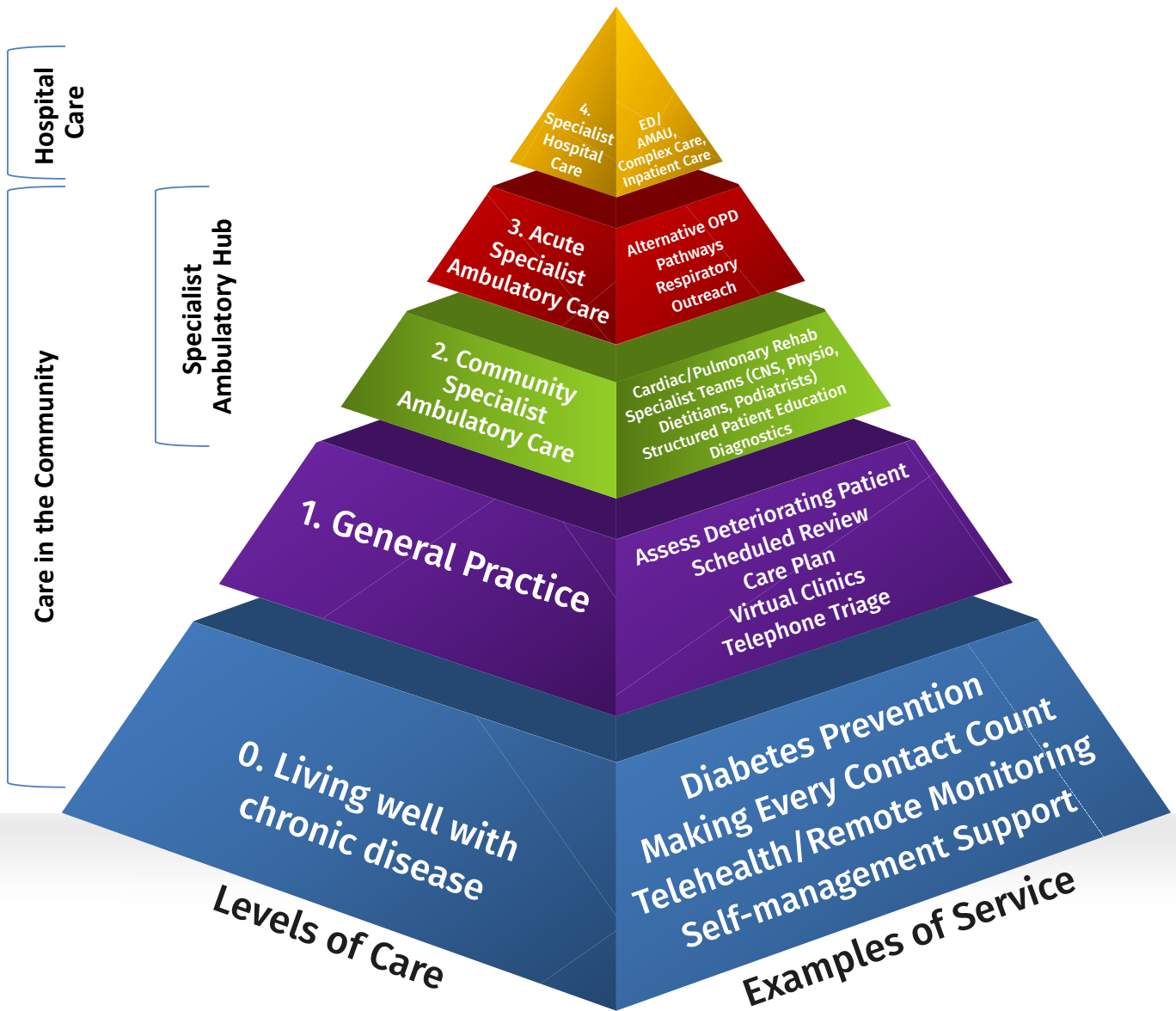
Quality and safety

The provision of high-quality, safe care is an integral component of integrated care.²⁰ Robust governance structures to support accountability and the delivery of high-quality, safe, patient-centred care are a key consideration in this model of care. New ways of working will require clear governance and oversight at the local, regional and national levels. Governance structures for integrated care for chronic disease will be set up nationally and locally, key stakeholders including service users will be involved. Robust measurement and evaluation processes are being developed to support this model of care.

