NHS GRAMPIAN DIRECTOR OF PUBLIC HEALTH REPORT 2023

Working Together to Help Health Happen

Foreword by Susan Webb, Director of Public Health (DPH)

Everyone in Grampian should be able to enjoy the benefits of good physical and mental health and be able to live fulfilled lives. Our population in Grampian is ageing, many are living with multiple health conditions, and a greater proportion of our working age population is experiencing ill-health. The number of years we can expect to live in good health is decreasing and this is affecting some communities more than others. People who live in our most deprived areas are spending a much greater proportion of their life in poor health than their peers who live in the least deprived areas.

Last year I highlighted four threats to population health: the higher cost of living; increase in need and demand for health, social care and community support services; infectious diseases; and climate change. These threats remain with us and in my report this year I focus on the work we are doing collectively across Grampian to protect and improve our population's health and reduce inequalities. None of the work described in this report has been done by one team or one organisation alone, but holds true to the classic definition of public health "the science and art of preventing disease, prolonging life and promoting health *through the organised efforts of society."*[1]

With the commitment and support of the public sector leaders in the North East we have come together as a Population Health Alliance with a shared commitment to reduce the inequalities that determine poor health and help create a healthier, fairer and safer place to live. Following the publication of my report last year, we engaged with partners to learn together what is working well, recognise gaps in our response and identify opportunities to work together for greater action. Through this work we have strengthened our working relationships, creating opportunities to share good practice and find solutions to achieve our shared goals to improve the health of the population we serve.

Together, we have created the building blocks for a healthy, fair and safe environment. Building on these strong foundations we now need to increase the scale and impact of our activities, shifting the balance from responding to problems to early intervention and prevention if we are to live more years in good health.

It all matters, we all have a role to play and as the examples in this report show, when we work together we can make a difference. If you want to hear more about the work set out in this report, or think #*teampublichealth* can support you, please contact us gram.directorofpublichealth@nhs.scot

Susan Webb

Director of Public Health, NHS Grampian

Introduction

After many decades of improvement, Scotland's health is worsening. This decline started a decade ago, before the pandemic, and is occurring at a faster pace in our most vulnerable communities. Life expectancy, a consistent indicator of population health, had been increasing but stalled soon after 2010 and has decreased in the last few years. The greatest deterioration is seen in those groups already experiencing the worst mortality rates and lowest life expectancy[2].

Grampian follows a similar pattern to Scotland. Consistent increases in life expectancy were seen until 2010-2013 (figs 1 and 2). Since then, the trend has flattened and life expectancy is now on average 78 years for men and 82 years for women, although this varies across our three Local Authority areas.

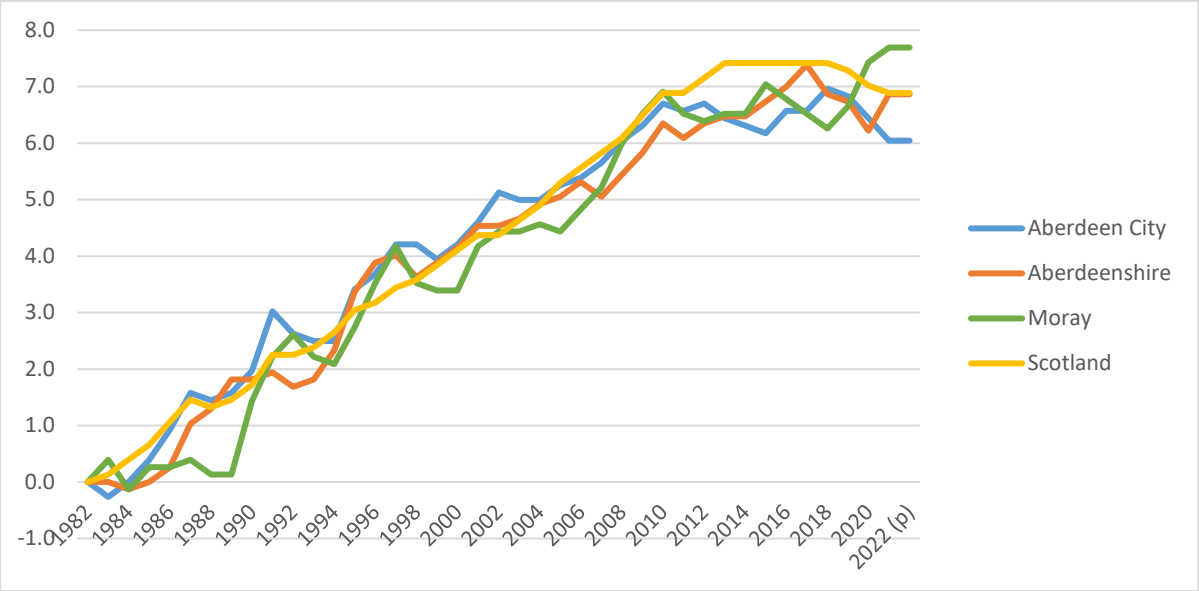


Figure 1. Percentage increase in female life expectancy in Aberdeen City, Aberdeenshire, Moray and Scotland since 1982.

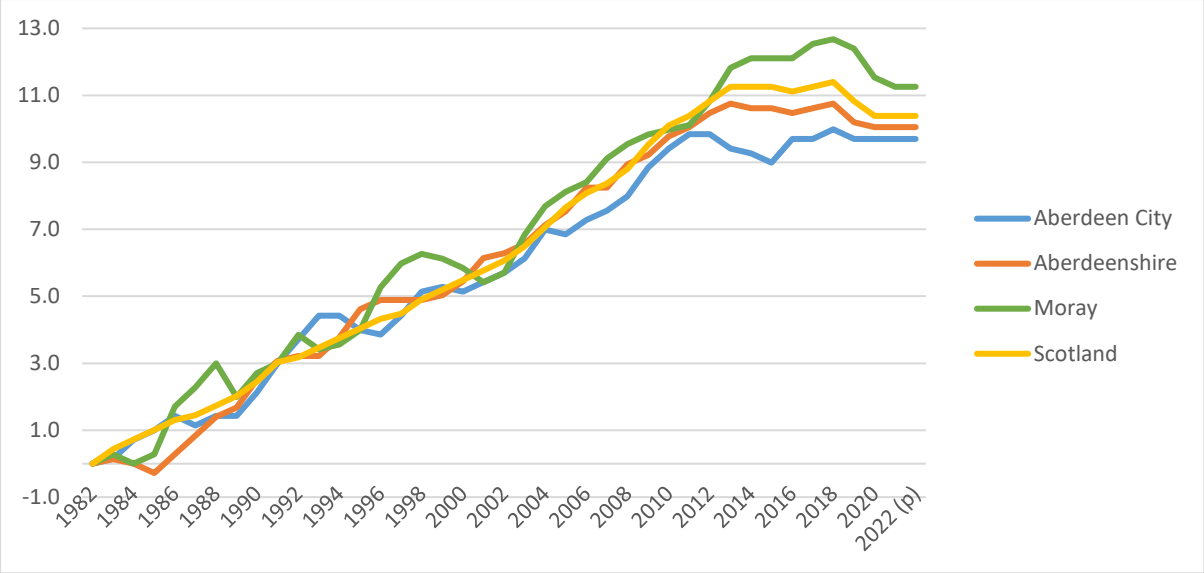


Figure 2. Percentage increase in male life expectancy in Aberdeen City, Aberdeenshire, Moray and Scotland since 1982.

National data tells us that in more deprived areas life expectancy has been going down. This is unprecedented in modern times and demonstrates the urgency with which we must coordinate and coalesce our efforts across sectors to protect our population's health. Extensive research suggests that policies which reduced spending on public services and social security have contributed significantly to this change[3]. In 2021 (most recent data available; fig 3), women living in the most deprived areas of Grampian (SIMD1*) have an average life expectancy at birth 6.2 years lower than women in the least deprived areas (SIMD5). The gap for men is 8.3 years.

