

Realistic Medicine: A Fair and Sustainable Future

Chief Medical Officer for Scotland
Annual Report 2021-2022



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Foreword



The challenges in delivering healthcare sustainably have been compounded over the last year. The world has been made more uncertain by accumulating circumstances with the potential to have an impact on the health and wellbeing of people everywhere. It's impossible not to be concerned by these uncertainties and the instability people are facing, or saddened by global events that are leading to such significant direct and indirect consequences for people's lives and security.

In April, the WHO stated that there had been more than 100 attacks on healthcare facilities in Ukraine since February.¹ We must remember that this is not the only zone of conflict across the world where these type of incidents have occurred, but they have been particularly visible to us. My thoughts are with the people affected by ongoing crises across the globe, and those who courageously continue to deliver healthcare in the most challenging settings.

Last year, I spoke of the immense challenges that our health system was facing and how they had been compounded by the COVID-19 pandemic. I also spoke of how important Realistic Medicine had become in helping us overcome those challenges.

While life for many of us is becoming less restricted, COVID-19 has not gone away and the pandemic will continue to impact here and in other countries for some time yet. COVID-19 continues to place significant strain on the health of Scotland's people, our workforce and our health and care system

This is my second annual report as Chief Medical Officer for Scotland. I'd like it to be of interest to everyone, but hope that it will be of particular interest to healthcare professionals here in Scotland.

This year, I focus on five key areas:

1. Collaborating for a healthier, fairer Scotland
2. Personalising care through understanding
3. Innovating for a more sustainable system
4. Supporting our workforce
5. The health of our nation

These topics are of great importance to me.

The inequalities exacerbated by this pandemic continue to run deep in our society; life expectancy in Scotland has stalled. It is widely recognised that Scotland's health and the inequalities that exist across our society are deeply intertwined. This must be the foundation on which our emerging strategies are built on. We must continue to collaborate, innovate and improve access to services, if we are to improve the lives of people living in our most disadvantaged, most vulnerable communities.

Encouragingly, there are already excellent examples across Scotland of good practice in tackling inequalities. In my report, I highlight just a few of the approaches that can help us create the healthier, fairer Scotland we all wish to see.

As we emerge from the effects of the COVID-19 emergency, many people are waiting longer than previously to access treatment. It is, however, clear that practising Realistic Medicine continues to make a positive impact on the people we care for, and remains more important than ever in addressing these challenges. I am convinced that by listening to what matters to people and involving them in decisions about their care, we can deliver personalised care they really value. I have provided what I think are some very positive examples of how colleagues are innovating and improving access to care for people who need our help the most.

Of course we cannot deliver better care without looking after our workforce. I recognise the immense pressure that you have been under, particularly over the last two years. The dedication you have shown and the sacrifices that you have made to help ensure that people continued to receive the best possible care have been humbling.

I hope that you recognise the importance of the issues I have described in this report and that you will join me in providing collective leadership to overcome them. I would be delighted to hear any **comments or suggestions** you have on how we can further embed Realistic Medicine and help deliver **careful and kind care** for everyone.

*"We are caught in an inescapable network of mutuality, tied in a single garment of destiny.
Whatever affects one directly, affects all indirectly."*

Martin Luther King

Professor Sir Gregor Smith
Chief Medical Officer for Scotland

Collaborating for a Healthier, Fairer Scotland



Equity

Introduction

The social determinants which lead to inequalities in people's experience of health are well understood and have been for some time. We know too that it will take leadership, joint ownership and collaboration with partners beyond our health and care system if we are to tackle the inequality that exists in our society. Without this co-ordinated and relentless approach I am concerned that the inequalities experienced by many may persist, deepen and affect many more.

The pandemic has shown us how precarious circumstances are for many of our communities facing the greatest hardships. But, it has also shown us how quickly and effectively we can mobilise to support those most in need.

Providing communities, leaders, funders and planners, across public services and beyond, with a deeper understanding of local needs, underpins the effectiveness of this response. It relies on mechanisms to capture data and evidence, routinely assess local needs and share learning to inform local and national decision making. This includes smarter use of public health data and intelligence, and linked data on outcomes. It must also include the knowledge and experience of people living and working within our communities.

Third sector, voluntary and wider community partners have an important role in shaping what we do. These voices, and the voices of those with lived experience of disadvantage, are crucial. We must ensure that local need can be identified and addressed through a shared vision and a strong ethos of collaboration and accountability. Ultimately, collaboration is key and cross-sector working will help to achieve an inclusive health and care system, and the fairer Scotland we all wish to see.

There are, however, some encouraging signs that we are heading in the right direction. We must continue to build on and learn from approaches that aim to address the social determinants of health and I want to highlight some examples that I would like to see become more widespread.

Scotland's child poverty action plan



Almost one quarter of children in Scotland are living in poverty; an unacceptably high number, and one that requires a whole-nation effort to tackle. Experience of childhood poverty can negatively impact on the wellbeing of families and prevent children from realising their full potential.² The impacts of growing up in poverty can be wide reaching – including to education and health outcomes.

Child poverty affects educational attainment, future earning potential and is a key predictor of youth homelessness.³ In our most deprived communities, people spend less time in good health than those living in our most affluent (more than 24 years lower for both males and females). People are 18 times more likely to have a drug-related death in our most deprived communities, and the suicide rate is three times higher than in our least deprived communities.⁴ These facts are sombre, but not inevitable. Given what we know, we must make a relentless and collaborative effort to address the root causes of these inequalities.

Best Start, Bright Futures – tackling child poverty in Scotland

While a lot of the building blocks for tackling child poverty are already in place through initiatives like the Scottish Child Payment, Parental Employability Support Fund and embedded advice services, families living in poverty have reported that this is not enough. Initiatives are often said not to be working for them the way they need them to. A common theme is that services are not joined up when people need them most, creating financial and emotional barriers to accessing support.

These systemic problems should be addressed, and while there is no easy fix, continuing to operate in ways that don't deliver change for people living in poverty is not an option.

90% of children in poverty come from one of six family types:⁵

- Lone Parents;
- families with a disabled adult or child;
- minority ethnic families;
- larger families (three+ children);
- families with young mothers (under 25); and
- families with a baby under one.

Doing things differently, doing things better

In March 2022, The Scottish Government launched **Best Start, Bright Futures**, the second action plan intended to tackle child poverty. The fact that this is the second plan recognises that there is much more to be done to improve the lives of children living in poverty in Scotland. It outlines the key actions needed: increasing income from employment, reducing household costs and maximising families' income.

The approach taken to develop the plan is particularly encouraging. Close collaboration between local and national government, healthcare and third sector organisations working alongside families with lived experience has led to a shared understanding of what is needed to tackle child poverty in Scotland.

It is not a plan for the Scottish Government but a plan for all of Scotland – recognising the contribution all parts of our society must make to deliver the change needed.

Best Start, Bright Futures sets a commitment to trial new multi-agency ways of working and engagement. Work is commencing in Glasgow and Dundee, two pathfinder areas to personalise support for everyone – delivered with kindness, dignity and respect.

Listening to and understanding what's important to families, what they need, and when they need it, sits at the heart of this approach. By doing so the aim is to deliver support and services that families value, and deliver them in a way that reduces the difficulties people can face when they navigate a complex system.



Figure 1: delivery plan elements

Our role as healthcare professionals

Delivering personalised care is a key principle of Realistic Medicine and also sits at the core of Best Start, Bright Futures. Many families in, or at risk of, poverty, have regular contact with healthcare and with third sector organisations. Healthcare professionals are well placed to help tackle child poverty. By building on our contacts with families and using our trusted role within communities, we can ensure families are aware of the support they can access, which often sits beyond health. We must be able to signpost them easily to reliable, high-quality financial, emotional and practical support that meets their needs.

Best Start, Bright Futures aims to create a 'no wrong door' approach to support, with a particular focus on further embedding additional non-clinical and social support roles in General Practice, including benefit and welfare experts to support families who may not be in touch with other services.

Collaboration is key

This plan is an attempt to shift more focus to prevention and providing personalised support at the right time, for as long as people need it, to help break the cycle of crisis management and improve health inequalities in the long term in Scotland.

I am keen to promote the multi-agency, collaborative approach that has been taken here. It is evident that Best Start, Bright Futures has been developed around the needs of the people it aims to help and I commend everyone involved. It is precisely the kind of approach we need to help address health inequalities across all of the social determinants of health.

Anchor institutions

I welcome the work to position NHS and social care providers as 'anchor institutions' within our communities; working with others, such as housing associations, local government and universities, to nurture the conditions for health and wellbeing.

We can do this by amplifying opportunities in local communities through:

- increased access to employment in health and care; and,
- considering how communities can use NHS land and buildings to support their health and wellbeing.

We must work in partnership with the third and voluntary sectors to support people who need our help the most, helping build strong relationships that connect the building blocks of a healthy community.

Navigating towards a better life

Case Study 1: Overcoming adverse childhood experiences

Background

The Navigators met “Craig” in the ED when he was brought in suffering from extreme anxiety. At the time he was in prison. Craig has been in the care system since the age of three because his mother was addicted to heroin and couldn’t look after him. His childhood was traumatic. On release from prison he reconnected with the Navigator Service.

Navigator Support

The Navigators have been working with Craig since his release. Initially, he was living in homeless accommodation but now has his own home. The Navigators connected him with Fresh Start, a charity who provided all his white goods and essentials and they decorated his house. Craig has custody of his 5-year-old son; social work were involved on Craig’s prison release but they are no longer needed due to his progress. Although Craig still suffers from anxiety things are improving with the help of his GP. The Navigators also connected Craig to the “CALM” helpline for men, which he has used on a few occasions particularly during lockdown. The “Running on Empty” fund has helped Craig with food vouchers and phone credit and he now has a temporary job. The Navigators are in regular weekly contact and will support Craig for as long as he needs them.

We know that people who have adverse experiences in childhood have poorer health outcomes and this increased risk continues throughout life. There is also evidence that this experience may put people at greater risk of violence, both as victims and perpetrators. We must adopt a supportive approach, seeking to provide understanding, personalised care and agency for people experiencing the adverse effects of violence, to help break these destructive cycles.

The Navigator project provides support within nine Emergency Departments in Scotland. It’s run by the charity “Medics against Violence.”⁶ The service works closely with local Alcohol and Drug Partnerships given these issues can often affect the same people. 23 highly skilled people make up the Navigators team, some with lived experience, some with a vast amount of professional experience and some with both.

Although primarily set up as a violence reduction programme, violence rarely comes alone as a concern, and the team are skilled in helping empower people to address a wide range of issues. Navigators provide psychosocial support to people who experience difficulties with drug and alcohol use, are affected by violence, or are in a heightened emotional state. Some clients are living in substandard housing, or are homeless. Others may be people who are victims or survivors of domestic abuse, sexual abuse or assault, and people who are affected by a loved one’s drug and or alcohol use.

People they engage with may feel completely overwhelmed by their current situation or may feel let down by services in the past. There’s no “three strikes and you’re out” in the approach taken by this service, a critical aspect of their approach. Instead, the Navigators roll with any resistance and try to find any safe way possible to engage with people. Key to this is understanding that trusting another person or “worker” can be incredibly difficult for some.



People in crises may be managing their situation as best they can and the Emergency Department can seem the only safe place to go. Navigators work in a person-centred way. They provide a safe space and listen to help people explore the reason why they have been in hospital. Navigators actively seek out people who may need their support and use this window of opportunity – the “reachable moment” – to plant the seeds of change.

People are encouraged to identify anything that may be a barrier to them accessing support or making changes. Navigators walk alongside people who need their help, empowering and enabling them to overcome those barriers. They also draw on their own lived experience, to provide empathy and offer hope.

Dr Sara Robinson, consultant in Emergency Medicine at the Royal Infirmary of Edinburgh was pivotal in bringing Navigators to Scotland.

“The Emergency Department is a hectic and unpredictable workplace, which is why I love working here. Our clinical skills and problem-solving abilities are being used constantly as we move from patient to patient. But sometimes the problem isn’t medical and we can’t help. Sometimes the result is medical but the source of the problem is not. Our health is a complex interaction between our physical, mental and social wellbeing. To improve health we need to tackle more than just the clinical aspects of it.

That’s where having a team like Navigator really adds value to the work we do and the patients we treat. The team that make up Navigator are among the most empathic, proactive people I have ever met. They help and support people to make meaningful changes in their lives. To move away from violence, addiction or negative social circumstances. They don’t judge, they listen. They don’t pretend to be able to fix problems, instead they help our patients find solutions. The Navigator team allow staff and the people we care for to hope.

Patients and clinical staff can’t fail to be inspired by the Navigators ‘can do’ attitude. Our Navigators challenge us all to be the best version of ourselves, and they support us to get there.”

Here are some views from people who have accessed the Navigator service:

A different service

“The thing is about Navigator is they come to you. ‘Cause a lot of people that need support don’t actually seek it out. They just kinda let it lie and then things get worse. Whereas Navigator, they kinda – not in a pressuring way – but they don’t really let you off.”

Connection with Navigator

“I felt like I was talking to a person, you know, not a professional, which was nice.”

Empowerment

“The Navigators have definitely gave me that boost sorta reassurin’ us that I can totally change. They showed me that, it’s like I can dae it, eh? And that it’s possible to dae.”

Case Study 2: Being believed was the key to escaping abuse

Background

In 2018 the Navigators met Gina when she attended the Emergency Department with her children, one of whom had been injured. She disclosed to the Navigators that the child's father had caused the injury intentionally and that this was part of a pattern of ongoing abuse against Gina and her children by her husband who was a healthcare professional. Gina had never spoken to anyone about it before as she didn't think anyone would believe her as to everyone around her, she seemed to have a lovely life.

Navigator Support

Gina chose to report to the police and was supported to do this by the Navigators, who she asked to remain with her when she gave her statement. The Navigators left their contact details but didn't hear from Gina again until recently.

Gina's lawyer who is dealing with the legal side of this case put her back in touch with Navigator as she was keen to reconnect with them to investigate possible support for her children who had witnessed and experienced a lot of abuse. Gina is back at work and is receiving regular counselling. She remembered the impact of being believed on that night in the ED and said it gave her the strength to make a statement to the police thus ending her abuse. It is also without question that speaking to someone who had been in the same position as her also made a huge impact, demonstrating the value of the Navigators' lived experience.

Importantly, the Navigator service also looks after their Navigators. It actively supports their workforce's wellbeing and encourages them to develop and acquire new skills. Key to this is regular supervision and counselling, because this work is hard and can be challenging.

This is a fantastic example of collaboration that is actively seeking to improve the wellbeing of some of the most vulnerable people in our society. The way in which the Navigators take the time to listen – to find out what is going on in people's lives – and ensure they can access the care and support they need and value, is an approach we can learn from across our health and care system.

I'm personally grateful to the people who have been willing to share their experiences of the Navigator approach in this report.

Naloxone: improving services for people who use drugs

People who access care in crisis are often struggling with multiple issues beside health. Addiction is often involved. Substance use costs more healthy years in 20-59 year olds than any other single pathology.

