



# Clinical Design and Innovation

## 2023 - A year in review



# Clinical Design and Innovation 2023 – A year in review

Examples of our collaborative work to change and improve services



## Designed clinical services

- Diabetes in pregnancy
- Cardiac rehabilitation
- People with mental disorder and substance use disorder

available at

[hse.ie/eng/about/who/cspd/ncps/](https://hse.ie/eng/about/who/cspd/ncps/)

## Improved access to care

A new child and adolescent eating disorder service was opened for Cork and Kerry.

"Work-Able Solutions" initiative began helping people with chronic pain stay employed or return to work.



## Ensured the voice of service users is at the centre of everything we do

An older person's reference group was established to share what matters most to them.

Patient co-design of clinical services.



## Supported people to live well in their communities

In 2023:

**GPs managed** ~ 550,000 patients with chronic diseases

**Community Specialist Teams** saw ~ 100,000 older people



# Table of Contents

<b>2</b>	<b>Clinical Design and Innovation 2023 – A year in Review Infographic</b>
<b>4</b>	<b>A Message from the National Clinical Director for Integrated Care</b>
<b>5</b>	<b>Supporting people to live well in their communities</b>
<b>5</b>	Older people living well at home
<b>5</b>	Chronic disease managed in primary care
<b>7</b>	Stroke awareness and care
<b>7</b>	New services for patients with arthritis
<b>8</b>	<b>Improving access to care</b>
<b>8</b>	Access to care for long Covid
<b>8</b>	Access to services for migrant children
<b>8</b>	Access to Mental Health Services
<b>9</b>	Access to care for mothers and babies
<b>10</b>	Reopening of acute medical units
<b>10</b>	Access to digital and assistive technologies for people with disabilities
<b>11</b>	<b>Enabling better healthcare</b>
<b>12</b>	<b>Glossary</b>
<b>13</b>	<b>References</b>

## A Message from the National Clinical Director for Integrated Care



I am pleased to share some of our key achievements in this summary document, Clinical Design and Innovation 2023 A Year in Review.

Clinical Design and Innovation (CDI) brings together healthcare experts to design health and social care services. In 2023, there were 31 National Clinical Programmes supported by CDI teams. These programmes cover a wide range of services from emergency care to chronic disease. [Full list of the programmes available here.](#)

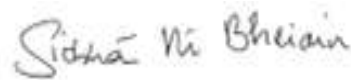
The programmes work with staff across the HSE as well as patients and service users to co-design Models of Care for integrated health and social care services. Integrated care delivers patient care that is safe, timely, efficient and as close to home as possible. The programmes also design clinical documents for frontline staff to support diagnosis and treatment. These clinical documents are available on our [CDI website](#) under the relevant programme. The overall aim of CDI is to design and support the implementation of healthcare that is safe, effective and accessible for all.

### In 2023, some key achievements included:

- helping older people and people with chronic disease access care in their communities
- improving access to mental health services for eating disorders and suicide crisis
- improving services for pregnant mothers and preventing hearing loss in new-born babies

- increasing the capacity of urgent care
- supporting access to digital and assistive technologies for people with disabilities
- educating and empowering the public to self-manage their own health
- supporting strategic and operational decision-making across health and social care services through clinical designs and documents available from our [CDI website](#)
- providing clinical expertise to enable change, such as the implementation of the Assisted Decision-Making Act.

This review profiles some of our collaborative work to change and improve services in 2023. It shows how our work has positively impacted the people who use our services and their families. We encourage you to follow us on our X [Twitter] @HSE\_CDI for updates on future clinical documents and various events in 2024 and to [visit our CDI website](#) to learn more about the work of CDI.



*National Clinical Director, Integrated Care,  
Office of Chief Clinical Officer, HSE*

# Supporting people to live well in their communities

With our aging population and rising rates of chronic disease (almost 30% in 2021 [Department of Health, 2022]), it is crucial to provide care in the community whenever possible, as this is the most accessible and cost-effective setting.

The Chronic Disease Management and Older Person's Programme are delivered by the Enhanced Community Care Programme (ECC), which is jointly led by clinical and operational teams, based on clinical designs.

## Older people living well at home

Research shows that most people prefer to stay in their own home as they get older. The Healthy Age Friendly Homes Programme, with Age Friendly Ireland, aims to help people to live at home longer. This avoids their early admission to long-term care. 31 Coordinators are in place to support this initiative across the country. They visit homes, assess needs and create support plans with older adults to support them to live with dignity and independence in their communities.