4.3 The Integrated Model of Care for the Prevention and Management of Chronic Disease

The Integrated Model of Care for the Prevention and Management of Chronic Disease recognises the population health approach (Figure 6) and organises services as per Figure 7 to support the differing levels of complexity of conditions for people with chronic disease. It defines five levels of service that need to be provided for a population in order to deliver integrated ‘end-to-end’ care for chronic disease.

Figure 7. Model of care for the integrated prevention and management of chronic disease



Level 0: Living well with chronic disease

Individuals living with chronic disease, in partnership with their family and carers, make decisions daily and undertake actions that impact on their health. It is important to empower people to make the best decisions for their health by arming them with the knowledge and skills to support them in this pursuit. Self-management support encompasses a broad range of interventions that aim to increase patients' knowledge, skills and confidence in managing their health problems.¹⁹ Interventions to support self-management include education sessions so individuals can learn more about their condition and how to manage it, goal-setting and the development of an action plan, or participation in activities such as counselling or peer-support groups to increase resilience, exercise classes or stop smoking services.

'Making Every Contact Count' is also an important aspect of living well in the community.²⁴ By 'Making Every Contact Count' (MECC), through the use of brief advice and brief interventions, health professionals can encourage patients to make healthier lifestyle choices during routine contacts to help prevent and manage chronic diseases. MECC focuses on modifiable health behaviours that are known risk factors for chronic disease (tobacco use, physical inactivity, harmful alcohol consumption and unhealthy eating) in an effort to prevent the onset, slow the progression or reduce the complications associated with the major chronic diseases.

Level 1: General Practice and the new Chronic Disease Management Programme (CDM)

A Chronic Disease Management Programme (CDM) for individuals with General Medical Scheme (GMS) or GP Visit Cards commenced in 2020 for individuals over the age of 70 years and will be rolled out to all adult patients with a GMS or Doctor Visit Card over a four-year period.³⁰ The Programme is comprised of three components:

1. Opportunistic case finding.
2. An annual preventive programme for patients at high risk of CVD or diabetes.
3. A structured treatment programme for those diagnosed with the one of the chronic diseases included in the Programme (CVD, COPD, asthma and/or diabetes).

Opportunistic case finding supports targeting individuals with risk factors for chronic disease to see if they have the condition, but are unaware of it and hence, it supports early detection, early intervention and improved outcomes.³⁰ Individuals identified by their GP as being at high risk of CVD or diabetes, will receive an annual preventive GP and Practice Nurse visit to actively address risk factors. The opportunistic case finding and preventive components of the Programme will commence in year two of the CDM programme (2021).

As part of the contract, GPs will return a standard clinical data set to a clinical data repository. These data will include demographics, diagnoses, clinical examination results, diagnostic results and lifestyle risk factors. These are valuable data that could provide an indication of the risk factors for ill-health, the health behaviours and the levels of the major chronic diseases that are present in a vulnerable cohort of the population. Furthermore, these data may shed some light on the levels of GP and patient engagement with the CDM programme in its initial stages. Such information will be valuable in supporting service planning, the judicious use of resources and targeting particular subsets of the population as the CDM programme is rolled out over the next four years. It is anticipated that once fully rolled out, the CDM data returns will give an idea of the prevalence of risk behaviours and chronic diseases in the GMS/Doctor Visit card population in the community.

Level 2: Community specialist ambulatory care

The objective of the ambulatory care specialist hub is to provide ready access to diagnostics, HSCPs and specialist support to GPs in the community in managing patients with chronic disease.

The key functions that are carried out in the specialist ambulatory care hub are:

- Integration between preventive, primary care, community and acute ambulatory care services;
- Access to a multidisciplinary specialist team based in the community;
- Access to community diagnostics such as phlebotomy, Xray, echocardiography, BNP and spirometry;
- Access to self-management support services including cardiac rehabilitation, pulmonary rehabilitation, foot protection services, diabetes structured education, diabetes prevention and weight management programmes;
- A case management function; and,
- Promotion and support of population health initiatives within primary care.

