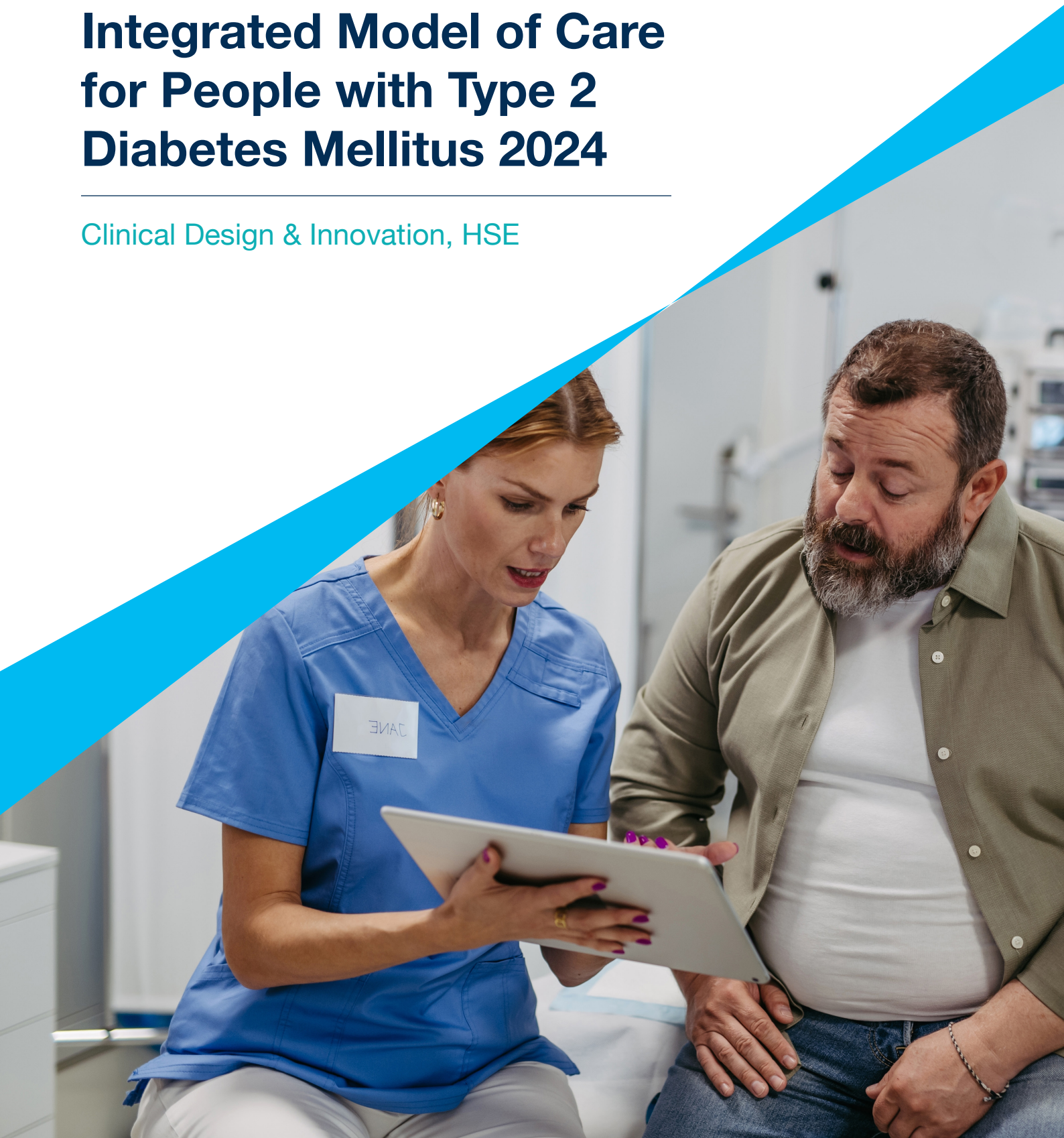
Integrated Model of Care for People with Type 2 Diabetes Mellitus 2024

Clinical Design & Innovation, HSE



CDI Clinical Practice Guidance Document Cover Sheet

Document Type	Model of Care
Document Title	Integrated Model of Care for people with Type 2 Diabetes Mellitus (2024)
Document Owner/Author	National Clinical Programme for Diabetes
National Service/Area	Clinical Design and Innovation
Approved by:	CCO Forum
Unique Identifier Number (UID):	CDI/0089/2.0/2024
Version Number:	2
Publication Date:	May 2024
Recommended Revision Date: *	May 2027
Electronic Location:	

** Refer to HSE National Framework for developing Policies, Procedures, Protocols and Guidelines (PPPGs)*

Version	Revision Date	List Section Numbers Changed	Author
2.0	May 2024	All sections reviewed	NCP Diabetes Model of Care working group

Contents

APPENDICES

LIST OF TABLES

LIST OF FIGURES

National Clinical Programme For Diabetes Sub Working Group

A multidisciplinary working group supports the planning and delivery of the work of the National Clinical Programme for Diabetes in line with agreed programme plans. This model of care was written by a group comprising experts by experience (people who have diabetes or care for/family member of someone with Diabetes) and experts by knowledge (members of the clinical multidisciplinary team). The importance of person centred individualised care and the multidisciplinary team will be a constant theme throughout this document.

Name	Role
Dr Austin Bayley	Principal Clinical Psychologist, St. James's Hospital,
Dr Mary Jane Brassill	Consultant Endocrinologist, Diabetes Integrated Care Tipperary University Hospital/CHO5
Dr Cathy Breen	Dietitian Lead, NCP Diabetes/Clinical Specialist Dietitian, St. Columcille's Hospital
Dr Claire Buckley	Public Health Representative
Ms Marie Courtney	Professional Development Co-ordinator for Practice Nurses
Ms. Assumpta Coyle	Podiatry Lead NCP Diabetes/Podiatry Manager, Saolta Hospital Group
Dr Lisa Devine	General Practitioner, ICGP Lead
Ms Orla Duane	Carer/family member representative for person with Type 2 DM
Ms Jenny Dunbar	Diabetes Ireland
Dr Kate Gajewska	Clinical Manager for Advocacy and Research, Diabetes Ireland
Ms Karen Gaynor	Programme Manager, National Clinical Programme for Obesity
Ms Christina Hamilton	Diabetes Ireland
Dr Karen Harrington	Clinical Specialist Dietitian, National DSMES Office, Office of the NCAGL Chronic Disease
Ms Margaret Humphreys	Structured Patient Education Lead, Integrated Care Programme for Chronic Disease
Ms. Valerie Humphreys	Person with Type 2 Diabetes Mellitus representative
Mr Trevor Hunter	Pharmacist Representative, Primary Care Pharmacist North-west
Ms. Dervla Kennedy	Programme Manager, National Clinical Programme for Diabetes
Dr. Aftab Khattak	Consultant Endocrinologist at Our Lady of Lourdes Hospital, Drogheda. RCPI Diabetes CAG Rep (East)
Ms Liz Kirby	Dietitian Lead, National Diabetes Prevention Programme
Ms. Joanne Lowe	Nurse Lead NCP Diabetes/CNS Diabetes Integrated Care CHO East
Dr Michael Lockhart	Specialist Registrar Endocrinology, Galway University Hospital
Dr Ciara McGowan	Senior Dietitian, National SMES Office, Office of the NCAGL Chronic Disease

Name	Role
Dr Sheena McHugh	Research Lead, School of Public Health UCC
Ms. Yvonne Moloney	Diabetes Advanced Nurse Practitioner, University Hospital Limerick/ Nurse lead NCP Diabetes
Ms Trish Murphy	Diabetes Integrated Care CNS Waterford
Dr Eoin Noctor (Chair)	Consultant Endocrinologist, University Hospital Limerick
Ms Sarah O'Brien	National Lead, Healthy Eating and Active Living Programme
Professor Derek O'Keeffe	Clinical Lead National Clinical Programme for Diabetes/Consultant Endocrinologist, Galway University Hospital
Mr Kieran O'Leary	CEO Diabetes Ireland
Ms Una O'Neill	cANP, Diabetes Integrated Care Naas/CHO7
Ms Sinead Powell	Dietitian, Diabetes Ireland
Ms Suzanne Seery	Dietitian Lead, National Clinical Programme for Obesity
Dr Farrah Shaamile	Consultant Endocrinologist, Diabetes Integrated Care Tallaght Hospital/CHO7

Foreword

This evidence based Model of Care for people with Type 2 Diabetes will result in improved patient care. It has been an enormous privilege as the HSE National Clinical Lead for Diabetes to be involved in this work and I would like to acknowledge the tireless efforts of the entire multidisciplinary working group of People living with Diabetes, advocates, academics and clinicians, led by our excellent chair Dr. Eoin Noctor.

Finally I would like to sincerely thank all the members of the Diabetes National Clinical Programme team for their valuable expertise and in particular Ms Dervla Kennedy for bringing it all together.

Prof Derek O'Keeffe

HSE National Clinical Lead For Diabetes

Executive Summary & Recommendations

This model of care takes a population health approach to the management of Type 2 Diabetes Mellitus (T2DM). It aims to improve the health of the entire population and to reduce health inequalities among population groups. It recognises the higher prevalence of T2DM among socially disadvantaged groups. The delivery of services that emerge from implementation of this model of care will need to be supported by the development of national and local clinical guidelines and clear patient pathways, which should be supported by a diabetes registry with accurate Irish data, and a National Diabetes Strategy to detail service planning for individual services.

This model of care is guided by international best practice and outlines the spectrum of health services required to manage T2DM in general practice and primary care, community, and hospital settings. Also, it can be seen that self-management education and support (SMES) is a cornerstone of clinical care across all levels of service. Please refer to Appendix 1 for further information on SMES services available.

In this Model of Care, there are five defined levels of care, in line with the National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland (2020). Each level brings more intensive intervention to individuals with increasing needs, across the levels of service delivery. Each Chronic Disease Ambulatory Care Specialist Hub serves 3 Community Healthcare Networks which serve a population of 150,000 people across the Health Regions. These levels do not contain distinct cohorts, rather, individuals will move between levels (both up and down) as the complexity of their T2DM care needs change. For the purpose of this document, the term healthcare professional (HCP) includes the broad range of professionals involved in delivering clinical services across all health and social care settings. This includes, but is not limited to, medical, surgical, nursing and midwifery, and health and social care professionals (HSCPs). The key elements of the model, outlining the different levels of care, are set out in detail in chapter two of this document, but there follows here a brief summary of the role each level will play in the model of care. The expansion to a higher degree of complexity via Enhanced Community Care presented in this MOC is only possible when supported by adequate staffing and access to an appropriate integrated care team, the required resources and facilities to deliver services, and appropriate training and CPD to upskill as required for individual roles.

Adult Level 0 – Living Well with Diabetes

This level involves a range of initiatives that will be available locally to enable a supportive healthy environment for the population, including people with prediabetes and diabetes. These initiatives will support healthy decision making in home, work and social environments.

People will have the opportunity to develop Self-Management skills by participating in relevant programmes within their locality. By ‘Making Every Contact Count’ brief advice and brief interventions, HCPs can provide support to individuals to enable healthy lifestyle choices. Across all levels of service there will be shared care pathways developed for high risk groups.

Adult Level 1 - General Practice and Primary Care Team

Most adults with T2DM will present initially to primary care. The General Practitioner (GP), General Practice Nurse (GPN), and the wider multidisciplinary primary care team are the key health care professionals within this setting. They lead on prevention of diabetes through risk factor management, early identification of prediabetes, T2DM and complications, proactive management of these conditions including signposting or

onward referral to specialist services within ambulatory care hubs. The hub-based services support GP-lead primary care via early access to self-management education and multidisciplinary interventions for individuals with more complex T2DM and/or multimorbidty for optimisation of their condition. The GP and team have a central role in ensuring an integrated, person-centred approach to support individuals to self-manage their own condition, and to develop appropriate care plans in collaboration with people with T2DM. The Structured Chronic Disease Management Programme in General Practice provides additional supports to GPs in caring for individuals living with chronic disease in the community (HSE). Further information on the CDM programme can be accessed (CDM 2019).

Adult Level 2 - Community Specialist Ambulatory Care

Level 2 ambulatory care hubs will provide specialist support to GPs in managing the treatment of people with T2DM, helping to prevent disease progression and development of diabetes-related complications. Care provided in community specialist hubs builds on level 1 services to provide enhanced support for more complex care needs.

This level involves provision of specialist diabetes multidisciplinary services in the community for adults and Self-Management education and support services. These services are delivered in line with the National Diabetes Prevention Programme, the Chronic Disease Management Programme (introduced as part of GP Contractual Reforms 2019) and the National Framework for the Integrated Prevention and Management of Chronic Disease.

Adult Level 3 - Acute Specialist Ambulatory Care

Level 3 acute specialist ambulatory care will provide multidisciplinary care for the highest complexity of Type 2 diabetes that cannot be safely cared for in a community setting and requires long term follow up. Physician-led multidisciplinary team (MDT) services are available in every health region, co-located in hospital sites, to provide care for adults with T2DM and specific complex care needs, described in detail in section 3.

Adult Level 4 - Specialist Hospital Care

Supporting early intervention and proactive care in the community, with a focus on hospital avoidance is a key aim of this MoC. However, hospital avoidance isn't always possible. This level describes the pathways for people with Type 2 diabetes who have been admitted to acute services under the care of a medical consultant. The aims of care at this level are to treat the presenting complaint, optimise health and glycaemia, to reduce bed days where possible, and support a multidisciplinary discharge plan to the appropriate services as part of end-to-end diabetes care to reduce the risk of re-admission and ultimately, improve patient outcomes.

Key Enablers

Each level of service will require robust information and communications technology (ICT) systems for secure data collection, information sharing and communication across settings and services. Access to quality assured laboratory services resourced to deliver an appropriate range of services and clinically appropriate turn-around time is essential to support all levels of care in the community and hospital. National surveillance systems to monitor population prevalence of T2DM and associated complications are also required. Services at each level will need to be developed and evaluated in parallel to ensure the provision of integrated end-to-end care for individuals living with T2DM. As per Step 9 of the 10 Step Framework for the Integrated Prevention and Management of Chronic Disease (2020-2025) steps must be taken to train, resource and retain an adequately trained workforce to implement this model of care.

Glossary of Acronyms

Acronym	Meaning
ADA	American Diabetes Association
AMP	Advanced Midwife Practitioner
ANP	Advanced Nurse Practitioner
cAMP	Candidate Advanced Midwife Practitioner
cANP	Candidate Advanced Nurse Practitioner
BMI	Body Mass Index
BP	Blood Pressure
CBT	Cognitive Behavioural Therapy
CF	Cystic Fibrosis
CGM	Continuous Glucose Monitoring
CHO	Community Health Organisation
CMS	Clinical Midwife Specialist
CNS	Clinical Nurse Specialist
CPD	Continuous Professional Development
CSII	Continuous Subcutaneous Injectable Insulin
DIP	Diabetes in Pregnancy
EASD	European Association for the Study of Diabetes
GDM	Gestational Diabetes Mellitus
GP	General Practitioner
HbA1c	Glycosylated Haemoglobin A1c (measurement of glycaemia)
HSE	Health Service Executive
ICPCD	Integrated Care Programme for Chronic Disease
IDF	International Diabetes Federation
IMC	Irish Medical Council
LADA	Latent Autoimmune Diabetes in Adults
MDI	Multiple daily injections (of insulin)
MDT	Multidisciplinary Team
MMUH	Mater Misericordiae University Hospital
MoC	Model of Care
MODY	Mature Onset Diabetes of the Young
MOU	Memorandum of Understanding

Acronym	Meaning
NMBI	Nurses and Midwives Board of Ireland
NWHIP	National Women and Infants Health Programme
OGTT	Oral Glucose Tolerance Test
PET	Pre-eclampsia toxaemia
PGDM	Pre-gestational diabetes mellitus
PPC	Pre-Pregnancy Care
RAMP	Registered Advanced Midwife Practitioner
RANP	Registered Advanced Nurse Practitioner
RoI	Republic of Ireland
SLA	Service Level Agreement
T1DM	Type 1 Diabetes Mellitus
T2DM	Type 2 Diabetes Mellitus
TFT	Thyroid Function Test
UK	United Kingdom
WHO	World Health Organisation
WTE	Whole Time Equivalent

1.0 Introduction

Type 2 diabetes mellitus (T2DM) is a common metabolic disorder characterized by chronic hyperglycaemia. A diagnosis of T2DM carries significant implications, including a reduced life expectancy due to an associated risk of microvascular and macrovascular complications. (Welch & Vella, 2022).

1.1 Epidemiology of type 2 diabetes

Diabetes has been described by The Lancet as "a defining disease of the 21st century" in a 2023 editorial, which reported that more than 1·31 billion people could be living with diabetes by 2050.

Diabetes is diagnosed when; a fasting plasma glucose is 7.0 mmol/L or greater, an HbA1c is 48 mmol/mol or greater, or a 2-hour glucose level on a 75g oral glucose tolerance test is 11.1 mmol/L or greater. Each of these abnormalities requires confirmatory testing; either with a different test on the same day, or the same test on a different day. Diabetes may also be diagnosed if a random plasma glucose is 11.1 mmol/L or greater, and unequivocal symptoms of hyperglycaemia are present (confirmatory testing not required in this case).

Prediabetes (impaired fasting glucose, impaired glucose tolerance, or HbA1c of 42-47 mmol/L) is a pivotal risk factor in developing T2DM. The global prevalence of impaired glucose tolerance (IGT; a 2hr glucose on a glucose tolerance test of 7.8-11.0 mmol/L) was 9.1% (464 million) in 2021 and is projected to increase to 10.0% (638 million) by 2045. The global prevalence of impaired fasting glucose (IFG; fasting glucose of 6.1-6.9 mmol/L) was 5.8% (298 million) in 2021, and is projected to increase to 6.5% (414 million) in 2045 (Rooney et al., 2023). Concerning, the prevalence of prediabetes in children and adolescents is estimated to be 8.84% (95% CI, 6.74%-10.95%) for prediabetes in childhood. (Han et al., 2022)

The International Diabetes Federation (IDF) estimates the world's adult population (20-79 years) living with diabetes to be 537 million people (representing 10.5% of this age group). As the world's population is growing, the predicted rise in diabetes prevalence is increasing. The International Diabetes Federation (IDF) suggests that between one third and a half of people with T2DM globally could be undiagnosed- an estimated 240 million people (IDF 2021). The majority (90%) of this population live in low- and middle-income countries (IDF 2021). Type 2 diabetes is the fourth highest cause of DALYs (Disability Adjusted Life Years) among non-communicable diabetes, after ischaemic heart disease, COPD and intracerebral haemorrhage and a leading cause of 'years of life lost' due to premature mortality (YLLs) (Vos et al, 2020).

In the absence of a National Diabetes Registry, it is impossible to accurately determine diabetes prevalence in Ireland. However, Scotland's population (5.5 million) is similar to Ireland's (5.1 million), and they have a national diabetes registry. In 2021 they reported that 6% of their population had diabetes (The Scottish Diabetes Survey, 2021). In 2022 there were 5,149,139 people living in Ireland (Irish Central Statistics Office data). If 6% of our population were living with diabetes, this would equate to 308,000 people, with 272,904 of those having T2DM, accounting for over 90% of all diabetes diagnoses.

The Irish Longitudinal Study on Ageing (TILDA) 2015 reported that 10% of adults aged 50 and over have T2DM. Over the age of 80 years, prevalence rises to 16%. The TILDA study also found that the prevalence of diabetes was higher in men (12%) compared to women (7%). The prevalence of doctor-diagnosed

diabetes in Ireland has increased from 2.2% of the adult population in 1998 to 5.2% in 2015 (Tracy et al, 2016).

In 2015, the global cost of diabetes was estimated to be US$1.31 trillion, with direct medical costs accounting for two-thirds of the costs (Bommer et al, 2016). A cross-sectional analysis of TILDA data showed that healthcare costs attributable to diabetes in those aged over 50 years were estimated to be €89 million annually with hospital admissions accounting for almost 70% of these costs (O'Neill et al, 2018). Diabetes-related out-patient department costs were estimated to be €18.5 million per annum. Diabetes was associated with an increase in GP visits, out-patient visits, hospital admissions and accident and emergency department attendances (estimates based on self-reported service use). More recently, an audit of hospitalisations in an Irish public hospital estimated that the mean hospitalisation cost for T2DM was €5,026 per admission (Friel et al, 2022).

1.2 T2DM Model of Care

This model of care defines the way in which health care services for people living with type 2 diabetes are delivered. It describes the service required, who should provide it, and outlines where the service or care should be delivered, from a whole health system perspective.