* SIMD is the Scottish Index of Multiple Deprivation. This is comprised of a number of factors considered important in material deprivation but its two main components consider income and employment deprivation. Small geographical areas called datazones are ranked across Scotland according to their deprivation level and split into five equal groups called quintiles. SIMD1 is the most deprived quintile while SIMD5 is the least deprived. Further details on how SIMD is calculated can be found here: https://www.gov.scot/publications/simd-2020-technical-notes/

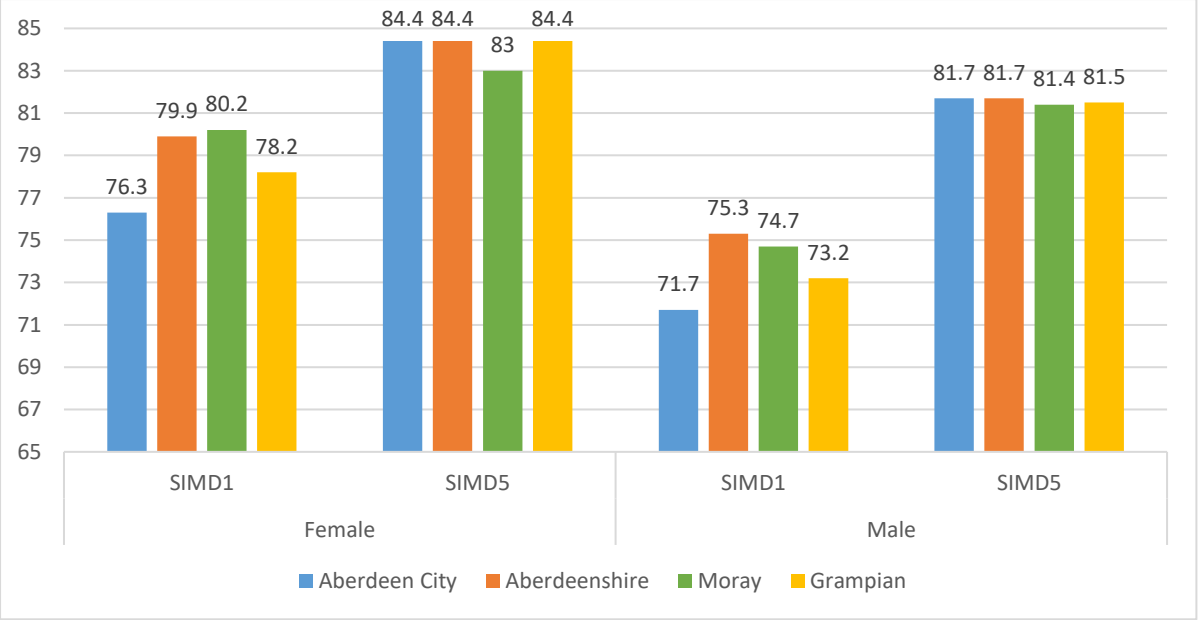


Figure 3. Life expectancy at birth in Grampian by sex, deprivation quintile and local authority area, 2021. NB: In Moray, the highest life expectancy for female residents is actually seen in SIMD4 rather than SIMD5. The female life expectancy at birth in SIMD4 in Moray is 84.1, much closer to the figures seen for SIMD5 in the other areas.

Healthy life expectancy (HLE) is a measure of how many years of life people spend in good health. HLE at birth has been decreasing for both men and women in Grampian since 2015-17. By 2019-21 (most recent data available), HLE at birth had fallen from 65.9 to 64.5 years for women, and from 65.2 to 63.9 years for men. The greatest drop in healthy life expectancy locally has been for women in Aberdeen City, where a drop of 3.3 years was seen over this period. Across Scotland, people in the poorest areas spend more of their life in poorer health than their peers in the wealthiest areas (fig 4). Despite having a lower life expectancy overall, people living in our poorest areas spend more than twice the number of years in poor health as their compatriots living in the wealthiest areas. This means a much greater proportion of life in poor health.

Men spend fewer years in good health compared to women, however this is also socially patterned, with people who live in the poorest areas experiencing a shorter period in good health compared to people who live in the wealthiest areas. Although men spend fewer years in good health, women experience a longer period in poor health. This difference will influence the type of women's health services that will be required to meet their needs.

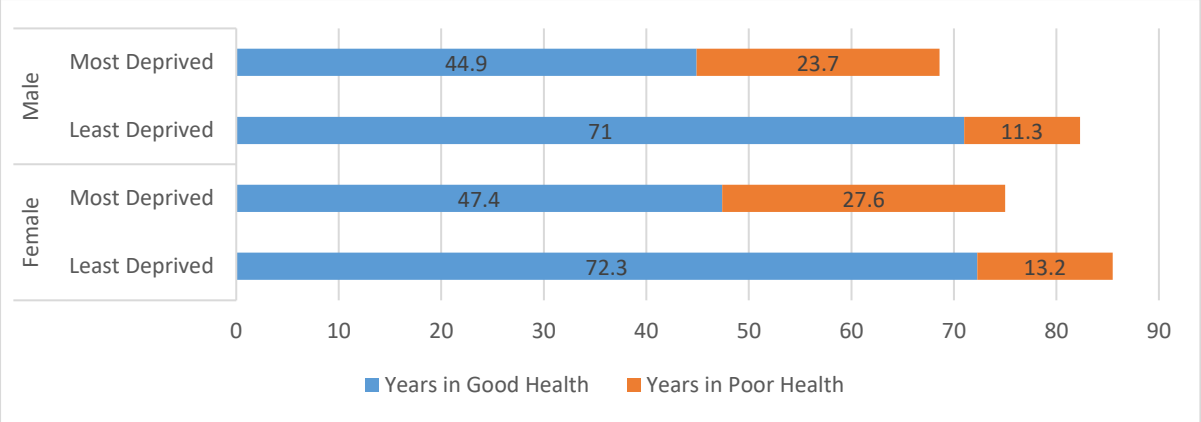


Figure 4. Healthy life expectancy in Scotland in the most deprived and least deprived deciles*, by sex, 2019-21[4].

In Grampian, heart disease and cancer are the leading causes of death. The mortality rates for these causes are about 1.5 times higher in the poorest compared to the wealthiest areas. Some of the largest differences in mortality rates are observed for Chronic Obstructive Pulmonary Disease (the most deprived areas have a rate 3.3 times higher than the least deprived areas), alcohol-related (2.7 times), accidents (2.4), suicide (2.4) and liver disease (2.3). A much greater inequality than all of these is seen for drug-related deaths, where rates are 7.2 times higher in the most deprived areas (fig 5).