The chronic disease specialist team for each CHN, based in the hub will work with the GPs and practice nurses in their respective Networks. As previously mentioned, the hub will also provide self-management support services to the three affiliated CHNs. Such services include pulmonary rehabilitation, cardiac rehabilitation, diabetes structured patient education, diabetes prevention and weight management programmes.

Diabetes Self-Management Education programmes will be available in the hubs. These are structured, group-based education programmes designed to support individuals with diabetes to improve their glycaemic control and have been demonstrated to have a positive impact on healthcare service utilisation due to type II diabetes.³¹ The dietitians based in the hubs will spend half of their time in delivering the structured patient education programme to their population, and half of their time engaging in individual sessions.

A National Diabetes Prevention Programme and a Weight Management Programme are being developed and will be provided by diabetes dietitians to the population of the three affiliated mapped networks associated with each of the specialist ambulatory care hubs. These programmes are designed to prevent/delay the onset of the complications of diabetes and to support weight management, respectively. The evidence base supports a reduction in healthcare service utilisation for each of these programmes.^{32,33}

Cardiac rehabilitation provides education and skills training for patients who have experienced a recent cardiac event or who have heart failure to empower them to self-manage their condition.³¹ Over the course of a number of months this programme of education and exercise enables the patient to regain their functionality and their confidence in managing their condition. Similarly, pulmonary rehabilitation provides a programme to patients with recent admission for exacerbations of COPD as well as stable COPD, to enable them to regain their respiratory functionality, and the skills and confidence needed to manage their condition in the community.³¹

Case Management is a “proactive approach focussed on high-risk patients with a combination of medical, nursing, pharmaceutical care and social care needs”.¹⁹ A case management function is one that can be undertaken by any discipline within the hub and is responsible for the following;

- Act as a key point of access when complex care issues emerge;
- Assist in the coordination of care across the Community specialist ambulatory care teams (i.e. CDM/ICP OP Hub);
- Help patients and families to navigate the care system across acute and community systems;
- Co-ordinate care where multiple services are involved and have sufficient professional autonomy to guide how those services can be optimally delivered; and,
- Undertake comprehensive assessment and develop a care plan which will anticipate and inform ongoing and likely future care needs.