The model of care needs to be supported by cross-government and cross-sectoral policies and initiatives which address the effects of the range of social determinants of health through meaningful legislative change and societal factors.

Changes to population health have impacted on healthcare policy and strategy in recent years. The Integrated Framework for the Prevention and Management of Chronic Disease (2020) notes that Irish people are living longer (Health in Ireland, DoH 2022), but are living with an increased prevalence of chronic disease. The healthcare experience of individuals with chronic disease is often characterised by episodic, reactive care, culminating in repeated hospital admissions which is neither person-centred nor sustainable. It outlines how our health services need to evolve to meet our changing needs: a change in thinking from a hospital-centred focus, to a person-centred focus, is what is required. The 2017 HSE Framework for Living Well with a Chronic Condition recommends education should be provided at all stages of the integrated care pathway should involve collaborative goal setting, patient empowerment and self-management support.

We know that people living with T2DM face many challenges. Some of the challenges highlighted in the literature include; challenges relating to communication and education around day-to-day implications of diabetes; treatment burden; and navigation of the health system for people living with T2DM. Vulnerable groups, including, but not limited to, lower socioeconomic status, presence of language and cultural barriers, may have specific challenges in the prevention and management of T2DM. (Nikpour et al., 2022).

The landscape of management and treatment strategies is changing rapidly in T2DM and ensuring that knowledge is up to date may represent a further challenge to healthcare professionals. In addition, T2DM does not exist as a standalone condition in many patients , being associated with other risk factors such as cardiovascular risk factors (Petrie et al., 2018).

These challenges highlight the need for an inclusive, dynamic, and person-centred process for provision of care. A model of care defines the way health services are delivered and describes best practice care

and services for a person, population group or patient cohort as they progress through the stages of a condition, injury, or event (NSW Agency for Clinical Innovation, 2013). It should be noted that it is not a clinical guideline, although links are provided to comprehensive clinical care guidelines produced by relevant professional bodies, which are routinely used in clinical diabetes care in Ireland.

As outlined in the Integrated Framework for the Prevention and Management of Chronic Disease (2020), one of the guiding principles is that care should be provided at the lowest appropriate level of complexity. It envisions a responsive service which collaborates with individuals and their carers to meet the complex needs of managing a chronic condition. A key goal is 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 Model of Integrated Care for people with T2DM will describe the five levels of service that are needed to deliver integrated end-to-end care in Ireland for people living with diabetes.

The implementation process for the model of care should be underpinned by a detailed implementation plan and effective change management approach to ensure sustainability. Integrated care across all levels of service requires a shared electronic health record to ensure safe clinical care, and to allow assessment of the effectiveness and quality of the service as it progresses. Given the scale of change and service developments needed, effective use of resources provided to Diabetes Integrated Care must be utilised and further investment made.

1.3 National Context

The HSE National Clinical Programme (NCP) for Diabetes was established in 2010 to provide clinical leadership to improve the access to, and quality of, diabetes care nationally, and to improve clinical outcomes for people living with diabetes, while utilising health care resources effectively. Clinical leadership is pivotal to changing our health service where necessary to meet individuals' clinical needs and expectations. The NCP for Diabetes was established as a partnership between Ireland's Health Service Executive (HSE) and the medical specialist professional training body, the Royal College of Physicians of Ireland (RCPI). The HSE's National Clinical Programmes have used Models of Care (MoC) as a framework to co-design, develop and implement changes to improve the quality of services.

In October 2015 the Diabetes Cycle of Care (CoC) was introduced nationally by the HSE, enabling eligible people with diabetes (i.e. holders of medical cards and doctor visit cards) to avail of two funded diabetes visits yearly with their General Practice team. The 2018 Model of Integrated Care for Patients with Type 2 Diabetes set out how this should be implemented in practice in Ireland in order to improve diabetes care in Ireland. By 2020, the Cycle of Care had evolved into the Chronic Disease Management (CDM) programme, within which the Chronic Disease Treatment Programme, Prevention Program and Opportunistic Case Finding Programme, provide for visits at General Practice level for people who are holders of medical cards/ doctor visit cards and who are at risk of developing, or have been diagnosed with, T2DM.

Several other national frameworks are also relevant to the care of people living with T2DM. Making Every Contact Count (MECC, 2016) is the HSE's national framework for equipping all healthcare workers with patient contact with the tools to help with primary and secondary prevention of chronic disease.

The Integrated Model of Care for the Prevention and Management of Chronic Disease (2017) describes how services should be delivered to people living with chronic disease (including T2DM) in Ireland. The Sláintecare national framework and principles for the design of models of care (2019) aims to support those involved in the planning, design, commissioning and evaluation of health and social care services nationally, regionally, and locally, with the aim of standardising models of care and improving health outcomes. This updated T2DM model of care builds on the base of changing healthcare policy and incorporates these key Sláintecare principles outlined below (Sláintecare,2017). This model is closely aligned with the National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland 2020-2025 The development of this model involved multiple stakeholders from people with lived experience, medical, nursing and HSCP professionals, researchers and higher education institutes. Following a consultation and editing process the document was approved by:

- Speciality specific groups such as Self-Management Education and Support Office
- National Clinical Programme for Diabetes
- Clinical Advisory Group of Consultant Endocrinologists
- National Clinical Advisor and Group Lead for Chronic Disease
- HSE's Chief Clinical Officer (CCO) Clinical Forum

1.4 Strategic Background

The Sláintecare Report of the Oireachtas Committee on the Future of Healthcare (2017) set out the ten-year vision for the health service in Ireland and identified the nine elements that will underpin the ten-year reform programme (figure 1), through the creation and implementation of a population health approach for service planning and funding. A key element of the Citizen Care Masterplan is service redesign based on population health planning, knowledge of current levels of service delivery and configuration and the principle of collaboration with partners. There will be a comprehensive range of primary, acute and social care services at no cost or reduced cost, with the majority of care provided in community settings. The alignment of this model of care to the Sláintecare model of care principles is set out in section 3.1

1.4.1 Slaintecare Principles

This model of care aligns to the Sláintecare principles as follows:

Population Health Perspective

Population health is broadly defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within a group" (Kindig 2003). Taking a population health perspective to the development of models of care means prioritising the needs of a population in designing services. This model draws on the population health approach for chronic disease and national and international data available on prevalence of T2DM. The model is based on the population health pyramid set out in Figure 4. Within the population, and at different times in their lives, adults will experience different levels of Diabetes complexity or risk and therefore, have different requirements for healthcare services. Many people will be managed within primary care. Prevention of disease progression and prevention of development of complications occurs at every level.

Person-centred Care

This MoC organises care for people with T2DM around the person's individual needs. Care pathways and clinical management plans should all be individualised to optimise care for the persons assessed needs. Individualised care plans should be developed through frequent team communication, in partnership with the person with T2DM. Collaborative care plans should be reviewed by the person with T2DM with their

GP team. As part of the implementation plan for this MoC, patient-reported outcome measures should be reviewed and incorporated into the monitoring and evaluation process.
Services will be developed to provide the right care, in the right place, at the right time and will be built around the needs of the individual. A suite of individualised treatment options and supports will be available and offered with permission and in collaboration with patients, with continued follow up for support.

Health and Wellbeing
Improved health and wellbeing is about empowering and supporting people to live healthier lives by addressing risk factors, early detection of disease and offering timely intervention. The phrase 'shift left' describes how early, targeted interventions can reduce risk factors and impact of disease. For people with T2DM, the HSE's Self-Management Support Framework and Healthy Ireland Programme are two key elements to support them to self-manage their health behaviours and/ or diabetes. In addition, this MoC embraces the 'Making Every Contact Count' framework and reinforces the importance of highlighting key messages about health behaviours to patients in every one of their contacts with the health services. All care pathways proposed in this MoC take into consideration the person's long-term health and wellbeing.

Prevention of disease progression and prevention of development of complications is central to all levels of service delivery.

Coordination of Care
Sláintecare describes 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.' Co-ordination of care between specialist acute services, community specialist ambulatory care hubs and General Practice is a fundamental aspect and key enabler in this MoC. Care should be coordinated across primary and secondary care and should be as integrated as possible. Regular MDT meetings to discuss complex, challenging and difficult situations or treatment decisions e.g., consider starting diabetes technology is an important component of delivering integrated, person-centred diabetes care.

A full spectrum of services across all levels of care will be required to ensure continuity of care through integrated care pathways. Standardised referral guidelines, pathways and processes will be developed by the HSE to ensure timely access to patient centred, cost efficient, integrated care between health professionals and across all health and social care settings. For guidance on referral guidelines refer to the Integrated Care Programme for Chronic Disease guide on ECC Hub on HSELand.

Equity
This model of care works to address challenges around equity of access to services and equitable provision of services nationally while facilitating local flexibility in the delivery of services. It is recommended that there is geographical equity, i.e. all people with T2DM can access high quality Diabetes care across all levels of service outlined. Social determinants of health need to be considered and mitigated against with additional resources and supports tailored for, and targeted at, more vulnerable populations. This MoC sets out an approach to reduce health inequality, and measure variation in needs, experience outcomes and resourcing. Special consideration should be given to ensure care, education and resources provided are appropriate for people with culturally and linguistically diverse backgrounds.
Services are underpinned by the principle of equity, recognising that vulnerable groups may have specific challenges in the prevention and management of T2DM. This vulnerability may take several forms, including

lower socioeconomic status and the presence of language and cultural barriers, for example. A universally accessible and equitable service should provide a tailored approach in which these, and other vulnerable groups, can access appropriate diabetes management services in a timely manner.

Self-Management education and support (SMES)
This model of care is underpinned by the HSE's Self-Management Support Framework (2017) and the MECC Frameworks for the prevention and management of chronic disease. Individuals will be supported with knowledge, skills confidence to help to self-manage their condition and to access support services in the locality.

People with T2DM should be empowered by healthcare professionals to manage and optimise their own health and should be provided with the necessary skills and supports to do so. This MoC recognises the importance of providing people with timely information and education (using a variety of methods) and facilitating group and peer support networks to complement their care. Training and education, co-ordinated and facilitated at a national level, for all healthcare professionals involved in the care of these people is also encouraged to help them better support and encourage Self-Management.

Top of Licence Practice and Teamwork
Top of license practice refers to all health professionals delivering the care for which they are qualified and trained. Best-practice T2DM care requires a collaborative, multi-disciplinary approach with all health care professionals working together with the person with T2DM to optimise care. To achieve consistent, high-quality, cost effective care, advanced practice and clinical specialist roles should be developed within specialist services, nursing and dietetics health and social care professions. All staff occupying such roles must possess the relevant specialist qualifications to carry out specialist clinical care.

To achieve consistent, high-quality, cost-effective, person-centred care, clinical nurse specialist diabetes integrated care and registered Advanced Nurse Practitioner Integrated Care, advanced practice and clinical specialist roles should be developed within specialist diabetes services for health care professionals. Teams have clear roles and responsibilities for each team member and are committed to maintain continuity of care through communication and record keeping where personal continuity is not possible.

Supported by Technology
A national health information and communications technology infrastructure, including electronic health records and e prescribing is essential for integrated services to improve communication and sharing of clinical information between HCPs and across service settings. Services will require technological and administration support and training to enhance diabetes technology integration and to enable clinical data sets to be collected and analysed for quality improvement and service planning. Information, communication and self-management support will be provided via online platforms. Services will be designed and resourced to be flexible in delivery, such as face to face or digital service delivery.

Sláintecare policy requires that services be focused primarily in the community. The COVID-19 pandemic has further emphasised the importance of this to protect vulnerable groups by avoiding care in congregated settings as much as possible. Opportunities have arisen from the uptake of virtual consultations, telemedicine and the use of digital tools that have been increasingly used to complement and augment face to face, physical care and management during the pandemic. For example,

transportation may be a barrier for attending clinics for some people living with Diabetes, which virtual care solutions can address (HSE Telehealth RoadMap 2024-2027, HSE Digital Health Strategic Implementation Plan 2024). Implementation of the Diabetes management model of care will further support early intervention and increased access to Diabetes management services in the community.

Quality and Safety

Clear and robust governance structures to support accountability and the delivery of high-quality, safe, patient-centred, integrated care are a key in the development of services for people with T2DM. Services will be developed and constantly reviewed in collaboration with persons with lived experience of T2DM. Interventions are delivered by a team of trained, experienced and competent HCPs with appropriate staffing levels. New ways of working will require governance and oversight at local, regional and national levels. Robust measurement and evaluation processes will be developed to support this model of care. Quality will be measured by reported patient experience to include, defined outcome measures, key performance indicators, regular and standardised service monitoring and reporting, audit and evaluation. This should be facilitated by standardised data collection processes and integrated electronic medical records. Services should have dedicated space and be appropriately equipped for all service users in line with National Guidelines on Accessible Health and Social Care Services (NAU/HSE, 2014).

The Healthy Ireland Framework (2013-2025) is the national cross-governmental framework for improving health and wellbeing and reducing chronic disease. It states that "Combining four key protective lifestyle behaviours: being active, not smoking, drinking alcohol within the recommended guidelines and eating recommended amounts of fruit and vegetables could add up to avoid up to 90% of type-2 diabetes "

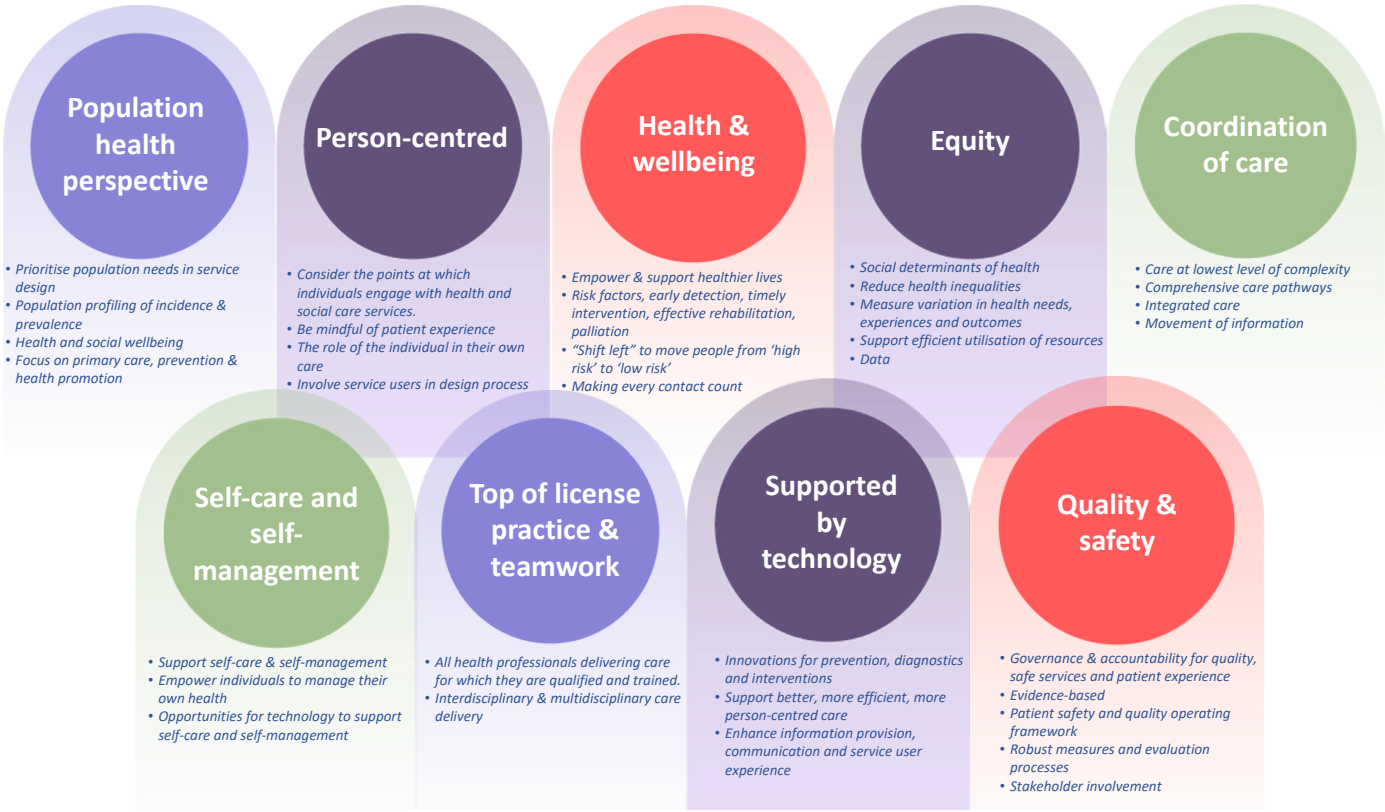


Figure 1: *Sláintecare Model of Care Principles (Sláintecare, 2019)*

The National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland 2020-2025 (2020) demonstrates how "end-to-end" care for chronic disease will be provided within the Irish health services through a generic Model of Care for the Integrated Prevention and Management of Chronic Disease (Figure 2). Each of the National Clinical Programmes for Chronic Disease (The National Heart Programme and the National Clinical Programmes for Respiratory and Diabetes) are adapting this to develop models of care detailing end-to-end care for heart failure, chronic obstructive pulmonary disease, asthma and Type 2 diabetes mellitus. This common approach also describes the model for the delivery of integrated care for individuals living with more than one chronic condition (multimorbidity).

Figure 2: *Model of Care for the Integrated Prevention and Management of Chronic Disease (Integrated Care Programme for the Prevention and Management of Chronic Disease, 2020).*

The HSE Corporate Plan (2021 - 2024) sets out a number of service-related objectives and key actions the HSE will take to improve the health service and the health and wellbeing of people living in Ireland. The delivery of integrated care across T2DM, COPD, asthma and heart failure at the lowest appropriate level of complexity through the Enhanced Community Care Programme (ECC) is a key objective in this plan. This MoC will support the implementation and evaluation activities of the ECC at the national and local levels to drive the delivery of high quality, safe care.

As part of implementing Sláintecare and improving how health services are delivered, six new health regions for Ireland have been developed as outlined in Figure 3. The aim of the new regions is to enable planning and provision of better healthcare, with a shared budget to care for the people living in each region. This model of care sets out national services for people with T2DM, which align to proposed Community Health Networks (CHNs), Ambulatory Care Hubs, Integrated Health Areas and Health Regions to support integrated care delivery across community, primary care and hospitals.

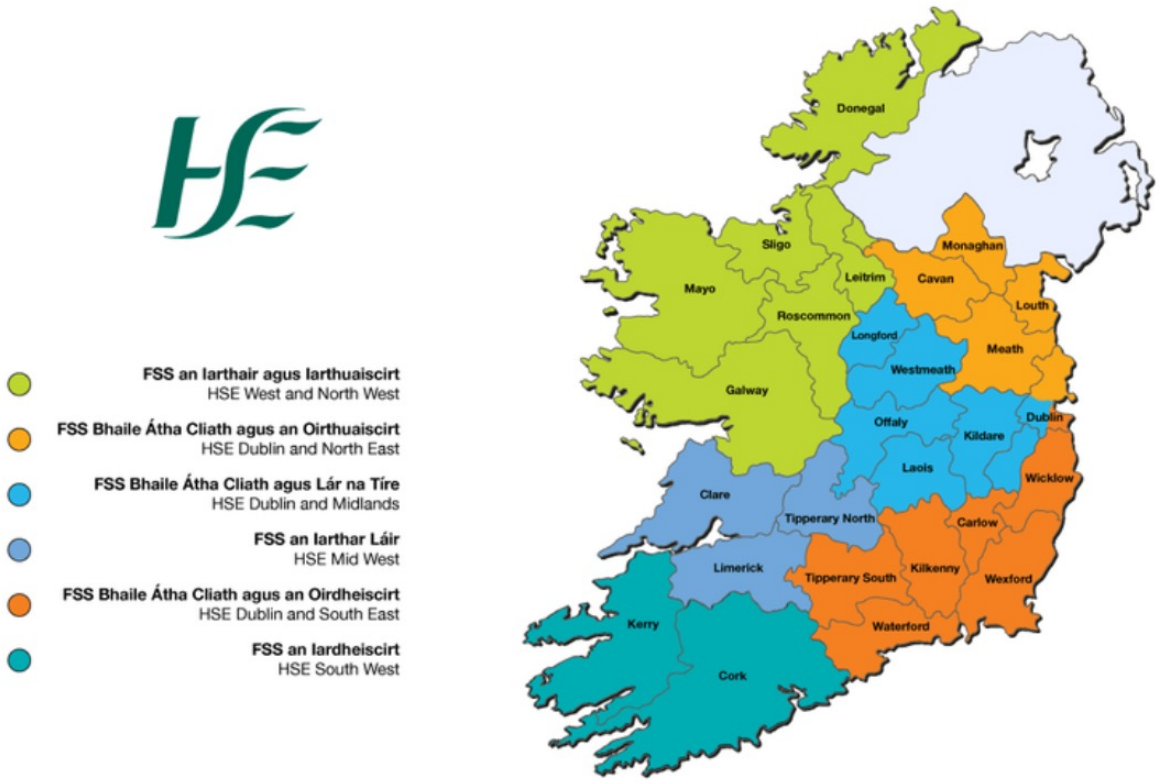


Figure 3: *HSE Health Regions 2024*

1.5 Aim and Objectives of the Model of Care for people with Type 2 Diabetes Mellitus

Aim:

The aim of this model of care is to outline the spectrum of best practice care and services for T2DM management in Ireland, ensuring the right care, in the right place at the right time.