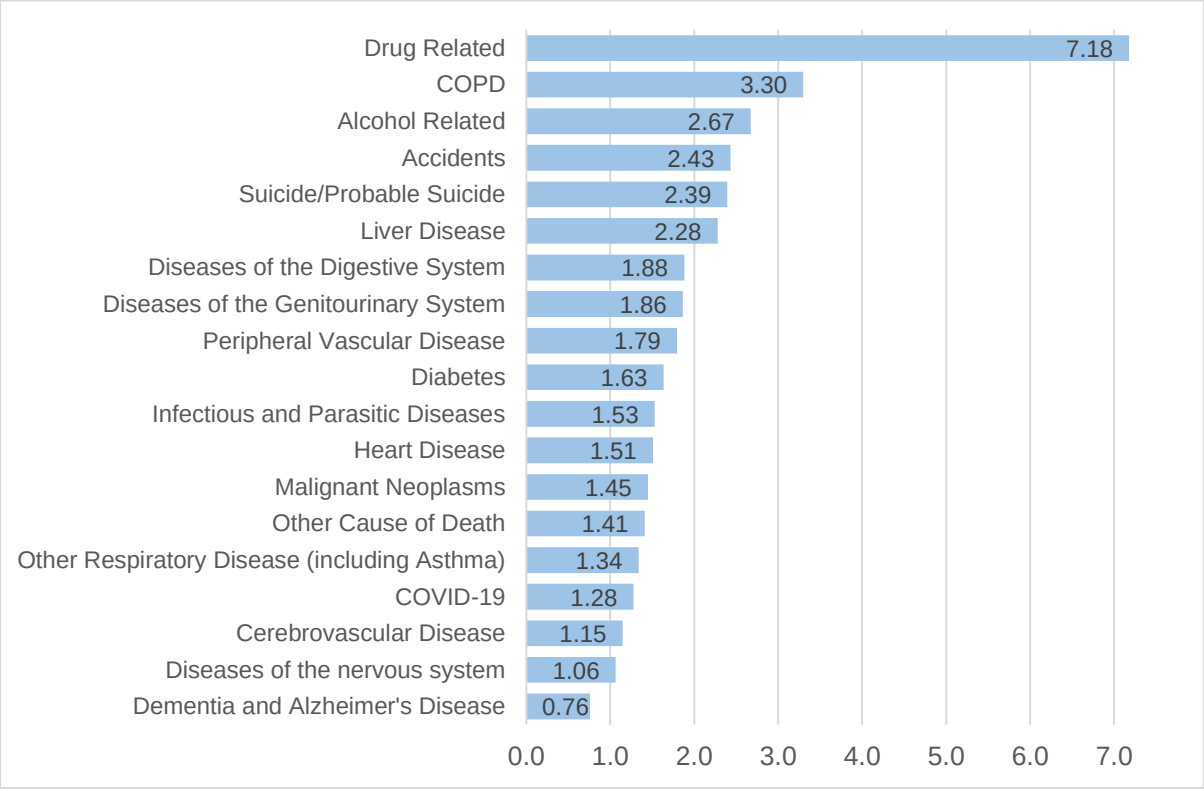


Figure 5. Ratio of mortality rate in most deprived quintile to mortality rate in least deprived quintile by cause, 2013-2022.

* When datazones are split into ten equal groups, these are called deciles.

The top six causes of ill-health (disease burden) in Scotland are cancer, cardiovascular disease, neurological disorders, mental health disorders, musculoskeletal diseases and substance use disorders. The annual disease burden is forecast to increase by 21% between 2019 and 2043, with the same top five leading causes, but chronic respiratory diseases replace substance use disorders in sixth place.

Absolute increases in disease burden are forecast to be largest for cardiovascular diseases, cancers, and neurological disorders, and relative increases for common infectious diseases, unintentional injuries; diabetes and kidney diseases; and chronic respiratory diseases. These relative increases are due to the disproportionately high impact of these causes in elderly age groups. A significant proportion of years of life lost due to ill health and premature mortality is attributable to multiple deprivation (fig 6), and also avoidable through prevention and/or early diagnosis and treatment.

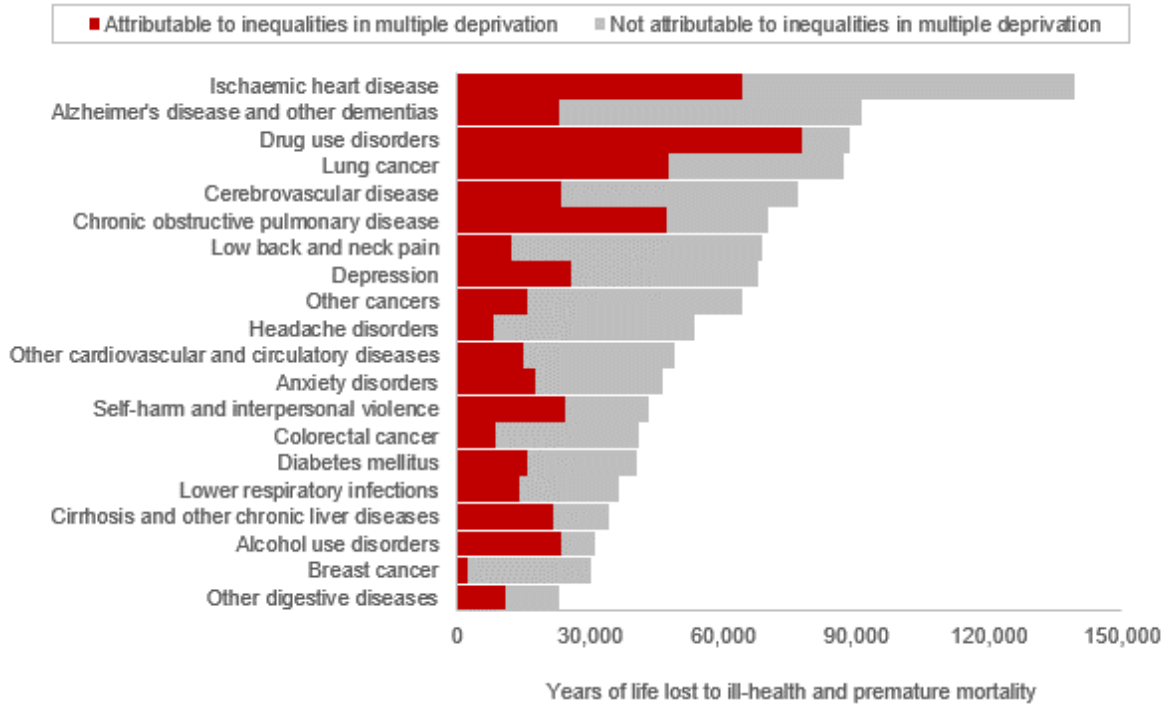


Figure 6. Leading 15 causes of population health loss and extent of health loss inequalities

The Director of Public Health Report for 2022 described how our health and social care system continues to be under acute pressure and our ability to continue to deliver safe, effective, person-centred, and sustainable care is under threat. Scotland's and Grampian's health is also facing other emerging threats from new infectious diseases, climate change and the rising cost of living - all of which have the potential to translate into worsening health and demand on the system if they are not addressed. These threats remain with us and this year's report sets out our progress in working together as a population health system to protect and improve our population's health and reduce inequalities.

Improving Population Health in Grampian

We know that social and economic factors (wider determinants of health), our health behaviours and the environment we live in account for at least 80% of the observed health inequities in our population (fig 7). These factors are interconnected and overlap. The most important impacts on health come from the wider determinants but they often manifest through our health behaviours and can only be addressed through active, healthy and empowered communities with access to joined up support, whether public, private or third sector, when it is needed. We need to take account of people's social and economic circumstances and lived experience as we actively seek to promote and support healthy behaviours in the design and delivery of health and care services. By working together effectively, across boundaries, disciplines and sectors, and with communities who are experiencing disadvantage and poor health, we can achieve a fair and vibrant society where all individuals and communities can flourish.

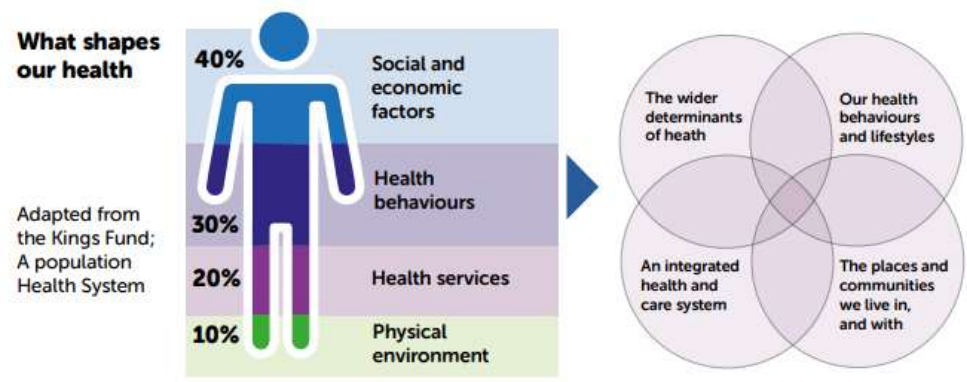


Figure 7: King's Fund Population Health System[5]

The following sections of this report showcase how we are taking a whole system approach, with our partners and communities, to address the threats to population health and reduce inequalities.

Working together to support people with the impacts of the higher cost of living

Over the past two years, the impact of the higher cost of living has affected many people in Grampian, as well as across the UK and other countries. We have seen large increases in the costs of basic necessities, including heating fuel and food. Between January 2022 and January 2024, food costs have risen by 25% on average (fig 8). Even before this increase, it was reported that 26.9% of households would need to spend more than a quarter of their disposable income on food to meet national nutritional guidelines[6]. There is increased anxiety around how to cover essential bills and items such as food, fuel and housing, with particular issues existing for people who live in rural areas.