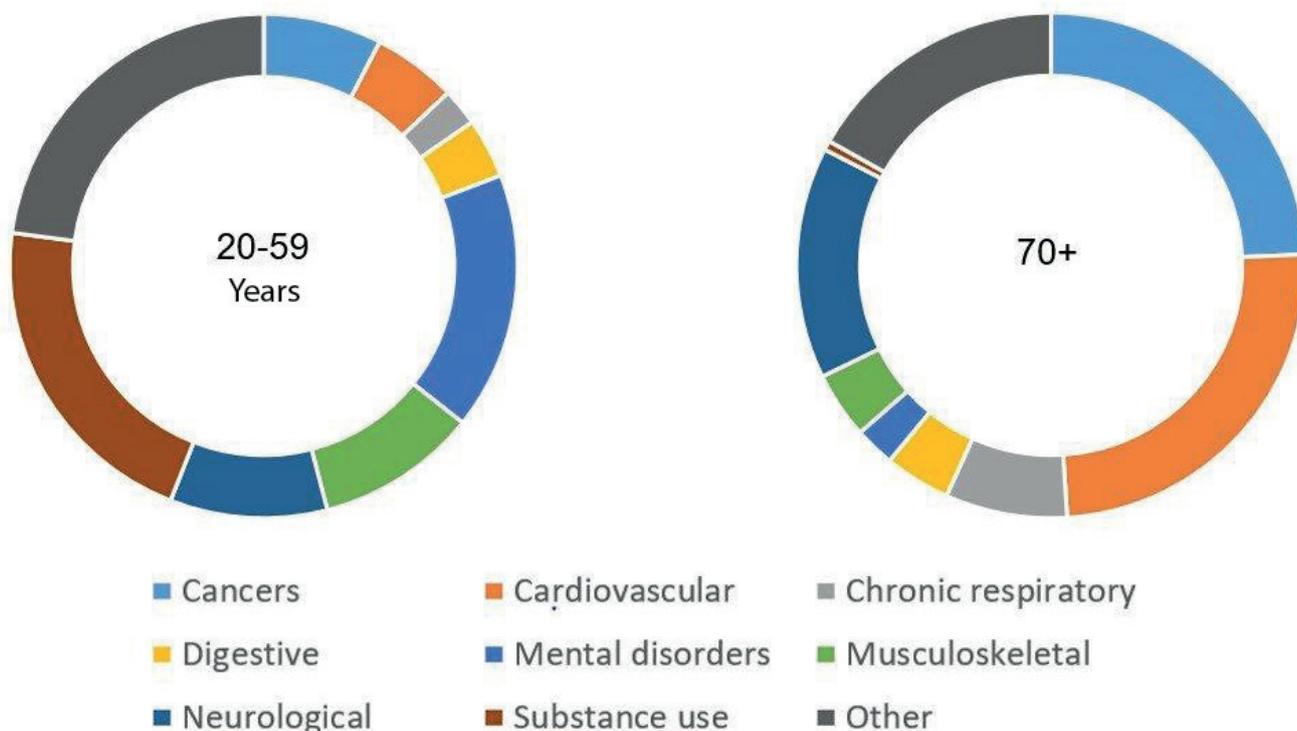


Figure 2: Leading causes of mortality⁷

Drug deaths leave a devastating impact on individuals, families and the wider community. They remain unacceptably high in Scotland. I want to draw attention to the work being done on take-home naloxone. Since 2015, Scotland has been working to distribute naloxone kits; this demonstrates the progressive collaboration we need to see to provide access to those most at risk.

The benefits of Naloxone

In 2020, 1,339 people died as a result of a drug-related death.⁸ A further 1,190 died due to causes related to alcohol.⁹ Alcohol and drug-related deaths occur more frequently in communities affected by socio-economic hardship. These deaths are preventable causes of premature mortality. The numbers of people dying prematurely has been increasing in recent years, further contributing to a widening of the gap in life expectancy between our most well-off and least well-off communities.

Preventing drug and alcohol-related harms and reducing inequalities that occur as a result of substance use require all those involved to embrace the principles of Realistic Medicine.

It requires an approach to people that empowers them to be equal partners in their care and encourages them to articulate what is important to them. Many people who experience drug and alcohol dependency have also experienced trauma and adverse experiences in childhood.

Building trust and working through trusted relationships is a key means by which people are supported from the moment of crisis to achieve their own recovery goals. At a time of crisis and high risk drug use, people may have multiple and complex needs and a limited support mechanism to draw on.

Naloxone is a lifesaving emergency treatment that can reverse the effects of an opiate overdose. Scotland was the first country in the world¹⁰ to introduce a national naloxone programme, empowering individuals, families, friends and communities to reverse an opiate overdose.

When someone receives a naloxone kit, they also take part in a wider conversation about the risks they experience, ways to keep safe and other supports they may need. Naloxone kits can be given out by trained peer workers, homeless outreach teams and the Ambulance Service. This diversity of skills and experiences is crucial in establishing meaningful connections with people and increasing the effectiveness of the programme approach.

The principles of Realistic Medicine also inform and highlight the importance of a Recovery-Orientated System of Care (ROSC) for people at risk of drug and alcohol harm. A ROSC is a co-ordinated network of community based person-centred services and supports working to build on the strengths of individuals, families and communities. A ROSC acknowledges the role that family members, care givers, significant others, friends and the community can play in a person's recovery.

Understanding, supporting and promoting this approach is particularly apposite in the light of the impact of COVID-19. At a time when many statutory and third sector frontline services were extremely limited in terms of their ability to deliver harm reduction and recovery support, Recovery Communities across Scotland quickly responded and moved online, providing a diverse and innovative range of activities and assistance to people in active addiction and those on their recovery journeys. Individuals were provided with the required equipment, data services and training to access online tools. For a traditionally digitally excluded community, this represented a major step change and a foundation to build on as we move out of the pandemic.

The Ambulance Service experience

The Scottish Ambulance Service (SAS) has created a network of specialised clinical leads to engage with staff on Take-Home Naloxone (THN), aiming to provide the training required to allow clinicians to supply THN. As well as training paramedics and technicians, community first responders have also been included, taking care to the patient as quickly as possible. The supply of THN is expected to be standard practice in the ambulance service by January 2023.

SAS staff have received education and development related to drug harm reduction and the supply of THN across Scotland. As of 31 March 2022, 1,275 THN kits have been supplied.¹¹

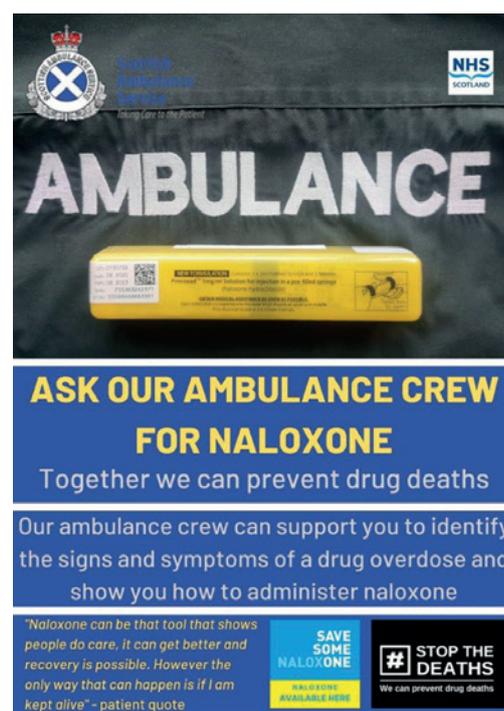


Figure 3: SAS THN kit distribution

THN has not only been given to people at risk (34% of kits), but to their friends and family (40% of kits), with the remaining kits distributed to services supporting those at risk.

78% of people requesting another kit said the previous one had been used to reverse an overdose.

Alongside staff training, a public information campaign has been running since December 2021. This has encouraged the public to engage with THN supply.



Health board/Alcohol and Drug Partnerships and data sharing

The Scottish Ambulance Clinical Effectiveness Leads (CEL) have forged strong links with all territorial NHS boards and Alcohol and Drug Partnerships (ADPs) across the country.

From July to December last year, 4,330 incidents were reported to NHS boards via the Scottish Ambulance Service Non Fatal Overdose Pathway.

Early feedback indicates that around 40% of people reported were not known to services, or receiving any support for addiction.

The CELs have collaborated with drug treatment and support services to look at the potential for connecting people with support services when the 999 call is made, ensuring more timely and equitable access to support regardless of where people live. SAS are also working together with Police Scotland and Scottish Fire & Rescue service to replicate the Non Fatal Overdose Pathway across all of Scotland's emergency services. I would like to hear from other professions about their experiences and the lessons learned.

In the future, in order that we address these complex challenges, it is important that we ensure that we involve and activate all of our assets, practising Realistic Medicine and continuing to personalise care and share decision making. We must harness the strengths and resilience in our communities who are well placed and well informed to help tackle preventable deaths and to radically reduce drug and alcohol harm.

Conclusion



We must remove barriers to good health where these exist but I remain optimistic that we can overcome the challenges, if everyone has a fair chance to thrive. The time for co-ordinated and relentless action is, however, never more urgent.

Multi-agency collaboration is required to tackle health inequalities, enable system change and deliver a healthier Scotland.

In this chapter I have shared some excellent examples of collaboration at a strategic, population and service level. We need to promote and learn from each of them, and work in partnership across our system and beyond our traditional way of doing things.

We should be prepared that any progress to tackle our entrenched health inequalities will be incremental. There's no easy blueprint for success, and it will take genuine determination to collaborate, moving away from an organisation-focused approach, to thinking about what we can achieve together across systems.

Considerations

- How can you ensure that the people you care for never experience opening a “wrong door” while centring services around their needs?
- How can we personalise the care we provide and ensure we deliver better value care for the people who need our help the most?
- How can you collaborate with partners beyond health to help tackle the inequalities affecting the people you care for?

Personalising Care through Understanding



Population

Introduction

The challenges facing our health and social care system are substantial. COVID-19 has impacted on the delivery of routine care for longer than first anticipated and as a consequence some longstanding conditions now require more urgent management. Our services, and our staff, have been under unprecedented pressure for prolonged periods and we must ensure a more sustainable way of providing high-quality care.

We know that if people are fully involved in decisions about their care, they are far more likely to value the treatment they choose. This further reduces waste and potential harm. Therefore Realistic Medicine provides us with a clear, forward-looking vision to deliver value-based health and care that is rooted in **careful and kind personalised care**.

If we are to deliver careful and kind care to our patients, we must also show kindness and compassion for the people we care for and for each other. Compassion and kindness have the profound power to enhance our wellbeing, help us make connections, build trusting relationships and increase empathy.

As healthcare professionals, it is our decisions that commit our precious healthcare resources. By practising Realistic Medicine, we can foster a new culture of stewardship – where we are mindful of the resources we use and deliver better value care, for the people we care for and for our system.

Over the past two years we have found some innovative ways to help ensure people can access careful and kind care that they value. In this chapter, I highlight a few approaches that are transforming access to services and delivering better value care for people who are vulnerable, and those living with multiple long terms conditions – the people who need our help the most.

Multi-disciplinary teams

During the last two years, as a consequence of the pandemic, the ways in which people could access treatment and care had to change to protect public health. I understand why some may feel frustrated at not being able to access care in the way they expected. Colleagues across our health and care system recognised this too. I've been extremely encouraged by their willingness and determination to overcome these challenges and how they have continued to innovate to find new ways of making sure people can access the care and support they need, when they need it.

There have been real benefits for people accessing services remotely – some are saving on travel and time away from work and education, or have been able to be joined by people close to them via shared video link. As we continue to recover and redesign health and care services, we must also continue to innovate and improve to ensure people can access care based on their needs and what is important to them, rather than the needs of the system. In doing so, we can achieve greater equity and more timely care.

To deliver the right care at the right time we continue to expand community multi-disciplinary teams (MDTs) across Scotland. This evolves the model of care from the doctor often being the first contact, to a model where patients will benefit from the range of expert advice from the whole MDT.

MDTs work to ensure people get the right care from the right healthcare professional first time, led by their GP, supported by the practice team. This means less time spent referring people between services. It also means more time is made available to support people with complex medical needs. Through the expansion of these MDTs and this renewed focus on the role of the GP as an expert medical generalist, the sustainability of general practice teams will also improve. The changes in approach to the way care is delivered have included:

- vaccinations – change in model for delivery of immunisation programmes to free practice nurse time for long-term condition management;
- pharmacotherapy – more efficient processing of repeat prescriptions and medication reviews;
- community treatment and care services – providing nursing and healthcare assistant support for bloods, wounds, ear irrigation and chronic disease monitoring;
- urgent care services – mainly Advanced Nurse Practitioner (ANP) support in areas such as same-day care, home visits, care homes; and
- additional professional clinical and non-clinical services including physiotherapy services, community mental health services and community link worker services.

The scale and value of this work cannot be underestimated. Over the past four years, the multi-disciplinary primary care workforce has expanded significantly, increasing the number of MDT staff per practice from 0.3 Whole Time equivalent (WTE) in 2018 to 2.69 WTE by March 2021, by which time 2,463 WTE multi-disciplinary staff have been recruited.¹²

Enhancing General Practice capacity indirectly and directly

Making the most of the MDT ensures time is used more effectively, reduces multiple appointments for the same issue, and frees up time for longer appointments, where required. Evaluation of MDT contribution (where MDT members are prescribers) in Edinburgh¹³ has resulted in the following expectations emerging:

- One WTE practice-embedded Physio can augment workload capacity by the equivalent of five GP sessions (half days) per week;
- One WTE practice-embedded Community Link Worker can augment workload capacity by the equivalent of one GP session per week;
- One WTE practice-embedded Advanced Nurse Practitioner can augment workload capacity by the equivalent of six GP sessions per week;
- One WTE practice-embedded Mental Health Nurse can augment workload capacity by the equivalent of five GP sessions per week;
- One WTE practice-embedded pharmacotherapy team member can augment workload capacity by the equivalent of three GP sessions per week (average across a skill-mixed team); and
- One WTE practice-embedded qualified pharmacist would augment workload capacity by more than three sessions, and make indirect impact on workload through prescribing system improvement.

Case Study 3: The frailty multi-disciplinary team – Coatbridge

Multi-Disciplinary Teams also provide a context to work across sectors to improve the health of complex and vulnerable people. In North Lanarkshire an MDT is providing comprehensive assessment of older people with increasing frailty on a proactive basis.

The MDT includes a local voluntary sector advocacy organisation (Equals Advocacy), doctors from primary and secondary care, community nursing, rehabilitation team, older peoples' mental health team, care at home, link worker and pharmacy.

Escalating frailty is identified by MDT members discussing people they have dealt with or by the electronic Frailty Index identifying high-risk patients. Patients are offered a facilitated home self-assessment supported by Equals Advocacy which focuses on a 'What Matters to Me' conversation, including anticipatory care planning as well as a comprehensive frailty and carers assessment. This is brought to the virtual MDT meeting with the advocacy worker acting on the service users behalf, ensuring they are at the centre of their care.

The MDT formalises a diagnosis of frailty, allocating a key worker and organising a polypharmacy review. At the MDT a range of additional interventions and referrals are made, such as carers assessment or falls risk assessment tailored to the person's priorities and values.