Objectives:

- To define specific services for the effective care of people living with T2DM incorporating prevention, early identification and treatment to prevent progression of disease and complications and support improved patient outcomes.
- To ensure effective integration and support across levels of services

Scope:

The scope of this model of care is to define the services required to support the general population of adults with T2DM. It includes health services operated and funded by the HSE and includes community-based services as well as hospital-based secondary and tertiary care services. This model of care is guided by national and international best practice. It is not intended to be a clinical guideline, although links are provided to comprehensive clinical care guidelines produced by relevant professional bodies, which are routinely used in clinical diabetes care in Ireland (See Appendix 2).

It acknowledges that specific health and social care settings, high risk and vulnerable groups will require additional interventions and support. Working with the relevant national clinical programmes and services, this model of care will inform the future development of shared pathways, policies, strategies and services to improve health outcomes in these settings.

This model of care acknowledges and supports the range of services and activities external to the HSE such as voluntary agencies that play a vital role in prevention and treatment but does not include these settings. The National Clinical Programme for Diabetes advocates for policy, legislation and cross sectoral action to support healthy environments for all.

This MoC outlines the universal care pathways for people with T2DM in Ireland. The Chronic Disease Management Programme supports two GP visits a year for people with medical card and GP visit cards. All services in the Diabetes Ambulatory Care Hubs and hospitals are free to all people with T2DM, when clinically indicated.

2.0 The Integrated Model of Care for People with Type 2 Diabetes Mellitus

This model of care describes clinical services aligned with the best existing evidence to address the real-world practical care of individuals with Diabetes. The right service design is one where the population is actively engaged in prevention, health behaviour improvement and Self-Management support with timely access to relevant and necessary treatment based on their individual needs.

The treatment goals of T2DM care are to optimise the health, well-being, and quality of life of people living with T2DM. Using a population-based approach, it is possible to define groups of people with chronic disease within a given catchment area according to their care requirements and provide the most appropriate services to meet their needs. The aim is to provide early identification and intervention before complications arise, rather than intervening later. It is used to stratify patient groups into levels of risk, with different interventions provided at each level to maintain health. A population health approach for chronic disease, which this model of care for T2DM is based on, is shown in Figure 4.

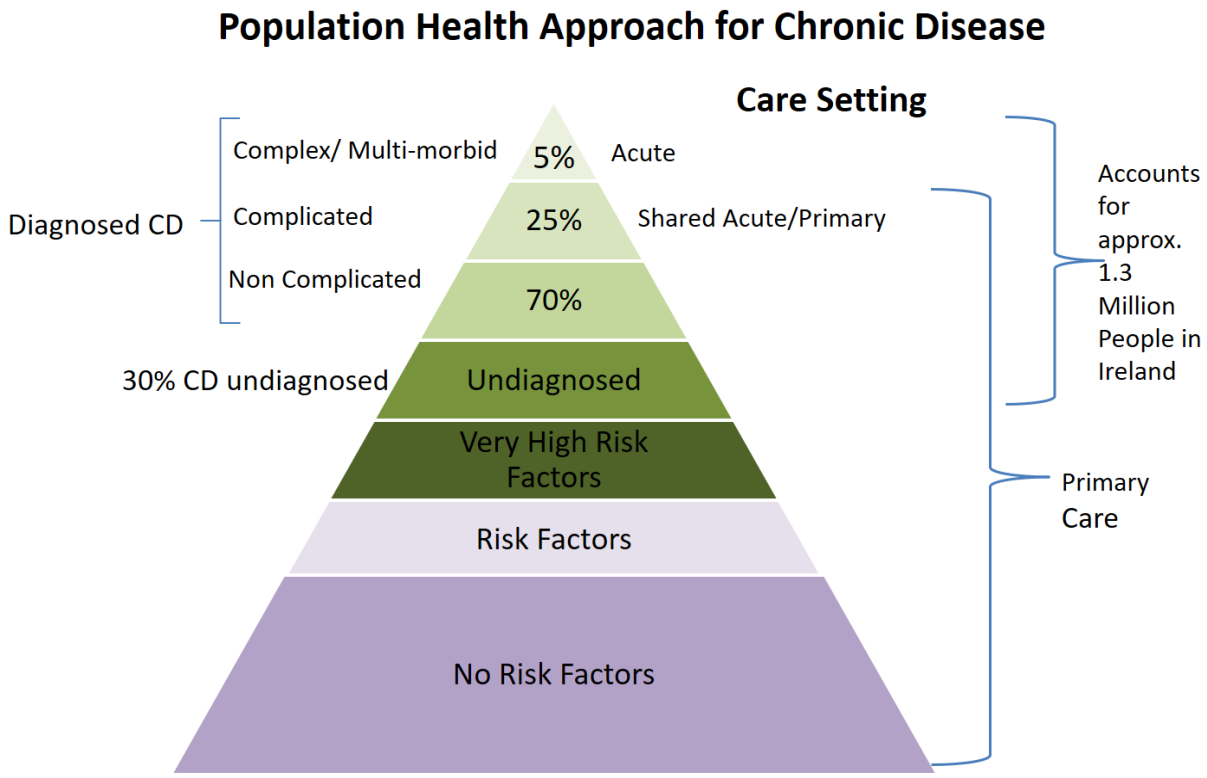


Figure 4 *Population health approach for Chronic Disease*

Figure 5 shows the full spectrum of services required to provide end-to-end care for chronic disease in Ireland and the settings where they should occur. Community and primary care services cover many of the health and social care services outside of the hospital setting. Primary care can be defined as the first level of contact for the population with the health care system, bringing health care as close as possible to where people live and work. Primary care includes services provided by general practice teams as

well as other health professionals such as nurses, health and social care professionals, pharmacists and community health workers. The aim of the primary care team is to provide services that are accessible, integrated, of a high quality and which meet the needs of the local population within the Community Healthcare Network. For the T2DM MOC clinical services there is very close integration between general practice, specialist ambulatory care hubs and hospital care (Figure 6).

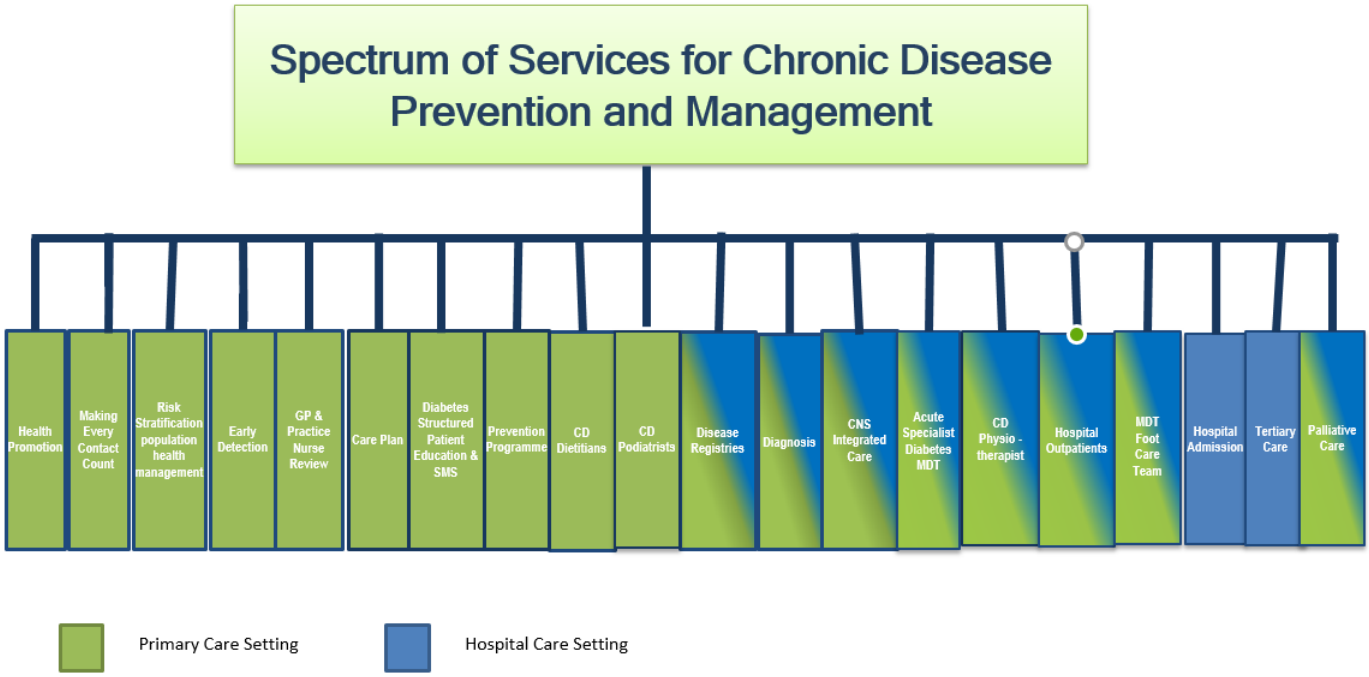


Figure 5: *Spectrum of services for people living with or at risk of chronic disease (Integrated Care Programme for the Prevention and Management of Chronic Disease, 2020)*

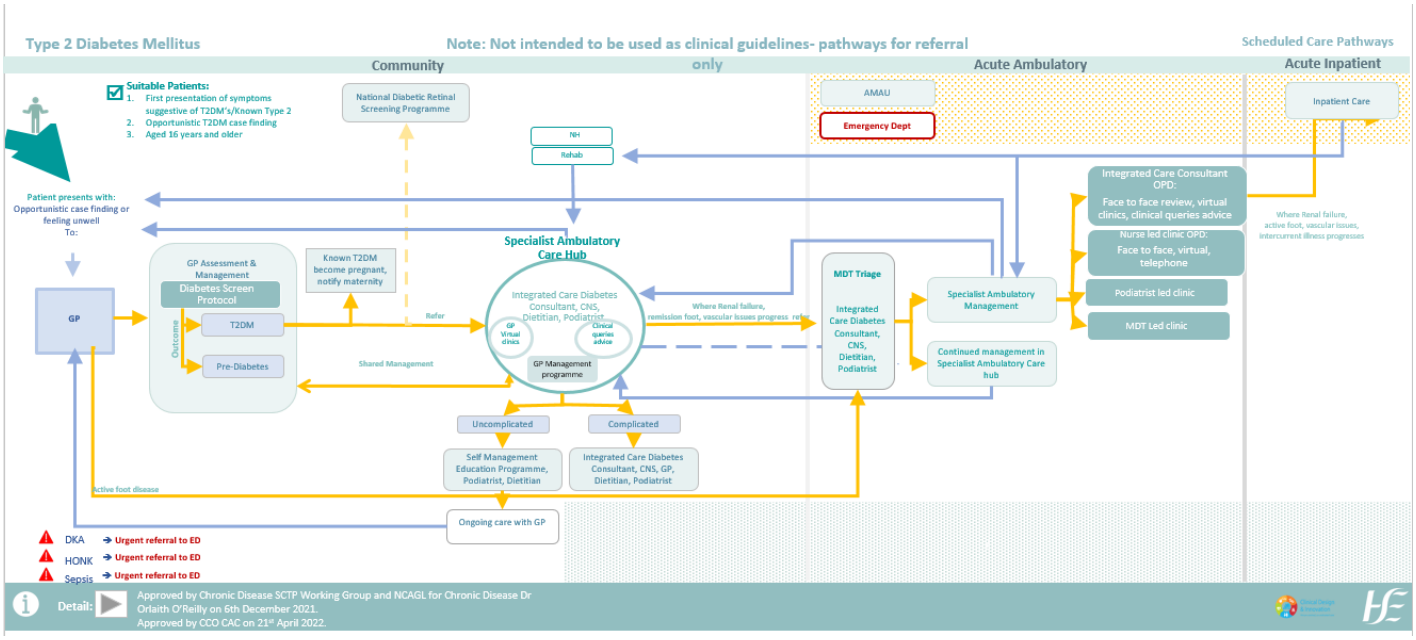


Figure 6: *End to end pathway of care for people with T2DM*

2.1 The Multidisciplinary Team working with people with Type 2 DM

The various members of the MDT for all levels of care and description of roles are outlined in Appendix 6.

Figure 7: *Model of Care for the Integrated Prevention and Management of Chronic Disease (Integrated Care Programme for the Prevention and Management of Chronic Disease, 2020).*

2.2 Level 0 Living Well With Diabetes

Care provision for the prevention and management of type 2 diabetes in adults

Level 0 (Figure 7) outlines the community support for the prevention, detection and management of prediabetes and T2DM. It outlines the physical, psychosocial, and clinical needs of this cohort.

2.2.1 Overview and Patient Journey

Level 0 Care provision involves a range of initiatives that will be available locally to enable a supportive, healthy environment for people at risk of and living with Type 2 Diabetes. These initiatives will support healthy decision making in the home, at work, and in social environments. People at risk of and with T2DM should receive comprehensive, collaborative, end-to-end care within the community.

Health care professionals will provide support to individuals to engage in healthy behaviours, in a compassionate and de-stigmatising manner while respecting individual autonomy. Healthcare professionals will be encouraged to develop skills and knowledge to fully support the physical, psychosocial and emotional care of people at risk or living with T2DM.

2.2.2 Prevention strategies

a) Population intervention

A population health approach focuses on prevention of disease and the promotion of health rather than solely the diagnosis and treatment of diseases.

The aim of primary prevention is to prevent disease before it ever occurs by reducing exposure to factors that contribute to causing disease, including environmental, societal and lifestyle factors. Secondary prevention aims to detect or treat disease as soon as possible to halt or slow progression. Common population level primary prevention strategies include targeted food and drink taxation (e.g. in foods high in sugar), encouraging calorie content on menus, limiting specific food and beverage advertising, encouraging affordable physical activity options, improving the built environment, and addressing social determinants of health. However, the capacity and responsibility to implement these evidence-informed policies and actions that enable population level primary prevention lie mainly outside the health sector. The Department of Health leads on cross-sectoral action including policy, and legislation, to support healthy environments for all. The HSE contributes to this work through the Healthy Eating Active Living Programme. While the importance of these population level measures in the prevention of diabetes must be emphasised, the definition and implementation of these are outside the scope of this document.

b) Healthcare Professional role and responsibility

Through implementation of the HSE behaviour change programme 'Making Every Contact Count' (MECC) brief advice and brief interventions, health care professionals can support individuals to make healthier choices during routine contacts to help prevent and manage chronic diseases. MECC focuses on health behaviours that are known to impact chronic disease (healthy eating, physical activity, tobacco use and alcohol consumption). In addition healthcare professionals can take the opportunity to address prevention of illness/complications/optimisation of condition through offering advice on risk factors, pre-pregnancy counselling and vaccination depending on patient need. Please follow the link below for more details on MECC in Appendix 5.

The Chronic Disease Management Programme offers a high risk prevention programme and an opportunistic case finding programme to those age 45 and over. It also provides a structured treatment programme to those adults age 18 years and over who hold a Medical/GP visit card (but not private patients in the GP practice). Eligible patients with a diagnosis of Gestational Diabetes (Medical/GP visit card holders and private patients) may also be registered directly onto the Prevention Programme since January 2023.

c) Individualised access to care

The person at risk of T2DM should be provided with tailored, individualised care by their healthcare team. For those eligible, this input may include access to their GP care via the GP Chronic Disease Programme and onward appropriate referral for 1:1 or group self-management education and support (provided in a Level 2 setting).

Those diagnosed with prediabetes should be offered support through the National Diabetes Prevention Programme. Prediabetes is defined as having HbA1c 42-47mmol/mol or a fasting Plasma glucose of 6.1-6.9moml/L.

The National Diabetes Prevention Programme offers a 12-month block of care in a group setting (Appendix 1). Participants can join an online or in person programme via referral from their GP. The programme is free to all those identified as high risk, including private patients, GMS card holders and GP visit card holders.

Participants of the programme are supported with the following components of care;

- **Eating for Health** – supporting participants to achieve a balanced, varied diet for health which is personalised, enjoyable and achievable for the long term
- **Movement for Health** – supporting participants to engage in mild to moderate/physical activity with a focus on sustainable, practical approaches to being active, which includes interrupting sitting time, activities of daily living and structured opportunities for varied types of activity.
- **Weight for Health**- supporting overweight participants to lose 5-7% of their weight where appropriate and for those where weight loss is not appropriate focusing on other health gains.
- **Change for Health** - focuses on self-efficacy, behaviour change and self-management – empowering participants to actively engage in their health care and their personal plan for change.
- **Understanding Risk** – enabling participants to understand the benefits of health behaviour change and their own ability to significantly reduce the risk of developing T2DM and cardiovascular related risk.

Within the ongoing care for individuals with T2DM, there should be consideration and addressing of the particular needs of those with challenges to access and engage fully with services. Such obstacles to access might include but are not limited to: physical disability, intellectual disability, literacy and language barriers, mental health conditions, sensory challenges and neurodiversity.

2.2.3 Detection and diagnosis of Type 2 Diabetes

International guidelines differ in their recommendations for assessing the risk of Type 2 Diabetes and there is a lack of international consensus on risk assessment tools. The current ADA guidelines (2024) recommend screening for prediabetes and Type 2 diabetes risk through an informal assessment of risk factors or with an assessment tool, such as the ADA's risk test (ADA 2022). The UK NICE guidelines for diabetes prevention recommend a two-stage process: 1) risk assessment offered and 2) where necessary followed up with a blood test to confirm whether an individual has type 2 diabetes or is at high risk (NICE 2017). Risk assessment is recommended in certain predefined groups. No particular risk assessment tool is recommended, rather NICE recommends that health professionals use a validated computer-based risk assessment tool using routine clinical data. If a computer-based risk-assessment tool is not available, they recommend a validated self-assessment questionnaire giving the example the Diabetes Risk Score assessment tool.

2.2.4 Supports for individuals living with Type 2 Diabetes

Level 0 supports include the HSE online A-Z patient information and diabetes specific resources and signposting of services available through diabetes patient support groups (HSE Diabetes 2024). In addition all people who have been diagnosed with T2DM should be linked with the next tier (i.e. Level 1) services and be provided with at least two structured reviews with their GP and practice nurse annually. The CDM programme provides this for eligible people with T2DM who have a GP visit or medical card. Diagnosis is a key time for people with T2DM and every opportunity (including, but not limited, to CDM visits) should be used at this time to guide, educate and support newly diagnosed people to manage the condition effectively and for the person to live a full and healthy life.

a) Self-Management Education and Support

Self-management support aims to increase a person's knowledge, confidence and skills when looking after their health. Self-management support is about helping people to learn more about their condition, set goals, problem solve, and make plans to live a healthier life.

The following characteristics describe someone who is able to self-manage their long term condition. The person (HSE, 2017):

- Knows about their condition
- Follows a treatment plan (care plan) agreed with their health professionals
- Actively shares in decision-making with health professionals
- Monitors and manages signs and symptoms of their condition
- Knows how to respond to a deterioration in their condition
- Manages the impact of the condition on their physical, emotional and social life to the best of their ability
- Adopts lifestyles that promote health
- Has access to support services and has the confidence and ability to use them.
- Has support from family and friends, and work colleagues
- Is able to communicate their needs and the emotional impact of living with the condition.

Building positive health behaviours and maintaining psychological well-being are key foundations to achieving diabetes treatment goals and maximising quality of life. Self-Management support encompasses a broad range of interventions that aim to increase knowledge, skills and confidence of people living with T2DM in managing their health (HSE, 2017). Interventions to support Self-Management are varied and can include education sessions, online resources and support, counselling, or peer-support groups. These include, but are not limited to, diabetes Self-Management education and support, diet, physical activity, smoking cessation, alcohol limits, taking medications, weight management and psychosocial care. Individuals living with T2DM and their family and carers will be supported to make the best decisions for their health through programmes and initiatives to increase knowledge, skills, and confidence in diabetes self-management.

b) Training and guidance of Healthcare Professionals

Minimising bias, stigma and discrimination against people with T2DM needs to be at the forefront of health care provision. Being mindful of providing a consistently emotionally safe, non-judgemental, and encouraging space in all healthcare appointments is essential in order to fully support people with their diabetes care. Appropriate use of correct language is at the centre of each clinical engagement. See Section 5 for reference to the Language Matters documents.