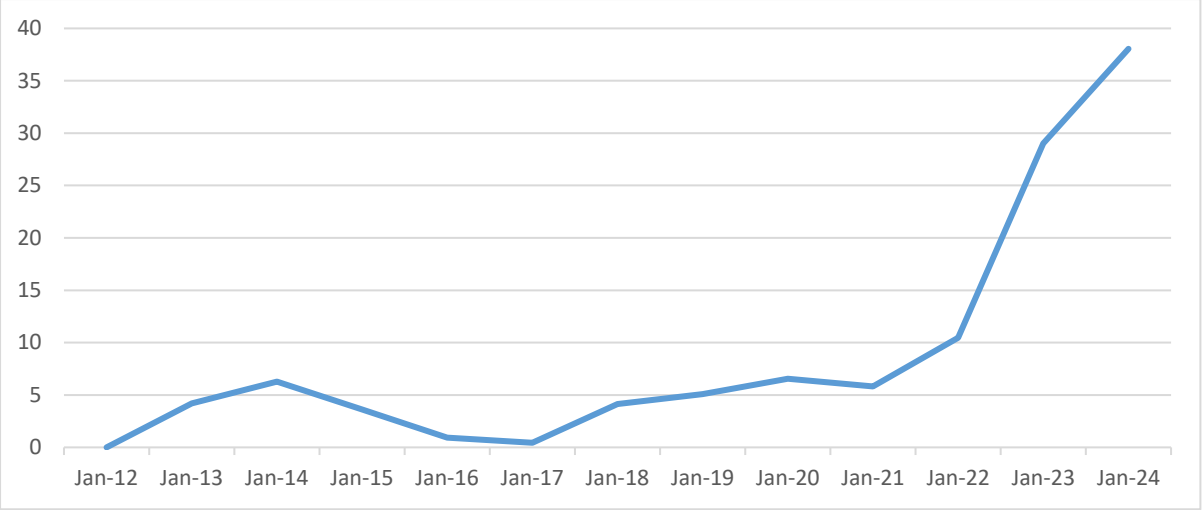
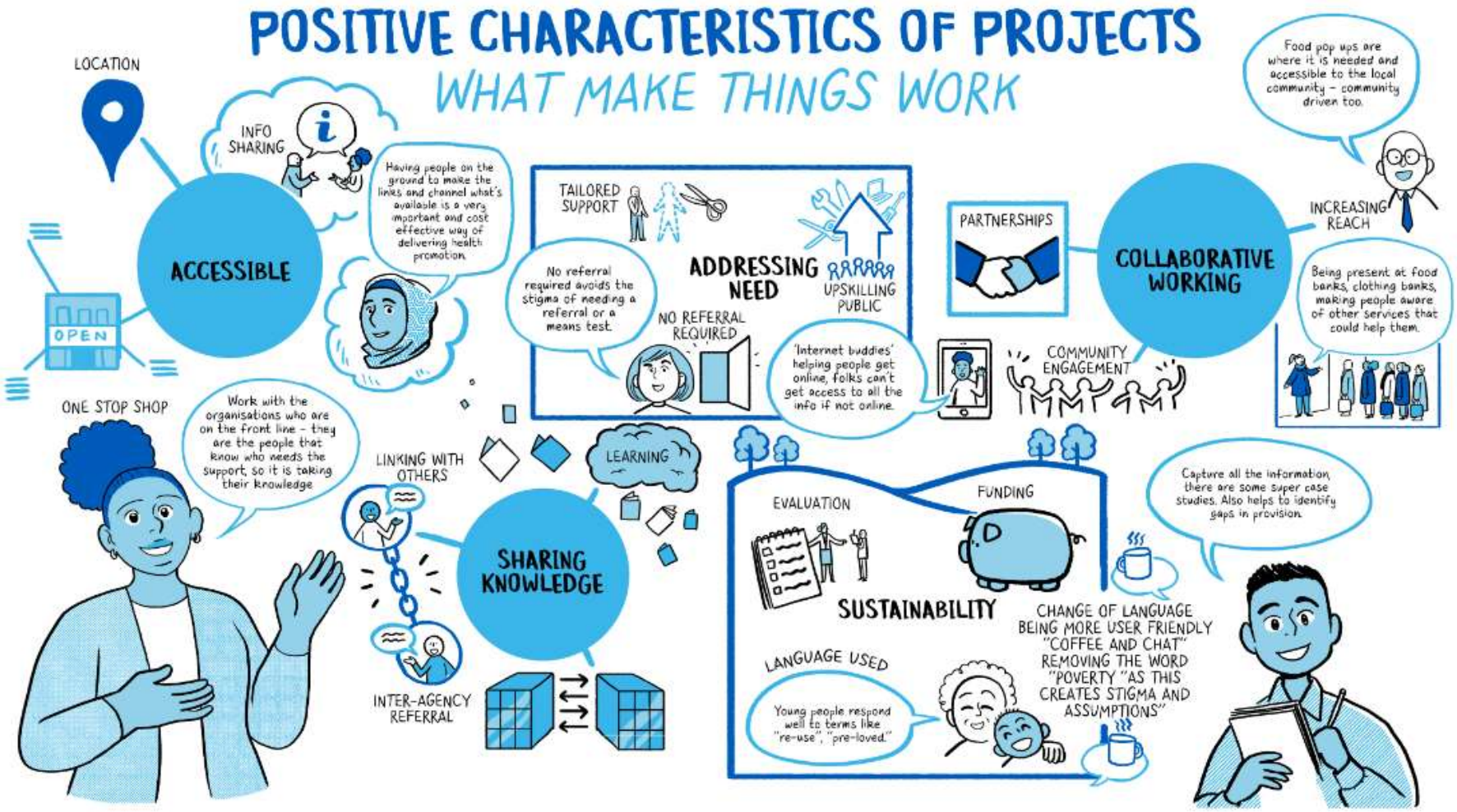
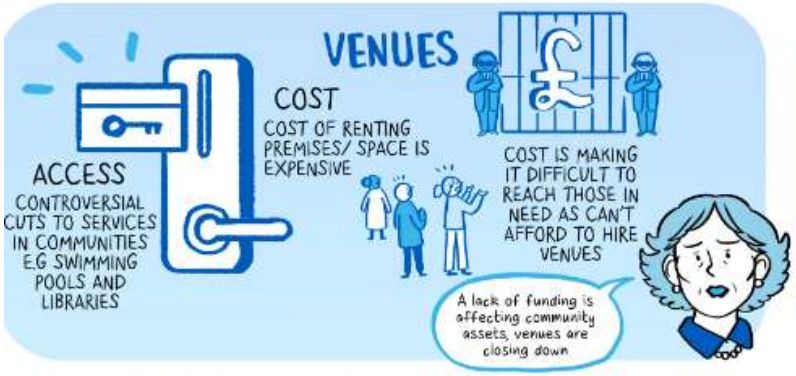


Figure 8. Percentage increase in price of food and non-alcoholic beverages since January 2012 using annual CPIH inflation rates, UK[7]