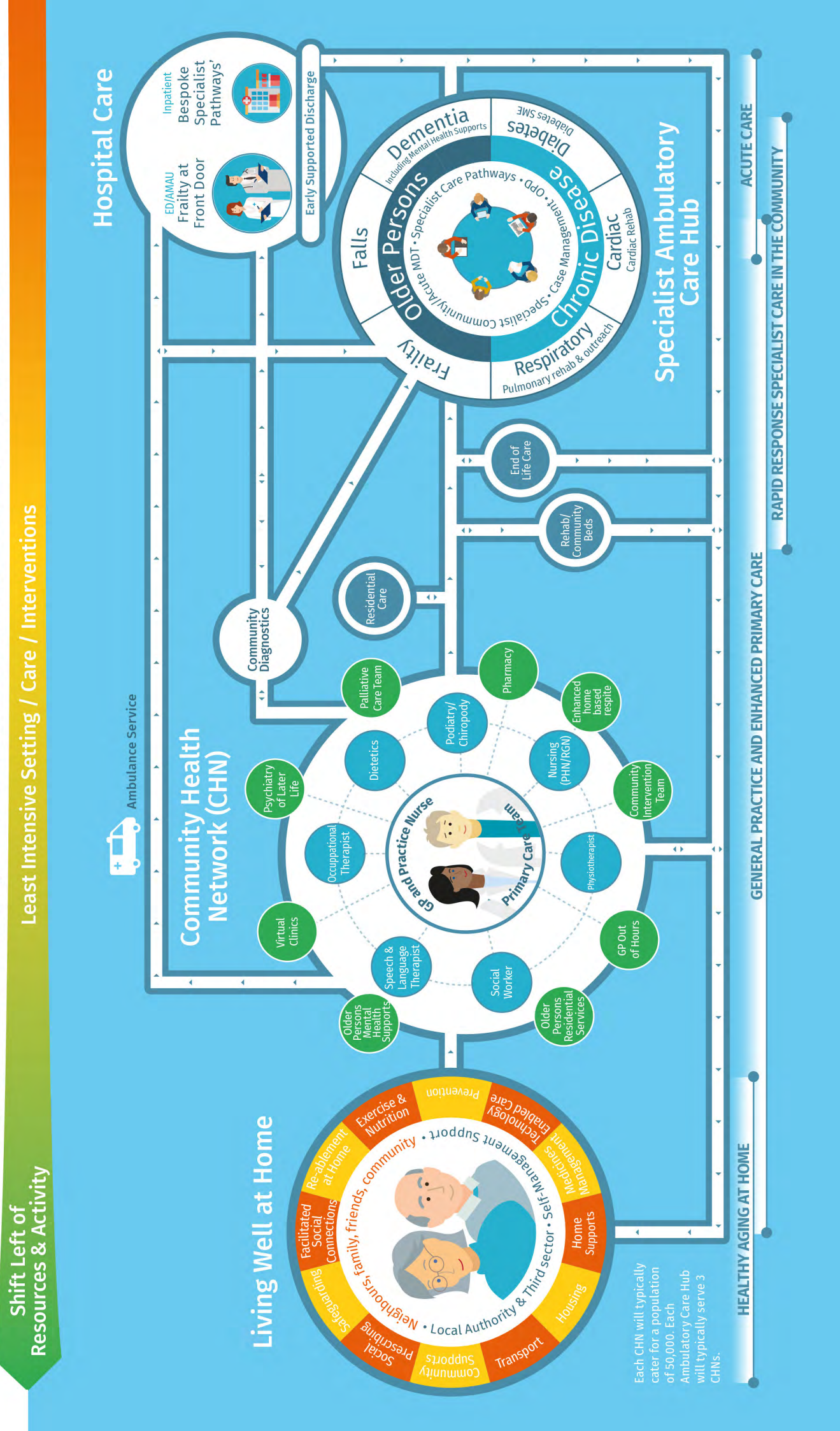
Level 3: Acute specialist ambulatory care

Medical consultants will provide services in the specialist ambulatory care hubs and this will support ready access to specialist opinion for individuals living with chronic disease. Outpatient services will be offered from the hub with a focus on reducing waiting list times for outpatient services and supporting rapid review of urgent cases in an effort to avoid hospitalisation. This rapid access to specialist opinion can be critical in enabling GPs to continue to manage their patients in the community and to reduce Emergency Department and Acute Medical Assessment Unit admissions.³⁴ The close integration between the specialist team and the GP, which will be facilitated by the sharing of information and the case management approach, will enable both the staff within the acute and primary sectors to manage patients who have complicated chronic disease, multimorbidity or deteriorating conditions in a holistic and person-centred manner.

A COPD outreach programme has been developed and has already been rolled out in a number of hospital locations. This service will move to be provided through the ambulatory care hubs. This service supports early discharge of patients with COPD to the community, following an in-patient stay for exacerbation. The patient remains under the clinical governance of the respiratory consultant and is visited regularly by the outreach team consisting of a clinical nurse specialist and a clinical specialist physiotherapist in their home, for a defined period of time to ensure a safe transition of care back to the GP in the community. This service has been shown to reduce length of stay, improve patient experience and to facilitate the integration of care between the GP and acute services.³⁵

Figure 8. Older Persons/Chronic Disease Service Model

Older Persons/Chronic Disease Service Model



4.4 Protecting vulnerable populations

The ICPCD and ICPOP have collaborated to develop integrated models and pathways to address the health needs of Ireland's older population who live with one or more chronic diseases. Each of these programmes cover distinct populations: the Chronic Disease Programme covers 1.3 million people living with one or more of the major chronic diseases, approximately 200,000 of these are aged over 75 years and approximately 90,000 of these will be suffering from multimorbidity (two or more chronic diseases). Hence at the top of the care pyramid, the models for chronic disease and older people will overlap and smooth transition of care for this vulnerable group will be facilitated between the Chronic Disease and ICPOP specialist teams at local hub level. Figure 8 describes the integrated model for older people or people with chronic disease. The overall objective is to keep people well at home, support GPs to care for people at home for as long as possible, facilitate access to specialist services in the local specialist ambulatory care hub, minimise referrals to the acute hospital and instead, provide specialist ambulatory care services in the community and maximise home support and re-enablement services.