Training for healthcare professionals should include MECC training and training in topics such as informed and supported decision making, the empowerment approach, and person-centred care. Psychosocial considerations are recommended when providing care for adults with T2DM and appropriate training provided, some recommendations are outlined in Appendix 4. It is important that healthcare professionals are enabled to avail of training by their line managers through, for example, release from work to attend, as appropriate.

Inclusive healthcare involves effective, respectful, and emotional, attuned communication between the person with T2DM and healthcare provider (Hendrieckx, Halliday, Beeney & Speight, 2020). Details on a

practical guide is available in the References section. The National Diabetes Service Scheme (NDSS) of the Australian Government has produced guidance to support healthcare professionals to identify, address, and communicate about, emotional health problems during consultations with adults with T2DM (NDSS). Specific training on effects of pharmacotherapy and technology as appropriate should be available to healthcare professionals to help optimise clinical outcomes for those at risk of or living with T2DM.

2.3 LEVEL 1 GENERAL PRACTICE AND PRIMARY CARE TEAM

2.3.1 Overview and patient journey

Most adults with type 2 diabetes present initially to primary care. The general practitioner (GP), general practice nurse (GPN), and the wider multidisciplinary primary care team, work in partnership with the person living with diabetes to optimise Self-Management and patient outcomes. The members of the multidisciplinary team are made up of Doctor, Nurses, Dietitians, Occupational Therapists, Podiatrists, Psychologists, Social Workers and Physiotherapists. The community pharmacist plays an important role in working with the patient to maximise medication benefit and promote medication safety. Based on data from the iSIMPATHY model, a detailed proposal for a pharmacist delivered holistic medication review is currently under consideration by the HSE, and would appear to be of great benefit in the management of people with type 2 diabetes, multimorbidity and polypharmacy. Together, primary care stakeholders work to identify diabetes early, optimise diabetes management, and prevent and manage complications.

Person-centred care is a key goal in the organisation of care for people living with type 2 diabetes in primary care and should be central to all aspects of the patient journey.

Some key moments in the patient journey in primary care include:

- Screening for diabetes in people with risk factors, referral and signposting to diabetes prevention services and resources
- Initial management, regular ongoing management at appropriate complexity level, appropriate vaccination, screening for the complications such as cardiovascular disease, diabetic kidney disease and provision of a foot examination.
- The person living with diabetes is also eligible to attend for retina screening via the retina screening program. General practice teams are asked to validate that the patient has a diagnosis of diabetes as a part of this process.
- Individualised care, considering differing persons' priorities and ensuring an integrated person-centred approach for patients, their families, and carers throughout the lifespan of the person living with diabetes. The care plan provided at the CDM review can be an important component of this process.
- Referral to free self-management education and support
- Onward referral to specialist services within community care hubs and secondary care as outlined in line with national guidance.
- Communication with people living with diabetes which is matched with the individual needs of the patient. To achieve this we incorporate approaches supporting use of IT, sensitivity to literacy, language, sensory issues or any communication challenge faced by the patient.

This model of care seeks to empower patients to experience the best possible patient journey grounded in a holistic empathetic structure. It should be effortless for the patient and incorporate pathways that

are transparent and equitable. There must be a focus on pathways which incorporate vulnerable groups at all levels of the model of care, recognising that vulnerable groups may have specific challenges in the prevention and management of type 2 diabetes.

2.3.2 Level 1 Care

All healthcare professionals should be supported to initiate person-centred, non-stigmatising, conversations about risk factors for diabetes, using the pillars documented in the MECC programme (Appendix 5). Screening tools are available and can assist in recognising patients for whom additional screening would be indicated.

Full use of the Opportunistic Case Finding program should be made in eligible patients, and referral of people with a diagnosis of prediabetes to the Diabetes Prevention Programme should be made.

Where a diagnosis of T2DM is made, eligible patients are enrolled in the Structured Chronic Disease Management Programme in General Practice. It entitles individuals with a diagnosis of type 2 diabetes who are aged 18 years and over, and who have a medical card or doctor visit card, to two scheduled reviews with their GP per annum, and a preceding visit with their Practice Nurse for physical examination, bloods and education. These collaborative consultations focus on lifestyle health behaviour improvements and/or medical management of diabetes and associated risk factors, depending on individual needs. The GP and person with type 2 diabetes agree a joint care plan every 6 months to address aspects of their care that are of importance to the individual. People are supported to self-manage T2DM through referrals to the free to all Self-Management education programmes delivered at Level 2 (see Appendix 1).

It should be noted that not all people diagnosed with type 2 diabetes are eligible for the CDM program, as this is only available to those with a medical card or GP visit card. This may risk widening healthcare inequalities among people with T2DM. Research carried out using data from The Irish Longitudinal Study of Aging (TILDA). 31.6% of people with self-reported type 2 diabetes, aged 50 years and over, did not have a medical card or GP visit card (O'Neill et al 2019).

People with a new diagnosis of T2DM should be offered referral to evidence-based diabetes self-management education and support (DSMES) courses within three months of diagnosis with follow-up as required using face to face and blended options which are delivered at Level 2 (Appendix 1). Provision of patient educational materials and support in a timely manner is of the utmost importance considering the practical and psychological burdens of a new diagnosis of diabetes. HSE SMES services and patient support organisations add huge value and should be signposted to at the earliest opportunity. At an early stage patients need to be aware of dietary and movement advice and the programs and entitlements they are eligible for. Eg. Long Term Illness card, National Diabetic Retinal screening programme (see appendix 4)

TABLE 1: SELF-MANAGEMENT EDUCATION AND SUPPORT

(See Appendix 1 for more information)

All people with type 2 diabetes are recommended to have access to structured diabetes education, also referred to as self-management education and support (SMES) programmes, within 3 months of a new diagnosis and as required.

There are four critical times to evaluate the need for diabetes SMES to support people develop the skills to aid treatment plan implementation, medical nutrition therapy and well-being:
(1) at diagnosis,
(2) annually, and/or when not meeting treatment targets,
(3) when complicating factors develop (medical physical, psychosocial) and
(4) when transitions in care occur. (ADA 2024)

SMES programmes are offered via the community specialist ambulatory care hubs, in group and individual settings. The HSE provides group type 2 diabetes SMES programmes for people with a confirmed new diagnosis of type 2 diabetes and for those with an existing diagnosis, as required.

See Appendix 1 for more information on the programmes.

All Programmes:
- Are free of charge for all people with type 2 diabetes
- Are for medical card (GMS) and non-medical card holders
- Include a core course and a follow-up component in the programme
- Are offered in-person and online according to local needs.
- Welcome a support person to attend (i.e. family member, carer or friend).

People who are unable to avail of or are not suitable for a group SMES programme can be referred for an individual medical nutrition therapy consultation with the hub community dietitian.

Services are underpinned by the principle of equity, recognising that vulnerable groups may have specific challenges in the prevention and management of T2DM. This vulnerability may take several forms, including lower socioeconomic status, presence of language and cultural barriers, physical and intellectual disability etc. A tailored approach, offering different solutions/pathways may be necessary to allow these, and other vulnerable groups, to access appropriate diabetes management services in a timely manner.

For those presenting with suspected mental health distress (e.g. low mood, adjustment difficulties to new diagnosis of diabetes, anxiety, or eating disorder), the primary care team should freely and sensitively explore psychological, social, and emotional factors making diabetes care more challenging and then refer on to local psychological supports (e.g. psychologists in primary care, Diabetes Ireland support groups etc) or mental health services as appropriate for more in-depth effective intervention.

People with type 2 diabetes will present to multiple services within primary care for management of other health and social care needs. Ensuring they are enrolled in the CDM programme with their GP, or under the

care of the hospital-based diabetes service, depending on complexity, is the best way to support ongoing care and monitoring of their diabetes. Referral to specialist Level 2 services in ambulatory care hubs is for episodic care and specialist opinion / education / intervention to clinically optimise diabetes - not for ongoing care. It may be helpful in some instances for primary care staff who provide ongoing care for other health or social care needs to liaise with the persons GP or colleagues in specialist diabetes services for support with care delivery as required. Both surgical and non-surgical remission pathways for T2DM should be considered in future healthcare planning in Ireland.

2.3.3 Requirements, Education and Training

Resourcing of the Model of Care for T2DM is essential. Resourcing, recruitment, and retention of skilled professionals in all domains of level 1 are needed for the model of care to operate. Undergraduate, graduate and continued education for HCPs across all health and social care settings should provide education and training to address skills, knowledge and attitudes necessary to confidently and effectively support people living with diabetes holistically, with such services delivered in an integrated manner. Clinical leadership, leadership in change management and leadership in patient advocacy are needed for maximal operation of the Model of Care. Seamless patient pathways and integration of IT solutions are of great importance at level 1.

2.4 LEVEL 2 COMMUNITY SPECIALIST AMBULATORY CARE

2.4.1 Overview

Community Specialist Ambulatory Care will be provided by a multidisciplinary team of diabetes specialists in a Community Specialist Ambulatory Care Hub, providing timely access to education and clinical care for people with type 2 diabetes which is available and free to full population, where clinically indicated.
The community team will act as a specialist support to general practice and an important link to acute specialist services. Their aim is to achieve timely access to specialist services for patients living with more complex chronic disease, in a community setting. In addition, people presenting with multi-morbidity (e.g T2DM and cardiovascular disease, heart failure etc.) can access collaborative integrated care that is co-ordinated across the specialist community teams in the Hub (e.g the cardiology community specialist team).

2.4.2 Patient Journey

The Specialist Ambulatory Care Hub will provide episodic, rather than continuous care. The team member(s) will provide specialist opinion/education/intervention focused on optimising diabetes care and outcomes and then discharge back to referrer once the episode of care is complete, or if no further input indicated. The exception to this is the diabetes podiatrist, who will provide ongoing care, as per the Model of Care for the Diabetic Foot (HSE 2021).

Should the patient present with active foot disease the podiatrist, or Integrated Care Consultant working closely with the GP will transfer the care of the patient to their acute hospital based rapid access diabetic foot clinic.

Patients on insulin should receive ongoing care from a Consultant Endocrinologist, but in specific cases, with full agreement from the patient's own GP, and following education and stabilisation under the care of an endocrinologist, selected patients may have their insulin managed in primary care. Future input from the Specialist Ambulatory Care Hub multidisciplinary team can be sought for these patients as required.

Where the patient is deemed to require long term secondary care follow-up, or develops complexity appropriate for management at Level 3, the Integrated Care consultant or ANP will transfer care of the patient to their acute hospital-based out-patient department. Continuity of care for the patient is enabled through the split posts of the IC Consultant and ANP who provide care across the community and acute hospital settings.

The cANP and ANP Diabetes Integrated Care caseload will be agreed with the key stakeholders in each area as per service level needs and agreements.

TABLE 2: REFERRAL TO THE SPECIALIST AMBULATORY CARE HUB MULTIDISCIPLINARY TEAM

The following are examples (not an exhaustive list) of people who should be considered for referral to the Specialist Ambulatory Care Hub multidisciplinary team:

Newly Diagnosed Person with Type 2 Diabetes:

Referral to Diabetes Self-Management Education and Support (SMES) and one to one medical nutrition therapy with Dietitian as appropriate*

**People who are unable to avail of, or are not suitable for, a group SMES programme can be referred for an individual medical nutrition therapy consultation with the hub community dietitian.*

- Referral to integrated care consultant / ANP in setting of complex presentation e.g.
- Clinical uncertainty as to type of diabetes, although presumed to be type 2 diabetes (unless ketotic or acutely unwell)
  - Patients under age 40 years
  - Patients with established atherosclerotic cardiovascular disease or diabetic nephropathy
  - Patients with established complications at diagnosis

Prediabetes

- Referral to Diabetes Prevention and Weight Management Dietitian for Self-Management education programmes (Diabetes Prevention Programme and Best Health Obesity management programme) or one-to-one medical nutrition therapy consultation as appropriate (Appendix 1).

Known T2DM with suboptimal glycaemia:

- Referral to Dietitian for medical nutrition therapy consultation
- Referral to CNS / ANP / integrated care consultant for advice / review for optimisation of glycaemia
- Referral to Self-Management Education and Support (Appendix 1)

Known T2DM with diabetes-related complications:

- Declining renal function (if eGFR <30 ml/min/1.73m2 refer to Level 3) or persistent microalbuminuria (>30mg/mmol)
- New atherosclerotic cardiovascular disease, or uncontrolled CV risk factors
- Painful peripheral neuropathy without the presence of active foot disease
- Pre-proliferative or proliferative retinopathy

T2DM with a specific clinical need not described above;

- Moderate, high risk or in remission diabetic foot
- Steroid-induced hyperglycaemia in people with T2DM
- Recurrent hypoglycaemia or impaired hypoglycaemic awareness
- Pre-pregnancy planning (Patients will attend acute services for duration of pregnancy)
- Patients who default from secondary care with a view to re-engaging them with services

Patients who meet criteria for T2DM care in the community hub should be referred to the hub whose catchment area the person with Diabetes home address lies within, assuming the hub in question has appropriate resourcing to accept referrals for T2DM care.

Requirements, Education and Training

Care will be delivered in a specialist ambulatory care hub, outside of the hospital setting, where the specialist diabetes multidisciplinary team (MDT) will be based. Co-location of the hub team members is necessary to maximise their impact on service delivery and patient outcomes.

All members of the MDT require electronic access to laboratory results. An IT infrastructure is required which integrates with both GP and hospital IT systems. All are necessary for safe and efficient patient care and communication. It is also required for collection and auditing of data which should be standardised nationally.

Resourcing, recruitment, and retention of skilled professionals in all domains of level 2 are needed for the model of care to operate. Undergraduate, graduate and continued education for HCPs across all health and social care settings should provide education and training to address skills, knowledge and attitudes necessary to confidently and effectively support people living with diabetes in an integrated manner.

The Specialist Ambulatory Care team minimum recommended staffing per Hub (150,000 population) (HSE, 2020):

- 0.5 WTE Integrated Care Consultant Endocrinologist, who also provides diabetes care in the acute hospital setting (0.5 matched WTE in hospital setting)
- 0.5 WTE Diabetes Registered Advanced Nurse Practitioner Integrated Care Diabetes, who also provides diabetes care in the acute hospital setting (0.5 matched WTE in hospital setting)
- 3 WTE CNS Diabetes Integrated Care (CNS DIC) (0.8 WTE in Integrated Care Hub and 0.2 WTE for hospital setting)
- 1 Clinical Specialist Dietitian*
- 3 WTE Diabetes Dietitians (Senior Grade)
- 3 WTE Diabetes Prevention & Weight Management Dietitian (Staff Grade)
- 3 WTE Diabetes Podiatrists (1 x Clinical Specialist Grade; 1 x Senior Grade; 1 x Staff Grade)
- 2 WTE Admin support
- 1 WTE Healthcare Assistant*
- Access to 1 WTE Clinical Psychologist *

An Operational Team Lead (Grade VIII) is responsible for co-ordination of the Specialist Ambulatory Care team operations. The Hub should also have access to pharmacist support for both medication review and advice and access.*

Additional funding required, to be considered as part of implementation plan

2.5 LEVEL 3 ACUTE SPECIALIST AMBULATORY CARE

2.5.1 Overview and Patient Journey

Acute specialist ambulatory care will provide multidisciplinary care for the highest complexity of diabetes that cannot be safely cared for in a community setting and requires long term follow up.

TABLE 3: REFERRAL TO THE ACUTE HOSPITAL MULTIDISCIPLINARY TEAM

The following people would most appropriately have their diabetes-related care managed by the acute specialist ambulatory multidisciplinary diabetes care team in the secondary care setting:

People with T2DM who:

- Need insulin
- Have progressive diabetic nephropathy
- Require dialysis
- Have significantly impaired renal function (<30mg/mmol) (CKD ≥ Stage 4 / eGFR ≤30ml/min/1.73m2)
- Are pregnant
- Are on active cancer treatment
- Have active diabetic foot disease
- Have an active eating disorder
- Have gastroparesis
- Had bariatric/metabolic surgery in the last 2 years and in conjunction with the obesity care team
- Have early onset (< 40 years old)

The following list of patients are outside the scope of this document but be aware that they require referral and management in a Level 3 acute care setting:

- With MODY (maturity onset diabetes of the young)
- Who have cystic fibrosis related diabetes
- Who have secondary causes of diabetes e.g. diabetes due to endocrinopathies (Cushings, Acromegaly), pancreatitis and post pancreatic surgery
- Who have new onset of diabetes post-transplant (NODAT)
- With Genetic causes of diabetes (e.g.) Turners Syndrome.

Requirements, Education and Training

Care will be delivered in the hospital setting, where the specialist diabetes multidisciplinary team (MDT) will be based.

All members of the MDT require electronic access to laboratory and technology results. An IT infrastructure is required which integrates with GP, Hub, and hospital IT systems. This is necessary for safe and efficient patient care and communication. It is also required for collection and auditing of data which should be standardised nationally.

Resourcing, recruitment, and retention of skilled professionals in all domains of level 3 are needed for the model of care to operate. Undergraduate, graduate and continued education for HCPs across all health and social care settings should provide education and training to address skills, knowledge and attitudes necessary to confidently and effectively support people living with diabetes, and to work with HCPs across all levels of care in an integrated manner.

Team Members in a Level 3 Service:

Note: Level 3 and Level 4 care is delivered by the same team- the hospital-based diabetes MDT-i.e. there is not a separate team to deliver Level 3 and Level 4 care. This must be taken into account when resourcing the diabetes MDT appropriately. Figures recommended are based on international figures and will require further consideration in the development of a National Diabetes Strategy.

Recommended level 3 specialist diabetes MDT staffing per 250000 population (JBDS 2023)

- 2.5 WTE endocrinologists (this is for diabetes only, and does not incorporate staffing for endocrinology/ general internal medicine) including 0.5 WTE integrated care. Consultant endocrinologist who also provides diabetes care in the community specialist ambulatory care hub
- 1.5 WTE RANP including 0.5 WTE Integrated diabetes RANP who also provides diabetes care in the community specialist ambulatory Care hub
- 5 WTE diabetes CNS (separate to the CNS CD hub team)
- 4 WTE diabetes dietitians (1 WTE Clinical Specialist, 2 Senior Grade, 1 WTE staff grade)
- 3 WTE diabetes podiatrists per 150.000 population (1 WTE Clinical specialist podiatrist, 1 WTE senior podiatrist, 1 WTE staff grade podiatrist (Diabetic foot model of care 2021)
- 1 WTE psychologist
- 1 WTE pharmacist
- 1 WTE healthcare assistant
- Admin support

Additional funding will be required for some of the above posts, to be considered in implementation plan

2.6 LEVEL 4 SPECIALIST HOSPITAL CARE

Overview: Key elements of care provided at this level

This level describes patients with T2DM who have been admitted to acute services under a Medical Consultant. Within the acute setting, the Medical Consultant responsible for the admitted patient will request consultations for patients diagnosed with T2DM from speciality services / healthcare professionals with the multidisciplinary team. The aims of care at this level are to treat the presenting complaint, optimize health and glycaemia, to reduce bed days where possible, and support a multidisciplinary discharge plan to the appropriate services as part of end-to-end diabetes care.