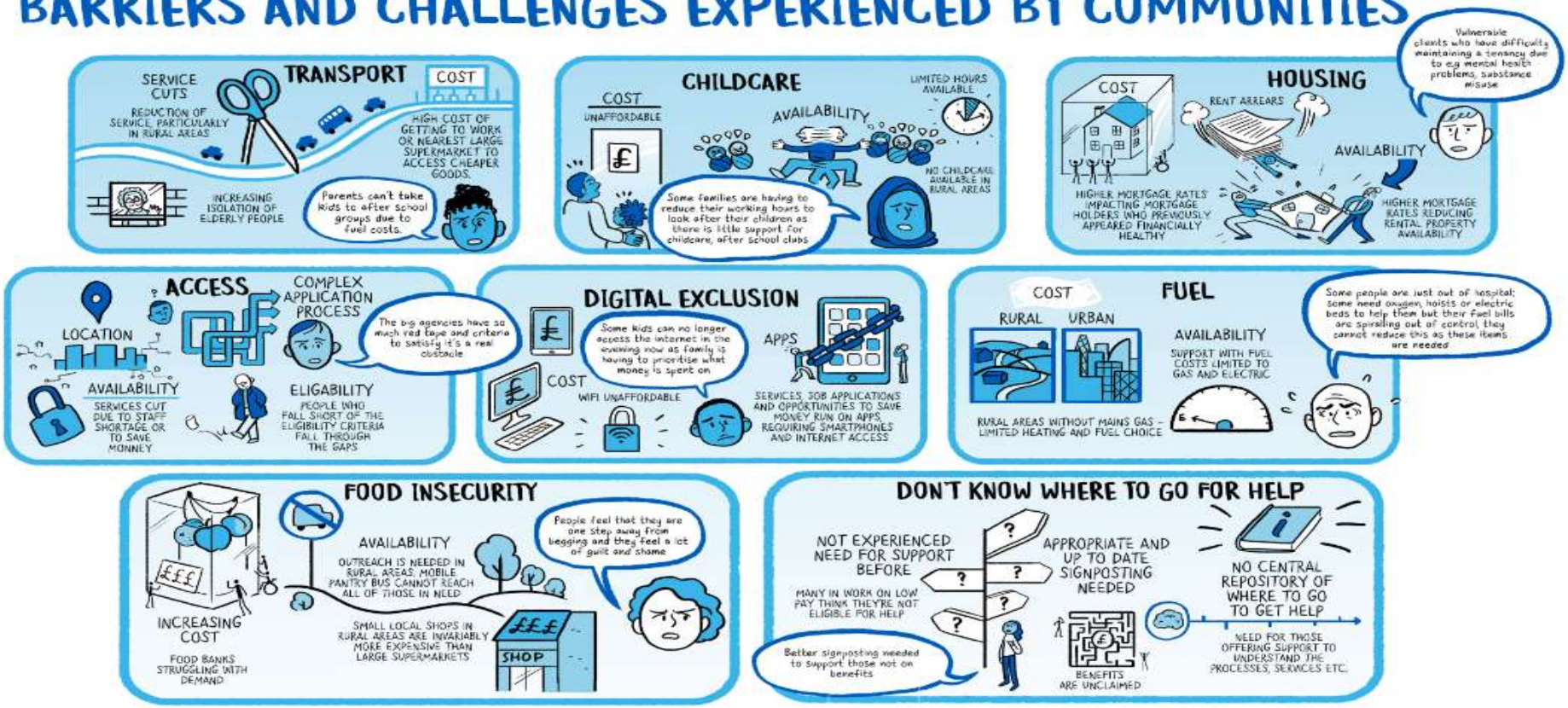
Following the publication of last year's DPH annual report, the North East Population Health Alliance (NEPHA) engaged with members to learn together what is working well, recognise gaps in our response and identify opportunities to work together for greater action. Learning from engagement and co-working in 2023 identified the key elements that lead to success as well as the barriers and challenges faced by communities and service providers alike (summarised in the following graphics). There were many examples of good practice, with partners sharing information and working together to make services accessible to communities where it is needed, working with organisations who are at the frontline. However, our communities and service providers still face a number of challenges in achieving equitable access to services and support for those who are most vulnerable to ensure their basic needs for food, fuel and housing are met. Building on our strong partnership working, we now need to focus on removing the barriers identified, as well as improving data and information sharing for action, evaluating and learning from the collective impact of our activities.


POSITIVE CHARACTERISTICS OF PROJECTS
WHAT MAKE THINGS WORK
LOCATION
ACCESSIBLE
OPEN
INFO SHARING
Having people on the ground to make the links and channel what's available is a very important and cost effective way of delivering health promotion.
ONE STOP SHOP
Work with the organisations who are on the front line - they are the people that know who needs the support, so it is taking their knowledge
LINKING WITH OTHERS
INTER-AGENCY REFERRAL
SHARING KNOWLEDGE
LEARNING
TAILORED SUPPORT
ADDRESSING NEED
UPSKILLING PUBLIC
No referral required avoids the stigma of needing a referral or a means test.
NO REFERRAL REQUIRED
'Internet buddies' helping people get online, folks can't get access to all the info if not online.
PARTNERSHIPS
COLLABORATIVE WORKING
COMMUNITY ENGAGEMENT
INCREASING REACH
Food pop ups are where it is needed and accessible to the local community - community driven too.
Being present at food banks, clothing banks, making people aware of other services that could help them.
EVALUATION
FUNDING
SUSTAINABILITY
Capture all the information, there are some super case studies. Also helps to identify gaps in provision.
LANGUAGE USED
Young people respond well to terms like "re-use", "pre-loved."
CHANGE OF LANGUAGE BEING MORE USER FRIENDLY "COFFEE AND CHAT" REMOVING THE WORD "POVERTY "AS THIS CREATES STIGMA AND ASSUMPTIONS"

BARRIERS AND CHALLENGES EXPERIENCED BY SERVICE PROVIDERS



BARRIERS AND CHALLENGES EXPERIENCED BY COMMUNITIES



Case study: New Pitsligo – The Community Paradigm Pilot
Supported by The King's Fund, a Community Paradigm approach was piloted in 2022/23 within the village of New Pitsligo. The pilot aimed to learn and develop how we work with communities as a key partner in 'enabling wellness'. The pilot involved a significant amount of time engaging and listening to people in the village to gain an insight into their needs and priorities, and to seek commitment to this way of working and a working group was identified.

The working group designed and delivered engagement activity based on insight, knowledge, experience and a spirit of experimentation. An Asset-Based Community Development (ABCD) approach assisted with recognising existing assets within the village as well as creating a focus for the engagement in the form of a Celebratory Event. The event showcased and celebrated the wide range of existing assets (22 community groups and services) already mobilised and helping to create opportunities for positive health and wellbeing within the village. Attended by more than 100 people living or working in the village, it has been the catalyst to re-define local issues and enable existing assets and individuals to be part of solutions for improvement.

Learning from the pilot included:

- There are promising opportunities to improve health and wellbeing from building partnerships involving local government, NHS and voluntary sector organisations when time is taken to build trust and work with community priorities.
- The pilot made significant progress due to having a dedicated person in post with the necessary skills, experience and time to 'dig deep' within the community. However, this funding was time limited and so future approaches need to consider sustainability from the outset.
- Existing information governance and approaches around project management and measuring impact requires reconsideration as currently act as a barrier to this way of working. Our tools to collaborate with others, such as Microsoft Teams, are limited and on occasions do not accommodate community members.
- Introducing this pilot highlighted a medical model culture, a reluctance for change, preconceived ideas from partner organisations and underlined a need to clearly define the different role and expertise each organisation can offer.
- Despite the community feeling over consulted and a lack of confidence and trust in the system due to previous engagement experiences, many demonstrated a willingness to participate due to the positive nature of this engagement approach.
- The emphasis on the role of the community as equal and active contributors in decision making that involves their wellbeing was instrumental to the shift in mindset. Investing time to build trust and confidence with community members in this way of working is essential.

Overall, the learning is that this approach is complex and cannot be simply 'applied' to a community. Partners need to be invited in by trusted community members/third sector organisations to help facilitate conversations between communities and organisations. Health also have a role in providing specific educational inputs, and support through our work as an anchor organisation to provide access to buildings and help to develop skills within communities to encourage the growth of self-management in communities (such as help to access funding). What is required is bespoke to each community and must build on the existing local supports which exist.


Celebrate
New
Pitsligo!

Case study: Cost of Living, Cost of Smoking

Tobacco smoking causes nearly 9,000 deaths in Scotland each year and 90,000 hospital admissions. Smoking and poverty are intimately related: smoking rates in the most deprived neighbourhoods in Scotland are five times higher than in the most affluent neighbourhoods and smoking households with the lowest incomes were projected to spend almost 30% of their income on tobacco. As such, smoking as a health behaviour is closely related to wider determinants such as income, wealth and power.