Older Persons Community Specialist Teams saw nearly 100,000 older people last year. Most of them (74%) were discharged home to receive community-based care, with only 6% needing hospital admission. Just 3% were admitted to long-term care. This shows how important these teams are in preventing unnecessary hospital stays for older adults and providing timely, tailored support to help them thrive in their own communities.

Additionally, nine Community Connector roles were established to link older people discharged from Community Specialist Teams to local non-medical support groups.

## Chronic disease managed in primary care

In 2023, General Practitioners (GPs) managed nearly 550,000 patients with chronic diseases through the HSE's Chronic Disease Management Programme in GP Practice (HSE, 2024). As a result, 90% of these patients avoided hospital visits for ongoing management of their condition (HSE, 2024).

GPs can refer patients to Community Specialist Teams (CSTs) for specific episodes of care. In 2023, 24 out of 30 planned Chronic Disease CSTs were operating.

GPs can refer patients to Community Specialist Teams (CSTs) for specific episodes of care. In 2023, 24 out of 30 planned Chronic Disease CSTs were operating.

### Diagnostic tests

CSTs provide access to diagnostic tests and specialist multidisciplinary opinion to help diagnose and manage conditions like Chronic Obstructive Pulmonary Disease (COPD), asthma, heart failure and atrial fibrillation as close to home as possible.

This has led to reduced hospital waiting lists and wait times for these tests. For example, Tallaght University Hospital has cleared its two-year waiting list for spirometry/Lung Function Tests with waiting times for such examinations now meeting the Sláintecare target of 10 weeks or under.

### Reducing out-patient waiting times

CD-CSTs have significantly reduced outpatient waiting times. In Galway University Hospitals (GUH), the endocrinology waiting list was cut by 60%, almost eliminating waits over 12 months. Additionally, 300 patients were removed from the GUH cardiology wait list by setting up appointments at a hub and redirecting heart failure patients there.

### Reducing hospital bed stays

CSTs are also easing pressures on hospitals. In GUH/Galway City, a focus on reducing heart failure (HF) hospital readmissions resulted in a 31% reduction in 30-day readmissions and a 42% reduction in 6-month readmissions. This saved 592 bed days in 2023.

### Home heart monitoring

Since October 2022, Bray Cardiology CST offers home heart rhythm monitoring. GPs can refer patients with palpitations or suspected heart rhythm disorders. This service provides immediate feedback and daily monitoring for prompt diagnosis and treatment. 90% of cases did not require hospital visits.

### Managing multiple conditions

Approximately 40% of patients, enrolled in the CD Treatment Programme, had two or more chronic conditions (HSE, 2023). There are numerous integrated multidisciplinary clinics for individuals living with multi-morbidity. One example is the combined Cardiopulmonary Specialist Clinic “Breathe Easy, Beat Strong”. This clinic treats patients with heart disease and lung disease in the community. It opened in April 2023 at the Dublin North West Integrated Care Centre. In its first year, it treated 52 patients, reducing their visits from six to two.

CDI continue to enable CSTs to deliver high quality, integrated care through the implementation of supporting ICT infrastructure, training and education and appropriate staffing in the community.

### Exercise and education programmes

Pulmonary and cardiac rehabilitation exercise and education programmes have consistently been shown to reduce illness, hospitalisations and death, while also improving patients' quality of life.

Last year, 11 pulmonary rehabilitation services operated nationwide, which helped reduce wait lists for Pulmonary Rehabilitation programs. [Guidance for staff delivering Virtual Pulmonary Rehabilitation](#) was developed. Virtual rehabilitation allows patients to attend sessions online, saving on transport time and costs.

A [Model of Care for Integrated Cardiac Rehabilitation 2023](#) was published to ensure a high-quality service and inform patients and their families about what to expect from their cardiac rehabilitation. A Sub-Group has been established to support implementation of the Model of Care.



## Stroke awareness and care

Stroke is the leading cause of acquired disability and the third leading cause of death in Ireland (Irish National Audit of Stroke, 2020). Currently, less than half of people with suspected stroke get to a hospital within three hours of signs and symptoms developing. With stroke, the faster someone receives treatment, the better the outcome. Working with the Irish Heart Foundation, we produced an Act F.A.S.T. radio advertisement and video to inform the public of the signs and symptoms of a stroke. [https://www.youtube.com/watch?v=WckB15sJ9r4&ab\\_channel=IrishHeartFoundation](https://www.youtube.com/watch?v=WckB15sJ9r4&ab_channel=IrishHeartFoundation)



Early Support Discharge teams offer stroke rehabilitation at home, allowing suitable patients to be discharged from hospital earlier. Four new teams were established last year and more staff were recruited for the existing six teams. We also secured funding for equipment for patients to carry out rehabilitation outside of their one-to-one treatment/ therapy sessions

## New services for patients with arthritis

People with musculoskeletal disorders (MSDs) and arthritis often face work challenges, leading to temporary or permanent absences. “Work-Able Solutions” is an initiative that helps those with chronic pain stay employed or return to work.