Individual's Journey:
While this is a non-exhaustive list, the most common indications for diabetes-related admission and/or consult request to the inpatient diabetes team would include:

- Hyperglycaemia or Hyperosmolar Hyperglycaemic State in the presence of concurrent infections, steroids, or nasogastric feeds
- Euglycemic diabetic ketoacidosis
- Severe or recurrent hypoglycaemia
- Active diabetes related foot disease - Charcot arthropathy and/or infection
- Off-loading or surgical debridement of the foot
- Dialysis and advanced renal disease in individuals with diabetes
- Acute Coronary Syndrome in individuals with diabetes
- Pregnancy in women with diabetes (this is not within the remit of this model of care but covered in the Pregnancy in Diabetes Model of Care,2024)
- Metabolic/bariatric surgery in individuals with diabetes
- Cerebrovascular accident requiring nasogastric feed in individuals with diabetes
- Psychiatric admissions in individuals with diabetes
- Any non-diabetes related admission that is complicated by hyper- or hypoglycaemia in individuals with diabetes e.g. care of the elderly, oncology, perioperative optimisation of blood glucose, orthopaedic surgery etc.
- Palliative or end of life care in individuals with diabetes

In line with the ICPCD Model of Care, during any inpatient stay all persons diagnosed with diabetes should be linked with the appropriate team members, and ensure that on discharge all individuals are linked with the appropriate specialist diabetes services. In an inpatient setting a modified version of the NHS Institute for Innovation "Think Glucose" traffic light system is a tool that can be used to triage inpatient referrals to the diabetes team. This assessment tool provides hospital staff with guidance as to when a patient requires input from the specialist diabetes team, where available. (Ryder 2014). These are not hard and fast criteria, and staff should always use their professional judgement and refer to local policy when making referrals about individual patients:

Red: Always Refer

- Acute Coronary Syndrome • Diabetic Ketoacidosis / Hyperosmolar Hyperglycaemic State • Severe hypoglycaemia • Newly diagnosed diabetes of atypical presentation • Intravenous insulin infusion with glucose outside limits • Previous problems with diabetes as inpatient e.g. history of severe hypoglycaemia or DKA/HHS as inpatient• Intravenous insulin infusion for over 48 hours • Impaired consciousness • Unable to self-manage • Parenteral or enteral nutrition or prolonged fasting • Foot ulceration • Sepsis • Patient request

Orange: Sometimes Refer

- Significant educational need • Intravenous insulin infusion with good glucose control • Nil by mouth more than 24 hours post surgery • Persistent hyperglycaemia • Stress hyperglycaemia • Poor wound healing • Steroid therapy

Green: Referral to diabetes team not normally required

- Minor, self-treated hypoglycaemia • Transient hyperglycaemia • Basic educational need • Routine dietetic advice • Well managed diabetes • Good self-management skills • Routine diabetes care

Some individuals will need referral to the diabetes podiatrist as an inpatient but not to the rest of the diabetes inpatient team – for example in the case of a primarily vascular indication in an individual with Type 2 diabetes.

The discharge process should be well planned, documented and communicated to the person with diabetes, their carers and with the individual's GP and / or all appropriate members of their specialist diabetes service, for seamless end-to-end care. Consider need for referral to SMES services. A single discharge summary should be generated with input from all of the MDT. On discharge from hospital people with Type 2 diabetes should be linked in with all appropriate community diabetes services in line with the ICPCD.

For vulnerable populations in institutions who are unlikely to have a specialist inpatient diabetes team e.g. prison populations or psychiatric hospitals, contact for clinical support from the GP or diabetes service the patient is under should be sought as required

End of life care: The focus in hospital-based end of life care shifts to ensuring that the symptoms of hyper- and hypoglycaemia are managed and minimised. The priorities become avoiding metabolic decompensation and diabetes-related emergencies, with the least invasive testing and minimum effective amount of medication. Open and sensitive communication with families and carers about care plans is imperative. The clinical care recommendations are covered in the HSE Diabetes Care: Towards End of Life document (HSE 2022).

Service user involvement and respect for their diabetes self-management is critical at all stages of hospital admission. Individuals with diabetes manage their condition on a day to day basis when out of hospital and should continue to self-manage during a hospital admission unless there is a specific reason why they cannot and in line with other National policies (e.g. sharps disposal). The choice to continue to self-manage (including self-monitoring of blood glucose, sharps disposal, use of diabetes technology and insulin administration) during admission, if well enough to do so, should be that of the patient, via collaborative

conversations and joint decision making with hospital staff. There is guidance from the UK based Joint Diabetes Societies for Inpatient Care detailing how service user involvement can be integrated with the rest of the hospital care to provide safe and effective management of diabetes in hospital. Advice should also be sought from the hospital diabetes team, remotely or in person, and according to local policy.
Access to a range of appropriate food choices for diabetes self-management should be facilitated as far as possible in an inpatient setting. A nutrition care plan that meets patients' medical nutritional therapy requirements is an integral component in inpatient diabetes care. Nutrition standards for therapeutic diets including diabetes are covered by the HSE Food, Nutrition and Hydration Policy for Adult Patients in Acute Hospitals (2018)

In individuals with diabetic foot disease, engagement regarding following an agreed off-loading plan while in hospital, and education in relation to foot risk classification and risk of amputation, may be necessary.

The purpose of this Model of Care is not to give clinical guidance and there are excellent, up to date defined clinical guidelines in relation to hospital-based diabetes care from:

- The American Diabetes Association Diabetes Care in the Hospital (ADA 2024)
- Joint British Diabetes Societies for Inpatient Care Group (Sampson 2018)
- Diabetic Foot Model of Care 2021 (HSE 2021)

Requirements:

- Optimal staffing in a specialist inpatient diabetes care team includes the MDT members outlined in the Appendix 6 (however the best diabetes care possible should still be delivered within the staffing available):

Note: Level 3 and Level 4 care is delivered by the same team- the hospital-based diabetes MDT-i.e. there is not a separate team to deliver Level 3 and Level 4 care. This must be taken into account when resourcing the diabetes MDT appropriately. Figures for a specialist inpatient diabetes team should consider international figures and contextualisation for the Irish hospital setting and will require further consideration in the development of a National Diabetes Strategy.

Training requirements to support this level:

- The skills and competencies addressed in the training should be relevant to the level of service provided, with opportunity for HSCPs and nursing (NMBI approved) to develop clinical specialist and advanced roles in inpatient diabetes care.
- Training and supports to develop subspecialty in inpatient diabetes care for physicians.
- Education and training in diabetes for hospital teams needs to include hypoglycaemia/ hyperglycaemia management, insulin adjustment, sick day advice, technology, DKA/HHS management, managing insulin regimens and enteral feeds, and safe prescribing practices for non-insulin therapies in type 2 diabetes mellitus
- MECC

Metabolic Surgery

In individuals with comorbid type 2 diabetes and obesity, the current evidence suggests that metabolic surgery is safe, and is more effective than best medical care in producing weight loss and improvements

in glycaemic control. Metabolic surgery would likely result in a reduced risk of T2D-related complications and a reduction in associated health service utilisation over the longer term. Even based on conservative assumptions, a metabolic surgery programme provided as part of the T2D clinical care pathway would be an efficient and highly cost-effective use of healthcare resources relative to best medical care. Metabolic surgery should be provided in the context of a programme including end-to-end care, from referral, pre-operative assessment, the acute surgical care episode through to long-term follow-up. Additional staff would be required to avoid existing surgical care being displaced. The success of a metabolic surgery programme would be dependent on the integration of patient management between primary and secondary care. Development of care pathways that include linkage to hospital and community services would be necessary to support GPs in providing long-term follow-up to these patients. The Obesity National Clinical Programme will support the Diabetes National Clinical Programme in the planning and delivery of metabolic surgery care pathways (HIQA HTA 2022)

3.0 Implementation

To realise the benefits, in health and economic terms at individual patient, health service and societal level, full implementation of the model of care is necessary. The NCP Diabetes will develop a detailed implementation plan to support the delivery of services in line with this MoC, including outlining stakeholder roles, responsibilities and identifying and delivering enablers.

In proposing the current MoC, the programme is cognisant that there are numerous deliverables to be achieved in the short to medium term (e.g. ECC rollout, Registry development). Of course demands will change in the longer term as efforts at the prevention of diabetes increase , new treatments become available, the population ages and more people look to access care, which is why we recommend a regular update of the T2DM MOC in line with updating of other key documents in the ICPCD.

General requirements to deliver services in line with the T2DM MOC include, but are not limited to:

- The recruitment and retention of a skilled workforce and the capacity to develop and implement new roles;
- Training and education to support the development of integrated diabetes service for hospital and community staff.
- Defined metrics including structural, service procedures, processes and outcomes for each level of service
- Patients reported experience and outcome measures.
- Key performance indicators which reflect the success of the service as defined by the National Clinical Programme for diabetes in collaboration with services
- Established national and local governance structures
- The full implementation of supporting frameworks e.g. ”Making Every Contact Count” and “Living Well with a Chronic Condition: The National Framework and Implementation Plan for Self-management Support for Chronic Conditions: COPD, Asthma, Diabetes and Cardiovascular disease”.
- The availability of adequate physical facilities and digital services for the hub in each area;
- The availability of management support and expertise at the national and local levels;
- The development of clinical ICT systems to support the work of the multidisciplinary teams, data capture and exporting systems together with the development of risk stratification and population health systems
- Robust and sustainable data monitoring and collection systems in place to record and monitor implementation service performance and delivery of safe and effective care.
- The ongoing support and strengthening of the GP contract for chronic disease prevention and treatment
- The continued development and delivery of the Integrated Care Programme for Older People in partnership with the delivery of the Programme for the Integrated Prevention and Management of Chronic Disease, with HCPs working together in an integrated way, within the ambulatory care hubs. This will identify and capitalise on opportunities for synergistic working and support the delivery of care for patients living with complex chronic disease and multimorbidity.
- Strong political, managerial and clinical leadership at all levels to implement and sustain the changes required to deliver integrated care for diabetes, as close to home as possible, within the health system.
- Adequate financial resources and capacity across the whole system will be required to deliver the necessary reforms across the four service levels.
- Timely access to Level 3 and level 4 treatment services for severe and complex diabetes is required nationally as a priority.

4.0 Governance

4.1 National Governance

The National Clinical Programme for Diabetes was established in 2010 with the overarching aim of improving diabetes healthcare services throughout Ireland and consequently reducing the mortality, vision loss and limb loss associated with diabetes.

Specific national governance functions of the National Clinical Programme for Diabetes include:

- Facilitating the implementation of local services and ensuring they are in line with the model of care
- Providing national leadership on diabetes care
- Developing accredited training programmes
- Developing national patient education programmes
- Developing appropriate key performance indicators, minimum service standards and reporting processes in the implementation of each level of service
- Developing standardised monitoring and evaluation of current service provision to ensure services are effective in terms of providing quality care balanced with cost effectiveness
- Providing a centralised resource of up-to-date information for healthcare professionals, patients, the media and the general public
- Fostering key relationships with patient advocacy groups (Diabetes Ireland) and other key stakeholders

4.2 Clinical Programme Key Collaborations

The National Clinical Programme for Diabetes will collaborate at a national level with a number of national programmes as outlined in figure 8 in the promotion of best practice, quality improvement and integrated service pathways for people with diabetes as well as training programmes and resources for patients and healthcare staff.

T2DM is a complex disease and collaboration with most other clinical programmes will be required including but not limited to renal, obesity, ICPOP, stroke, acute medical, oncology, surgery, vascular, scheduled and unscheduled care, trauma / orthopaedic, mental health NCP, eating disorders, intellectual disability, CF, palliative, cardiology.

Figure 8: *Key collaborations between the Diabetes Clinical Programme and National Clinical Programmes (NCP), Integrated Care Programmes (ICP) and National Policy Priority Programmes*

4.3 Local Governance

At local level, an ECC joint local implementation governance group will include key management, clinician and patient stakeholders across community, primary and secondary care settings to support the implementation and delivery of diabetes care. The functions of the local implementation governance group are to:

- Ensure a locally-driven focus on the development of services built around the needs of local populations living with diabetes
- Ensure appropriate leadership at the clinical and operational levels to develop and design services and to support the prioritisation and resourcing of these services
- Ensure local evaluation services are in place to drive service improvement and to feed in to national evaluation
- Ensure local care pathways continue to be developed and implemented to support the delivery of integrated care at the local level

4.4 Clinical Governance

The ICPCD referral guidelines set out the clinical governance for the members of the MDT and the latest version of these guidelines should be referred to, in conjunction with this document.

The clinical governance at each level of care is outlined below:

Level 0 and Level 1:

Clinical governance with General Practitioner

Level 2:

Clinical governance of patients referred directly to the Diabetes Nursing Service (Integrated Care) remains with the referring physician (GP or Integrated Care Consultant).

If the GP initiated referral requires further specialist input, the nurse will discuss with the Integrated Care Consultant who will then assume clinical governance for the patient for that episode of care.

In the case of intra-speciality patient referrals; following the specialist MDT meeting discussion and subsequent acceptance of an intra speciality referral, the clinical governance of the patient is then taken over by the relevant I.C. Consultant.

Advance Nurse Practitioner(s) work autonomously within teams and / or on an individual basis within their scope of practice outlined in the local service MOU (Memorandum of Understanding) with their supervising Consultant.

Clinical Nurse Specialist(s) work within teams, supporting the I.C. Consultant and within their scope of practice.

Podiatrists work autonomously within their teams and/or scope of practice and speciality.

Dietitians work autonomously within their teams and/or scope of practice and speciality.

The overall clinical governance rests with the referring GP or Integrated Care Consultant for the patient's diabetes.

Level 3:
Clinical governance with Consultant Endocrinologist and General Practitioner
Level 4:
Clinical governance with Consultant Endocrinologist, or admitting medical/surgical consultant, depending on local arrangements.

ANPs, podiatrists and registered dietitians at all levels work autonomously within their teams and/or scope of practice and speciality with overall medical governance as outlined above.

Clinical governance must adhere to:
1. The HSE Code of Governance (2015)
2. The HSE Patient Safety Strategy 2019-2024

4.5 Professional Governance

Professional governance for each disciplinary group within the multidisciplinary teams will be through their existing community or acute clinical line managers.

Within Nursing, the professional governance within an integrated care arena; for a CNS is as follows:

- The professional reporting relationship is to the Director of Public Health Nursing (DPHN) or designated Nursing Manager.
- The clinical reporting relationship is to the associated Consultant Endocrinologist / Integrated Care Consultant Endocrinologist or senior clinical decision maker with responsibility for the service/service user.
- Will report to the Operational Lead Integrated Care ICPCD Specialist Community Team on operational and administrative matters.

For the ANP;

- Is professionally accountable to the Director of Nursing with collaborative agreements with the Director of Public Health Nursing in the chronic disease ambulatory care hub(s) associated with service area.
- Is clinically accountable to the supervising Integrated Care Consultant Endocrinologist/Clinical Lead.
- Operationally liaises with the department/directorate/Director of Nursing/Assistant Director of Nursing (Acute)/ Director of Public Health Nursing / Assistant Director of Public Health Nursing (Community)/hub lead
- A Local Integrated Care Governance Group with operational and strategic governance responsibility will oversee and support RANP service development

Services for Adults

Medical governance of inpatients at Level 4 of the model of care may be under the Endocrinologist or the medical / surgical team that the patient is admitted under, depending on local arrangements. Streamlining and structuring the flow of patients in Level 4 with input as required from the diabetes team can impact on appropriate follow up after discharge.

As per the Model of Care for the Diabetic Foot, care is discharged back to GP with low-risk foot on discharge. In remission high / moderate risk foot would be discharged to Podiatry in the hub.

5.0 Education and Training for Health Care Professionals

5.1 Requirements for All Healthcare Professionals

Healthcare professionals will be supported to develop the skills, knowledge, competence and confidence to fully support the physical, psychosocial and emotional care of people at risk of, or living with Type 2 Diabetes.

The expansion of a higher degree of complexity via Enhanced Community Care presented in this Model of Care is only possible when integrated care teams have access to appropriate training, education and ongoing opportunity for continuing professional development.

The skills and competencies addressed in any training should be relevant to the level of service provided, with opportunities for health and social care and nursing professionals to develop clinical specialist and advanced roles and for physicians to advance in sub-specialities in diabetes care.

All disciplines engage in reflective practice, peer support and avail of opportunities within the multi-disciplinary team to utilise the expertise within teams to support each other.

Training includes:

- Mandatory training relevant to role and responsibility.
- Training to develop skills, confidence and competence to deliver appropriate level of care.
- Training to maintain clinical competency.
- Research and audit training

Training recommended for all:

Making Every Contact Count (MECC 2022) Training: Through MECC training health professionals develop skills to encourage patients to make healthier lifestyle choices during routine contacts to help prevent and manage chronic diseases. Following completion of the MECC training (Appendix 5) a further 'Enhancing your Brief Intervention Skills' workshop can be completed.

Behaviour Change: Behaviour change training may include -person centred care/counselling skills, motivational interviewing, cognitive behaviour therapy

Empowering approach to care: e.g. Knuston Diabetes Counselling and Empowerment Course

Language Matters /Stigma (Diabetes Ireland, 2023)

Psychosocial Care

The American Diabetes Association (2022) outlined useful recommendations for effective diabetes self-management strategies, including psychosocial considerations:

- Psychosocial care should be integrated with a collaborative, patient-centred approach with the goals of optimising health outcomes and health-related quality of life.
- Psychosocial screening and follow-up may include exploration of attitudes about diabetes, expectations for medical management and outcomes, affect or mood, general and diabetes-related quality of life, available resources (financial, social, and emotional), and psychiatric history.

- Assessment for symptoms of diabetes distress, depression, anxiety, disordered eating, and cognitive capacities using age-appropriate standardised and validated tools at the initial visit, at periodic intervals, and when there is a change in disease, treatment, or life circumstance. Including caregivers and family members in this assessment is recommended.

Diabetes and Emotional Health Practical Guide for health professionals (NDSS 2015)
This practical guide is designed to support health professionals to identify, address and communicate about emotional health problems during consultations with adults with type 1 or type 2 diabetes. It was developed by the National Diabetes Service Scheme (NDSS) of the Australian Government in 2015, with an update to a user friendly 2nd edition version as an interactive PDF in 2020. It provides practical information and resources to increase awareness and assist in managing the emotional and mental health aspects of diabetes. Chapters include 1-8 addressing: communication, facing life with diabetes, diabetes distress, fear of hypoglycaemia, psychological barriers to insulin use, depression, anxiety disorders, and eating problems. The final chapter provides guidance on making referrals to mental health professionals.

Mental Health: Mental Health and Suicide Prevention Training (HSE 2024)

Physical Activity - Promoting Physical Activity & Behaviour Change -The NIPC (2024), in partnership with HSE Health and Wellbeing, offer this free, online training and education programme, designed to equip healthcare professionals in Ireland with the core knowledge, skills and competences to deliver, understand and support patients to undertake physical activity.

Smoking Cessation

Smoking cessation training (HSE 2024) - following completion of the MECC training modules which addresses tobacco, a workshop on enhancing skills can be completed-Smoking Cessation Training for Health Care Professionals

Technology for care delivery – Upskilling in relevant training to enable telehealth, digital, remote health care provision as relevant to role- eHealth Ireland (2024)

Services and supports – all staff should be aware of the supports available locally and be able to actively promote and signpost service users to additional services to enable service users to access the support and care they need.

5.2 Requirements For Specialist Teams

Training available via HSEland (taken from hub induction document available on ECCP Hub HSELand)

Making Every Contact Count (MECC) (6 x 30 min eLearning modules) Chronic Disease Management Course on HSeLanD

The nursing management of adults with type 2 diabetes mellitus - 3.5 - 4 hours online (HSeLanD) plus workshop (via local CNME)

Basic Life Support (BLS) training

Diabetic foot screening: 60 minutes online (HSeLanD)

Delivering Change in Health Services - Complete Guide 70 minutes (HSeLanD)

Training available from National Diabetic RetinaScreen Programme (2024)
Diabetic RetinaScreen Module for Health Professionals

Obesity training available delivered by NIPC (2024), funded by HSE
Advanced Practice in Obesity Management - this free, online training and education programme, designed for healthcare professionals in Ireland. The course covers the core knowledge and skills to deliver evidence-based obesity management.

Training for Self-Management Education and Support Educators
Programme specific training e.g. DISCOVER DIABETES–Type 2, Diabetes Prevention Programme, DESMOND, Best Health
Educator skills specific training –Behaviour Change Training, Facilitation skills training

Training for hospital teams
Education and training in diabetes for hospital teams needs to include hypoglycaemia/ hyperglycaemia management, insulin adjustment, DKA/HHS management, managing insulin regimens and enteral feeds, and safe prescribing practices for non-insulin therapies in type 2 diabetes mellitus. This should be undertaken as a part of professional training, formally through specific modules/courses (e.g. HSELand), and informally through workplace-based teaching sessions (small and large group), as best fits the educational need.