Last year, colleagues from the University of Aberdeen, NHS Grampian and Turning Point Scotland undertook a Participatory Action Research study entitled: *Cost of Living, Cost of Smoking: Community Intelligence for Public Health* (https://www.cost-of-smoking.org/). The study engaged affected community members from Banff, Fraserburgh and Peterhead to gain insights into the social contexts and lived experiences of smoking during the cost-of-living crisis. The researchers worked with community members and health improvement colleagues, to develop feasible and acceptable solutions around tobacco prevention and control.

Community partners identified the combined effects of increased stress owing to the financial crisis, and increased availability, affordability and acceptability of smoking products in the form of e-cigarettes in low-income neighbourhoods as a key issue driving health behaviours related to smoking and vaping.

The explicit targeting of children and implications for people who have never smoked were further concerns, as were environmental issues. Overall, e-cigarettes were seen negatively, as severely undermining cessation, 'replacing one problem with another' and encouraging new uptake. On this foundation, a shared action agenda was developed prioritising:

(a) healthy alternatives to address the stress-related root causes of smoking;
(b) inclusive and targeted access to available cessation support services;
(c) incentivising cessation through locally framed messaging; and
(d) deliberative dialogue between communities and service providers.

These actions will be delivered though NHS Grampian's Tobacco Control strategy.

An example of local messaging that came out of the project. Community partners wanted more aspirational messages when looking at what they could buy with money saved by stopping smoking – focusing on luxuries rather than essentials like the weekly shop.

Case study: NHS Grampian as an Anchor Institution

Being an Anchor Institution is about intentionally choosing how we spend our money, provide good jobs and use our land and buildings to benefit the health of our communities. As shown earlier in this report, health and wealth are intrinsically linked. Therefore, working through the pillars of anchors (work and jobs, procurement and land and assets) to use our resources to benefit our communities is one of the most up-stream prevention activities we can undertake. Embedding an Anchors mind-set is more than contributing to the local economy or providing jobs. By acting with intentionality, we can focus our activities to those who need it most and therefore contribute to addressing the stark inequalities in health outcomes that exist.

We understand the vital role that many community groups and partners have in supporting our communities to stay in good health. As an Anchor organisation, we aim to support our partners, community and third sector to share our spaces with us where appropriate and capacity allows. We can do more to build on this work to better use our accommodation to support our communities. This requires continued promotion of our smarter working programme to modernise the workspace, in addition to existing policies of securing and keeping secure patient information.

Through our Anchors work so far, we have created 23 new jobs as part of the Baird and Anchor construction projects, worked in partnership with councils to explore collaborative procurement opportunities to increase local spend, approved a Community Asset Transfer for Leanchoil Hospital in Forres and located a vaccination centre in Aberdeen City to improve footfall and contribute to the local economy (see separate case study later in the document). Now we must consider how we take our Anchors activity forward over a longer time period to embed this mind-set in the organisation.

Our actions this year will focus on communicating our anchors ambition to embed an anchors lens in our work, working closely with partners to maximise our potential, and focusing our activity to reduce inequalities.

Child Poverty

More than 21,000 children in Grampian are living in poverty. This equates to one in five children and is a picture that is worsening over time (see table below). Within families the impact of insufficient income leads to a reduced ability to support child health and development. There may be poorer quality housing, less ability to afford healthy food and less opportunities for children to learn and play. The emotional stress of living in poverty can reduce our quality of life, impact negatively on family relationships and the quality of parental interactions with children. Poverty also leads to people feeling less confident with less control over their lives. All of this can lead to poorer mental health, wellbeing and physical health.

	2014/15	2021/22	2022/23	No. of Children
Aberdeen City	18.7%	20.5%	21.8%	8,476
Aberdeenshire	15.6%	16.0%	16.5%	8,846
Moray	20.8%	24.1%	23.9%	4,182

Table 1. Modelled estimates of child poverty that account for housing costs, using DWP/HMRC children in low income families local measure. Various data sources are available to explore child poverty locally. Exact figures differ between different measures but regardless of the exact figures, it is clear that too many children live in poverty.[8]

Feedback from partners, young people and families has highlighted the challenges of accessing medical appointments required for themselves or their child and the added financial hardship that they are experiencing. The cost of travel can deter people from attending medical appointments or push families into poverty. The topic of transport poverty has been highlighted as a public health issue (see case study below).

Case study: Barriers to Accessing Healthcare

Ms. X is a lone parent aged under 24 with a 4 month old baby who required a scan. They live rurally with no transport which would allow them to access their appointment at the time needed. Therefore, they either required an overnight stay near the hospital or would need to delay the diagnosis by a further 2 months which could have a long term effect on the child. The family's only income is statutory benefits as they had to give up work prior to the baby being born. In this case, they were supported using a cash first approach. However to ensure equity for all parents the systems require to change so that all children, young people and parents can access the medical support they require at the right time.

The pan-Grampian Public Health System Leadership group, comprising NHS, Health and Social Care Partnership, Community Planning Partnership Managers and including those who specifically work in the area of Child Poverty, came together in May 2024. The need to identify and mitigate against the costs and cost-related barriers faced by families accessing healthcare was an agreed priority.

In the coming year we will pay particular attention to poverty-proofing our health and care services and pathways. Poverty-proofing is a term that describes making sure that every part of the pathways through services is accessible to more vulnerable groups. It is about identifying and addressing those costs and cost related barriers that we as a public sector may be placing on our families and preventing that cost being one that may push a family into crisis.

Substance Use and Drug related deaths

Research in the UK has found that any exposure to poverty during childhood was associated with worse physical and mental health in adolescence, with a clear dose-response relationship between poverty exposure and risk of mental health problems at age 14[9]. Further research from Sweden found that poverty during childhood and adolescence were associated with a higher risk of drug use disorders and drug crime convictions in young adulthood[10]. Adverse childhood experiences (ACEs) are also associated with a higher risk of substance use during the life-course[11]. Lower socio-economic position and poverty during childhood is associated with a higher risk of being exposed to ACEs[12], and the combined effects are greater than the sum of their parts[13].

Drug use is a health issue strongly associated with social deprivation: changes in national drug misuse death rates are largely driven by deaths in areas of deprivation (fig 10). These rates in Scotland are by far the worst in Europe. Each death is a tragedy which only represents the most acute impact of drug use. After large increases in deaths in the decade to 2021 (Aberdeen City 29 to 62; Aberdeenshire 19 to 31; Moray 10 to 17), there has been a decrease in 2022 (42 in Aberdeen; 24 in Shire; 9 in Moray).

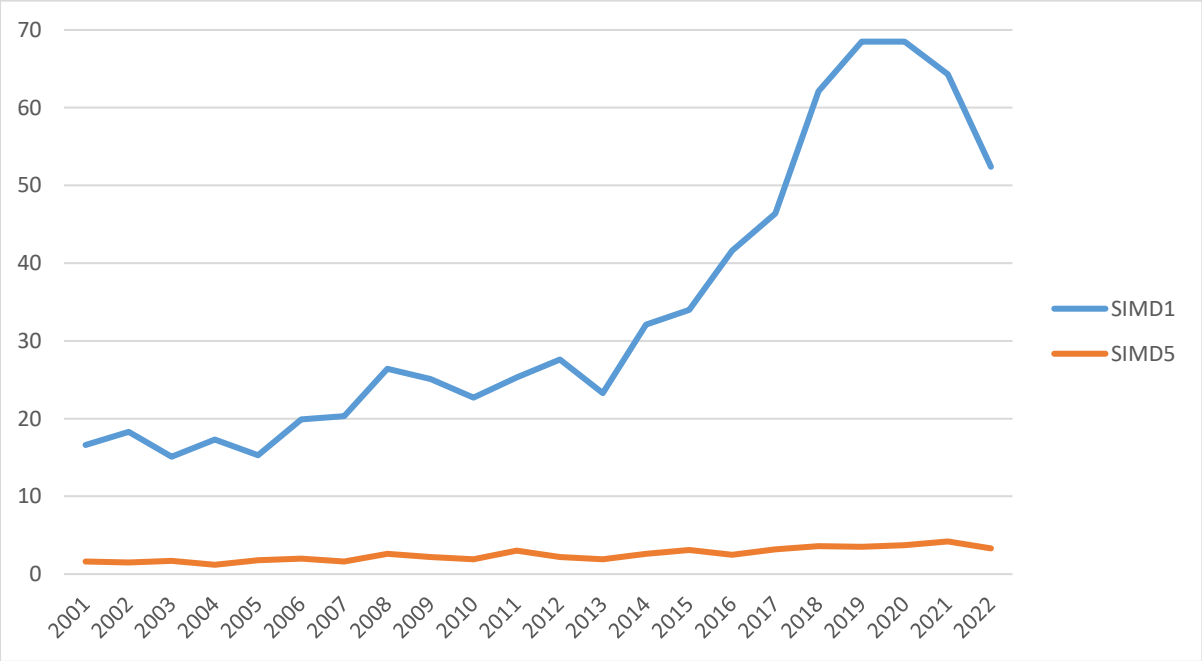


Figure 9. Age-standardised drug misuse death rates in Scotland per 100,000 people, by SIMD quintile, by year.