- In a snapshot of 56 patients who had medication reviews there were 28 new items started and four increased but also 66 items stopped and 37 doses reduced to give more appropriate prescribing plans.
- Those changes resulted in a 31% reduction in anticholinergic drugs – drugs that increase the risk of, or worsen confusion.
- It was also associated with a saving of £92 per person per year showing that more personalised care offers better outcomes and value.
- In terms of capturing the patient's wishes, the practices have improved a high baseline level of electronic Key Information Summary, with 87.5% of those discussed having an active record and an increase in the number of severely frail patients with an Anticipatory Care Plan from 10% to 25%.
- Up to 8% of those discussed benefitted from an increase in their care at home package to support their independence.

Feedback from both service users, carers and members of the MDT has been positive.

"It's so positive... this new way of working – how everybody is coming together... and I think it's the best thing" – (Carer)

Moving care closer to patients

People living with long-term conditions often have an abundance of knowledge about living with their conditions and can benefit from sharing experience. Clackmannanshire and Stirling HSCP supports patients with vitamin B12 deficiency to self-administer their treatment – this approach enabled 50% of patients to self-administer their own B12 injections and is now offered to the 4,000 people the service supports. This previously accounted for 16,000 appointments annually.¹³

Appointments, especially in secondary care often involve travelling from home, taking time away from work or education. In Forth Valley MDT working has allowed 9% more patients to be managed in their community by a physiotherapist embedded in their practice.

Advance practice physiotherapists embedded in GP practices now offer around 3,000 direct access appointments per month. Less than 1% of patients require follow up with a GP and less than 2% referred to secondary care. Rolling out the service, 26 practices with a physiotherapist saw a 9% reduction in patients requiring secondary care whilst 24 practices without a physiotherapist saw a 13% increase in referrals.

At a system level this equates to at least 700 fewer referrals to hospitals each year. In addition, the Primary Care Mental Health Nurse service is delivering more than 4,000 appointments each month, meaning far more direct contact with mental health services and less than 2% of people being referred back to GP care. The service is also offering 15 and 30 minute appointments, allowing for longer conversations to truly personalise care, and reducing the likelihood of secondary care referral.

Tools to access care

Care Navigation is a process to signpost people to the best-skilled person to deal with their needs. There are now more ways of consulting with patients including telephone consultations, video consultations, group consultations (shared medical appointments), virtual group consultations and digital interfaces such as DACs (Digital Asynchronous Consulting) alongside traditional face-to-face consultations.

DACs describes a range of general practice digital tools that support clinical triage and remote consultations where the clinician and patient are not necessarily present at the same time. These tools should be used to deliver care in the way best suited to the person being consulted.

Digital consulting: Near Me

Video-based consultation via the Near Me service, provides virtual access to care. Near Me allows people and those closest to them to access the care that they need remotely from a setting that suits them. Some benefits include:

- reduced need for travel (an estimated 50 million miles of travel have been saved since January 2020);
- reduced time away from work and education;
- allowing multiple family members to join consultations;
- consulting geographically remote specialists or members of the MDT; and
- reduced exposure to healthcare-acquired infection.

The benefits of remote consulting are particularly important in rural communities.

Case Study 4:

"We live in a remote rural area and have used Near Me in our local surgery before the coronavirus lockdown. It saves us so much time and hassle as we do not need to travel to Inverness for every appointment (80 miles and two hours each way), but still have the 'face-to-face' experience. Many of our appointments are mainly talking and we can see the benefits for us and also the hospital from removing the need to travel for every appointment. In addition, we would normally claim travel expenses for a hospital visit which is no longer needed, saving the NHS money. If we have to wait for an appointment when the surgery is running late, this would be much nicer to do in our home rather than in a hospital waiting room with anxiety about our return journey and our dogs sitting outside in the car park. Of course, lockdown has changed everything, and now it is also safer to have video and telephone consultations. The reduction in travel is also good for the environment and indirectly all our wellbeing. Where actual in the room appointments are not needed, this is such a good thing."

Click [here](#) to view Dr Callum Duncan Consultant Neurologist talking about his experiences of Near Me

The [Near Me Quick Start Guide for Practice Administration Staff](#) makes it easier for Practice administration staff to offer Near Me appointments by providing step-by-step guidance when speaking to people seeking help. The Near Me system also features an option to "**Consult Now**", where healthcare professionals can send a one-time URL link to a person's phone or e-mail. This function allows both professionals and the people they care for connect instantly via video call. **This allows for rapid conversion from phone to video, which can reduce the need for in-person follow-up.**

Group consultations

Group consultations have gained popularity over several years. Shared medical appointments give the flexibility to deliver high-quality routine care to improve outcomes for the people we care for.

They are recognised as being effective and efficient use of clinicians' time.¹⁴ More importantly, they provide a safe environment where people can gain mutual support from others as part of their self-management.¹⁵ People also often find it easier to complete a course of group sessions online, saving them time when they do not have to travel to attend.

Many in-person groups ceased during the pandemic and a video group solution that was safe and simple to use for both patients and clinicians was requested. In response, a Group Consulting feature was launched in November. This allows up to 30 participants to take part in a patient-friendly and secure video meeting. Current users of group video sessions include Dietetics, Clinical Psychology, and Psychiatry, and they have enabled people to remain connected with their healthcare team as well as access peer-to-peer support and shared decision making.

I'd encourage you to take a look at the [resources available to support professionals to set up and run Near Me Group Consultations](#)

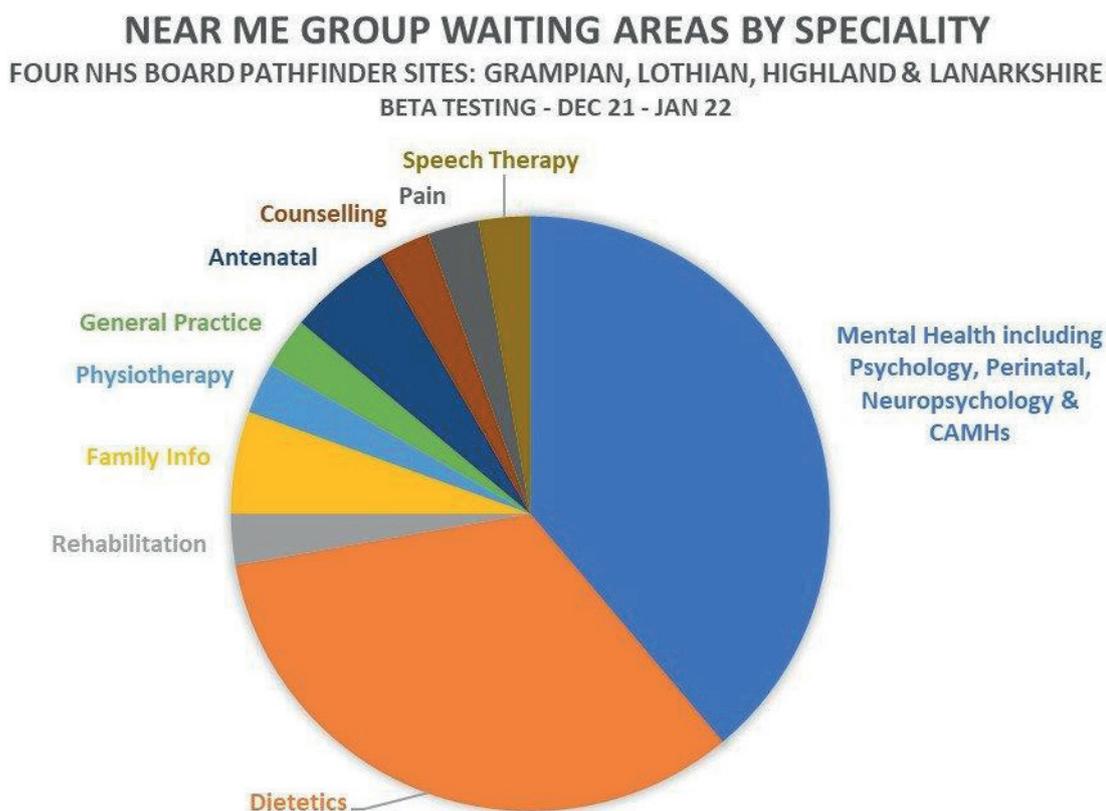


Figure 4: use of Near Me group consultations by specialty 1 December 2021 to 31 January 2022

Transforming access to care for people who have suffered sexual assault

Work to transform and personalise care for people who have suffered rape and sexual assault is an outstanding example of collaboration and change, driven by a shared desire to help people in an extremely vulnerable moment.

Case Study 5

In 2019, 19-year-old Katie was drugged and raped. She reported it to the police who made arrangements for her to attend a new Sexual Assault Response Coordination Service (SARCS), provided by her local health board. The SARCS staff looked after her immediate health and wellbeing needs, such as checking if she was at risk of pregnancy and testing for sexually transmitted infection. As the assault was within the previous seven days, she also had a Forensic Medical Examination (FME).

The SARCS provided a quiet and friendly healthcare environment, in contrast to the police station, which was the former location for FME in that health board area. Nonetheless, when Katie arrived, she felt scared and unsure of what was going to happen and just wanted to go home to her own bed where she felt safe.

A nurse at the SARCS offered Katie a hot drink and something to eat, and sat with her while they waited for the FME to begin. This was a comfort to Katie, and helped to make her feel safer. Katie was also comforted by the support provided by the nurse during the FME, who ensured that she was always aware of what was going to happen next and why.

After the FME, Katie was offered longer-term support from a designated nurse called Barbara. Barbara coordinated Katie's ongoing health and wellbeing support, including a referral for specialist counselling, and support to obtain a certificate to be absent from work, meaning Katie didn't have to arrange these herself. Katie also had access to a family service, meaning her mum also got the support she needed.

Over time, Katie and her mum began to feel like they were more able to manage day to day. When Katie was contacted by Barbara after 12 weeks, she said she felt much better. She was receiving advocacy support from Rape Crisis Scotland and was due to start her counselling. Barbara reassured Katie that while she would not contact her proactively, she could get in touch with her at any time.

When reflecting on her experience recently, Katie told Barbara that the care she received during this difficult time was invaluable. She said she felt listened to and respected by the SARCS staff at a highly traumatic time in her life. The SARCS was a peaceful space and the nurse gave her time to comprehend what had happened and made her feel able to get the tests that she needed. Katie felt that she was able to speak and be heard without feeling judged.

Katie said that this support has enabled her to find the courage and strength to go forward and live a full life and that such support can help someone to survive the trauma that a rape or sexual assault can cause.

In 2017, a **CMO taskforce** was established by my predecessor, Dr Catherine Calderwood, to lead the improvement of Forensic Medical Examination (FME) services in Scotland to provide person-centred and trauma informed healthcare for people of all ages. A Forensic Medical Examination (FME) is a type of examination for people who have experienced rape or sexual assault and is carried out by a specially trained doctor, who may be able to collect evidence that could help the police.¹⁶ The taskforce has had wide representation and contribution from across health, justice, social work and the third sector.

Listening to the views of people with lived experience has been pivotal, and has helped transform the way services are delivered. The taskforce has ensured:

- no one has to go to a police station for an examination;
- sexual Assault Response Co-ordination Services (SARCS) now operate in each health board across Scotland*;
- SARCS staff are trained to provide medical, emotional and practical support to people in the days following an assault; and
- people who experience rape or sexual assault are supported and empowered to ask questions before they decide to go ahead with any aspect of care.



Understandably, some people who have experienced rape and sexual assault, may be undecided whether to talk to the police. Having the choice to self-refer for a FME is an important aspect of giving people control at a time when it has been taken away. The Forensic Medical Services (Victims of Sexual Offences) (Scotland) Act 2021, which commenced on 1 April 2022, provides people aged 16 and over the ability to access healthcare and request an FME without first having to make a police report. Any evidence collected during this examination will be securely stored within the SARCS for 26 months, giving people time to decide on whether to make a police report.



A National Strategic Network is being established under the NHS, to provide continued national leadership for the improvement of SARCS and to help ensure the highest standards of patient care.

* NHS Borders SARCS expected to be operational by Summer 2022

Preventing long-term ill health

As well as ensuring access to services people need, we must prioritise the prevention of illness and its complications including obesity and the metabolic disease associated with it. This opens up ways to prevent long-term ill health with benefits to the individual, reduces the need for healthcare, improves quality of life and helps people to continue doing what matters to them.

Case Study 6

David is a taxi driver from Edinburgh, who benefited from the “Counterweight Plus” intervention

See his story [here](#)



There is also a whole system benefit in reducing the volume of complications and people requiring long term care, ultimately delivering value-based health and care – better value for the people we care for and for our health and care system. In Scotland, two in three adults are living with excess weight. This is even more marked among our least affluent communities.¹⁷ In addition, the number of people living with type 2 diabetes (T2DM) is increasing. The Scottish Diabetes Survey (2020), shows that 278,239 people are currently living with type 2 diabetes, a 46% increase since 2008.¹⁸

It is however possible for people recently diagnosed to achieve remission through intensive weight management programmes.¹⁹ Remission for people with type 2 diabetes means that blood sugar levels are controlled without the need for any diabetes medication.²⁰

MDT working between clinicians, dietitians and psychology delivers an intervention: Counterweight Plus.²¹ It focuses on supporting people to achieve remission through significant weight loss. Studies have shown that this approach works,²² with nearly half of the study group achieving remission and for those who lost 15kg or more, up to 86% were in remission at 12 months.

In direct response to the need to support people during the pandemic, Counterweight Plus has been delivered remotely via NHS Near Me, with scales, blood glucose and blood pressure monitors given to people to use at home. This has allowed greater reach, faster access and ensured people received vital support.

Counterweight Plus Outcomes:

- 60% of patients lost >10% of their starting weight
- 40% achieved remission of Type 2 Diabetes

This is value based health and care in action. An approach guided by clinical and cost effectiveness evidence, where people access care they value and are supported to live longer, healthier lives.

Getting it right takes team work. I would encourage healthcare professionals to consider how they can work in partnership with their MDTs to deliver proactive, value-based interventions like this.

Sharing information about things that matter

Providing personalised care based on what matters most to people, is a key tenet of Realistic Medicine. This extends beyond improving care and preventing ill health through to ensuring we know and understand the wishes of those with long-term health conditions.

We must ensure our health services deliver a good quality of life for people as well as ensuring they are able to die with dignity and in comfort. We must create confidence between people and their health professionals that the right care will be provided in the right place, informed by what matters most to the people we care for. Previous Realistic Medicine reports have highlighted the related issues of inappropriate investigation and over-treatment, especially towards the end of life.²³

I've listened to people expressing frustration at having to repeat their "story" to every new professional they encounter. People expect that those charged with providing their care will share as complete a picture as possible of the person in front of them. In a health emergency that "story" may include vital information, such as a person's wishes for care and treatment when their health deteriorates, and what really matters to them.

Emergency care and treatment decisions must be personalised to the individual patient. As healthcare professionals it is crucial we know that the care we provide is what the people in front of us would choose if able; failing to do so runs a significant risk of moral injury to those providing emergency care.