4.5 Lessons from the COVID-19 Pandemic

Sláintecare policy requires that services be focussed primarily in the community and advise that “left shift” should take place.¹ The COVID-19 pandemic has emphasised the need to do this to an even greater extent than previously recognised. It is now essential that congregated settings for older people or people with chronic disease are avoided as much as possible and that these individuals are cared for in their own homes to the greatest extent. Care for these vulnerable cohorts should not be provided in the acute hospital setting if suitable alternatives can be made available. Hence, there is an even greater need to develop the specialist ambulatory care hub and to provide both sub-acute rapid consultant opinion and more scheduled ambulatory care services in this community setting.

GPs will normally triage via telephone and direct patients to the COVID-19 pathways if this infection is suspected. Chronic disease care, where COVID-19 is not suspected, is provided both in a proactive way through the GP Chronic Disease Management Programme, or in a reactive way if the patient is deteriorating. The GP will refer to the ambulatory care specialist services in the hub, as necessary. Rapid access to diagnostics and specialist opinion will be facilitated, as will outreach services. This integration of multidisciplinary team working will facilitate care being provided in the community and hospital avoidance, where possible.

5.0 Implementation

The accompanying document to this Framework, entitled the *'National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland: a 10-step guide to support local implementation'* (Figure 9) describes the key steps to enable the implementation, embedding, monitoring and evaluation of integrated care at the national and regional levels.⁴ Given the ICPCD's close collaboration with the ICPOP, the 10-Step Guide has been developed to complement the ICPOP's Framework and draws on their extensive work in this area.³⁵ It is a framework approach, rooted in evidence, which leverages national enablers to support engagement and innovation at the local level in order to drive health system change.³⁵

The 10-Step Guide is intended to act as a guide to support local implementation of the ICPCD Framework. Integrating healthcare is complex, and this implementation guide accounts for local variation in geography, services and ways of working while also learning from the ICPCD's and ICPOP's practical experience on the ground. The role of the ICPCD and health services at the national level is to mandate and to provide support to local implementation groups. Better health system change is achieved by implementation "owned" in local areas, with a shared vision and agreement on locally-attuned pathways. Local groups are responsible for implementing the model of care in their specialist ambulatory care hub and networks, according to the national blueprint developed by the ICPCD.

Figure 9 on page 32 gives a brief overview of the ten-step guide for implementation of integrated care. Please see the document entitled *'National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland: a 10-step guide to support local implementation'* for further detail on the implementation process.⁴





Figure 9. 10-Step Guide for the implementation of integrated care for the prevention and management of chronic disease in Ireland

6.0 Monitoring and evaluation

The evidence indicates that a well-designed model of care for the prevention and management of chronic disease that sits within an integrated health service, is associated with positive outcomes including improved patient satisfaction, improved accessibility of health and social services and reductions in waiting times, levels of utilisation of hospital services and costs secondary to a reduction in hospital admissions.³⁷⁻⁴¹

Of note, integrated care programmes are complex, often context-specific interventions which operate within complex adaptive systems. Therefore, significant heterogeneity is encountered within the literature which makes the comparison of outcomes challenging.³⁷ The often contradictory findings of evaluations of integrated care initiatives in the UK and further afield are leading to an increasing consensus that perhaps reform at scale, with reconfiguration at the whole system level within the health system is what is required, not simply the introduction of new models of integration within existing services.⁴¹ This need is echoed by Sláintecare.¹

However, despite the diverse evidence base and variations within and across reviews in terms of the characteristics, duration and intensity of interventions, positive trends are evident. The evidence indicates that health outcomes take time to manifest and so it is judicious to consider both process and outcome indicators when examining impact.^{37,41}

The “Quadruple Aim” is gaining increasing traction within the evidence base for integrated care. This consists of four aims: to improve population health outcomes; to improve experience of the healthcare system for individuals and their families and carers; to improve cost efficiency of the healthcare system and; to improve experiences for service providers and clinicians.⁴² There is strong evidence to indicate that integrated care improves the quality of care, patient satisfaction and accessibility of services.⁴¹ In addition, staff perceive that they are delivering higher quality care.⁴¹ Therefore, a shift in focus is required to reflect such outcomes going forward. Truly patient-centred care prioritises the individual within the healthcare system, empowering them to navigate and manage their own care.^{1,20} Patient-reported outcome measures should therefore be a central outcome metric going forward, in addition to the suggested indicators above.⁴³ A workstream for data capture, data linkage and analysis is to be put in place which will support the identification of impacts of the intervention whilst also considering attribution of impacts.