Devices – ABCD Glooko Academy (2024) modules on Continuous and Flash Glucose Monitoring

DISCIPLINE SPECIFIC TRAINING	
Health and Well being staff	Training, education and guidance to health and wellbeing staff in developing and delivering health promotion campaigns will be evidence-based, non-stigmatising, and promote positive messages about reducing risk and living with Type 2 Diabetes.
Dietitian	Those delivering care at level 0 will need an understanding of population health approaches and working within health promotion principles and practices to promote and support those at risk of and living with type 2 diabetes to create supportive healthy environments at individual, family, and community level. Those delivering care at level 1 need the relevant training to support care provision at level 1. In addition they will need an understanding of referral criteria for onwards referral to level 2 services when appropriate. For those delivering care at level 2 proficiency in medical nutrition therapy for type 2 diabetes is assumed. In addition, they will need training to address the more complex needs of those seen in ECC hubs due to the changing referral criteria: e.g. pharmacotherapy training in new and complex regimens including insulin, training in renal disease and it's interaction with diabetes and pre-pregnancy planning in diabetes. Those delivering care at level 3 will require training in medical nutrition therapy as it relates to insulin, gastroparesis, advanced renal disease, eating disorders, technology and metabolic/bariatric surgery in Type 2 diabetes. Those delivering care at level 3 will also need to have the skills and training to address the specific needs of young adults.

Nursing	Nurses will require further post graduate education and professional development depending upon their own scope of practice, workplace setting and position. Along with NMBI approved diabetes disease specific postgraduate education for those wishing to take up specialist posts, Nurses may require further education in additional programmes including (but not exclusively) nurse prescribing and advanced practice. Access to workplace CPD and appropriate mentorship to support nurses seeking these qualifications is an essential requirement. Other courses both structured and unstructured and attendance at study days, conferences maybe necessary to maintain their professional competence as outlined by the regulator, NMBI.
Medical	As well as the relevant professional training appropriate to the doctor's specialty (e.g. general practice-ICGP, endocrinology-RCPI) and grade (e.g. registrar, consultant), the doctor should avail of structured and unstructured training through a mix of educational programmes (e.g. short courses, certificate course) and workplace training (e.g. rotation within a specialist diabetes department).
Podiatry	Training will be required relevant to the grade position (staff, senior and clinical specialist) held by the podiatrist relevant to their job description/role and current advances in the professional field as well as disease specific advances. The FPT podiatrist will lead and deliver diabetic foot education to HSE community services. The MDFT podiatrist will lead and deliver diabetic foot education to HSE hospital workers. The Community foot protection team and hospital MDFT podiatrist will work together to provide foot education to GP's and Practice nurses.

5.3 Recommendations for Relevant Training Bodies

Medical doctors (e.g. ICGP, RCPI) should have access to specialist training, continuous medical education and mentorship schemes within Diabetes specialist services to make them proficient within their clinical practice and academic departments. It is this model's recommendation that doctors should have experience rotating through all levels of care.

Training pathways for diabetes clinical specialist and advanced practitioner posts should be introduced for HSCPs.

Recommendation for undergraduate and postgraduate Nurse education programmes that clinical placements incorporate rotating through all levels of care

6.0 Metrics and Evaluation

6.1 Community and Hospital Settings

It is important that this model of care includes a mechanism for monitoring implementation of recommendations, activity and outcomes. This is vital to ensure the delivery of a safe, high-quality, evidence-informed and equitable Diabetes service nationally. Indeed it is the professional responsibility of clinicians to engage in audit and research of their clinical practice to ensure that the best care is provided to their patients.

Level 1: In the first instance, as part of the Chronic Disease Management Programme GPs must return data on people enrolled on the CDM programme in their practice including; demographics, programme uptake and engagement, clinical details, multi-morbidity and lifestyle risk factors (smoking, weight, BMI and waist circumference, physical activity levels, alcohol). The CDM treatment programme requires GPs to carry out a number of specified physical examinations and clinical measurements at each visit such as BP, weight, HbA1c and diabetic foot examination which are reported on. Reports detailing the outcomes of the CDM programme have been published (2024) and are available online.

Levels 2 and 3: The Diabetes Integrated Care service across level 2 & 3 will be monitored and evaluated as part of the wider Integrated Care Programme for the Prevention and Management of Chronic Disease as it is rolled out as part of the Enhanced Community Care Programme and Modernised Care Pathways. A set of organisational process metrics are required to be collected and reported to the Local Governance Group and the Office of the Enhanced Community Care Programme on a regular basis. Each Diabetes integrated care service is required to collect and report data on key performance indicators to the Local Governance Group within their region on a regular basis for the purpose of performance monitoring and service improvement. The Chronic Disease Community Specialist Team Operational Lead aligned to the hub will oversee the return of data in line with nationally agreed pathways.

In addition to the organisational metrics, it is recommended that additional data to inform on activity and outcomes be collected by all Diabetes teams and be reviewed, discussed and acted upon at local level to inform continuous service improvement. The introduction of an integrated patient care record in time will support electronic data collection, collation and reporting. Please refer to the most up to date ICPCD metrics and evaluation guidelines online for further guidance (ICPCD 2024)

Level 4: Hospital Inpatient Enquiry (HIPE) data is the principal source of national data on discharges from acute hospital in Ireland. Figures for people with Diabetes discharged and those presenting with Diabetes complications should be monitored. Acute Diabetes teams should monitor and evaluate activity levels, patient experience and clinical outcomes. This should be supported by electronic patient care records and systems that collect, collate and report data.

This model of care recommends that a national diabetes registry is established. This registry should not only act as a mechanism of determining prevalence but should also enable quality improvement processes to be implemented to support collection, collation, analysis and reporting of a suite of structure, process and outcome metrics which draw on best evidence for end-to-end diabetes care. This process would support service improvement initiatives and best practice in diabetes care by:

- Providing data that would support national and regional service planners to design, resource and implement diabetes services to meet population need

- Identifying accessibility challenges or identifying hard to reach groups in a particular area so that adaptations could be made to support increased accessibility and equity of the services
- Supporting research to improve and expand diabetes services to optimise patient experience and outcomes e.g. describing the clinical and cost effectiveness of diabetes services and new initiatives.

6.2 Experience and Outcome Measures

Reflecting the move towards a person-centred integrated care system for the prevention and management of chronic disease, the Integrated Care Programme for the Prevention and Management of Chronic Disease has been working with the Office of the Enhanced Community Care Programme to ensure a focus on people with Diabetes and staff experience measures as part of the national measurement and evaluation process for chronic disease services. Work is ongoing to implement a national approach to capturing staff experience, patient reported experience measures and patient reported outcome measures for all Enhanced Community Care Programme-funded services. This reflects the quadruple aim of high value care (Sikka et al 2015) and places an emphasis on taking a population health approach. In the interim, it is essential that an approach to capturing patient experience and outcome measures as part of the above-described regional measurement and evaluation process should be agreed, implemented and acted upon at the local level.

Patient reported outcome measures (PROMs) are self-reported instruments that report health status directly from a patient. These can include biological and physiological variables, symptoms, functional status, activities of daily living, health perceptions and/or quality of life. Both generic (e.g. SF-36, WHODAS 2.0, PROMIS, EQ-5D, W-BQ) and diabetes-specific PROMs (e.g. DDS, PAID, DTSQ, ADDQOL, DQOL) exist. It's important that clinicians and researchers select PROMs that are valid, reliable and relevant to the specific population and care setting when evaluating outcomes in diabetes. Electronic capture of PROMs has been shown to be feasible in clinical diabetes care in other jurisdictions and should be considered to align with the ICPCD framework for incorporating e-health and technology in clinical practice.

Patient reported experience measures (PREMS) such as patient surveys and patient narratives should be considered in partnership with PROMs to provide more detail on the person with Diabetes views on both the process and the outcome of care received in both inpatient and outpatient settings (Coulter et al 2009).

7.0 References

- ABCD Glooko Academy (2024) - https://abcd.care/dtn/academy
- ADA (2024) ‘5. Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes: Standards of Care in Diabetes - 2024’ Diabetes Care, 47(1), pp. s77-S110. https://doi.org/10.2337/dc24-S005
- ADA (2024) American Diabetes Association Professional Practice Committee Standards of Care in Diabetes 2024;47(Supplement_1):S1–S313 https://doi.org/10.2337/dc24-S002
- ADA (2024). 16. Diabetes Care in the Hospital: Standards of Care in Diabetes—. Diabetes Care, 47(1), pp.S295-S306.
- Australian Commission on Safety and Quality in Healthcare. Evidence on PROMs [Internet]. Canberra: Australian Government; 2022 [cited 2022 September 22]. Available from: https://www.safetyandquality.gov.au/our-work/ indicators-measurement-and-reporting/patient-reported-outcomes/proms-lists/list-generic-proms
- Balanda, K.P., Barron, S., Fahy, L., McLaughlin, A. Making Chronic Conditions Count: Hypertension, Stroke, Coronary Heart Disease, Diabetes. A systematic approach to estimating and forecasting population prevalence on the island of Ireland. Dublin: Institute of Public Health in Ireland, 2010.
- Bommer C, Heesemann E, Sagalova V, Manne-Goehler J, Atun R,B€arnighausen Tet al. The global economic burden of diabetes in adults aged 20–79 years: a cost-of-illness study.Lancet DiabetesEndocrinol2017;3633: 423–430.
- Borisenko, O, Colpan, Z, Dillemans, B, Funch-Jensen, P, Hedenbro, J & R. Ahmed, A (2015) Clinical Indications, Utilization, and Funding of Bariatric Surgery in Europe, available at: https://link.springer.com/article/10.1007/s11695-014-1537-y (accessed January 2021)
- CDM (2019) Chronic Disease Management Programme - https://www.hse.ie/eng/about/who/gmscontracts/2019agreement/chronic-disease-management-programme/
- https://www.hse.ie/eng/about/who/gmscontracts/2019agreement/chronic-disease-management-programme/chronic-disease-management-treatment-programme.pdf.
- CDM (2024) Chronic Disease Management Programme Publications
- https://www.hse.ie/eng/services/news/media/pressrel/hse-publishes-second-report-into-the-implementation-of-the-structured-chronic-disease-management.html
- Central Statistics Office (2016). Census of Population 2016 - Profile 3 An Age Profile of Ireland. Available at https://www.cso.ie/en/releasesandpublications/ep/p-cp3oy/cp3/ (accessed January 2021)
- Coulter, A., Fitzpatrick, R., Cornwell, J. 2009. The Point of Care. Measures of patient’s experience in hospital: purpose, methods and uses. Available from: https://www.kingsfund.org.uk/sites/default/files/Point-of-CareMeasures-of-patients-experience-in-hospital-Kings-Fund-July-2009.pdf
- Department of Health (2013) Healthy Ireland Framework 2013-2025, available at: https://assets.gov.ie/7555/62842eef4b13413494b13340fff9077d.pdf (accessed January 2021)

- Department of Health (2019) Healthy Ireland Framework 2019-2025, available at: https://www.gov.ie/en/publication/e8f9b1-healthy-ireland-framework-2019-2025/ (accessed January 2024)
- Department of Health (2019) Sláintecare Action Plan 2019, available at: https://www.gov.ie/en/publication/109e2b-slaintecare-action-plan-2019/ (accessed January 2023)
- 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.
- Devlin, N, and Appleby, J. Getting the most out of PROMS. London: The Kings Fund; 2010. Available from: https:// www.kingsfund.org.uk/sites/default/files/Getting-the-most-out-of-PROMs-Nancy-Devlin-John-Appleby-Kings-FundMarch-2010.pdf
- Diabetes Ireland (2023) Language Matters https://www.diabetes.ie/talking-about-diabetes-language-matters-diabetes-ireland/
- Ehealth Ireland (2024). https://www.ehealthireland.ie
- Economic and Social Research Institute (ESRI) (2019) Growing up in Ireland: Physical and Health Development. Cohort '98 at 20 years old in 2018/19 — Key Findings No. 2. Dublin, available at: https://www.esri.ie/system/files/publications/SUSTAT79.pdf (accessed January 2021)
- European Commission (2020). Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions: Short term EU health preparedness for COVID-19 outbreaks. Brussels COM (2020) 318 Final
- Forde, R., Dinneen, S., Humphreys, M., Carmody, M., Clarke, A., O Leary, K., Conway, J. (2009) Review of Diabetes Structured Education. Republic of Ireland: Health Service Executive.
- Friel KM, Gillespie P, Coates V, McCauley C, McCann M, O'Kane M, et al. Estimating and Examining the Costs of Inpatient Diabetes Care in an Irish Public Hospital. Diabetes Med. (2022) 39:e14753. doi: 10.1111/dme.14753
- Hamilton K, Rita Forde, Mette Due-Christensen, Katarina Eeg-Olofson, David Nathanson, Sophia Rossner, Sara Vikstrom-Greve, Ann-Kristin Porth, Yuki Seidler, Alexandra Kautzky-Willer, Laure Delbecque, Asli Zeynep Ozdemir Saltik, Yvonne Hasler, Vanesa Flores, Tanja Stamm, David Hopkins, Angus Forbes (2023) Which diabetes specific patient reported outcomes should be measured in routine care? A systematic review to inform a core outcome set for adults with Type 1 and 2 diabetes mellitus: The European Health Outcomes Observatory (H2O) programme,Patient Education and Counseling,Volume 116,2023,107933,ISSN 0738-3991,https://doi.org/10.1016/j.pec.2023.107933.
- Han, C., Song, Q., Ren, Y., Chen, X., Jiang, X., & Hu, D. (2022). Global prevalence of prediabetes in children and adolescents: A systematic review and meta-analysis. Journal of Diabetes, 14(7). https://doi.org/10.1111/1753-0407.13291
- Hendrieckx, C., Halliday, J.A., Beeney, L.J., Speight, J. (2020) Diabetes and Emotional Health: a practical guide for healthcare professionals supporting adults with Type 1 and Type 2 Diabetes. 2nd edn. Canberra: National Diabetes Services Scheme, Diabetes Australia. An Australian Government Initiative.

- HSE (2024) Mental Health and Suicide Prevention Training https://www.hse.ie/eng/services/list/4/mental-health-services/nosp
- HSE (2020) 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. Ireland: Health Service Executive. Available at: https://www.hse.ie/eng/about/who/cspd/icp/chronic-disease/documents/national-framework-integrated-care.pdf
- Health Service Executive. National corporate plan 2021-2024. Dublin, HSE; 2021. https://www.hse.ie/eng/services/ publications/corporate/hse-corporate-plan-2021-24.pdf
- HSE (2024) Smoking Cesssation https://www.hse.ie/eng/about/who/tobaccocontrol/intensive-smoking-cessation-training
- Health in Ireland, Key Trends 2022. Department of Health. Dublin. https://www.gov.ie/en/publication/fdc2a-healthin-ireland-key-trends-2022/
- Health Information and Quality Authority (HIQA) (2015) Health technology assessment of chronic disease self-management support interventions. Advice to the HSE. Dublin: Health Information and Quality Authority.
- The HSE Code of Governance (2015) https://www.hse.ie/eng/about/who/directoratemembers/codeofgovernance/hsecodeofgovernance2015.pdf
- The HSE Patient Safety Strategy 2019- 2024 https://www.hse.ie/eng/about/qavd/patient-safety/hse-patient-safety-strategy-2019-2024.pdf
- Houses of the Oireachtas. Committee on the Future of Healthcare - Slaintecare Report. Dublin: 2017. Available from: https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/committee_on_the_future_of_healthcare/ reports/2017/2017-05-30_slaintecare-report_en.pdf
- HSE (2016). Making every contact count: a health behaviour change framework and implementation plan for health professionals in the Irish health service. Available at https://www.hse.ie/eng/health/hl/selfmanagement/donegal/health-social-care-professionals/making-every-contact-count-framework.pdf (Accessed January 2024)
- HSE Diabetes (2024) https://www2.hse.ie/conditions/diabetes/
- HSE Model of Care Diabetic Foot (2021) https://www.hse.ie/eng/about/who/cspd/ncps/diabetes/MoC/diabetic-foot-model-of-care-2021.pdf
- HSE (2017) Living Well with a Chronic Condition: Framework for Self-management Support National Framework and Implementation Plan for Self-management Support for Chronic Conditions: COPD, Asthma, Diabetes and Cardiovascular disease. Available at: https://www.hse.ie/eng/health/hl/selfmanagement/hse-self-management-support-final-document1.pdf (accessed January 2024)
- Health Service Executive. Chronic Disease Management. https://www.hse.ie/eng/about/who/gmscontracts/2019agreement/chronic-disease-management-programme/

- National Framework for the Integrated Prevention and Management of Chronic Disease in Ireland 2020-2025 - https://www.hse.ie/eng/about/who/cspd/icp/chronic-disease/documents/national-framework-integrated-care.pdf
- Health Information and Quality Authority (HIQA) (2015) Health technology assessment of chronic disease self-management support interventions. Advice to the HSE. Dublin: Health Information and Quality Authority.
- Hehn C, Ounajim A, Fagherazzi G, Gasch-Illescas A, Montagu G, Rumeau-Pichon C, Elissalde JA, Braithwaite B, Servy H, Thivolet C, Thébaut JF. Development and validation of a Type 1 and Type 2 diabetes-specific patient-reported experience measure e-questionnaire: Diabetes reported experience measures (DREMS). Diabetes Epidemiology and Management. 2024 Jan 1;13:100189.
- HSE (2020) 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. Ireland: Health Service Executive. Available at: https://www.hse.ie/eng/about/who/cspd/icp/chronic-disease/documents/national-framework-integrated-care.pdf
- HSE (2022) Diabetes Care Towards the End of Life https://www.hse.ie/eng/about/who/acute-hospitals-division/hospital-groups/dublin-midlands-hospital-group/news/diabetes-care-towards-end-of-life-clinical-care-recommendations.pdf
- HIQA HTA (2022) Metabolic Surgery for CoMorbid T2DM and obesity www.hiqa.ie/reports-and-publications/health-technology-assessment/hta-metabolic-surgery-comorbid-t2d-and
- HSE Telehealth RoadMap 2024-2027 https://healthservice.hse.ie/staff/procedures-guidelines/digital-health/hse-telehealth-roadmap-2024-2027/
- HSE Digital Health Strategic Implementation Plan 2024 https://www.ehealthireland.ie/ehealth-functions/chief-technology-transformation-office-ctto-/conference-presentation-slides-sessions-1-to-7/2_hse-digital-health-strategic-implementation-plan_fthompson_jward.pdf
- ICPCD (2024) Integrated Care Programme for Chronic Disease https://cnh.hseland.ie/icpcd/about/
- IDF Diabetes Atlas 2021 – 10th edition [Internet]. International Diabetes Federation; 2021. Available from: https://diabetesatlas.org/idfawp/resource-files/2021/07/IDF_Atlas_10th_Edition_2021.pdf
- Integrated Care Programme for the Prevention and Management of Chronic Disease (2020) National Framework for the integrated prevention and management of chronic disease in Ireland 2020 – 2025.
- International Diabetes Federation Diabetes Atlas (2021) available at https://diabetesatlas.org/ (assessed 30th January 2024)
- Hernar, I., Graue, M., Richards, D. et al. Electronic capturing of patient-reported outcome measures on a touchscreen computer in clinical diabetes practice (the DiaPROM trial): a feasibility study. Pilot Feasibility Stud 5, 29 (2019). https://doi.org/10.1186/s40814-019-0419-4

- JBDS (2023) https://abcd.care/resource/current/jbds-19-optimal-staffing-good-inpatient-diabetes-service
- Khan MAB, Hashim MJ, King JK, Govender RD, Mustafa H, Al Kaabi J. Epidemiology of Type 2 Diabetes – Global Burden of Disease and Forecasted Trends: J Epidemiol Glob Health. 2019;10(1):107.
- Kindig D, Stoddart G. What is population health? Am J Public Health. 2003 Mar;93(3):380-3. doi: 10.2105/ajph.93.3.380. PMID: 12604476; PMCID: PMC1447747.
- Lancet Editorial (2023) Diabetes a defining disease of the 21st century. https://doi.org/10.1016/S0140-6736(23)01296-5(Accessed 12/02/2024)
- Langendoen-Gort M, Groeneveld L, Prinsen CAC, Beulens JW, Elders PJM, Halperin I, Mukerji G, Terwee CB, Rutters F. Patient-reported outcome measures for assessing health-related quality of life in people with type 2 diabetes: A systematic review. Rev Endocr Metab Disord. 2022 Oct;23(5):931-977. doi: 10.1007/s11154-022-09734-9. Epub 2022 Jul 2. PMID: 35779199; PMCID: PMC9515038.
- Leahy S et al (2015) 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 research and Clinical practice Volume 10 issue 3 Dec 2015 pg 241-249
- Lindekilde, N., Scheuer, S. H., Rutters, F., Knudsen, L., Lasgaard, M., Rubin, K. H., Henriksen, J. E., Kivimäki, M., Andersen, G. S., & Pouwer, F. (2022). Prevalence of type 2 diabetes in psychiatric disorders: an umbrella review with meta-analysis of 245 observational studies from 32 systematic reviews. In Diabetologia (Vol. 65, Issue 3). https://doi.org/10.1007/s00125-021-05609-x
- Loveman E, Frampton GK, Shepherd J, et al. (2011) The clinical effectiveness and cost-effectiveness of long-term weight management schemes for adults: a systematic review. Health Technology Assessment. Vol 15, Issue 2, p 1-182
- MECC 2022 Making Every Contact Count HSE https://www.hse.ie/eng/about/who/healthwellbeing/making-every-contact-count/training-programme
- National Advocacy Unit, HSE, National Disability Unit, National Disability Authority (2014). National Guidelines on accessible health and social care services -a guidance document for staff on the provision of accessible services for all available at: https://www.hse.ie/eng/services/yourhealthservice/access/natguideaccessibleservices/natguideaccessibleservices.pdf (accessed January 2021)
- National Diabetes Retinal Screening Programme Training (2024) https://nssresources.ie
- National Diabetes Services Scheme (2015): Emotional Health Resources https://www.google.com/url?q=https://www.ndss.com.au/about-diabetes/resources/emotional-health-resources/&sa=D&source=docs&ust=1708961827441763&usg=AOvVaw14ol9PUEbB3QlDpsj13v8Y (Accessed February 2024)
- National Institute for Health and Care Excellence (2017) Type 2 diabetes: prevention in people at high risk https://www.google.com/url?q=https://www.nice.org.uk/guidance ph38&sa=D&source=docs&ust=1708961827441391&usg=AOvVaw1MUlvX69A5VVyyV3KE3P8N (accessed February 2024)