‘Work-Able Solutions’ is available to adults with MSDs or arthritis who are either in paid employment or receiving illness benefits for up to 6 months and have work-related

concerns. Referrals come from primary care centres and hospitals. Clients receive one-on-one sessions with an occupational therapist, either online or in person.

This project, funded for 24 months by Sláintecare Integration Innovation Fund, operates in Waterford, Kildare, Wexford, Kilkenny, Dublin South/ South East and Wicklow. Early results show high job retention, fewer lost workdays and high user satisfaction.

It is estimated that osteoarthritis affects more than 400,000 people in Ireland. A new “Hip and Knee Pathway” received Sláintecare Integration Innovation Funding and is currently being tested in University Hospital Wexford and Our Lady’s Hospital Navan.



The aim is to help patients presenting to their GPs with mild-to-moderate osteoarthritis of either their hip or knee to manage their symptoms and maintain their function through exercise and education. An app for patients to track their progress and maintain their improvements is currently being developed. From June to December 2023, over 450 patients were referred to the “Hip and Knee Pathway” service. Very few of these patients required further review by an Orthopaedic Consultant after completing the programme.

# Improving access to care

## Access to care for long Covid

Following a Covid-19 infection, around 10% of people may develop long-term symptoms, known as long Covid, that impact their quality of life and ability to work. Six long Covid clinics are now receiving patients at Beaumont Hospital, Dublin, St James's Hospital, Dublin, St Vincent's University Hospital, Dublin, Cork University Hospital, University Hospital Limerick and University Hospital Galway. Care pathways were developed to support staff delivering these clinics.

## Access to services for migrant children

Children of immigrant families represent a growing, diverse demographic in Ireland. In order to understand and respond to their healthcare needs, we produced a document for Healthcare Professionals entitled [Pathway Planning for Migrant Child Health](#). It outlines pathways to enable migrant children with significant medical needs to access specialist paediatric services.

## Access to Mental Health Services

### Eating Disorders

Last year, the Health Research Board (2023) reported that the number of child and adolescent admissions for eating disorders more than doubled in the last five years, from 33 in 2018 to 80 in 2022.



Picture - Family Room. From L-R: Dr Sandra Chong, NCHD, Dr Sara McDevitt, Consultant Child Psychiatrist, Sinead Buckley, Senior Occupational Therapist, Orla Fogarty, Senior Social Worker

In response, a new Child and Adolescent Regional Eating Disorder Service (CARED) for Cork and Kerry opened in 2023. This service, led by a Consultant Child Psychiatrist and a Consultant Paediatrician, provides specialised outpatient care for those under 18 with eating disorders. The new centre includes a dedicated medical assessment room for physical exams, aiming to reduce hospital visits. [A Guideline for the Assessment and Management of Patients with Suspected or Confirmed Eating Disorders in the Emergency Department](#) was developed to provide staff with a framework to assess risk to life and determine best care for adults and young people with eating disorders.



### Suicide Crisis

In 2022, more than one in 10 adults in Ireland had attempted suicide (Mitchell et al., 2023). GPs can now refer people who present with suicidal ideation or self-harm to a Suicide Crisis Assessment Nurses within the GP practice. Last year, there were 22 Suicide Crisis Assessment Nurses located across the country. They review patients within 72 hours and provide up to three follow-up appointments. This service was also piloted in child and adolescent mental health services (CAMHS) in North Dublin in 2023.

### Dual diagnosis

Half of people attending Community Mental Health Teams have a co-existing substance use disorder, known as dual diagnosis. We developed a [service delivery plan for Adolescents and Adults Dual Diagnosis teams](#). The plan aims to help deliver services in a more targeted and age-appropriate manner.