References

1. Committee on the Future of Healthcare. Sláintecare report. Dublin: Houses of the Oireachtas; 2017.
2. Health Service Executive. Community Health Organisations – report and recommendations of the integrated service area review group. Dublin: HSE; 2014.
3. World Health Organization. Integrated care models: an overview. Copenhagen: WHO; 2016.
4. Integrated Care Programme for the Prevention and Management of Chronic Disease. National Framework for the integrated prevention and management of chronic disease in Ireland: a 10-step guide to support local implementation. Dublin: HSE; 2020.
5. Contandriopoulos AP, Denis JL, Touati, N, Rodríguez, C. The integration of health care: dimensions and implementation. Working paper N04-01. Montreal: Université de Montréal; 2003.
6. Health Service Executive. ICP for prevention and management of chronic disease [Internet]. Dublin: HSE; 2017[updated 2017; cited 2020 August 7]. Available from: <https://www.hse.ie/eng/about/who/cspd/icp/chronic-disease/>
7. Central Statistics Office. Population change and historical perspective. In: Central Statistics Office. Population change and historical perspective. Cork; 2017.p. 7-11.
8. Central Statistics Office. Census of population 2016 – profile 3 an age profile of Ireland. Cork: CSO; 2017.
9. Department of Health. Health in Ireland: key trends 2018. Dublin: Department of Health; 2019.
10. Central Statistics Office. PEA22: projected population 2016 based by age, sex, criteria for projection and year [Internet]. Cork: CSO; 2018[updated undated; cited 2020 August 7]. Available from: <https://statbank.cso.ie/px/pxeirestat/statire/SelectVarVal/Define.asp?Maintable=PEA22&PLanguage=>
11. McNicholas T, Laird E. Change in chronic disease prevalence and health behaviours over the first four waves of TILDA. In: Turner N, Donoghue O, Kenny RA, editors. Wellbeing and health in Ireland's over 50s 2009-2016. Dublin, TILDA; 2018. p. 90 – 107.
12. World Health Organization. Non-communicable diseases: key facts [Internet]. Geneva: WHO;2018[updated 2018 June 1; cited 2020 August 10]. Available from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
13. Department of Health. Better health, improving health care. Dublin, Department of Health; 2016.
14. Department of Health. Health in Ireland: Key trends in 2019. Dublin, Department of Health; 2019.
15. Smyth B, Marsden P, Donohue F, Kavanagh P, Kitching A, Feely E et al. Planning for Health: trends and priorities to inform health service planning 2017. Dublin, Health Service Executive; 2016.
16. Department of Health. Sláintecare action plan. Dublin, Department of Health; 2019.
17. Health Service Executive. Community Healthcare Network Learning Sites: Network Manager handbook. Dublin, HSE; 2019.