- NIPC 2024, National Institute of Preventative Cardiology, Physcial Activity for Behaviour Change https://nipc.ie/physical-activity-behaviour-change-short-course
- NIPC 2024, National Institute of Preventative Cardiology, Short Courses (Obesity) https://nipc.ie/education/short-courses
- Nikpour, S., Mehrdad, N., Sanjari, M., Aalaa, M., Heshmat, R., Khabaz Mafinejad, M., Larijani, B., Nomali, M., & Najafi Ghezeljeh, T. (2022). Challenges of Type 2 Diabetes Mellitus Management From the Perspective of Patients: Conventional Content Analysis. Interactive Journal of Medical Research, 11(2). https://doi.org/10.2196/41933
- NSW Agency for Clinical Innovation (2013). Understanding the process to develop a model of care – An ACI framework, available at https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0009/181935/HS13-034_Framework-DevelopMoC_D7.pdf (January 2024)
- Nursing and Midwifery Board of Ireland NMBI (2015) Scope of Nursing and Midwifery Practice Framework. Available at https://www.nmbi.ie/nmbi/media/NMBI/Publications/Scope-of-Nursing-Midwifery-Practice-Framework.pdf?ext=.pdf . Accessed 19/03/24
- Nursing and Midwifery Board of Ireland NMBI (2019) Practice Standards and Guidelines for Nurses and Midwives with Prescriptive Authority (4th edition), Available at https://www.nmbi.ie/NMBI/media/NMBI/NMBI-Practice-Standards-Guidelines-02-03-2020_2.pdf?ext=.pdf . Accessed 19/03/24
- Nursing and Midwifery Board of Ireland NMBI (2020). Guidance for Registered Nurses and Midwives on Medication Administration. Accessed 19/03/24. Available at: https://www.nmbi.ie/NMBI/media/NMBI/NMBI-Medication-Administration-2020.pdf?ext=.pdf
- Nursing and Midwifery Board of Ireland NMBI (2021) Nursing and Midwifery Board of Ireland Code of Professional Conduct and Ethics for Registered Nurses and Registered Midwives. Accessed 19/03/24. Available at https://www.nmbi.ie/NMBI/media/NMBI/Code-of-Professional-Conduct-and-Ethics.pdf?ext=.pdf
- Oireachtas Committee on the Future of Healthcare (2017) Sláintecare Report, available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/165/270718095030-1134389-Slaintecare-Report-May-2017.pdf#page=1 (accessed January 2021)
- O'Neill KN, McHugh SM, Tracey ML, Fitzgerald AP, Kearney PM. Health service utilization and related costs attributable to diabetes. Diabetic Med. 2018; 35: 1727-1734
- O'Neill KN, McHugh SM, Tracey ML, et al.: Health service utilization and related costs attributable to diabetes. Diabet Med. 2018; 35(12): 1727–34
- Petrie, J. R., Guzik, T. J., & Touyz, R. M. (2018). Diabetes, Hypertension, and Cardiovascular Disease: Clinical Insights and Vascular Mechanisms. In Canadian Journal of Cardiology (Vol. 34, Issue 5). https://doi.org/10.1016/j.cjca.2017.12.005
- Rooney, M. R., Fang, M., Ogurtsova, K., Ozkan, B., Echouffo-Tcheugui, J. B., Boyko, E. J., Magliano, D. J., & Selvin, E. (2023). Global Prevalence of Prediabetes. Diabetes Care, 46(7). https://doi.org/10.2337/dc22-2376

- Ryder B, Burbridge W, Braycotton L, Ryder B, Cull M, Davies P, De P, Basu A, Lee B. Inpatient diabetes: do-it-yourself electronic referral system to support and enhance the Think Glucose project. Practical Diabetes. 2014 Jun;31(5):194-6.
- Sampson, M. and Jones, C., 2018. Joint British Diabetes Societies for Inpatient Care: clinical guidelines and improving inpatient diabetes care. Diabet Med, 35(8), pp.988-91.
- Sikka R, Morath JM, Leape L. The Quadruple Aim: care, health, cost and meaning in work. BMJ Qual Saf. 2015;24(10):608-10. Available from: https://dx.doi.org/10.1136/bmjqs-2015-004160
- Sláintecare (2019). National framework and principles for the design of models of care.
- The Scottish Diabetes Survey 2021. Scottish Diabetes Group: https://www.diabetesinscotland.org.uk/wp-content/uploads/2023/02/Diabetes-Scottish-Diabetes-Survey-2021-final-version.pdf
- Speight J, Reaney MD, Barnard KD. Not all roads lead to Rome—a review of quality of life measurement in adults with diabetes. Diabetic Medicine. 2009 Apr;26(4):315-27.
- Terwee CB, Elders PJM, Blom MT, Beulens JW, Rolandsson O, Rogge AA, Rose M, Harman N, Williamson PR, Pouwer F, Mokkink LB, Rutters F. Patient-reported outcomes for people with diabetes: what and how to measure? A narrative review. Diabetologia. 2023 Aug;66(8):1357-1377. doi: 10.1007/s00125-023-05926-3. Epub 2023 May 24. PMID: 37222772; PMCID: PMC10317894.
- Tracey ML, Gilmartin M, O'Neill K, Fitzgerald AP, McHugh SM, Buckley CM, Canavan RJ, Kearney PM. Epidemiology of diabetes and complications among adults in the Republic of Ireland 1998-2015: a systematic review and meta-analysis. BMC Public Health. 2016 Feb 9;16:132. doi: 10.1186/s12889-016-2818-2. PMID: 26861703; PMCID: PMC4748605.
- Tracey ML, McHugh SM, Buckley CM, et al.: The prevalence of Type 2 diabetes and related complications in a nationally representative sample of adults aged 50 and over in the Republic of Ireland. Diabet Med. 2016; 33(4): 441–5
- Vos T, Lim SS, Abbafati C, Abbas KM, Abbasi M, Abbasifard M, et al. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet. 2020 Oct;396(10258):1204–22.
- Wang H, Naghavi M, Allen C, Barber RM, Bhutta ZA, Carter A, et al. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet. 2016 Oct;388(10053):1459–544.
- Welch, A., & Vella, A. (2022). What is type 2 diabetes? In Medicine (United Kingdom) (Vol. 50, Issue 10). https://doi.org/10.1016/j.mpmed.2022.07.003
- World Health Organization Classification of diabetes mellitus. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.https://iris.who.int/bitstream/handle/10665/325182/9789241515702-eng.pdf?sequence

Appendices

APPENDIX 1

Self-Management Education and Support (SMES) Programmes

Self-management education and support (SMES) programmes (also referred to as structured patient education programmes) are internationally recognised as an essential component of the integrated prevention, treatment and management of type 2 diabetes. HIQA and the HSE Integrated Care Programme for the prevention and treatment of chronic disease recommend people living with chronic disease have access to evidence based SMES care and programmes, on diagnosis and thereafter as required (HiQA, ICP-CD).

Diabetes affects all aspects of a person's life. As people living with diabetes and their families provide almost 98% of their own diabetes care, it is recommended people have access to and complete SMES programmes, in group or individual settings. Building positive health behaviours and maintaining psychological well-being are foundational for achieving diabetes treatment goals and maximising quality of life (ADA 2024). SMES programmes support people to develop the knowledge, skills and confidence to make the complex daily decisions required for good health, optimum quality of life and reduced risk of possible diabetes related complications.

There are four critical times to evaluate the need for diabetes SMES to support people develop the skills to aid treatment plan implementation, medical nutrition therapy and well-being:

(1) at diagnosis,

(2) annually, and/or when not meeting treatment targets,

(3) when complicating factors develop (medical physical, psychosocial) and

(4) when transitions in care occur. (ADA 2024).

Evidence based group SMES programmes, that are developed in line with the HSE quality standards for diabetes SMES, serve to improve people's access to quality and effective programmes and offer peer support. The HSE quality standards for diabetes SMES programmes are: to have a defined philosophy, a defined curriculum and a formal training programme for educators, and to be audited and quality assured (Forde 2009).

People who are unable to avail of or are not suitable for a group SMES programme can be referred for an individual medical nutrition therapy consultation with the hub community dietitian. Individual consultations are also available with other members of the chronic disease community specialist hub team to meet people's care needs (e.g. diabetes specialist nurse, podiatrist, psychologist, consultant).

The HSE provides the following group SMES programmes for the prevention and treatment of type 2 diabetes:

All programmes are free of charge for all adults with T2DM e.g. those with a new or existing diagnosis, private patients, medical card (GMS) and GP visit card holders. People are offered the programme provided locally. Group SMES programmes include a core course component and a follow-up component. In-person and online programmes are offered as needed.

For People Living with	Group SMES Programme Name	Refer
Type 2 Diabetes	**DISCOVER DIABETES – Type 2 programme** (Diabetes insights and Self Care Options Via Education and Reflection)	People with a confirmed diagnosis of type 2 diabetes; those with a new or existing diagnosis.
	DESMOND (Diabetes Education and Self-Management for Ongoing and Newly Diagnosed)	People with a confirmed diagnosis of type 2 diabetes; those with a new or existing diagnosis.
Pre-Diabetes	**Diabetes Prevention Programme**	People with a confirmed diagnosis of pre-diabetes
Obesity	**Best Health Programme**	BMI ≥ 30 kg/m2 (or 27.5kg/m2 for South Asian, Chinese, Black African or Caribbean individuals) With two or more obesity related comorbidities

Referrals are accepted to SMES programmes in the community specialist ambulatory care hub as per the guidance in the most up to date version of: 'A Guide for Referral of patients to the chronic disease ambulatory care services'.

Support: People are welcome to bring a family member, carer or friend for support. It is recommended to book an extra place for a support person.

HOW TO REFER, SIGNPOSTING AND PROGRAMME INFORMATION:

TYPE 2 DIABETES SMES PROGRAMMES:

- Contact the community dietitian team in the community specialist ambulatory care hub for information on local services.
- Diabetes Ireland offers a group online education programme for people with a diagnosis of type 2 diabetes or pre-diabetes, called CODE (Community Oriented diabetes education). Contact: 01-8428118 or www.diabetes.ie.
- For detailed information on available Type 2 Diabetes SMES programmes: go to www.hse.ie/diabetescourses

PROGRAMMES SUPPORT PEOPLE:

- to gain an understanding of what diabetes is and how to treat and manage it
- to recognise their important role in: active self-care, partnership with their health care team and participating in diabetes check-ups
- to learn about diet and lifestyle treatments including the role of medical nutrition therapy, physical activity, smoking cessation, limiting alcohol intake, weight management and diabetes medication
- to learn about taking care of their wellbeing and mental health and developing strategies to cope and address their concerns about living with diabetes
- to develop behaviour change skills and strategies to support them with effective self-care of diabetes (e.g. coping, problem solving, goal setting, relapse prevention)
- to learn about other services and supports available (e.g. long term illness scheme, footcare services, retinal screening services, dental services, Diabetes Ireland support)
- with self-referral to appropriate services (e.g. GP, practice nurse, diabetes nurse specialist, Diabetic Retinal Screening, counselling services, etc).

SELF-REFERRAL:

- the option for self-referral to DISCOVER DIABETES-Type 2 or DESMOND or CODE is supported via the HSE A-Z website at www.hse.ie/diabetescourses. People can register for an in-person or online type 2 DSMES programme in one's own county. People can attend courses at locations of their preference

DIABETES PREVENTION PROGRAMME:

- Contact the community dietitian team in the specialist ambulatory care hub for information on local services. The programme is designed to prevent/delay the onset of the complications of diabetes.

OBESITY MANAGEMENT PROGRAMME:

- Contact the community dietitian team in the specialist ambulatory care hub for information on local programmes.
- The Best Health programme is designed to provide education and support to facilitate self-management of health behaviours related to weight and health management for those living with obesity.

References:

ADA (2024) '5. Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes: Standards of Care in Diabetes - 2024' Diabetes Care, 47(1), pp. s77-S110. https://doi.org/10.2337/dc24-S005

APPENDIX 2
Diabetes Clinical Guidelines

As outlined in the main body of the document, this Model of Care for T2DM is not intended for use as a clinical guideline. The links contained below are documents produced by relevant professional bodies which are in routine use in the clinical care of T2DM in Ireland at the time of writing.

American Diabetes Association Standards of Care in Diabetes 2024
https://diabetesjournals.org/care/issue/47/Supplement_1

Of note, the link above is to the most recent edition at the time of writing. For the most up to date recommendations, the reader should access the following link, which gives information about updates published online between annual Standards of Care publications https://professional.diabetes.org/standards-of-care/living-standards-update

European Association for the Study of Diabetes
https://www.easd.org/guidelines/statements-and-guidelines.html
https://www.easd.org/

Irish College of General Practitioners (2019) Diagnosis and management of uncomplicated Type 2 Diabetes in Adults (T2DM): A succinct practical guide for Irish General Practice: Quick Reference Guide
https://www.icgp.ie/go/library/catalogue/item/635EAD13-8305-4A73-9A19FB346193CBD5/

National Medicines Information Centre (2023)
https://nmiccomms.newsweaver.com/3qbtmkhgat/ybnmycp8rx3

APPENDIX 3
Care Plan CDM Programme

Confidential Personal Medical Information Registered on Chronic Disease Management Programme

My Personalised Care Plan

The information on this Personalised Care Plan form was discussed and agreed with my healthcare professional
It should assist me in taking care of my health and contains confidential and important information.
It should help when I need extra support or if my condition gets worse.

Date
Patient Name

Patient Addres

Date of Birth

Key Contact Numbers
GP Contact Number
GP Out of Hours Service

Things I have discussed with doctor/nurse about my medications
no

Health & Wellbeing

My concerns in relation to my health
pain in knees and ankles

Other things that matter to me
no

MY GOALS

Review previous goals

Overall goals agreed at my last review **Progress**

Lifestyle Goals agreed at my last review **Progress**

Review future goals

Overall Goals agreed at this review **Plan**
will trial exercise bike
Lifestyle Goals agreed at this review **Plan**

Other Services where I can get information or support to help manage my long term condition

Smoking	(Quit helpline 1800 201 203 and www.quit.ie)
Self Management Support	www.hse.ie/selfmanagementsupport
Healthy Eating	www.hse.ie/healthyeatingactiveliving
Alcohol	www.askaboutalcohol.ie
Exercise	www.getirelandactive.ie

Medications

APPENDIX 4

Service and Supports for Those at Risk of or Living with Type 2 Diabetes

SERVICES AND SUPPORT - USEFUL INFORMATION, CONTACTS AND LINKS	
Type 2 Diabetes Information	Referral to HSE type 2 diabetes courses via GP referral (option to refer in the Healthlink referral system). HSE type 2 diabetes courses information video for people living with type 2 diabetes https://www.youtube.com/watch?v=VQHRfl3tJg4 HSE Health A-Z website information on type 2 diabetes. www.hse.ie/diabetes HSE advice and booklets on living well with type 2 diabetes, including advice on diet, keeping active, mental health, alcohol, smoking, managing weight, foot care, driving, managing illness/sick days and managing diabetes related health problems. https://www2.hse.ie/conditions/type-2-diabetes/living-with/ Healthy eating for people with type 2 diabetes booklet available in English and the following languages; Arabic, Bengali, Chinese, French, Hindi, Pashto, Polish, Romanian, Russian, Spanish, Ukrainian, Urdu: https://www2.hse.ie/conditions/type-2-diabetes/living-with/eating-healthy/ Foot Care information leaflets for people with diabetes https://www.hse.ie/eng/about/who/cspd/ncps/diabetes/resources/education/ and www.healthpromotion.ie “Diabetes Smart” is a free short online course on type 2 diabetes. It is offered on the Diabetes Ireland website www.diabeteseducation.ie HSE My Diabetes emails. Sign-up for regular emails from a dietitian with advice and support about the common treatments for type 2 diabetes, healthy eating, mental health and much more. https://www.hse.ie/campaigns/sign-up/diabetes/ Sick day guidance for managing type 2 diabetes https://www.hse.ie/eng/about/who/cspd/ncps/diabetes/resources/education/
Pre-Diabetes Information	Referral to Diabetes Prevention Programme available via GP on diagnosis of Pre-diabetes (option to refer in the Healthlink referral system). Visit HSE Health A-Z website www.hse.ie/pre-diabetes, for information on Pre-diabetes , a booklet on Diabetes Prevention- a guide to healthy living can be downloaded and a video with information about the Diabetes Prevention Programme can also be found on this page.

SERVICES AND SUPPORT - USEFUL INFORMATION, CONTACTS AND LINKS	
Alcohol	www.askaboutalcohol.ie HSE Alcohol and Drugs Helpline 1800 459 459 Includes; alcohol drinks calculator, self-assessment tool and links to services.
Citizens Information Office	www.citizensinformation.ie 0818 07 4000
Counselling Services	HSE Counselling in Primary Care (CIPC) is available for medical card holders on referral from GP or Primary Care Team. https://www.hse.ie/eng/services/list/4/mental-health-services/counsellingpc/
Dental Services	www.welfare.ie or www.citizensinformation.ie
Diabetic Retinascreen	www.diabeticretinascreen.ie 1800 45 45 55
Driving And Diabetes	www.rsa.ie https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html
Eat Well	www.healthpromotion.ie www.healthyireland.ie https://www2.hse.ie/healthy-eating-active-living/ www.indi.ie Irish Nutrition and Dietetic Association –The official website of registered dietitians and nutritionists in Ireland – here you will find trusted, evidenced based information and fact sheets on a range of diet related topics Healthy eating recipes and food safety advice www.Safefood.eu Healthy Eating for Older people https://www.gov.ie/en/publication/9791c-healthy-eating-for-older-adults/ Healthy Food Made Easy: A Community Cooking Programme https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/heal/community-cooking-programmes.html
EHIC (European Health Information Card)	www.citizensinformation.ie www.ehic.ie
Entitlements	Information on entitlements such as the Long Term Illness Scheme, GP Visit cards, Medical Cards, Drugs Payment Scheme are available at https://www2.hse.ie/services/schemes-allowances/
Health related literature from the HSE	www.healthpromotion.ie Register for a healthcare professional account to have greater access, access to restricted publications and permission to order.
Medicine Support	National Medication Safety Programme www.safermeds.ie “Know, Check, Ask for your safety” My Medicines List - available in English and the following languages (Russian, Somalian, Georgian, Ukrainian, Arabic). For more information email: safermeds@hse.ie.mailto:safermeds@hse.ie

SERVICES AND SUPPORT - USEFUL INFORMATION, CONTACTS AND LINKS	
Mental Health	HSE website - www.yourmentalhealth.ie Minding Your Wellbeing is a free, online mental health and wellbeing, evidence-based programme from the HSE. This evidence-based programme. It consists of 5 video sessions (20 minutes each). https://www.hse.ie/eng/about/who/healthwellbeing/about-us/minding-your-wellbeing.html Text About is a free 24/7 service, providing everything from a calming chat to immediate support for your mental health and emotional wellbeing. Free-text HELLO to 50808 for an anonymous chat with a trained volunteer any time. www.textaboutit.ie
Physical Activity	https://www2.hse.ie/living-well/exercise/ www.healthpromotion.ie www.getirelandactive.ie Find information on local facilities and amenities where you can be active www.getirelandwalking.ie www.parkrun.ie www.sportireland.ie/keepwell
Samaritans	Samaritans telephone service is available 24 hours a day for confidential and non-judgmental support. www.samaritans.ie or Freephone 116 123 If you need a response immediately, it's best to call on the phone.
Social Prescribing	Social prescribing offers GPs and other health professionals a means of referring people to a range of non-clinical community supports which can have significant benefits for their overall health and wellbeing. https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/mental-health-and-wellbeing/social-prescribing/
Stress Management	Free online stress control classes https://stresscontrol.ie/ Mental Health Ireland Stress booklet https://www.mentalhealthireland.ie/wp-content/uploads/2022/04/Stress-Booklet.pdf?external=1
Support Organisations	Diabetes Ireland is the national charity dedicated to helping people with diabetes www.diabetes.ie Helpline 01 8428118. The Irish Heart Foundation is the national charity fighting stroke and heart disease. www.irishheart.ie Croí West of Ireland Cardiology Foundation www.croi.ie Irish Coalition for People living with Obesity, Patient advocacy and support for people living with obesity. The organisation delivers information sessions regularly in person and online https://icpobesity.org/ Bodywhys, The Eating Disorders Association of Ireland www.bodywhys.ie 01 2107906

SERVICES AND SUPPORT - USEFUL INFORMATION, CONTACTS AND LINKS	
Tax Relief Support	www.revenue.ie
Quit Smoking	www.quit.ie National Quitline 1850 201 203
Weight Management	Managing weight and living with type 2 diabetes: www.hse.ie/diabetes Talking about weight, information booklet for people to support people to manage weight, health and wellbeing https://www.hse.ie/eng/about/who/cspd/ncps/obesity/programme-resources/hse-talking-about-weight-guide-final-6.pdf Healthy eating meal plans to support weight management https://www.safefood.net/weight-loss Information on obesity diagnosis and treatment: https://www2.hse.ie/conditions/obesity/
Local Supports And Services	Consult your local "Directory of Services and Programmes for Adults with Asthma, Chronic Obstructive Pulmonary Disease (COPD), Diabetes, Heart Conditions and Stroke" compiled by your Self-Management Support Coordinator https://www.hse.ie/eng/health/hl/selfmanagement/resources-for-healthcare-professionals/resources-for-healthcare-professionals.html "Living Well" is a free 6 week group self-management programme for people living with, or caring for someone with one or more long-term condition. https://www.hse.ie/eng/health/hl/selfmanagement/living-well-programme/

Please Note:

- The current contact details and website links are correct at the time of printing.
- with developments of services and websites, these may change.