Case study: Tackling Stigma

Stigma and discrimination are key determinants of health, particularly for groups who are marginalised. While there are safe, effective, and lifesaving tools available to help people struggling with substance use, stigma is a common reason people do not seek care. Tackling stigma has been a focus of activity locally for NEPHA. Three multi-agency workshops have been held, the second concentrating on the lived experience of those affected by substance use, particularly experience of specialist services; the health and social care environment as a whole; and wider determinants of health and wellbeing.

People articulated the need to be seen and heard, see stigma disappear and be treated as humans. The main recommendation of the workshop was the development of a local 'Charter of Rights' setting out what people can expect when accessing services locally. Many people do not know what rights they have or how to access them. The Scottish Government has recently published a national draft Charter of Rights aiming to:

- Directly support people to know and understand their rights to access drug and alcohol services.
- Directly support service providers and government to improve the availability, accessibility, acceptability and quality of such services.

The draft national charter was used as the basis of a third workshop locally exploring practicalities and barriers around implementing a national charter. Feedback from this workshop included calls for:

- Age appropriate peer support services (including youth workers for younger people) and practical assistance (form filling, advocacy at meetings etc.);
- Single points of access to services (no wrong door);
- Services trained in person-centred care; continuity of care across services (e.g. Not having to continuously share stories, which can be re-traumatising);
- Easy access/remove barriers; rapid access to appropriate services within a reasonable time frame.

A key output from the workshops was a clear ask for time-scales for change and how this rights-informed approach will influence specialist and wider services. The Medication Assisted Treatment (MAT) standards process is already yielding positive developments in more person-centred care, better access, improved retention and addressing wider social determinants (e.g. proactive, assertive outreach services encapsulated by MAT standard 3). We need to build on this and do more collectively to deliver tangible and genuinely responsive service developments that provide holistic support to people affected by substance use and their families.

Working Together to Protect Grampian from Infectious Diseases

Infectious disease was recognised in last year's report as one of four key threats to our population's health and wellbeing. NHS Grampian has worked with colleagues across all three local authorities to develop a new Joint Health Protection Plan (JHPP)[14]. The plan focuses on protection from infectious disease and environmental hazards in the context of the other threats of widening health inequalities, climate change and the sustainability of health and social care services.

Two vaccine-preventable diseases have been at the forefront of action to protect health this year. Measles outbreaks in England and Europe[15], as well as a small number of cases elsewhere in Scotland, increase the possibility of measles being introduced into Grampian. Measles is an extremely infectious disease which can cause serious, life-long complications or death. Extensive work has been undertaken locally within the health protection team (HPT) and across the health service to ensure we are prepared to respond to cases and outbreaks as they may occur. Meanwhile, whooping cough (caused by the bacterium, *Bordetella pertussis*) cases have risen sharply in Grampian and nationally since December 2023, representing the largest national outbreak in Scotland in at least a decade[16]. Unimmunised infants are at particularly high risk of complications from whooping cough infection, including pneumonia, seizures, encephalitis and death. The HPT undertakes active contact tracing of all notified cases of whooping cough to find susceptible pregnant women, infants or those who work with them, advising clinicians when their patients are identified as susceptible contacts who warrant antibiotic prophylaxis.

The most effective way to protect people from measles, whooping cough and many other infectious diseases is through vaccination. Vaccination can prevent or reduce the severity of disease, minimise disability and save lives, often in the most disadvantaged groups in society. It offers excellent value for money by reducing current and future public expenditure on health and social care provision.

The European Region of the World Health Organization (WHO) recommends that on a national basis at least 95% of children are immunised against diseases preventable by immunisation and targeted for elimination or control. An uptick in vaccine uptake rates took place during the covid pandemic, though numbers have since returned to rates similar to those prior to the pandemic (fig 13). Rates of vaccine uptake in Grampian are generally high, comparing well with the Scottish average and recent work to look at uptake in different sub-populations has identified that the vaccination programme performs well in both rural and urban areas and in areas of deprivation. However, there is still work to be done to improve in those areas where uptake is lower, including in some ethnic groups. A Vaccine Equity Workshop is planned in the coming months to identify the key issues affecting uptake and take action to address these.

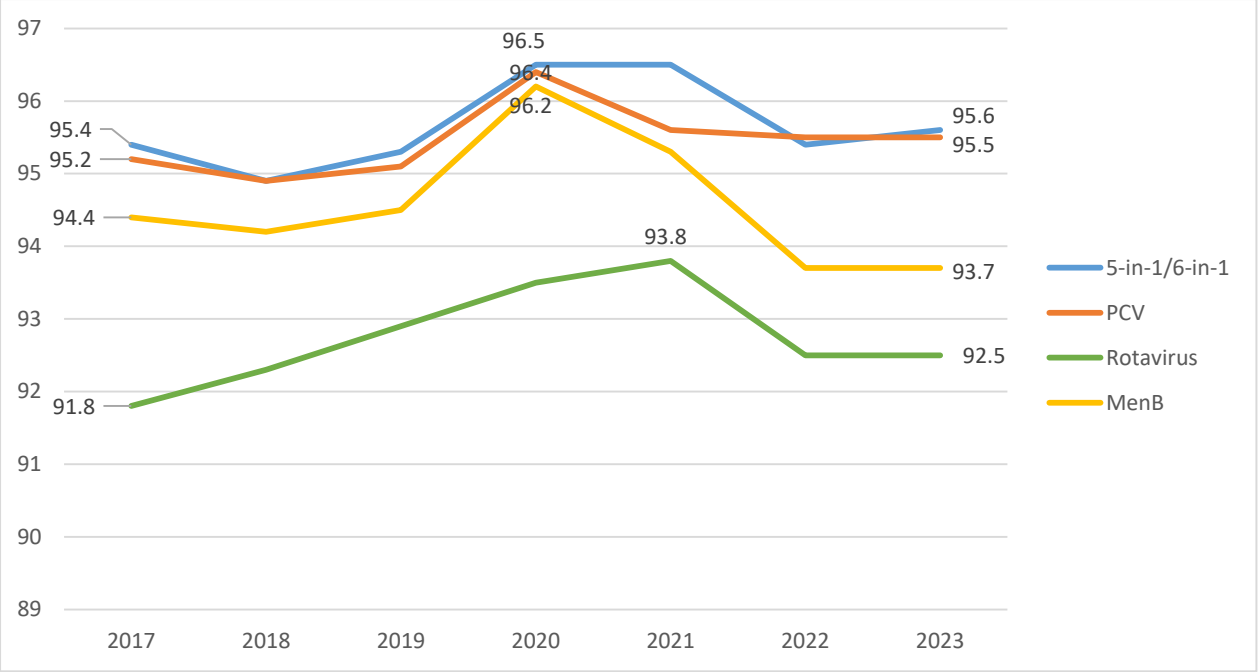


Figure 10. Percentage completed primary course of named vaccines by 12 months of age in NHS Grampian[17].

Below are two examples of public health messages shared by the HPT this summer to help the public to protect their own health.