18. Health Service Executive. Chronic disease management programme [Internet]. Dublin: HSE;2019[updated July 2020; cited 2020 August 10]. Available from: <https://www.hse.ie/eng/about/who/gmscontracts/2019agreement/chronic-disease-management-programme/>
19. Health Service Executive. Living well with a chronic condition: framework for self-management support. Dublin, HSE; 2017.
20. Department of Health, Sláintecare. National framework and principles for the design of models of care. Dublin, Department of Health; 2019.
21. Health Service Executive. A national chronic disease management patient support programme for HSE. Dublin: HSE; 2008.
22. Goodwin N, Curry N, Naylor C, Ross S, Duldig W. Managing people with long term conditions. London: Kings Fund; 2010.
23. Glynn R, O'Reilly O. A discussion paper on developing risk stratification and population health management in Ireland. Dublin, HSE(internal paper - unpublished);2018.
24. Health Service Executive. Making every contact count: a health behaviour change framework and implementation plan for health professionals in the Irish health service. Dublin, HSE; 2016.
25. Department of Public Expenditure and Reform. Staff paper 2016: General Medical Services Scheme. Dublin, DPER; 2016.
26. Jennings SM, O'Reilly O. Preventing chronic disease: defining the problem. Dublin, HSE; 2010.
27. Gallagher J, James S, Keane C, Fitzgerald A, Travers B, Quigley E et al. Heart failure virtual consultation: bridging the gap of heart failure care in the community - a mixed-methods evaluation. ESC Heart Fail. 2017 Aug;4(3):252-258.
28. Health Service Executive. Attend anywhere: patient information video consultations [Internet]. Dublin: HSE;2020[updated July 17; cited 2020 August 10]. Available from: <https://www2.hse.ie/services/attend-anywhere/>
29. Health Service Executive. Attend Anywhere virtual service rewarding for patients and staff [Internet]. Dublin: HSE;2020[updated 2020 July 7; cited 2020 August 10]. Available from: https://www.hse.ie/eng/about/our-health-service/making-it-better/attend-anywhere-virtual-service-rewarding-for-patients-and-staff.html?utm_source=broadcast&utm_medium=email&utm_campaign=Storytelling&utm_content=%23OHS%20%20Attend%20Anywhere%20virtual%20service%20rewarding%20for%20patients%20and%20staff
30. Department of Health, Health Service Executive, Irish Medical Organisation. Terms of agreement between the Department of Health, the HSE and the IMO regarding GP contractual reform and service development. Dublin, HSE; 2019.
31. Health Information and Quality Authority. Health technology assessment of chronic disease self-management support interventions. Dublin, HIQA; 2015.
32. Ashra NB, Spong R, Carter P, Davies MJ, Dunkley A, Gillies C et al. A systematic review and meta-analysis assessing the effectiveness of pragmatic lifestyle interventions for the prevention of type 2 diabetes mellitus in routine practice. London, Public Health England; 2015.

33. Dee A, Kearns K, O'Neill C, Sharp L, Staines A, O'Dwyer V et al. The direct and indirect costs of both overweight and obesity: a systematic review. *BMC Res Notes*. 2014 Apr 16;7:242.
34. Coffey A, Leahy-Warren P, Savage E, Hegarty J, Cornally N, Day MR et al. A Systematic Literature Review on Tackling Delayed Discharges in Acute Hospitals Inclusive of Hospital (Re) admission Avoidance. Dublin, Department of Health; 2015.
35. National COPD Working Group. Pulmonary rehabilitation model of care. Dublin, HSE; 2015.
36. Integrated Care Programme for Older Persons. Making a start in Integrated Care for Older Persons. A practical guide to the local implementation of Integrated Care Programmes for Older Persons. Dublin, HSE; 2018.
37. Damery S, Flanagan S, Combes G. Does integrated care reduce hospital activity for patients with chronic diseases? An umbrella review of systematic reviews. *BMJ Open*. 2016;6:e011952.
38. Windle K, Wagland R, Forder J, D'Amico F, Janssen D, Wistow G. National Evaluation of partnerships for older people projects, final report. London: Personal Services Research Unit; 2009.
39. Bird S, Noronha M, Sinnott H. An integrated care facilitation model improves quality of life and reduces use of hospital resources by patients with chronic obstructive pulmonary disease and chronic heart failure. *Aust J Prim Health*. 2010;16:326–33.
40. Roland M, Lewis R, Steventon A, Abel G, Adams J, Bardsley M, et al. Case management for at-risk elderly patients in the English integrated care pilots: observational study of staff and patient experience and secondary care utilisation. *Int J Integr Care*. 2012;12.
41. Baxter S, Johnson M, Chambers D, Sutton A, Goyder E, Booth A. The effects of integrated care: a systematic review of UK and international evidence. *BMC Health Serv Res*. 2018 May 10;18(1):350.
42. Dalton H, Read DMY, Booth A, Perkins D, Goodwin N, Hendry A et al. Formative evaluation of the Central Coast Integrated Care Program (CCICP), NSW Australia. *IJIC*. 2019;19(3):15.
43. Kumpunen S, Edwards N, Georghiou T, Hughes G. Evaluating integrated care: why are evaluations not producing the results we expect? London, Nuffield Trust; 2019.