APPENDIX 5

Making Every Contact Count

The Making Every Contact Count (MECC) programme is a key action in supporting the implementation of Healthy Ireland, a National Framework for Improved Health and Wellbeing. 80% of GP consultations and 60% of hospital bed days relate to chronic diseases. By Making Every Contact Count health professionals can encourage people during routine consultations to empower and support people to make healthier choices to achieve positive long-term behaviour change.

The model for MECC is presented as a pyramid with each level representing an intervention of increasing intensity with the low intensity interventions at the bottom of the pyramid and the specialised services at the top. Implementing the Making Every Contact Count approach seeks to begin the process at the basic level of brief advice and brief intervention.

The Making Every Contact Count training programme is available to all HCPs in Ireland. It was developed in consultation with HCPs and service users in order to provide effective tools and knowledge to carry out a brief intervention. Information and links to access the online training and register for classroom based skills to practice training can be found at Training programme - HSE.ie

The Making Every Contact Count online training modules include:

- Introduction to behaviour change – providing a foundation in behaviour change theory and techniques including the underlying principles of a patient-centred approach.
- Four core topic modules on smoking, alcohol and drugs, healthy eating and active living.
- Two optional topic modules on mental health, overweight and obesity.
- A Skills-Into-Practice module - demonstrates the skills of how to carry out a brief intervention across a range of topics through a suite of video scenarios using real-life HCPs

Following completion of the on-line module there is an opportunity to complete a classroom-based 'Enhancing your brief intervention skills' workshop.

MECC complements existing engagement approaches by:

- Supporting HCP's to have a concise supportive conversation if doing your consultation by telephone or virtually.
- A MECC interaction takes a matter of minutes and is not intended to add to existing busy workloads.
- CPD points awarded for nursing staff and endorsed by HCP bodies
- Supports individuals in managing their own health.

Every day, people with chronic health conditions, their family members and carers will make decisions, take actions and manage a broad range of factors that contribute to their health. Self-management support acknowledges this and supports people to develop the knowledge, confidence and skills they need to make decisions and take actions in relation to their health conditions. The National Framework and Implementation Plan for Self-management Support for Chronic Conditions (HSE, 2017) provides an overview of self-management support and offers recommendations for implementation of self-management support in Ireland, along with a plan for implementation and priorities for early implementation.

Extended brief interventions will be conducted by health professionals with greater capacity to carry out this lengthier intervention, because of their specialist role or due to the specific service that they work in. This intervention should be delivered to individuals requiring more intensive support in their behaviour change efforts and/or who may be self-managing an existing chronic disease. The specialist services are delivered by practitioners who use specialised or advanced approaches to support individuals to change behaviour. These services include care delivered by HCPs specifically trained in delivering weight management interventions.

APPENDIX 6
The Multi-Disciplinary Team For Diabetes

Team Member	Role in Management
Consultant Endocrinologist	The Consultant Endocrinologist will provide clinical leadership in the provision of diabetes care within the ambulatory care hub (integrated care consultant) and secondary/tertiary care. The integrated care consultant will support the development and implementation of integrated diabetes services (Modernised Care Pathways) in the ambulatory care hubs, working in collaboration with a diabetes specialist multidisciplinary team, and partners in primary care. The integrated care consultant will also provide specialist diabetes services in the hospital, working in collaboration with a diabetes specialist multidisciplinary team, and partners in secondary/tertiary care. The consultant endocrinologist based in the hospital will work in collaboration with a hospital-based diabetes specialist multidisciplinary team to provide specialist care to people with diabetes in a hospital setting, in both an inpatient and outpatient setting. The consultant endocrinologist in both hospital and community will provide clinical governance for people with diabetes referred to them, will act as an advocate for the needs of people with diabetes, and will act as a resource for diabetes-related knowledge and training for the wider multidisciplinary team. The Diabetes Integrated Care Consultant, supported by their team, will implement the Modernised Care Pathways across their hospital and aligned hub(s). This will involve the triaging and review of patients across a number of streams including: • Clinical GP queries that can be responded to remotely - Consultant writes (letter by Healthlink), phones or emails GP with advice • Virtual Clinic – Consultant to GP group virtual case review • Rapid access face-to-face hospital outpatient clinic • Specialist Nurse/HSCP clinic under Consultant supervision • Face-to-face outpatient clinic • Consultant to patient virtual appointment
GP	GPs provide eligible patients with regular diabetes care through the Structured Chronic Disease Management Programme in General Practice. It entitles individuals with a diagnosis of type 2 diabetes who are aged 18 years and over, and who have a medical card or doctor visit card, to two scheduled reviews with their GP per annum, and a preceding visit with their Practice Nurse for physical examination, bloods and education. These collaborative consultations focus on lifestyle health behaviour improvements and/or medical management of diabetes and associated risk factors, depending on individual needs. The GP and person with type 2 diabetes agree a joint care plan every 6 months to address aspects of their care that are of importance to the individual. People are supported to self-manage T2DM through referrals to the free to all Self-Management education programmes delivered at Level 2. GPs are involved in the screening of patients with risk factors for type 2 diabetes opportunistically or via the Opportunistic Case Finding Programme. Where prediabetes is detected, patients are enrolled in the prevention program and referred to the Diabetes Prevention Program.

Team Member	Role in Management
GP cont'd	Key role in supporting, young people and adults at all levels of service through prevention, early identification, brief interventions, initial management and referring/ signposting to services as appropriate. Management of T2DM. Provides maternity care under the Maternity and Infant Care Scheme to women with Diabetes in Pregnancy. Essential to safeguarding processes.
General Practice Nurse	Works with GP supporting young people and adults with Diabetes through prevention, early identification, brief interventions, initial management and referring/signposting to services as appropriate. Also provides regular reviews. Provides care under Maternity and Infant Scheme to women with Diabetes in Pregnancy. Provides education and advice on implementing behaviour changes in accordance with MECC. Can provide combined/shared care with the secondary/tertiary services, for long term care of people with complex Diabetes.
Clinical Nurse Specialist	The CNS will work as part of a multidisciplinary team across levels 2,3 & 4 (Integrated care hub and secondary care) and will be responsible for implementing the delivery of the Model of Integrated Care for service users with Type 2 Diabetes within their designated healthcare organisation/health region. The CNS will deliver care to in line with the five core concepts of the role set out in the Framework for the Establishment of Clinical Nurse/Midwife Specialist Posts, 4th edition, National Council for the Professional Development of Nursing and Midwifery (NCNM) 2008. The core concepts for the CNS are: • Clinical Focus (Direct and Indirect Care) • Service user/client Advocacy • Education and Training • Audit and Research • Consultancy (including leadership in clinical practice)
RANP	**The Registered Advanced Nurse Practitioner RANP Diabetes Integrated care is** Responsible and Accountable for an agreed caseload of patients/clients with Type 2 Diabetes and their care journey from admission through to discharge from the advanced practice service. The Advanced Practice service is based on population health and service need. • Expert Clinical Practitioner and Senior decision maker. • Practices at a higher level of capability to the full extent of their licence as independent, autonomous, expert clinical practitioners. • Exercise higher levels of judgment, discretion, advanced skills, knowledge and expertise in the area of practice. • Work in collaboration with other healthcare professionals • Develop care pathways and new ways of working to support access to care (Department of Health 2019)

Team Member	Role in Management
RANP cont'd	**The main objectives of this expanded RANP Diabetes Integrated care role are to:** • Improve healthcare experience and outcomes for this significant chronic health problem, Type 2 Diabetes Mellitus. • Holistically assess, diagnose and treatment of this metabolic condition, admit/ discharge from RANP Integrated care service, referrals to Health and Social care Professional's HSCP's e.g. Dietitian, Podiatrist, and evaluate care in a safe and co-ordinated manner. • Quality service. • Improving the Type 2 Diabetes Mellitus Nursing process flow by offering seamless and streamlined care. • Professional development, academic continuance and personal satisfaction. • (HSE Office of the Nursing and Midwifery Services Directorate ONMSD 2020) **Responsibilities of RANP Diabetes Integrated Care Services** Overall purpose of the post is to provide safe, timely, evidenced based nurse-led care to an agreed caseload of patients with type 2 Diabetes at an advanced nursing level. **Autonomy & Expert Practice**-Referral and decision-making pathways, Team working, **Inclusion/exclusion criteria**, responsibilities for own actions, recognize limits, refer /consult appropriately. Provision of quality care, safe environment and processes for patients by the use of evidence based clinical guidelines that address patient expectations, promote wellness and evaluate care. **Caseload Management** **Direct Care**-undertaking and documenting a complete episode of patient care (assess, diagnose, plan, treat and discharge patients), scope of practice in the clinical setting; demonstrating advanced clinical and theoretical knowledge, critical thinking, clinical leadership, decision making skills, discharge from RANP Integrated care service, Health education, Risk reduction and Health & Safety. **Indirect Care** - Referrals, Case Discussion, Collaboration, Research & Change Management **Clinical Leadership** - The role will provide clinical leadership and professional scholarship in order to develop nursing practice and health policy at local, regional and national level. Implement and lead on education and healthcare initiatives as per HSE, DOH, ONMSD, HSE National Clinical Programme, and NMBI. **Audit** of Diabetes Nursing Practices **Research** - Contribute to nursing research to shape and advance nursing practice, education and health care policy at local, national and international levels.
Podiatrist	Podiatrists are specialist healthcare professionals dedicated to the diagnosis, treatment, management and prevention of disease and disorders affecting the foot, ankle and lower limb. There are many clinical areas that podiatrists work in, including, renal, vascular, rheumatology, paediatric, orthopaedics and diabetes to name but a few. Podiatry is a healthcare profession that specialises in the prevention, diagnosis and management of foot and ankle problems. The foot is a highly complex structure, which can develop problems affecting a person's overall health and quality of life.

Team Member	Role in Management
Podiatrist cont'd	A podiatrist's core training includes, wound management, vascular assessment, musculoskeletal and biomechanical assessment and management, skin and nail assessment and management, neurological assessment, surgical debridement, offloading management and diabetic footwear and foot appliances i.e. casting. This is not an exhaustive list. It is these inclusive elements of their training that make the podiatrist an integral team member and a central point of contact for any person diagnosed with diabetes and foot and ankle complications. A podiatrist should be the central point of contact for any person with diabetes who is at-risk from or who has diabetic foot disease. They are core members of the FPT (foot protection community team) and MDFT (hospital multidisciplinary diabetic foot team) and will take a lead role in the assessment, diagnosis, and treatment of diabetic foot complications. The Model of Care for the Diabetic Foot (2021) outlines a structured approach for the management of diabetic foot disease. In line with the Model of Care for the Prevention and Management of Chronic Disease (Health Service Executive, 2020), the Model of Care for the Diabetic Foot (2021) outlines a model of diabetic foot care which is delivered over five different levels of service with each level bringing more intensive intervention to individuals with increasing needs: • **Level 0: Living well with chronic disease:** Self-management support with a focus on prevention of foot complications. • **Level 1: General Practice:** Focus on foot screening of all those with newly diagnosed type 2 diabetes (T2DM) and annual review of those at low-risk of diabetic foot ulceration. • **Level 2: Community Specialist Ambulatory Care:** Foot Protection Teams will manage those who are at moderate- and high- risk of diabetic foot ulceration and those with the 'in remission' foot (healed ulcerations and non-active Charcot foot) • **Level 3: Acute Specialist Ambulatory Care:** Multidisciplinary Diabetic Foot Teams (MDFTs) are responsible for care of the person with active foot disease. • **Level 4 - Specialist Hospital Care:** MDFTs are also involved in the care of inpatients in hospital with active foot disease. Once a podiatrist has obtained their university degree in Podiatric Medicine they may work in either the public, voluntary or private sector. CORU is the health professions regulatory authority that regulates the podiatry profession. Similar to other health and social care professionals, podiatrists work as independent, autonomous practitioners. The HSE grade the podiatry work force according to training, expertise, experience, and skills. There are currently three clinical grades: staff grade, senior and clinical specialist: • Staff grade podiatrist: New graduate podiatrists are eligible to apply for and work in a staff grade podiatry position. The staff grade will be supported by more senior diabetes podiatrists within the same geographical area. • Senior podiatrist: Podiatrists who have at least three years' experience in their role or area of expertise are eligible to apply for and work in a senior podiatry position. • Clinical specialist podiatrist: Podiatrists who have at least five years' experience in their role or area of expertise are eligible to apply for and work in a clinical specialist position. The clinical specialist would be expected to have a greater understanding, depth and breadth of clinical expertise in the specialist area. They also would have an enhanced role in service design, development, and implementation.

Team Member	Role in Management
Dietitian	Registered dietitians are the regulated healthcare professionals who specialise in the assessment, diagnosis, treatment, and prevention of nutrition-related problems. In diabetes the aim of dietetic interventions is to optimise nutrition, glycaemia, and health. Dietitians are trained in medical nutrition therapy (MNT) and have the knowledge and skills to translate the science of nutrition in diabetes care, support health behaviour change, and adapt self-management education for patient centred care. The nutrition care process is the framework dietitians use for the assessment and development of person-centred nutrition care plans in diabetes. Depending on the setting and complexity, clinical assessment may include referral triage; anthropometrics; biochemistry including nutritional parameters, metabolic markers and data from diabetes technology; nutrition focused physical findings (appetite, mastication, and GI function); nutritional requirements; diabetes complications requiring specialised nutritional interventions (e.g. kidney disease, gastroparesis, disordered eating); food and nutrient intake; and eating behaviours (cultural and personal preferences, barriers, and facilitators). Again depending on the setting and complexity, clinical interventions may include delivery of self-management education and support (SMES); education and counselling for health behaviour change; individualised nutrition care plans including modified macronutrients for Type 2 diabetes to optimise glycaemia and health; individualised nutrition care plans for Type 2 diabetes complicated by cardiovascular disease, obesity, kidney disease, disordered eating, wound healing and complex pharmacotherapy regimens incorporating insulin and GLP1; ensuring the nutritional adequacy of the diet; treatment of nutritional deficiencies; use of meal replacements and oral nutritional supplements; pre-pregnancy planning; post metabolic surgery; and adaptation of nutrition care plans to personal and cultural preferences. Clinical specialism, leadership, mentorship and research skills progress across staff, senior and clinical specialist grades in dietitians working in diabetes. In Ireland, as part of diabetes MDTs, dietitians work at all five levels of the Type 2 diabetes model of care, delivering standardised, high quality and evidence-based MNT and SMES in one-to-one, group, in-person, online or blended care settings, and with digital supports. At Level 0 population dietitians specialise in population health approaches and health promotion to create supportive healthy food environments. At Level 1 in primary care teams community dietitians will deliver MNT for a variety of conditions to individuals who may also have Type 2 diabetes e.g. malnutrition / nutrition support, coeliac disease, swallow impairment or irritable bowel syndrome to name a few. At Level 2 dietetics care involves MNT to optimise glycaemia and health via one-to-one care or group based SMES that has been designed to incorporate clinical dietetic care, depending on the level of complexity and in conjunction with the GP and integrated care team. At Level 3 dietetics care again involves MNT to optimise glycaemia and health in individuals with the highest complexity of diabetes that cannot be safely cared for in a community setting and require long term follow up. At Level 4 MNT may involve additional specific considerations such as consistent carbohydrate meal plans or carbohydrate counts, and adaptations for altered appetite, fasting, changes in meal and snack timing, and enteral or parenteral nutrition.

Team Member	Role in Management
Community Pharmacy	Can provide support to individuals with Diabetes advice and signposting. Provide support and advice on medicines management for Diabetes and related complications
Clinical or Counselling Psychologist	Works within the MDT across levels 2,3 and 4 services, providing clinical assessment, intervention, care and support to young people, families and adults, delivering group and 1:1 intervention. Key aspects of psychology input include: Clinical assessment and screening for mental health, learning or behavioural difficulties, family-based interventions, range of psychotherapeutic models (e.g. cognitive behavioural therapy, systemic therapy),
Metabolic surgeon	Works within the MDT across levels 3 and 4 of metabolic surgery services
Administrative support	Works within the MDT across all levels of weight management and bariatric services Provides support to staff for administrative functions, including communicating with patients in specific service areas and medical typing. The role supports the team to deliver the clinical service, maintain local registers, scheduling appointments, facilitating communication and collecting minimum data sets.
Other Health Care Professionals	Role in Management: May be accessed through Primary Care Team or within acute service
Medical Social worker	Works within the MDT, providing counselling, support and practical assistance. Interventions are delivered though individual, group and family work. Clinical Interventions include psychosocial assessment of personal and family situations to aid in the effective delivery of care to patients. Assist patient and families to recognise strengths, coping strategies and challenges in coping with illness in their lives. Assist patients with accessing practical supports and services required to help them achieve healthy lifestyle. Provides education, consultation and assessment to MDT, patient and families.
Occupational Therapy	An Occupational Therapist works within the MDT. OTs deliver 1:1 and group interventions and practice in a range of care contexts such as Acute, Community, Social Care (disability and the older person) and Mental Health (children, adolescents and adults). The interventions provided include clinical assessment, treatments and intervention strategies, energy conservation, education, wellbeing, environmental access, technology development, specialised equipment assessment, advice and provision of advocacy. The key Occupational focus is on performance, justice, deprivation, occupational balance and health promoting occupations. The persons' goals are achieved by addressing engagement and participation in daily tasks such as showering, dressing, household and community mobility, promoting access, shopping, cooking, environmental medication and promoting engagement and participation in occupational roles.

Team Member	Role in Management
Physiotherapist	Physiotherapists provide clinical assessment and specific evidence-based exercise prescriptions. Treatment takes place in both group settings and on an individualised basis for those with complex needs. Physiotherapists work closely with other members of the multidisciplinary team to ensure that patients are exercising at a level that is sufficient to aid glycaemic management. Promoting exercise is key to establishing healthy lifelong behaviours. Physiotherapists promote and monitor physical activity.

NOTES

Integrated Model of Care for People with Type 2 Diabetes Mellitus 2024

Clinical Design & Innovation, HSE