Where people have not had the opportunity to discuss and record their care preferences, or where this information is not immediately accessible to emergency care providers, there is grave risk of doing harm through distressing over-medicalisation. There is an equally grave risk of dangerous under-treatment when rapid emergency treatment decisions are made based **on limited or inadequate information**.²⁴

Research has repeatedly established that where people have been able to have conversations about their treatment preferences, and these have been recorded in the Key Information Summary, they have been significantly more likely to die out of hospital, at home or in a homely setting.

ReSPECT

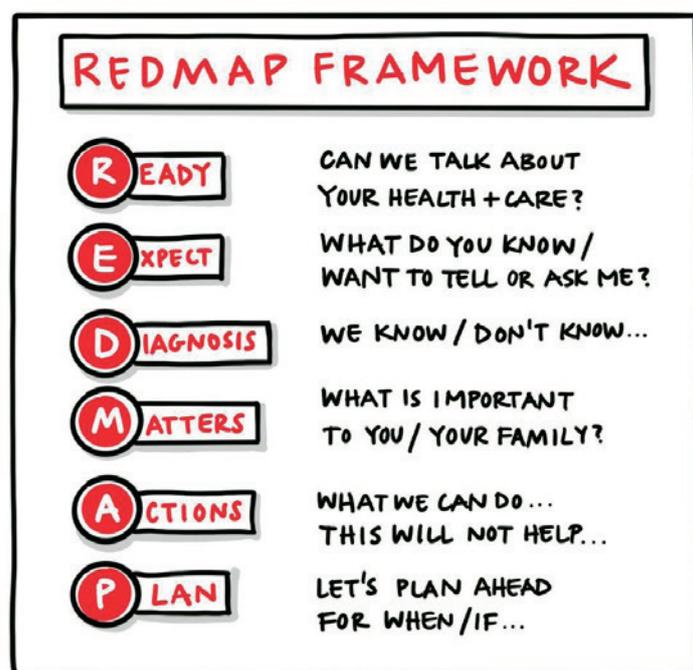
The ReSPECT process elevates care planning to a new level. It highlights and supports an intuitive conversation as integral to the process, and its implementation goes hand-in-hand with staff development.

The digital version of the ReSPECT process presents a transformative opportunity to meet that need, with a robustly sharable record, underpinned by a truly person-centred process.

The aim of ReSPECT is to have a single, accessible, shared record for each person, produced with them, centred on what matters to them. This record can evolve as the person's condition changes and aims to serve as a guide when an emergency does happen.

The ReSPECT process is for everyone, but will have increasing relevance for people who have complex health needs, people who are likely to be nearing the end of their lives, and people who are at risk of sudden deterioration or cardiac arrest. Some people will want to record their care and treatment preferences for reasons personal to them.

I see the future as embedding ReSPECT alongside other care planning tools to help ensure people receive the care that matters to them. They must have the opportunity to share in decisions about their care in a way that they understand and are comfortable with.



Scottish Capsule Programme (ScotCap)

Public Health restrictions during the pandemic have led to some people waiting longer to access services, including diagnostic testing. Innovation is required to help ensure people can access the tests they need, when they need them. The Scottish Capsule Programme seeks to do precisely that, and at the same time significantly reduce the number of people who need endoscopy.



The Scottish Capsule Programme (ScotCap) introduces a new technology, Colon Capsule Endoscopy (CCE), to Scotland.

CCE is a “pill” that contains two cameras, it’s swallowed and as it travels through the gut, it takes 50,000 images of the bowel lining. The capsule wirelessly transmits the pictures it takes to a data recorder, worn by the patient. In addition to this, people wear a detection “vest” which helps localise the position of the capsule as it travels through the body.

CCE offers several benefits to patients and their healthcare team:

- It is far less invasive than optical colonoscopy;
- Can be delivered closer to home; and
- Reduces stigma compared to traditional optical colonoscopy.

In rural and remote areas, e.g NHS Western Isles, the CCE service works with the “Hospital at Home Team” to deliver the procedure at home supported via Near Me, together with nursing staff from a delivery partner.

Feedback has been extremely positive. One person who recently underwent CCE said

“it’s a lot easier. It’s just swallowing a tablet, the prep is just the same as for a normal colonoscopy and it’s a really good option if you’re worried about the procedure as it’s a lot less invasive. It’s painless, it’s not uncomfortable at all, it’s easy to do and as long as you follow your prep work, it’s straight forward, I’d definitely recommend it.”



The **ScotCap Playbook** summarises key information encompassing patient information, bowel preparation, vetting and reporting procedures, data capture from every person participating in the national programme and a summary of the latest evidence base.

Conclusion



Our pandemic response has demonstrated our resilience and ingenuity – our capacity to innovate at speed. Our ability to tap into a wealth of creativity and our determination to find novel solutions to the challenges we face.

Our workforce has adapted and repurposed to confront the unique and sustained demands of COVID-19, and I want us to preserve that agility and strength in depth as we continue.

People must be supported to access the care that is right for them. Our system and indeed our national psyche is focused on care being doctor led, when there is clear evidence that other members of the Multi-Disciplinary Team are better placed to provide the care people need and value.

The work to develop SARCS demonstrates the value of truly personalised care and ensuring people have control over their care even in the most difficult circumstances.

We have a clear ambition. We want people who live or access services in Scotland to have more years in good health, and to reduce health inequalities.

We must promote innovation and adopt new and better ways of working; redesign the system around the people we care for, and what matters to them; and ultimately prioritise prevention, improve population health and reduce inequality.

Considerations

- Does your service support personalised care and ensure people can access the care they need at the right time?
- How can we modernise pathways to deliver careful and kind care in a way that eliminates harm and waste from our system?
- What can we, individually and as a profession, do to ensure people live the longest good quality life possible?

Improving and Innovating for a More Sustainable System



Introduction

Innovation and improvement are key to delivering value-based health and care. Medical science does not stand still nor does the world in which we practise.

Research has the power to transform and save lives, improve outcomes for the people we care for and drive a modern, innovative health and care system. From observational studies through to trials of the newest treatments and technologies across all disease areas; the opportunity for researchers, healthcare teams, patients, and the public to come together to drive advances in healthcare has never been greater. The importance of research and novel treatment has been brought into sharp focus by the pandemic.

The measures needed to keep our NHS staff safe – single-use PPE for example – have contributed to significant waste across our health and care system. We are amidst a climate emergency and as our largest employer, NHS Scotland has a key role in helping Scotland achieve net zero. We must find new ways of working and a more sustainable way of doing things.

In this chapter I highlight just some of the work of Scotland's Chief Scientist's Office, now in its 50th year, as well as some of the work that aims to deliver a greener, more sustainable health and care system.

COVID-19 research response

The last two years have demonstrated how vital research has been in understanding, treating and vaccinating against COVID-19. The response of Scotland's research community was rapid, joining the world effort to combat the pandemic and save lives.

Research shows the value of national and international collaboration with health and academic partners. The remarkable efforts have enabled world-leading research into understanding the risk factors for COVID-19 (**ISARIC** and **GENOMICC** trials); therapeutics such as dexamethasone and tocilizumab (**RECOVERY** trial); and vitally, brought about the approval of COVID-19 vaccines which are a key part of our recovery.

Case Study 7: Genomicc

Led by the University of Edinburgh, **GENOMICC** is the world's largest study of the genetics of critical COVID-19, involving more than 57,000 people. Latest research (March 2022) has identified some 16 new genetic variants associated with severe COVID-19, including some related to blood clotting, immune response, and intensity of inflammation. These findings will act as a roadmap for future efforts, opening new fields of research focused on potential new therapies and diagnostics with pinpoint accuracy.

Reaching this stage would never have been possible without the enduring professionalism, ambition, and energy of our dynamic research community. And whilst the COVID-19 pandemic has been unprecedented, it provides important lessons for the future of research.

The value of research



Figure 5: the SCOT-HEART trial

People are more aware of research than ever before. Almost all NHS boards in Scotland are research-active, and in the last year alone over 43,000 people in Scotland²⁵ have taken part in research.

Embedding clinical research at the heart of care is vital. Benefits include:

- better health outcomes: earlier diagnosis, novel treatments and prevention of illness.
- “research-active” hospitals have lower mortality rates, not limited to research participants.
- £1 invested in medical research delivers an annual return of around 25p.²⁶

Medical research in Scotland creates jobs, income and savings for the NHS, international competitiveness, and economic growth.²⁷ Scotland already has one of the largest life science clusters in Europe with over 200 medical technologies companies, 150 pharma services companies and 750 organisations, together employing over 40,000 people.²⁸ With an ambition to become the fastest growing health innovation life science cluster in Europe, the role of NHS Scotland as a powerful driver of research, development and innovation cannot be overstated.

Recovery and redesign

We are at a significant moment in global healthcare. Data and analytics, cutting-edge technologies, and treatments, including precision medicine, immunotherapy, genetics and artificial intelligence, are transforming the way we treat the people we care for.

Restoring Scotland’s diverse portfolio of research across all research phases, treatment types, and conditions is vital as we recover from the COVID-19 pandemic and look to redesign and improve services. Research helps create the conditions for a modern health and social care service that is focused on providing the evidence we need to deliver value-based health and care.

Work continues to enable further trials of the most advanced healthcare treatments, diagnostics and medical technologies and bring them to people faster. Research is also being used to help understand what doesn’t work (lower-value care), so we can improve best practice and focus our precious resources on providing healthcare that people really value and will benefit from.

We are rightly proud of our history of pioneering medical innovation and must build upon this to deliver a more sustainable health and care system for the people of Scotland. **Saving and Improving Lives - The Future of UK Clinical Research Delivery** – sets out an ambitious vision to realise the true potential of clinical research. It builds on our proven ability to work together, across the research community, across nations and across sectors in pursuit of a common goal – to create a clinical research delivery ecosystem which will shape the future of healthcare and improve people’s lives for years to come.

I want to take this opportunity to recognise the difference Scotland’s CSO has made to our lives over the last 50 years. We are a nation living with high levels of complex disease. We must continue to invest in vital research to find treatments that can transform the lives of the people we care for, not only in Scotland but also around the world.

We must build on our achievements thus far and utilise our research environment – a single unified health system, nationwide research infrastructure, some of the best medical experts and high-quality electronic health data to innovate and improve and transform the outlook for Scotland.

A sustainable health and care system



In my last annual report I began a conversation on the need to improve the environmental impact of the way we provide care. There is an urgent need to act to address the climate emergency and loss of biodiversity. In line with the rest of society, NHS Scotland needs to accelerate efforts to cut greenhouse gas emissions and become environmentally sustainable, and Scotland’s target date for achieving net-zero emissions has now been brought forward from 2045 to 2040.

I recognise the importance of environmental sustainability and climate action to many of you and how this is integral to our work and personal lives. I share this commitment to ensuring we deliver a more sustainable way of working and living. We must find a way to better focus our adaptation and innovation to address this emergent challenge.

Many of the actions needed in response to the climate emergency and the environmental crisis have positive health impacts. Cutting emissions and restoring biodiversity improves air quality and can reduce the incidence of or improve outcomes in diseases such as asthma, heart attacks and stroke. Eliminating pharmaceutical residues from wastewater prevents harm to biodiversity and limits the growth in antimicrobial resistant bacteria.

NHS Scotland has shown throughout the COVID-19 pandemic that it can act quickly in a crisis. Now, more than ever, there needs to be a focus on ensuring our health and care services are used equitably and sustainably in order to meet the needs of the people of Scotland – as well as those of our future generations.

A new **NHS sustainability strategy** will be published later this year. It will set out the approach and actions which will be taken by NHS Scotland, with support from the Scottish Government and working in partnership with others, to respond to the climate emergency. Its focus is on improving the environmental sustainability of the NHS, while also recognising the role that the NHS has in relation to helping achieve the UN Sustainable Development Goals relating to social and economic development.

Where and how

The way we provide care can have a major impact on both our communities and our environment, and can support our transition to a net-zero health service. By transforming where and how we deliver services, we can empower people to have more control over their health and wellbeing and deliver care which is environmentally sustainable, which increases our contribution to supporting good health and helps to reduce health inequalities.

Our NHS should act for the benefit of the local communities we serve and recognise that we can positively contribute to local areas in many ways beyond providing healthcare. As anchor organisations, NHS bodies have an unrivalled opportunity to model the sustainability goals around fair employment, gender equality and sustainable communities.

Our approaches should make a difference to local people including staff. By working in partnership with our local communities, we can design and use our buildings and spaces for social benefit. This includes providing access to better, greener outdoor space, and opportunities for recreation and physical activity, as well as reducing environmental impact.

NHS Scotland has already made significant progress in creating a sustainable health service but more needs to be done. We need to build on the good work that's underway, and make sure sustainability becomes everyone's responsibility.

Case Study 8: NHS Greater Glasgow and Clyde

NHS GGC has invested in excess of £1 million for a variety of **greenspace and biodiversity** projects to improve people's care experience and staff wellbeing. The Board recognises that our experiences over the last two years mean that this has never been more important. The Board's approach involves close collaboration with key partners:

- NHS GGC have signed up to the **Sustainable Glasgow Green Economy Hub Charter**. A commitment by leading employers in Glasgow to take action within their own organisations and sectors to contribute to a green recovery and radically reduce the city's carbon emissions.
- **Climate-Ready Clyde**: a cross-sector initiative funded by 15 member organisations and supported by the Scottish Government to create a shared vision, strategy and action plan for an adapting Glasgow City Region.
- **Glasgow Caledonian University's** School of Built Environment for undergraduate and postgraduate development in technical areas of expertise required to meet this challenge.
- **Clinical institutions**: working with clinical colleagues to embrace change, given they are the biggest users of resources and producers of waste.
- **National Agencies**: working with regulatory bodies.

Glasgow's approach is delivering more sustainable buildings and greener environment. The £71 million North East Hub will be NHS GGC's first net zero building for heating and power through a range of measures including the use of air source heat pumps and electricity generated by solar panels. The Hub has a courtyard designed to make better use of green space to support wellbeing.

Clydebank Health And Care Centre, which is nearing completion, has also been designed to utilise the district heating system using heat from the River Clyde harnessed by water-source heat-pumps.

Sustainable care

REALISTIC MEDICINE

WE CAN:



Achieving Scotland's climate goals and Realistic Medicine fit naturally together. To become a sustainable and greener healthcare provider, we must deliver safe, effective, personalised care, and reduce harm and waste through improvement and innovation. Realistic Medicine promotes a culture of stewardship of finite NHS resources, where we take responsibility, individually and collectively, to use our healthcare resources wisely.

Healthcare professionals are the stewards of the resources we use in the care we provide. The NHS in the UK has experienced growth in demand²⁹ for healthcare services of around 4.5% per annum and almost two thirds of it is generated by increases in the volume of activity, or innovation.³⁰

If we wish to see a more sustainable health and care system, we must focus our efforts on reducing the waste and potential harm caused by both under treatment and over investigation.