The recommendations include:

- 12 Adult Dual Diagnosis teams across the country, led by a Consultant Psychiatrist;
- Establishing four hubs, with outreach workers and family therapists, to treat 10 to 17 year olds;
- A Clinical Nurse Specialist and Addiction Counsellor to treat adolescents in areas that don't have a hub

### Psychosis

About 1 in every 100 people in Ireland will go through a period of psychosis in their life (Delay in psychosis treatment, 2022). An audit in 2023 which found that 77% of individuals with first episode of psychosis started treatment within two weeks of referral. This is a 10% improvement from the last audit in 2021-2022. More people with first episode psychosis are now getting cognitive behavioural therapy (61%) and support in finding work (49%). There has also been a 32% increase in physical health screening.

## Access to care for mothers and babies

Based on international data, up to 25% of confirmed permanent childhood hearing loss is caused by a congenital Cytomegalovirus (cCMV) infection. In 2023, we developed:

- a [process to help identify and treat babies with hearing loss due to cytomegalovirus](#);
- a [parent information leaflet](#).

Babies who receive early antiviral treatment for cytomegalovirus can avoid long-term hearing loss. This is a life altering intervention for affected babies.



Diabetes in pregnancy can have negative long-term health implications for both mother and baby. Women who experienced diabetes in pregnancy and frontline staff caring for these women collaborated to produce the first ever [Diabetes in Pregnancy: A Model of Care for Ireland](#).

This document recommends:

- specialised care for high-risk pregnancy;
- universal screening;
- post-partum care for women who develop diabetes during pregnancy.

All individuals (both GMS and non-GMS) diagnosed with diabetes (gestational diabetes mellitus) or high blood pressure (pre-eclampsia) during pregnancy are now entitled to enrol in the Prevention Programme in General Practice and will be eligible to join the Treatment Programme if they proceed to develop hypertension or type 2 diabetes mellitus.



## Reopening of acute medical units

More patients are now being sent by their GPs to acute medical units instead of busy Emergency Departments (EDs). Most of the acute medical units that closed in March 2020, due to Covid-19, have now re-opened. In 2023, there was a significant increase of patients (+19.4% or 16,348 patients) treated in acute medical units compared to 2022 attendance figures.

Letterkenny University Hospital reopened its Acute Medical Assessment Unit in 2023, redirecting 1,996 patients away from the ED. In Wexford General Hospital, the Acute Medical team redesigned their unit after a recent fire event and have treated just over 5,000 patients in their redesigned unit in 2023.

## Access to digital and assistive technologies for people with disabilities

The CREATE (Cooperative Real Engagement for Assistive Technology Enhancement) initiative aims to improve access to digital and assistive technologies for people with disabilities. Digital and assistive technologies make real changes to the day-to-day lives of people with cognitive, physical, and intellectual disabilities, enabling them to contribute to their communities through work, leisure, and most importantly, through social participation.

To date, nine projects have been funded by CREATE. In Stewarts Care, Dublin, the Meaningful Daily Living (CREATE) Initiative has improved social interactions and communication, as well as supported the independence and leisure of service users by providing better access to music, videos and the internet. In each of the nine Children's Disability Network Teams in Galway, Mayo and Roscommon, over 50 assistive technology devices and resources have been provided for service users.



# Enabling better healthcare

We enabled better healthcare and supported reform by providing education and expertise across a range of initiatives such as:

- Providing accurate and up-to-date online public health information on the HSE website's [Health A to Z](#).
- Webinars to educate staff on Dose Adjustment for Normal Eating (DAFNE). This course helps adults with type 1 diabetes learn how to adjust their insulin dose to match their food intake and blood sugar levels. This helps to reduce the risk of diabetes-related complications such as blindness and amputations. There were a total of 20 sites at the end of 2023. You can [find your nearest DAFNE centre online](#).
- Supporting the implementation of the Assisted Decision-Making (Capacity) Act in collaboration with HSE Human Rights through the development of clinical guidance and supporting services to comply with the Act. The Act is about supporting people to make decisions about their health and social care and maximising a person's decision-making capacity.
- Providing expert advice to support the Sexual Health Strategy and further roll out of the Free Contraception Scheme to give women control of their reproductive health.
- Co-ordinating Expert Advisory Groups to provide clinical opinions on a wide-range of topics, such as Assisted Dying and Care for Older Persons, with Age Friendly Ireland.
- Providing online resources on our website to enable our staff to deliver the best possible care. Examples of resources published in 2023:
  - » [Palliative care for children educational resources](#)
  - » [Guidance for the Care of the Adult Patient with a Tracheostomy \(hse.ie\)](#)
  - » [Paediatric Early Warning Score](#)
  - » [Paediatric algorithms](#)
  - » [The Vascular Surgery - A Model of Care for Ireland](#)
  - » [Guidance for the care of the adult patient with a tracheostomy](#)



Members of the older person's reference group share what matters to them during a recent engagement.