Appendix 1

ICP CD Steering Committee membership 2016 – 2019

Mr. David Walsh, Chair, Chief Officer, Community Healthcare - Dublin South, Kildare & West Wicklow

Dr. Orlaith O Reilly – National Clinical Advisor & Group Lead (NCAGL) Chronic Disease and Clinical Lead ICP CD

Dr. David Hanlon, NCAGL, Primary Care

Dr Siobhan Kennelly, NCAGL, Older Persons

Dr. Margo Wrigley, NCAGL, Mental Health

Dr. Pat Nash, Group Clinical Director, Saolta Hospital Group

Professor Ken McDonald, Clinical Lead Heart Failure Programme

Professor Pat Manning, Clinical Lead, Asthma Programme

Professor Tim McDonnell, Clinical Lead, COPD Programme

Professor Sean Dinneen, Clinical Lead, Diabetes Programme

Dr. Brendan O Shea, Director of the Postgraduate Research Centre, ICGP

Ms. Mairead Gleeson, General Manager, Office of the NCAGL CD

Mr. Brian Murphy, Assistant National Director, Primary Care

Mr. Ciaran Browne, General Manager, Acute Hospital Division

Ms. Colette Cowan, CEO, UL Hospital Group

Ms. Mary Wynne, Interim Nursing and Midwifery Services Director & Assistant National Director

Ms. Virginia Pye, Director of Public Health Nursing

Ms. Emma Benton, General Manager, Office of National Clinical Advisor & Group Primary Care

Ms. Yvonne Goff, Assistant National Director, Integrated Information Service/Chief Clinical Information Officer, OoCIO, HSE

ICP CD Clinical Leadership Group 2020

Subsequent to the changes in HSE management structures and the CCO Review of National Clinical Programmes (2019) the governance of the ICP CD was changed to a clinical leadership group. The composition of the current clinical leadership group is;

Dr. Orlaith O Reilly – Chair, National Clinical Advisor & Group Lead (NCAGL) Chronic Disease and Clinical Lead ICP CD

Professor Ken McDonald, Clinical Lead, National Heart Programme

Professor Sean Dinneen, Clinical Lead, Diabetes Programme

Dr. Des Murphy, Clinical Lead, Respiratory Programme

Dr. Sarah O Brien, Specialist Public Health Medicine, Office of the NCAGL Chronic Disease

Dr. Joe Gallagher, ICGP/HSE Primary Care Lead for Integrated Care Programmes (Cardiovascular Disease)

Dr. Diarmuid Quinlan, ICGP/HSE Primary Care Lead for Integrated Care Programmes (diabetes)

Dr. Mark O Kelly, ICGP/HSE Primary Care Lead for Integrated Care Programmes (COPD)

Dr. Dermot Nolan, ICGP/HSE Primary Care Lead for Integrated Care Programmes (asthma)

Ms. Mairead Gleeson, General Manager, Office of the NCAGL

Ms. Margaret Humphreys, National Lead for Diabetes Structured Patient Education

Ms. Clíodhna O Mahony, Programme Manager, National Clinical Programme for Diabetes

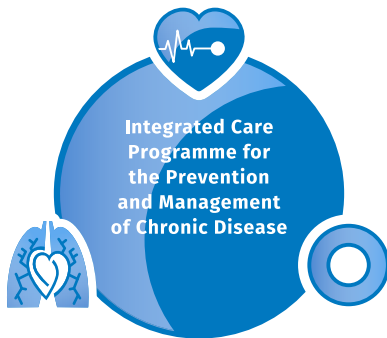
Ms. Susan Curtis, Programme Manager, National Clinical Programme for Respiratory

Ms. Regina Black, Programme Manager, National Heart Clinical Programme

Dr. Miriam Owens, Specialist Public Health Medicine *

Dr. Claire Buckley, Specialist Public Health Medicine*

*Currently reassigned to Covid services.



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