Value-based health and care

Realistic Medicine asks us to respond to the twin threats of harm and waste by focusing on the concept of value. When there is only enough resource to make interventions available to a few people, those interventions are offered to people who have most to gain and who are more willing to accept the risk of potential harm – in these circumstances, we are delivering high-value healthcare. However, as investment and resources increase, interventions are offered to people who are less severely affected, so the maximum benefit that this person can expect is less but the probability and magnitude of harm remains the same. By being mindful of the dangers of going beyond the “point of optimality” – we can maintain the best balance of benefit to harm to the people we are for.



VALUE BASED HEALTH & CARE

Value-based health and care can help relieve some of the pressures we are experiencing across health and care. It presents us with an incredible opportunity to provide more equitable, better-value care for the people we care for and for our system.

Let me be clear: value-based health and care is not primarily about saving money, or delivering efficiencies. It's about us, working with the people we care for, to consider whether a treatment or an investigation is going to be of value to them. By discussing the evidence, the risk and the benefits of available test and treatment options, we will be able to optimise the use of our precious healthcare resources and reduce harm and waste. In doing so we can relieve some of the workload pressures we are experiencing day in, day out, make better use of the resources at our disposal, increase job satisfaction and provide care that people, and those closest to them, really value.

As we remobilise and reform services, we must build towards a more sustainable health and care system that delivers the better value care we are looking for.

Conclusion

CULTURE OF
STEWARDSHIP



Scotland has been at the forefront of medical research for five decades and this innovation has brought about real benefits every day for us, our colleagues and the people we care for. We must innovate to deliver value based health and care for the future. Failure to protect the environment around us has direct consequences but also longer-term risks changing patterns of disease and our ability to treat it.

This year's World Health day was titled 'Our Planet: Our Health', noting that "an environmentally sustainable health system would improve, maintain or restore health, while minimising negative impacts on the environment and leveraging opportunities to restore and improve it, to the benefit of the health and well-being of current and future generations."³¹

Like many of you, I wish to see a sustainable innovative health and care system in Scotland that secures our future and that of our future generations.

Considerations

- How can you improve and innovate to help deliver a more sustainable system?
- How can you make better use of evidence and research to deliver better-value care?
- Can you change the environmental impact of your work, and better still, improve staff wellbeing?

Supporting Our Workforce



Workforce





Personal reflections Professor Sir Gregor Smith

Even before the pandemic began to exert its unprecedented impact on healthcare, it was evident that aspects of working in health and social care were becoming more challenging for many people. Over the last two years, however, these challenges have become amplified and more widespread.

Colleagues across Scotland have worked tirelessly, often in extremely difficult circumstances, and have continued to provide high quality treatment and care for the people of Scotland. I want to start the final chapter of this report by recognising the incredible contribution of Scotland's health and social care staff over the past two years and to convey my pride and gratitude to them for their commitment and skills.

But as we recover and restore health and care services we must recognise the toll that caring through the pandemic has had on our workforce. I listen to accounts from colleagues of their experience almost every day and I know that some people feel disenfranchised and undervalued. This has to change if we are to recapture fulfilling careers for all and sustain this remarkable commitment and expertise that people offer day after day.

People are more than employees: they are colleagues, patients, family members and carers. They are sports people, musicians, artists, writers and so much more. They come from diverse backgrounds and cultures, have different preferences and priorities, hopes and concerns. Some feel more able to speak out than others.

We must provide a working environment and culture which recognises this. Retaining and supporting our most valuable resource is vital if we are to deliver the optimal care for those who need our help now and in the future. We must provide our health and care professionals with the support they need to fulfil their roles, achieve their full potential, and ensure that they feel appreciated and valued.

I am highly aware of the pressures that health and social care professionals continue to face. Workplace stress in healthcare is proven to affect both the quality of care and patient satisfaction.³² Work, when good, is a protective factor for our mental health yet, contrarily, we recognise mental "distress" as a normal reaction for healthcare workers to some of the events we experience. "Normalising" stress, whether chronic or acute, is not, and cannot become, acceptable. It therefore has become increasingly important to consider how we address both the underlying causes of this and to support our staff emotionally and psychologically in their everyday work, to ensure that they are able to continue delivering the highest standard of patient care.

I know too that consistent access to some basics would help. Access to hot meals and refreshments throughout the working day, changing facilities, adequate car parking and bike storage, for example. These are seemingly simple expectations that I hear feedback about regularly. I'm committed to working collaboratively with representatives and organisations from across the professional spectrum to understand staff experience, and to help build supportive multi-disciplinary teams that are focused on providing fulfilling care and support to patients and colleagues alike.

The GMC undertakes and reports a survey³³ each year that is valuable in assessing trends in the experience and attitudes across the medical profession. The State of Medical Education and Practice in the UK (SoMEP) uses the GMC's own in-house data, primary research and other external data sources

to help understand and raise awareness of important issues in UK healthcare. Since 2019, the primary research feeding into this report has included an online survey of doctors: the SoMEP barometer survey.

The barometer includes seven burnout assessment questions from the Copenhagen Burnout Inventory. In the last survey, published in November 2021, there are indications that support some of the important and worrying messages I hear directly from colleagues;

- 12% of doctors in Scotland were categorised as being at a high risk of burnout i.e. gave a negative response on 6-7 of the 7 indicators (compared to 17% of doctors surveyed in all UK)
- 15% of doctors in Scotland were categorised as being at moderate risk of burnout i.e. gave a negative response on 4-5 of the 7 indicators (compared to 15% of doctors surveyed in all UK).

Of particular concern is the finding that fewer doctors from a black and minority ethnic background, particularly those who identify as Asian/Asian British doctors, feel that they are supported by their immediate colleagues or agree that they are part of a supportive team. There is also evidence of a widening gap between the experiences of disabled and non-disabled doctors, with almost twice the proportion of disabled doctors reporting dissatisfaction and struggle with workload, or who were categorised as high risk of burnout.

5% of doctors in Scotland had taken steps to leave in 2021 (compared with 7% of doctors surveyed in all UK). This is a rise of 1% in 2019 and a further 1% in 2020. It's critical that we fully understand the underlying reasons for this and take action to address it – particularly for those groups of doctors who are most at risk of leaving and those who feel less supported.

There is, however, progress despite these challenges. The survey also identifies a rise in the proportion of doctors who agree that they know who to contact to discuss matters relating to occupational health and wellbeing. There is more work to do here but this is encouraging. There are many examples of approaches around the country that are making a difference to staff experience and I share them in the hope that they become more visible and accessible, with consistency, across the country.

Improving retention in the medical workforce

Work to improve retention is central to the overall work to ensure confidence in longer-term medical workforce modelling. Linkage of clinical service demand and workforce provision will be key to ensure recruitment and training of a sustainable future medical workforce throughout the career spectrum, from undergraduate, through training employment and on to retirement.

In hospital specialties, those most at risk of leaving the profession are those in the years before retirement. In General Practice this appears to occur sooner, in the mid-career period.

Factors affecting the retention of medical staff are well documented:

- current vacancies;
- commitments to service expansion;
- acute demands from recovery plans;
- service development requirements (short-medium term); and
- 2015 pension scheme changes, including the alignment of occupational pension with state pension age.

The **Health and Social Care National Workforce Strategy**, sets out the need for action to improve retention across the health and social care workforce. Analysis of the medical workforce action plan is underway to identify high risk points, initially focused around hospital consultants approaching retirement. In parallel, further work is ongoing to address retention issues among General Practitioners, as well as retention at the early and mid-stage of postgraduate training. This will require co-ordinated policy and decision making from undergraduate training through to retirement.

Delivering these retention priorities is the main focus of the Scottish Shape of Training Transition Group. Work on late-stage consultant career is being developed to help ensure alignment of retention priorities with wider work on medical workforce supply/demand, and longer-term medical workforce planning.

In recognition that the approach will benefit from multi-system input, collaboration is welcomed between Scottish Government, the BMA and partnership input from the GMC and other professional organisations (through the Scottish Academy). They will work collaboratively with leads from NHS Board Executives Groups including Board CEOs Group, Scottish Association of Medical Directors and HR Directors Group. Policy and professional support from Scottish Government Health Workforce Directorate will ensure appropriate support and policy linkage.

Peer-to-peer support – Dr Carlyn Davie

“At the beginning of the pandemic, COVID-19 was a new illness that we knew little about and it’s no surprise that the additional pressure and uncertainty that it brought took its toll on healthcare professionals. I am proud to have been part of a team who started a Peer Support Service in the Emergency Department at the Royal Infirmary of Edinburgh at the start of the pandemic.

Peer Support involves providing the first line of support to healthcare staff after a stressful event or when personal stressors are impacting on your work life. We know from the literature that those who work in healthcare prefer to receive support from their peers.

A multi-disciplinary team have been trained to offer early, confidential, psychological first aid to colleagues when required. Psychological first aid is defined as a compassionate presence, designed to mitigate acute distress and assess the need for continued mental health care.

Staff can contact a peer supporter formally through a dedicated email address or informally by approaching them directly to arrange a time to meet. All Peer Supporters have had formal training to fulfil this voluntary role and are supported through monthly supervision sessions.

Our Peer Support Service has subsequently been supported and rolled out across NHS Lothian and our Health and Social Care Partnerships.

As we take stock of the current challenges facing the NHS and taking steps to recover our staff, we feel that Peer Support is an important piece of the puzzle.

My aspiration going forward would be that Peer Support becomes imbedded in the culture of our organisation and that this training and support is available to staff in all Health Boards across Scotland.”

Case Study 9:

I used the Peer Support Service after the sudden loss of my mother.

I was struggling with work, trying to hold everyone up and life in general.

I'd seen the Peer Support posters in the staff room.

I found the service a truly positive and helpful process.

I was able to talk, cry and more importantly, was listened to.

I did not feel judged. I felt cared for and supported. After getting everything out I was able to process life again and begin to move forward and focus the positives again.

I am not someone who talks about feelings but the peer supporter really made me realise the importance and need for this.

Thank you so much for your help and support. I really would encourage others to engage and I will use again if I need anything.

Following the success of the programme in Lothian, NHS Grampian is in the process of launching their own staff support scheme.

Developing tomorrow's leaders



Effective leadership, role modelling and embedding values of kindness, compassion and collaborative working creates a psychologically safe environment where all staff can excel, and improve care across Scotland.

But what makes leadership “effective” at this time? Scotland needs leaders who are inspirational, empowering, promote wellbeing, and who understand that it is our people who are tirelessly stepping up to meet the challenges we face in delivering healthcare day in, day out. There are some excellent examples of compassionate leaders like this across the health and social care system, but it also needs more leaders whose backgrounds are truly representative of the diverse workforce it employs.

Our collective aim must be to create and support people in health and social care to become leaders who focus on public sector values and an ethos of integrity and kindness; leaders who understand and enable a diverse, agile and dynamic workforce to respond to future challenges. And leaders who nurture and inspire the next generation to develop their own path towards these critical roles.

I was fortunate to encounter people who inspired and supported me during critical points in my career development. Though I came from a working class background, with a state school education, there were still people in senior roles with similar backgrounds, values and cultural experience that I could identify with and I recognise the privilege conferred by other characteristics that I possessed. Though the gender mix of leadership has undoubtedly improved, the same cannot be said about the presence of leaders from minority ethnic backgrounds and this must be addressed as a matter of urgency.

A key outcome, therefore, will be to create a diverse, inclusive and values-driven workforce in both health and social care that at all levels reflects the diversity in our communities – including socio-economic, ethnicity, gender and disability. Talent identification and succession planning are key tasks for leadership roles and are, in my view, one of the more enjoyable aspects of leadership.

The new **National Leadership Development Programme (NLDP)** will help to deliver on ambitions in the **National Workforce Strategy, NHS COVID Recovery Plan** and the new National Care Service, to ensure we nurture our talent and provide them with the skills required to lead and enable change, and deliver better services and ultimately better outcomes.

The NLDP will complement leadership development and support at local levels within health, social work and social care workplaces. It is being designed for leaders at all levels across health, social care and social work, in the public, independent and third sectors.

Key areas that have been identified as a priority for development in year one of the programme include:

- TURAS re-design.
Creating a new digital capability allowing all staff across the public and private sectors in health and care access to personalised learning plans and career conversations. The new system will have the functionality to create online communities on specific subject matters such as equality and diversity, collective leadership and wellbeing and signpost to other resources. This will deliver on a platform that enables inclusive learning and accessibility to all staff;
- Creating more diverse workforces – user research will be conducted and may subsequently lead to the design and delivery of an accelerated leadership development programme for ethnic minority staff; a race allyship programme and creation of sustainable ethnic minority networks within health, care and social work;
- Creating a range of resources on a wide variety of leadership and values issues for staff at all grades, and using different mediums that recognises their different needs and time available to commit to this development. This will include, for example: ten-minute webinars, one-hour masterclasses, live sessions and micro-credential courses delivered by the University of Glasgow;

- Sustainable Development Programmes for specific professional cohorts to create a leadership skillset in line with their roles in a post-pandemic environment. In year one, this will include: Managers of Adult Social Care Homes, Directors of Public Health, Chief Executives in Health Boards, Chief Officers of Health and Social Care Partnerships. The focus will be on their individual leadership development needs and how they can be more effective at collaborative working as a cohort. A senior multi-disciplinary cohort will also be piloted including a Senior Systems Leadership Programme. Specific skillsets required to deliver on the National Care Service aspirations and prioritise these will be established; and
- Formal on-boarding in year one of new senior roles within Health including Chief Executives, Workforce and Clinical Executive Directors.

It is expected that this national leadership development offering will be launched in August 2022. The programme will evolve over time and its content and focus will be designed to suit workforce needs, including expanding diversity work into other areas such as disability, gender and socio-economic status.

National Wellbeing Hub – collaboration in action

The experience of health and care staff over the last two years, and the need to support their physical and psychological wellbeing, have highlighted the requirement for the ongoing development of new national resources.

The **National Wellbeing Hub** has evolved since May 2020. It is a partnership between the Rivers Centre For Traumatic Stress and Scottish Government Health and Social Care, set up with the support and engagement of key partners – NHS Boards, Health and Social Care Partnerships, Professional Bodies and Associations, Coalitions and Trade Unions.

The mission is to develop the National Wellbeing Hub as an evidence-led resource to promote, enhance and support the psychosocial wellbeing and recovery of everyone in Scotland working in health and social care, including unpaid carers. The Hub team aim to continuously improve and promote the Hub as a single point of contact for health and social care practitioners and unpaid carers to obtain advice, information and support in relation to the delivery of evidence-based and best-practice psychological interventions, and to signpost them to other resources or sources of help.

Smartphone apps and computer-based programmes are increasingly recommended and used to support various aspects of mental wellbeing. The **National Wellbeing Hub** offer access to a such programmes. Also included are a series of resources developed to assist individuals, and their managers, if they have been affected by a long COVID syndrome. The platform features interviews with health and care workers affected by long COVID, sharing first-hand experiences of how a supportive and successful return to work can be facilitated.

Workforce Specialist Service

The Workforce Specialist Service (WSS) offers confidential mental health assessment and treatment for regulated health and social care professionals in Scotland. Mental ill health is more prevalent in these groups and they often have complex barriers that delay or prevent them accessing treatment so delivering an accessible, confidential and specialist service is an opportunity to protect and retain a vital workforce. This is especially important in the recovery period following the pandemic, when many will be affected by their experiences during that time.