# Glossary

<b>AMAU</b>	Acute Medical Assessment Unit
<b>Atrial Fibrillation</b>	a heart condition that causes an irregular heart rhythm
<b>cCMV</b>	Congenital Cytomegalvirus
<b>CDI</b>	Clinical Design and Innovation
<b>COPD</b>	Chronic Obstructive Pulmonary Disease
<b>CREATE</b>	Cooperative Real Engagement for Assistive Technology Enhancement
<b>CST</b>	Community Specialist Teams
<b>DAFNE</b>	Dose Adjustment for Normal Eating
<b>DoH</b>	Department of Health
<b>ECC</b>	Enhanced Community Care Programme
<b>Echocardiography</b>	A scan used to look at the heart and nearby blood vessels.
<b>ED</b>	Emergency Department
<b>GP</b>	General Practitioner
<b>GUH</b>	Galway University Hospitals
<b>HSE</b>	Health Service Executive
<b>Integrated Care (IC)</b>	IC aims to join up our health and social care services, to deliver patient care that is safe, timely, efficient and as close to home as possible.
<b>MDT</b>	Multi-disciplinary team
<b>MoC</b>	Model of Care
<b>MSDs</b>	Musculoskeletal disorders
<b>NCAGL</b>	National Clinical Advisor and Group Lead
<b>NCP</b>	National Clinical Programme
<b>OA</b>	Osteoarthritis
<b>Spirometry</b>	A test used to diagnose and monitor lung conditions

# References

Department of Health, 2022. Health in Ireland Key Trends 2022. Government of Ireland, Dublin. Available from [gov - Health in Ireland Key Trends 2022 \(www.gov.ie\)](https://www.gov.ie/en/publications-and-statistics/publication/health-in-ireland-key-trends-2022/)

Department of Health, 2023. Healthy Ireland Survey. Government of Ireland, Dublin. Available from [gov - Healthy Ireland Survey 2023 \(www.gov.ie\)](https://www.gov.ie/en/publications-and-statistics/publication/healthy-ireland-survey-2023/)

HSE, 2023. The Second Report of the Structured Chronic Disease Management Treatment Programme in General Practice. Available from [the-second-report-of-the-structured-chronic-disease-management-treatment-programme-in-general-practice.pdf \(hse.ie\)](https://www.hse.ie/eng/pressroom/pressreleases/2023/02/230223-structured-chronic-disease-management-treatment-programme-in-general-practice.pdf)

HSE, 2024. Slaintecare. Right Care. Right Place. Right Time. Progress Report 2021–2023 Retrieved from [gov - Slaintecare Progress Report 2021–2023 \(www.gov.ie\)](https://www.gov.ie/en/publications-and-statistics/publication/slaintecare-progress-report-2021-2023/)

Delay in psychosis treatment worsens quality of life for decades, Irish study finds. 2022. Available from [Delay in psychosis treatment worsens quality of life for decades, Irish study finds - Royal College of Surgeons in Ireland \(rcsi.com\)](https://www.rcsi.com/news/2022/05/12/delay-in-psychosis-treatment-worsens-quality-of-life-for-decades-irish-study-finds)

Irish National Audit of Stroke. Summary [Report 2020. Available from irish national audit of stroke summary report 2020 final.pdf \(d7g406zpx7bgk.cloudfront.net\)](https://www.irishnationalauditofstroke.com/summary-report-2020-final.pdf)

Kenny R.A., Scarlett S., O'Mahoney P., 2020. The Older Population of Ireland on the Eve of the COVID-19 Pandemic. Trinity College Dublin: The Irish Longitudinal Study on Ageing Available from [Reports - The Irish Longitudinal Study on Ageing \(TILDA\) - Trinity College Dublin \(tcd.ie\)](https://www.tcd.ie/~trinity/irish-longitudinal-study-on-ageing/)

Mitchell G., Murphy E. et al., 2023. Is an EU-wide approach to the mental health crisis necessary? Foundation for European Progressive Studies. 2023. Retrieved from [PS-Is-an-EU-wide-approach-to-the-mental-health-crisis-necessary.pdf \(feps-europe.eu\)](https://www.feps-europe.eu/wp-content/uploads/2023/07/PS-Is-an-EU-wide-approach-to-the-mental-health-crisis-necessary.pdf)



**Clinical Design and Innovation**  
2023 - A year in review