The WSS is delivered by experts with experience of supporting the management of issues such as depression, anxiety, burnout or addiction, in the health care workforce, balancing the issues of patient safety, the needs of the individual and the impact of their regulatory and working environment.

The service supports anyone who belongs to one of the regulated professions within health and social care and when fully established in Scotland, will be the most comprehensive service of its kind in the UK. To date, over 445 health and social care professionals have registered for the service.

Conclusion

The last two years have been extremely demanding for those working in our NHS, but the signs of increasing challenge for staff were present even before this. The pandemic has, however, affected our physical and mental health in an even greater form and further support methods are needed.

I am deeply affected by the experience of our workforce. I celebrate the many successes and plaudits you deservedly receive, but too often now I hear of the circumstances that make your career less fulfilling or less sustainable. I am committed to listening to your experience and advocating on your behalf when this is appropriate and necessary. At the NHS Scotland event last year I spoke of my role as an independent professional adviser being a two-way conversation; to represent the government to the profession but also to represent our profession to the government.

I will continue to advocate that every member of staff in Scotland has access to the basic things they need to do their job to the best of their ability. As a complex but compassionate system we must ensure staff are valued, feel valued and have access to the supports that fulfil them and sustain their careers.

Considerations

- What support do you need to carry out your role to the best of your ability?
- How can the new national leadership strategy support those who wish to be leaders to grow and develop?
- How do we tackle the variation in wellbeing services currently available to NHS Staff?

Appendix 1:

The Health of our Nation

Appendix 1: The health of our nation

Our health is central to our lives individually and as a population, and health is recognised as a human right.³⁴ A healthier population is essential if we are to realise our ambitions of providing opportunities for all, creating sustainable and inclusive growth and ultimately a more successful country. This chapter provides a summary of the current data and evidence, and use this to describe issues affecting Scotland’s population health. Many of those communities that have experienced the worst effects of COVID-19 are those who were already disadvantaged by inequalities in the wider determinants of health; including income, housing, employment opportunity and wider access to services.

COVID-19 continues to have a substantial impact on the health of our nation, including many tragic deaths due to the virus, and the stresses that necessary lockdowns and restrictions have placed on our health. We also continue to see marked inequalities in health, and there has been a stalling of overall improvements in health, as measured by life expectancy, since around 2012. A full understanding of how Scotland’s health has been affected by the pandemic will take time. Some effects could be delayed or may only be detected later. In addition, many of the tools we usually use to understand and measure health have been paused or changed due the pandemic, including surveys and how people use of health care.³⁵

Life expectancy and excess mortality

Scotland’s life expectancy data allows us to summarise the health of our population measured by rates of death and allows comparisons to be made over time.

Around 2012 there was a shift in life expectancy in Scotland.³⁶ Steady improvements – which had been observed for more than 50 years – stopped, and only very small increases in life expectancy occurred between 2012 and 2019 (see figure 6). These adverse changes in mortality trends reflect people dying younger than they should.³⁷ The impact was not equal across all groups, mortality rates among people living in our more socioeconomically deprived areas actually increased during this period.³⁸

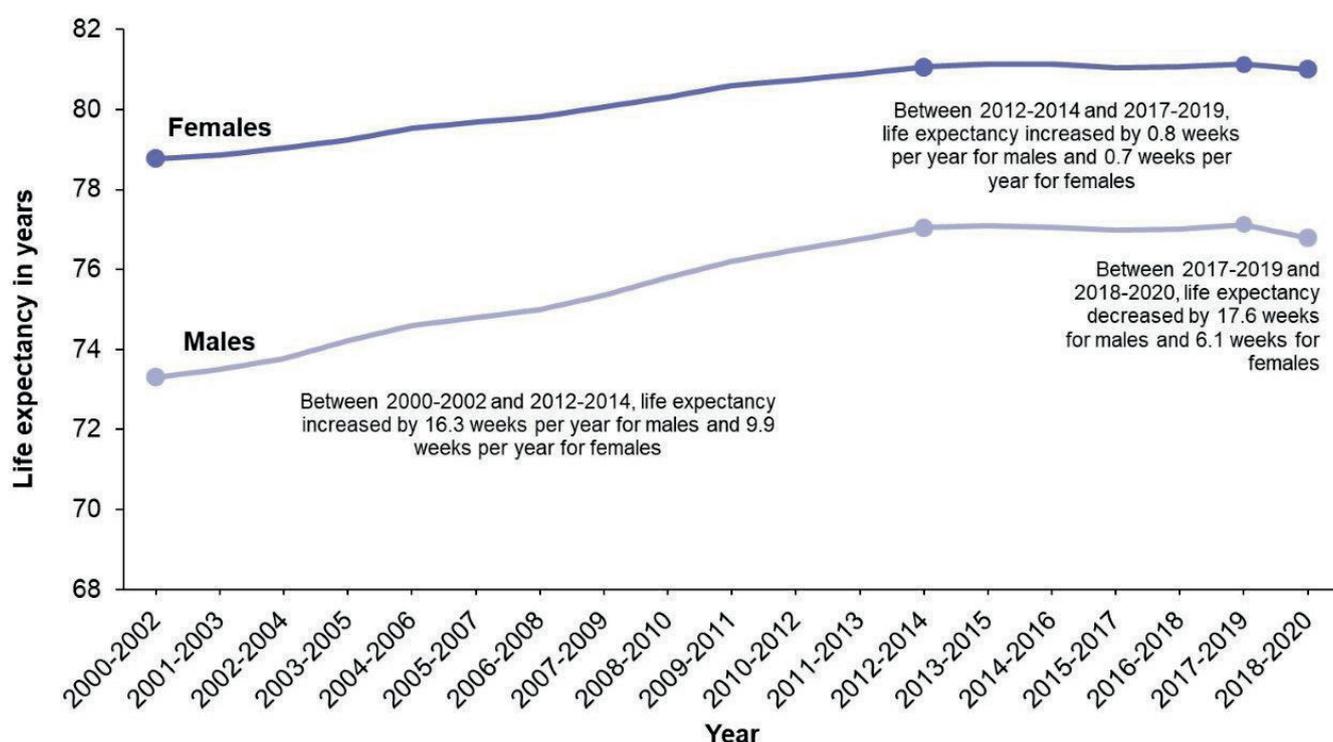


Figure 6: trend in life expectancy over time, Scotland, 2000-2002 to 2018-2020.

Source: [Life Expectancy in Scotland](#)

In 2020, 6,048 people died with COVID-19 as the underlying cause in Scotland, and a further 4,830 people died in 2021.³⁹ Also, more deaths occurred from other causes in both years than would be expected in comparison to the five years prior to the pandemic. This measure of the number of deaths, compared to the number expected, is known as “excess mortality”. It is not fully accounted for by deaths where COVID-19 was the underlying cause. There are several contributing factors, including the economic and social effects, and changes in health, social care and other services in the context of the pandemic.

The full effect of this may not be known for some years, however, information for the period 2018-2020 still shows a marked reduction in life expectancy in Scotland (see figure 6). Deaths from COVID-19 had the most substantial negative effect on life expectancy, but changes in drug-related deaths, and those due to external causes (such as accidents, poisoning and assaults) also had an adverse effect (see figure 7).⁴⁰

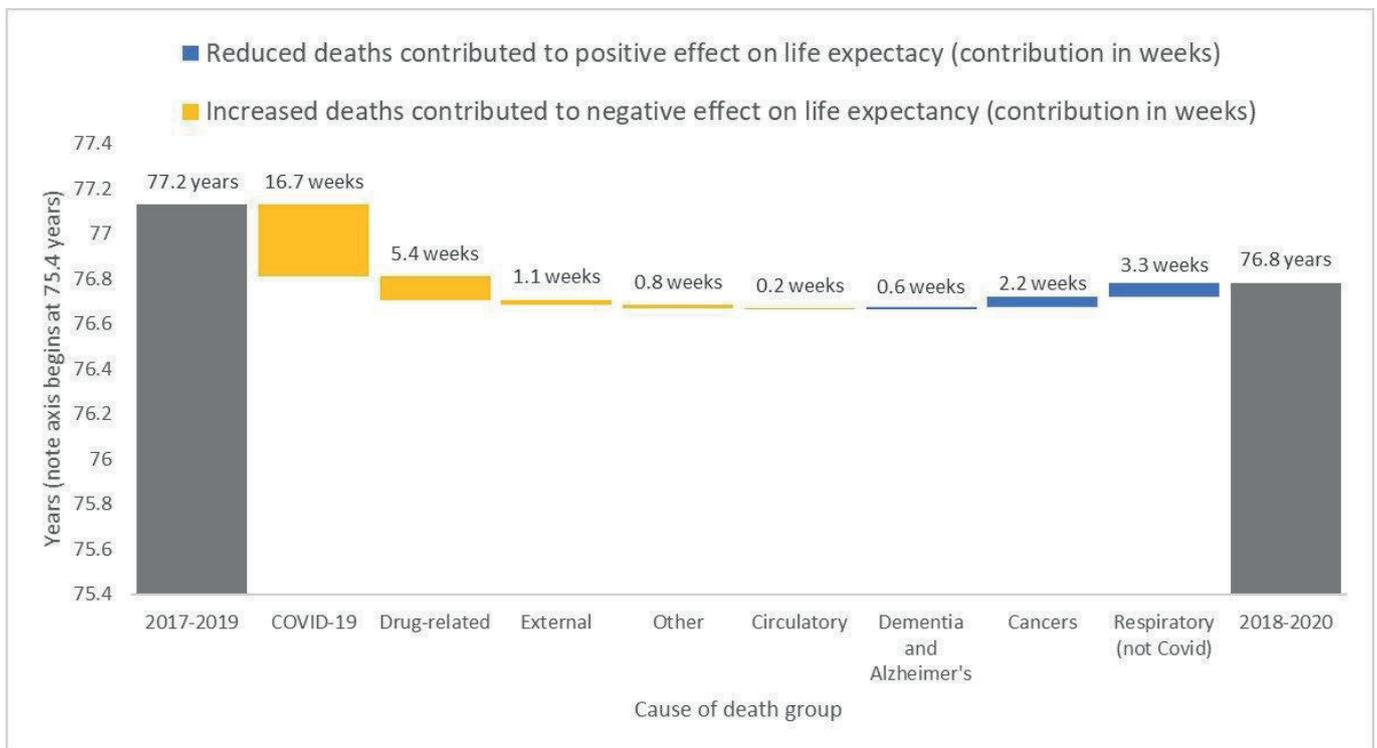


Figure 7: contribution of grouped causes of death to the change in male life expectancy in Scotland between 2017-19 and 2018-2020. Data source: [Healthy Life Expectancy in Scotland](#)

Measures of health and illness

Beyond mortality, healthy life expectancy (HLE) is a measure which provides an indication of the length of time that people consider themselves to be in “good” or “very good” health. In 2018-20 healthy life expectancy was 61.8 years for females and 60.9 years for males. It also demonstrates marked socioeconomic inequalities; females living in the most deprived tenth of areas can expect to live fewer than 50 years in good health, whilst for those in the least deprived areas the figure is more than 70 years (2018-2020) (see figure 8).^{41,42}

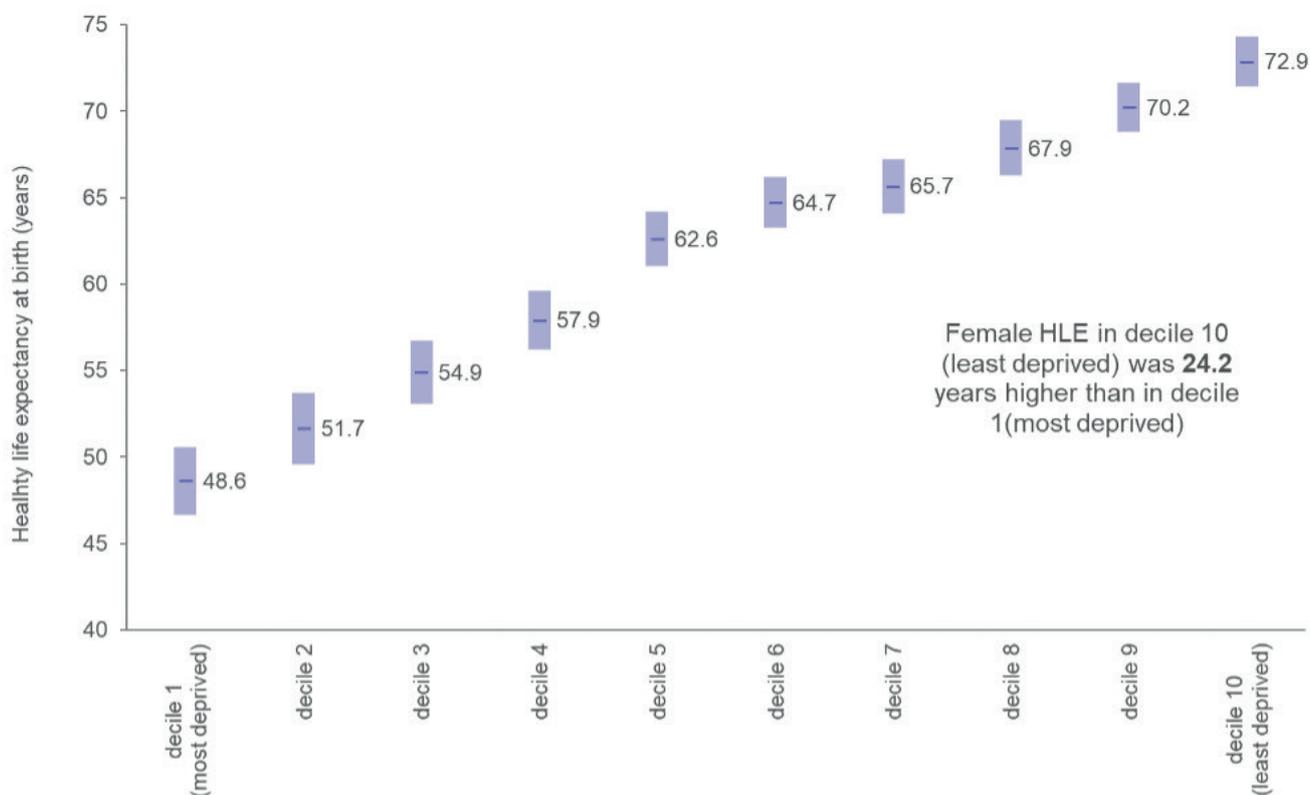


Figure 8: healthy life expectancy in Scotland, females, 2018-2020, by SIMD decile.
Source: [Healthy life expectancy in Scotland](#)

Disability-adjusted life years (DALYs) is a way to quantify the “healthy years of life lost” to ill health and early death.⁴³ This allows us to understand which health conditions are preventing people in Scotland from living longer lives in better health. The most recent overall data available, from 2019, shows that the number of “healthy years lost” increases with age, peaking at 70-74 years. The most substantial causes of healthy years lost are cancers and cardiovascular disease, with mental health conditions, injuries, substance misuse and musculoskeletal conditions also important in younger adult age groups (see figure 9).

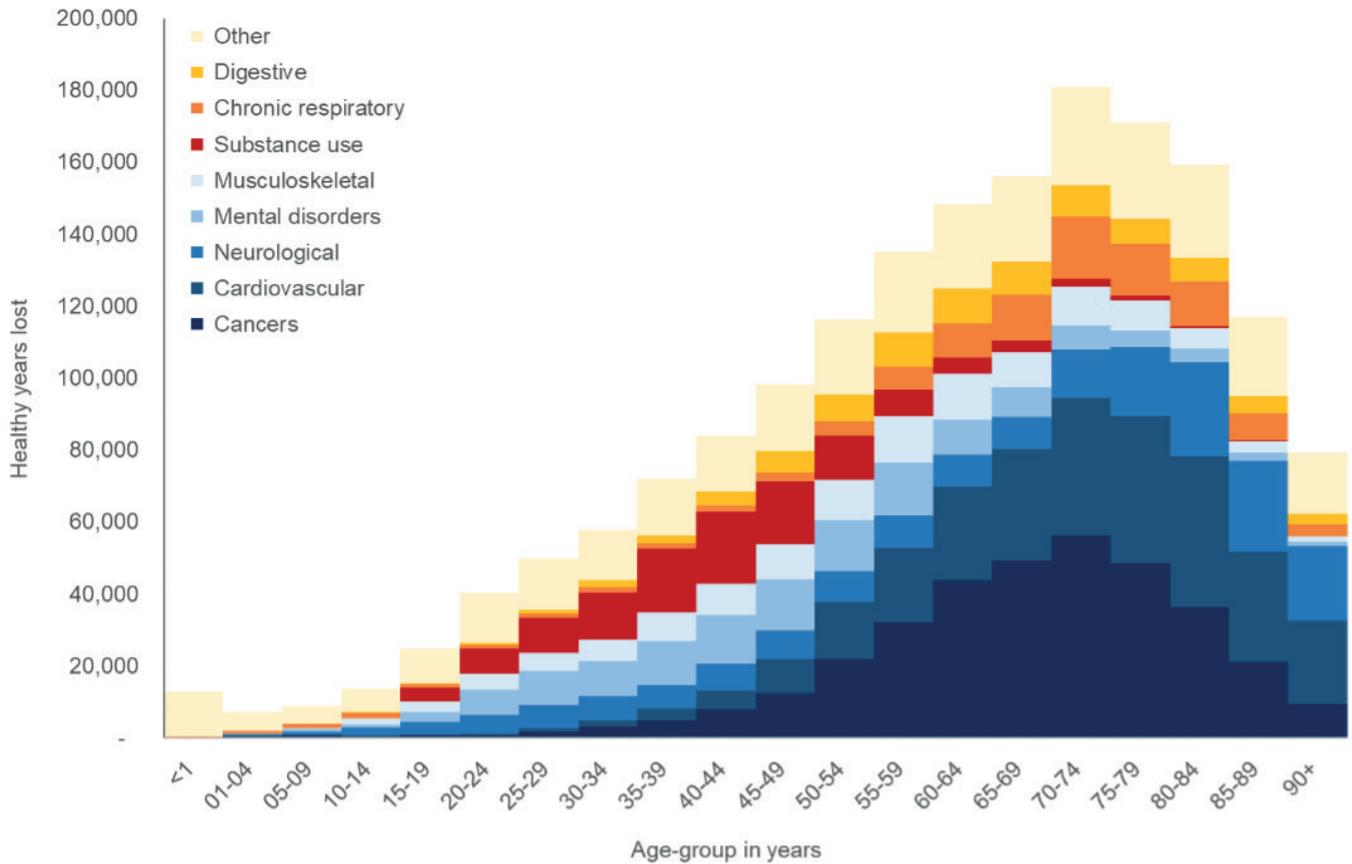


Figure 9: healthy years lost to grouped health conditions, by age group, Scotland, 2019. Source: Scottish Burden of Disease (SBoD) study, 2019.⁷

Recent changes in health and determinants of health

The past two years has been a period of huge change in our social interactions, education, work, travel, our economic circumstances, and the provision of health and social care.⁴⁴ Some of these changes were sudden and brief, others are more sustained and still evolving. These factors are known to be important building blocks of a healthy society, and it has been predicted that such changes will impact on the health of the population.^{45, 46}

Positive changes

There are a number of areas in which the changes during the pandemic appear to have had a positive influence on our health. Car traffic fell markedly during the first and second lockdowns, there was less HGV traffic during the first lockdown, and the total vehicle distance driven was 20% lower in 2020 than the previous five years' average.⁴⁷ The lower traffic volume is likely to have contributed to the fall in deaths in transport accidents, which were 20% lower than average over the previous five years.^{48, 49} Monitoring showed that air quality was markedly better in 2020 than in previous years, and this has also been attributed to traffic changes.^{50, 51}

The measures taken to restrict the spread of COVID-19 also influenced the transmission of other infectious diseases. Levels of influenza infections were exceptionally low over winter 2020/21 and 2021/22.⁵²

Mental health and wellbeing

Information from a survey carried out by the Office for National Statistics (ONS) show that, in February 2022, 1 in 20 respondents in Scotland felt lonely often or always, and one third reported high levels of anxiety. Nearly one third also reported that their wellbeing is being affected by the COVID-19 pandemic.⁵³

Data from the Scottish COVID Mental Health Tracker Study show that young adults aged 18-29 years reported the highest rates of symptoms of poor mental health, and lower mental wellbeing.⁵⁴ Young women were particularly affected, as were those with caring responsibilities, and those with pre-existing physical or mental health conditions.

Determinants of health

Information from a number of sources indicates that the material circumstances of some groups, in particular the self-employed and minority ethnic communities, have been adversely affected by changes in employment and the cost of living.^{55, 56} While the furlough scheme and uplift in Universal Credit helped mitigate the effect on household incomes in the short term, evidence suggests that many people are now struggling to make ends meet.⁵⁷ In survey responses 1 in 4 people reported that their employment had been affected by the pandemic, and household finances for around 1 in 7.⁵⁸

Education is a key way in which all children and young people can be provided with the socialisation and skills that positively influence health.⁵⁹ The impact of the pandemic period on education has been considerable, with children in Scotland estimated to have had, on average, 119 fewer days in school, from March 2020 to April 2021, compared with pre-pandemic levels.⁶⁰ Children of Primary 3 age are only now experiencing their first full year of school without nationwide closures.

Access to and use of health care

In February, 1 in 2 respondents to the ONS Opinions and Lifestyle survey in Scotland reported that access to healthcare and treatment for non-COVID-19 issues was being affected by the pandemic.⁶¹ Emergency admissions to hospital were around a third lower in March and April 2020 than in the same period in 2018-19 and remained about 10% lower in February 2022.⁶² Planned admissions remain around 25% lower in February 2022 than in the same period in 2018-19.⁶³

There are several factors contributing to these differences, including changes in how services are delivered, reluctance among some people to seek care due to fear of COVID-19 infection, not wishing to burden healthcare services and constraints within services due to the COVID-19 response.

It is possible to identify some concerning patterns that are important. It's estimated there were nearly 5,000 fewer diagnoses of cancer made in 2020 than would be expected.⁶⁴

Across all hospital specialties and illnesses, there were nearly 120,000 people waiting for inpatient or day-case treatment at the end of December 2021, compared with nearly 80,000 in December 2019.⁶⁵ Over the same period, the number of people waiting to be seen for a new outpatient appointment has increased by nearly 50%.⁶⁶

In addition, illness associated with COVID-19 has also had a substantial impact both acutely, and the emerging effects of long COVID, about which our understanding of the impact, causes and extent is still growing.⁶⁷

Impact on population groups

All the measures of health described thus far have in common stark inequalities between groups of people living in Scotland. These inequalities reflect the unequal access to the building blocks of good health that existed pre-pandemic.

Socioeconomic position and occupation are also associated with the rate of death from COVID-19, with this being up to 2.5 times higher in our most deprived communities compared with the least deprived (see figure 10).^{68, 69, 70}

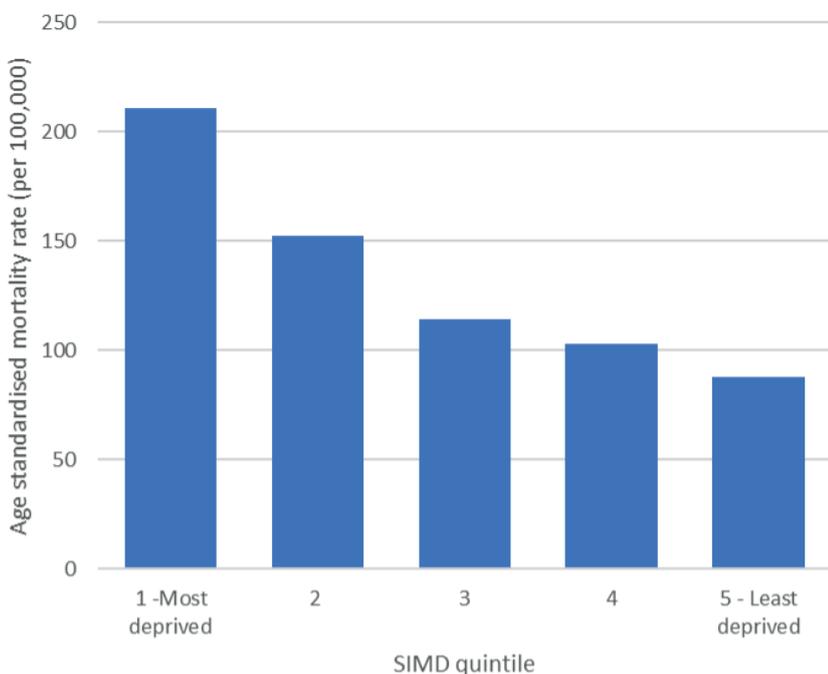


Figure 10: deaths involving COVID-19 (age-standardised mortality rate) by Level of deprivation (SIMD), Scotland, 1 March 2020 to 31 March 2022.

These inequalities in death from COVID-19 are significant and have widened as the pandemic has progressed.⁷¹

People have been constrained by circumstances, such as whether they are able to work from home, or the amount of space available in their home to isolate if someone is unwell.

There have also been marked inequalities in COVID-19 outcomes between ethnic groups, with those identifying as Pakistani having around a four-fold higher rate of hospitalisation or death due to COVID-19 than people in the White Scottish group.⁷²

Research has found that the pandemic has worsened the inequalities for those living with a disability or long-term condition. Factors include disruption to services, isolation and a feeling of being invisible.⁷³ Those with a disability have consistently reported higher levels of loneliness and poorer wellbeing than non-disabled people, as well as a higher impact on household finances and on access to healthcare.⁷⁴ This includes the parents of children with a long-term condition.⁷⁵

Many children and young people, although less likely to have severe COVID-19 illness,⁷⁶ have experienced substantial effects on their health and wellbeing.⁷⁷ Delivery of routine childhood immunisations has been well maintained, and timely uptake of these improved over the pandemic.⁷⁸ In other areas of health and health services for children there are concerning signs. The proportion of children at two and a half years of age for whom there is a concern about their development was higher in 2021 than in the pre-pandemic period.⁷⁹ There has been an increase in the percentage of children who are at risk of being overweight or obese at the age of 5 years. Fewer children have seen a dentist, with under two-thirds (64%) having been seen in the past two years in September 2021, compared with 97% in 2019, accompanied by a marked widening in the socioeconomic inequalities in dental care (see figure 11).

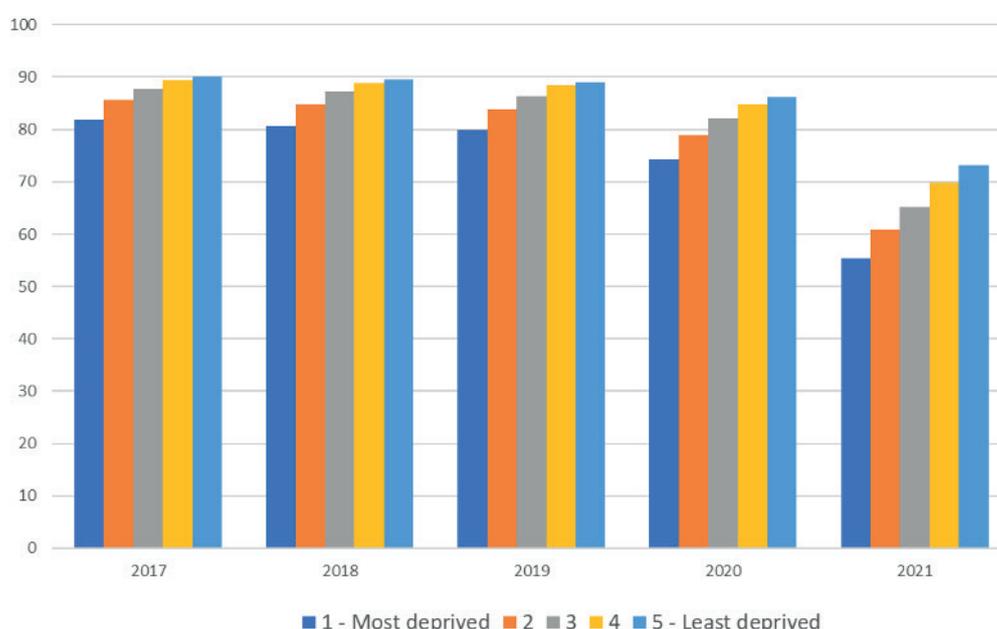


Figure 11: percentage of children registered with an NHS dentist who have been seen by their dentist in the previous 2 years, Scotland, 2017 to 2021, by deprivation (SIMD)⁸⁰

Unfortunately, the challenges of the past two years have compounded the faltering progress on improving population life expectancy observed in the years since 2012. The impact of this period on our health and wellbeing may continue to be felt for years to come.

Acknowledgements

Editorial Team



Chief Editor

Dr Stuart Hamilton
Scottish Clinical Leadership Fellow
2021-22



Professor Graham Ellis

Deputy Chief Medical Officer
for Scotland
Scottish Government



Craig Bell

Unit Head, Realistic Medicine Policy
Team, Scottish Government



Professor Marion Bain

Interim Deputy Chief Medical Officer

Contributors

Tackling Child Poverty Strategy Unit,
Scottish Government

Asif Ishaq, Fair Health Team,
Scottish Government

Kimberley Smith, Fair Health Team,
Scottish Government

Dr Christine A Goodall, Medics Against Violence

Geraldine Lennon, Navigators

Dr Sara Robinson, Consultant
in Emergency Medicine, NHS Lothian

Dr Tara Shivaji, Consultant in Public Health
– Drugs, Alcohol, Tobacco

Information Governance,
Public Health Scotland

Julie McCartney, Clinical Effectiveness Lead
– Drug Harm Reduction (East Region)

Dr Michelle Watts, Senior Medical Adviser,
Directorate for Primary Care, Scottish Government

Kathy Kenmuir, Professional Nurse Adviser
for Primary Care, Primary Care Directorate

General Practice Division,
Primary Care Directorate, Scottish Government

Primary Care Frailty Multi-Disciplinary Team
– Coatbridge

Jacqueline Walker, Type 2 Diabetes Prevention:
Professional Dietetic Advisor Directorate for
Population Health, Scottish Government

Laurie Eyles, Professional Advisor Framework
for the Prevention, Early Detection and Early
Intervention of Type 2 Diabetes, Scottish
Government

ReSPECT: Tim Warren, Lynsey Fielden, Dr Juliet
Spiller, Paul Baughan Jonathan Waldheim-Ross

Mr Angus Watson, Consultant Colorectal Surgeon,
NHS Highland

Anna Betzlbacher, Improvement Advisor Centre
for Sustainable Delivery

Chief Scientist's Office Scottish Government

Phillip McLean, Health Infrastructure Division,
Scottish Government

Andrew Forsyth, Health Infrastructure Division,
Scottish Government

Anne Leitch, Value-based health and care Lead,
CMO Division, Scottish Government

Dr John Colvin, Senior Medical Advisor,
Directorate for Health Workforce,
Scottish Government

Dr Carlyn Davie, Consultant
in Emergency Medicine, NHS Lothian

Leadership and Talent Management
Scottish Government

Dr Lynda Fenton, Consultant in Public Health,
Public Health Scotland

Rosie Cooper, National Improvement
Lead - Near Me Programme, Technology Enabled
Care Programme, Scottish Government

Marc Beswick, National Near Me Lead - Near Me
Network, Technology Enabled Care Programme,
Scottish Government

Maimie Thompson, Communications and
Engagement Manager, Technology Enabled
Care Programme, Scottish Government

The Realistic Medicine Team



Craig Bell

Unit Head, Realistic Medicine Policy Team, Scottish Government



Dr Stephen Martin

Team leader, Realistic Medicine Policy Unit Scottish Government



Dr Tom Speight

Senior Policy Manager, Realistic Medicine Policy Unit Scottish Government



Kirsty Elliott

Policy Officer, Realistic Medicine Policy Unit Scottish Government



Renzo Padreschi

Policy Officer, Realistic Medicine Policy Unit Scottish Government



Dr Stuart Hamilton

Scottish Clinical Leadership Fellow, Realistic Medicine Policy Unit Scottish Government



Anne Leitch

Value Based Health & Care lead, Realistic Medicine Policy Unit Scottish Government



Dr Catherine Labinjoh

National Clinical Advisor



Dr Helen Mackie

National Clinical Advisor



Polly Windsor

Senior Policy Officer, Realistic Medicine Policy Unit Scottish Government

References

- 1 WHO, WHO records 100th attack on health care in Ukraine. Available from: [WHO records 100th attack on health care in Ukraine](#) Accessed 17.05.2022
- 2 Evidence shows that children and young people from lower-income households in Scotland do significantly worse at all levels of the education system, and this starts early – see [Scottish Attainment Challenge Fairer Scotland Duty](#) and [Closing the poverty-related attainment gap: progress report 2016-2021](#) for more detail
- 3 Public Health Scotland, [Child Poverty in Scotland: health impact and health inequalities](#), October 2018
- 4 National Records of Scotland [Healthy Life Expectancy in Scotland, 2018-2020 | National Records of Scotland \(nrscotland.gov.uk\)](#), 1 October 2021
- 5 Data from the Family Resources Survey 2017-2020, for more information see [Tackling child poverty priority families overview](#)
- 6 Navigator, Scottish Violence Reduction Unit, [Navigator | Scottish Violence Reduction Unit \(svru.co.uk\)](#)
- 7 <https://www.scotpho.org.uk/comparative-health/burden-of-disease/why-burden-of-disease/>
- 8 National records of Scotland. Drug-related Deaths in Scotland in 2020. Available at [Drug-related Deaths in Scotland in 2020 | National Records of Scotland \(nrscotland.gov.uk\)](#)
- 9 National Records of Scotland. Alcohol Specific Deaths available at [Alcohol-specific deaths | National Records of Scotland \(nrscotland.gov.uk\)](#)
- 10 Bird S M McAuley A; Scotland's National Naloxone Programme. The lancet. Published: 26/01/2019. Available from: [https://doi.org/10.1016/S0140-6736\(18\)33065-4](https://doi.org/10.1016/S0140-6736(18)33065-4)
- 11 Data supplied from Scottish Ambulance Service Internal audit 2022
- 12 [Primary care improvement plans - implementation: progress summary - March 2021 - gov.scot \(www.gov.scot\)](#)
- 13 Data Supplied by Scottish Government Directorate for Primary Care, General Practice Division
- 14 Whitfield, G. (2010). Group cognitive-behavioural therapy for anxiety and depression. *Advances in Psychiatric Treatment*, 16(3), 219-227. [doi:10.1192/apt.bp.108.005744](https://doi.org/10.1192/apt.bp.108.005744)
- 15 Thimm, J.C., Antonsen, L. Effectiveness of cognitive behavioural group therapy for depression in routine practice. *BMC Psychiatry* 14, 292 (2014). <https://doi.org/10.1186/s12888-014-0292-x>
- 16 <https://www.gov.scot/groups/taskforce-to-improve-services-for-rape-and-sexual-assault-victims/>
- 17 [Scottish Health Survey 2019 - volume 1: main report - gov.scot \(www.gov.scot\)](#)

- 18 <https://www.diabetesinscotland.org.uk/wp-content/uploads/2022/01/Diabetes-Scottish-Diabetes-Survey-2020.pdf>
- 19 <https://www.eost2d.scot.nhs.uk/sharing-my-experience-on-counterweight-plus/>
- 20 [What is diabetes remission and how does it work? | Diabetes UK](#)
- 21 Counterweight plus Available from: [About us | Counterweight](#)
- 22 Lean MEJ, Leslie WS, Barnes AC, Brosnhan N, Thom G, McCombie L, et al. (2017) Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open label, cluster randomised trial. Lancet. Dec 4. pii: S0140-6736(17)33102-1 available from: <https://pubmed.ncbi.nlm.nih.gov/29221645/>
- 23 Scottish Government, Personalising Realistic Medicine [2019], available from, [Personalising Realistic Medicine: Chief Medical Officer for Scotland's Annual Report 2017-2018 - gov.scot \(www.gov.scot\)](#)
- 24 [fullfinalreport.pdf \(bristol.ac.uk\)](#)
- 25 Figures supplied by NHS Research Scotland (NRS) Central Management Team (CMT) for the period October 2020 – September 2021.
- 26 Fraser of Allander Institute. The Economic Contribution of the Pharmaceuticals Sector in Scotland (2021) Available from: https://fraserofallander.org/wp-content/uploads/2021/02/2021-01-12-The_Economic_Contribution_of_the_Pharmaceutical_Sector_in_Scotland.pdf > [accessed 5 May 2022]
- 27 The Campbell Report: a roadmap to investment for health innovation life sciences and healthtech (2021). Available from: <https://www.gov.scot/publications/campbell-report-roadmap-investment-health-innovation-life-sciences-healthtech-scotland/> [accessed 5 May 2022].
- 28 Saving and Improving Lives: The Future of UK Clinical Research Delivery (2021) Available from: <https://www.nhsresearchscotland.org.uk/news/saving-and-improving-lives-the-future-of-uk-clinical-research-delivery> [accessed 5 May 2022].
- 29 How hospital activity in the NHS in England has changed over time, The Kings Fund. Available from: [How hospital activity in the NHS in England has changed over time | The King's Fund \(kingsfund.org.uk\)](#) Accessed 15/05/2022
- 30 Environmentally sustainable health systems: a strategic document. The World Health Organisation. Available from: https://www.euro.who.int/__data/assets/pdf_file/0004/341239/ESHS_Revised_WHO_web.pdf [accessed 01/05/22]
- 31 Seppala, E.M., Hutcherson, C.A., Nguyen, D.T. et al. Loving-kindness meditation: a tool to improve healthcare provider compassion, resilience, and patient care. J of Compassionate Health Care 1, 5 (2014). <https://doi.org/10.1186/s40639-014-0005-9>

- 32 The state of medical education and practice barometer survey 2021, General Medicine council. Available from: [The state of medical education and practice barometer survey 2021 - GMC \(gmc-uk.org\)](https://www.gmc-uk.org). [accessed 18.05.22]
- 33 <https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health>
- 34 <https://www.gov.scot/publications/scottish-health-survey-2020-update/>
<https://www.scotlandscensus.gov.uk/about/planning-the-2022-census/background/>
- 35 Fenton L., Minton J., Ramsay J. et al. Recent adverse mortality trends in Scotland: comparison with other high-income countries. *BMJ Open* 2019; 9: e029936.
- 36 Ramsay J, Minton J, Fischbacher C, Fenton L, Kaye-Bardgett M, Wyper GMA, Richardson E, McCartney G. How have changes in death by cause and age group contributed to the recent stalling of life expectancy gains in Scotland? Comparative decomposition analysis of mortality data, 2000–2002 to 2015–2017. *BMJ Open* 2020; 10: e036529, <https://doi.org/10.1136/bmjopen-2019-036529>.
- 37 Fenton L, Wyper GM, McCartney G, et al. Socioeconomic inequality in recent adverse all-cause mortality trends in Scotland. *J Epidemiol Community Health* 2019;73:971-974.
- 38 <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/weekly-and-monthly-data-on-births-and-deaths/deaths-involving-coronavirus-covid-19-in-scotland> 19th May 2022
- 39 <https://www.nrscotland.gov.uk/files//statistics/life-expectancy-in-scotland/18-20/life-expectancy-18-20-report.pdf>
- 40 <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy/healthy-life-expectancy-in-scotland/2018-2020>
- 41 Walsh D, Wyper GMA, McCartney G. Trends in healthy life expectancy in the age of austerity. *Journal of Epidemiology and Community Health*. 2022; in press. available from: <http://eprints.gla.ac.uk/267211/>
- 42 <https://www.scotpho.org.uk/comparative-health/burden-of-disease/why-burden-of-disease/>
- 43 https://data.gov.scot/coronavirus-covid-19/detail.html#3_societal_harms
- 44 Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. 1991. Stockholm: Institute for Policy Studies. 2007. <https://www.iffs.se/media/1326/20080109110739filmZ8UVQv2wQFShMRF6cuT.pdf>
- 45 <https://www.bmj.com/content/369/bmj.m1557>
- 46 <https://www.transport.gov.scot/media/50410/covid-19-trends-in-transport-and-travel-in-scotland-during-the-first-year-of-the-pandemic.pdf>
- 47 NRS vital events table 6.01

- 48 <https://www.transport.gov.scot/media/50397/table-42-43-killed-and-serious-casualties-by-police-division-and-quarterly-statistics.xlsx>
- 49 <https://www.eea.europa.eu/themes/air/health-impacts-of-air-pollution>
- 50 https://www.scottishairquality.scot/sites/default/files/publications/2021-12/SAQD_Annual_Report_2020_Issue_1.pdf
- 51 <https://publichealthscotland.scot/media/12009/week-8-respiratory-report.pdf>
- 52 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/4march2022>
- 53 Wetherall, K., Cleare, S., Ward, J., Robb, K., O'Connor, R. 2022. Scottish COVID-19 Mental Health Tracker Study: Wave 5 Final Report. <https://www.gov.scot/publications/scottish-covid-19-scovid-mental-health-tracker-study-wave-5-report/pages/1/>
- 54 <https://policyscotland.gla.ac.uk/wp-content/uploads/2022/03/PSGCPHCOVIDMicroBrief4CYP.pdf>
- 55 <https://ifs.org.uk/publications/15512>
- 56 <https://www.jrf.org.uk/report/dragged-down-debt-millions-low-income-households-pulled-under-arrears-while-living-costs-rise>
- 57 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/4march2022>
- 58 <https://www.rwjf.org/en/library/research/2011/05/education-matters-for-health.html>
- 59 <http://cep.lse.ac.uk/pubs/download/cepcovid-19-023.pdf>
- 60 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/4march2022>
- 61 <https://scotland.shinyapps.io/phs-covid-wider-impact>
- 62 <https://scotland.shinyapps.io/phs-covid-wider-impact/>
- 63 <https://scotland.shinyapps.io/phs-covid-wider-impact/>
- 64 <https://publichealthscotland.scot/publications/nhs-waiting-times-stage-of-treatment/stage-of-treatment-waiting-times-inpatients-day-cases-and-new-outpatients-22-february-2022/>
- 65 <https://publichealthscotland.scot/publications/nhs-waiting-times-stage-of-treatment/stage-of-treatment-waiting-times-inpatients-day-cases-and-new-outpatients-22-february-2022/>
- 66 <https://www.gov.scot/policies/illnesses-and-long-term-conditions/longer-term-effects-of-covid-19-infection/>

- 67 <https://jech.bmj.com/content/73/10/971>
- 68 <https://www.gov.scot/publications/long-term-monitoring-health-inequalities-march-2022-report/documents/>
- 69 <https://www.nrscotland.gov.uk/files//statistics/covid19/covid-deaths-22-data-monthly-week-06.xlsx>
- 70 Wyper, G. M. A., Fletcher, E., Grant, I., Harding, O., de Haro Moro, M. T., McCartney, G., & Stockton, D. L. (2022, March 29). The widening of inequalities in COVID-19 years of life lost from 2020 to 2021: a Scottish Burden of Disease study. <https://doi.org/10.31235/osf.io/mhu6r>
- 71 https://publichealthscotland.scot/media/11979/pra_annual-monitoring-report-on-ethnic-health-inequalities.pdf
- 72 <https://scotlandinlockdown.co.uk/project-report/>
- 73 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/4march2022>
- 74 <https://publichealthscotland.scot/media/2934/covid-19-early-years-resilience-and-impact-survey-ceyris-report-4-final-findings-dec2020-english.pdf>
- 75 Romero Starke K, Reissig D, Petereit-Haack G, et al. The isolated effect of age on the risk of COVID-19 severe outcomes: a systematic review with meta-analysis. **BMJ Global Health** 2021;6:e006434
- 76 https://www.scotphn.net/wp-content/uploads/2022/03/2022_02_28-Ensuring-our-future-addressing-the-impact-of-COVID-19-on-children-young-people-and-their-families-Feb22-English.pdf
- 77 McQuaid F, Mulholland R, Sangpang Ray, Agrawal U, Bedford H, Cameron JC, et al. (2022). Uptake of infant and preschool immunisations in Scotland and England during the COVID-19 pandemic: An observational study of routinely collected data. *PLoS Med* 9(2): e1003916 available from: https://research-repository.st-andrews.ac.uk/bitstream/handle/10023/24938/McQuaid_2022_PLOS_Med_Uptake_infant_preschool_immunisations_CC.pdf
- 78 <https://scotland.shinyapps.io/phs-covid-wider-impact/>
- 79 <https://publichealthscotland.scot/publications/primary-1-body-mass-index-bmi-statistics-scotland/primary-1-body-mass-index-bmi-statistics-scotland-school-year-2020-to-2021/>
- 80 <https://publichealthscotland.scot/media/11300/2022-01-25-dental-report.pdf>



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