Hand Washing -

your protection against infection when visiting animal settings

We are now coming into the summer holidays and with that, we know that many people and families will be visiting petting zoos, farms and experiencing close contact with animals. There is no doubt that this is a great way to learn about farm animals and has a positive impact on the mental and physical well-being of individuals.

However, we have identified and managed several cases of diarrhoeal illness, linked to visits to these settings. E coli O157 and Cryptosporidium can be passed from 'hand to mouth' after touching animals or through contact with fields, fences and gates where animals are kept. Additionally, clothing and footwear can become contaminated with animal faeces.

Please continue to enjoy these animal visits and below are simple steps that can be taken to minimise the risk.

Remember to wash your hands with warm running water, liquid soap and dry with paper towels

- After touching/feeding animals and their
- environment,
- After going to the toilet
- After removing/handling footwear
- After cleaning buggy/wheelchair wheels
- Before eating or touching food
- Before leaving a farm attraction

Hot tips

- Hand sanitiser and hand wipes are not a substitute for hand washing.
- Hand sanitiser/gel is NOT effective against pathogens found in farm animals and their environment, such as E-Coli O157 and Cryptosporidium.
- It is recommended to take an extra pair of footwear and extra outer clothing to change into after visiting.
- Consider taking a bag/box to transport used footwear and clothing in when leaving the setting.
- When home, place outer clothing into the washing machine and thoroughly clean footwear that would have been in contact with animals and their environment, immediately wash hands after handling.

Wild Swimming

As we head into summer, it can be refreshing to dip into water to cool down on a hot day. Wild swimming refers to swimming in any natural water source such as waterfalls, rivers, lochs or the sea. Although wild swimming has known benefits to mental and physical health, there are unseen hazards associated with it which include exposure to pathogens that naturally occur in the outdoors

These risks can be reduced if you;

- Do not swim in water that has signs of blue green algae, remember that harmful algae can be other colours. Check the area for signs warning against entering the water
- Do not drink from rivers, lochs or waterfalls, this water is raw water and likely to contain all the harmful pathogens removed by water treatment – this is not like water from you kitchen tap
- Check the most recent water or real-time predictions of water quality on Scottish Environment Protection Agency's (SEPA) bathing waters pages
- Try not to swallow the water during swimming
- Wash hands after swimming and before eating or drinking

Source: Public Health Scotland. 2023. Wild swimming: how to swim safely in Scotland's outdoor water. https://www.publichealthscotland.scot/media/20099/2023-06-12-wild-swimming-v1.pdf

For more information, please visit the following websites;

SEPA Bathing Water – for information on bathing water quality across Scotland.
https://www2.sepa.org.uk/bathingwaters/Index.aspx

Water Safety Scotland – for information on all water safety activities
https://watersafetyscotland.org.uk/

Swim safe - open-water-swimming-safety-code.pdf (watersafetyscotland.org.uk)

Case Study: Aberdeen City Vaccination and Wellbeing Hub

The Aberdeen City Vaccination and Wellbeing Hub aims to deliver an easily accessible location where a range of health, social care and third sector organisations work together to respond to local need and put health inequalities at the heart of what we do. In doing this, we can prevent illness and/or further deterioration of someone's health through early intervention, in turn reducing demand on GP services and acute services in hospital.

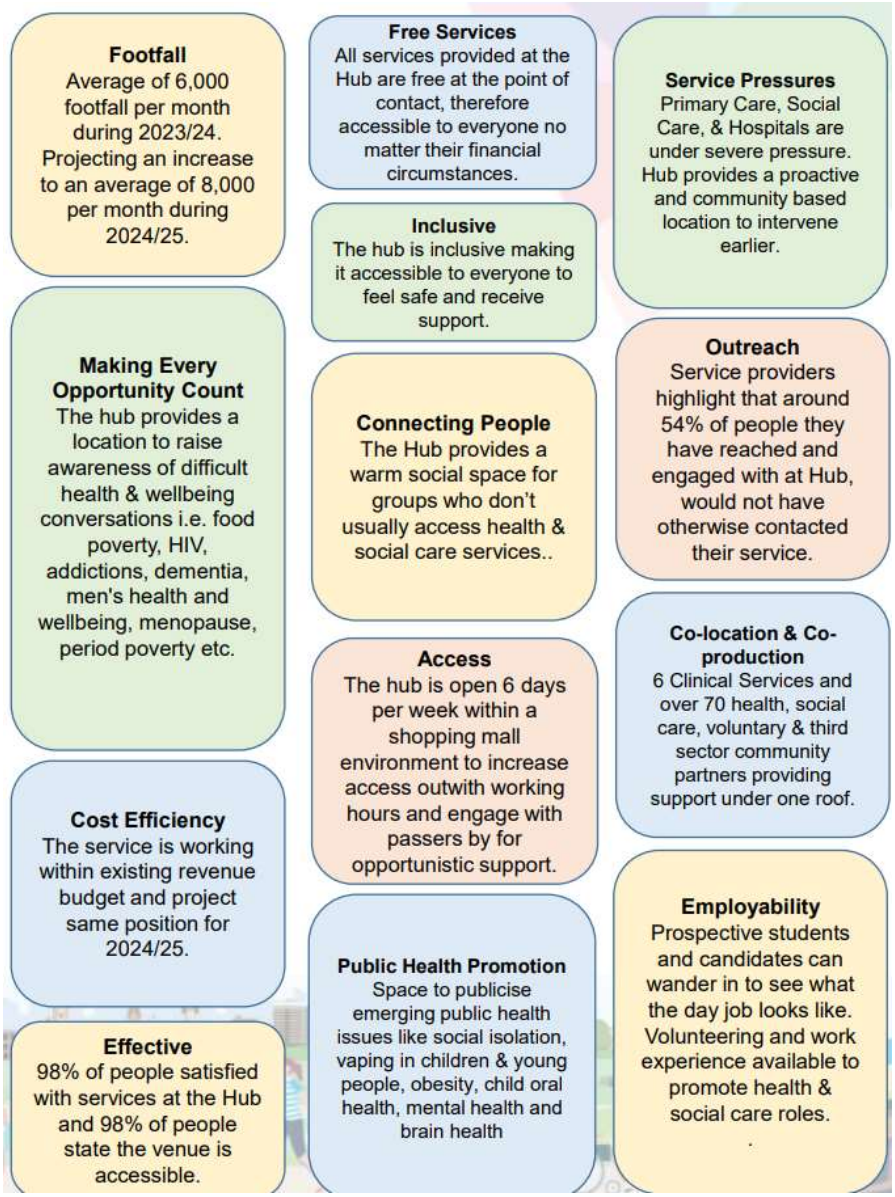
The project has demonstrated a truly collaborative and integrated model of working with health, social care, voluntary and third sector organisations towards meeting the needs of the population ensuring that support is available as early as possible to support prevention & early intervention. These collaborations have allowed services to co-produce events and support in a way that that addresses the widening inequalities gap and supports people's physical, mental and social wellbeing. Feedback from members of the public included:

"Pleased to see it is a Wellbeing Hub – Men like me are more likely to come in and have a chat."

"Love the fact there is different professionals on hand to help with issues."

"Plenty opportunities for asking questions – as we age our needs need to be anticipated as signs of future need can be spotted quite early."

Making these collaborations and co-locating with multiple services has enhanced the team's knowledge & understanding of a variety of voluntary service provision and self-management supports to assist with MEOC conversations & signposting. This is likely to reduce demand on primary and secondary care. Some features and achievements of the project are listed below:



Equitable Health and Care

Last year's DPH report highlighted the increasing demand and need for health and social care. Our population is getting older, changes in how we live, combined with the successes of our health and care system mean that more people are experiencing the effects of non-communicable disease and many are living with more than one health condition (multi-morbidity, see figs 11 and 12). The majority of people in Scotland who are living with multi-morbidity are under the age of 65 years. On average, people who live in the most deprived communities start to live with multiple health conditions 10 – 15 years before their peers in the least deprived communities[18]. Avoidable mortality follows the same pattern of inequality (figs 13 and 14); for women the proportion of deaths deemed avoidable is almost twice as high in the most deprived areas compared to the least deprived. For men, nearly 40% of deaths in the most deprived areas are deemed avoidable.

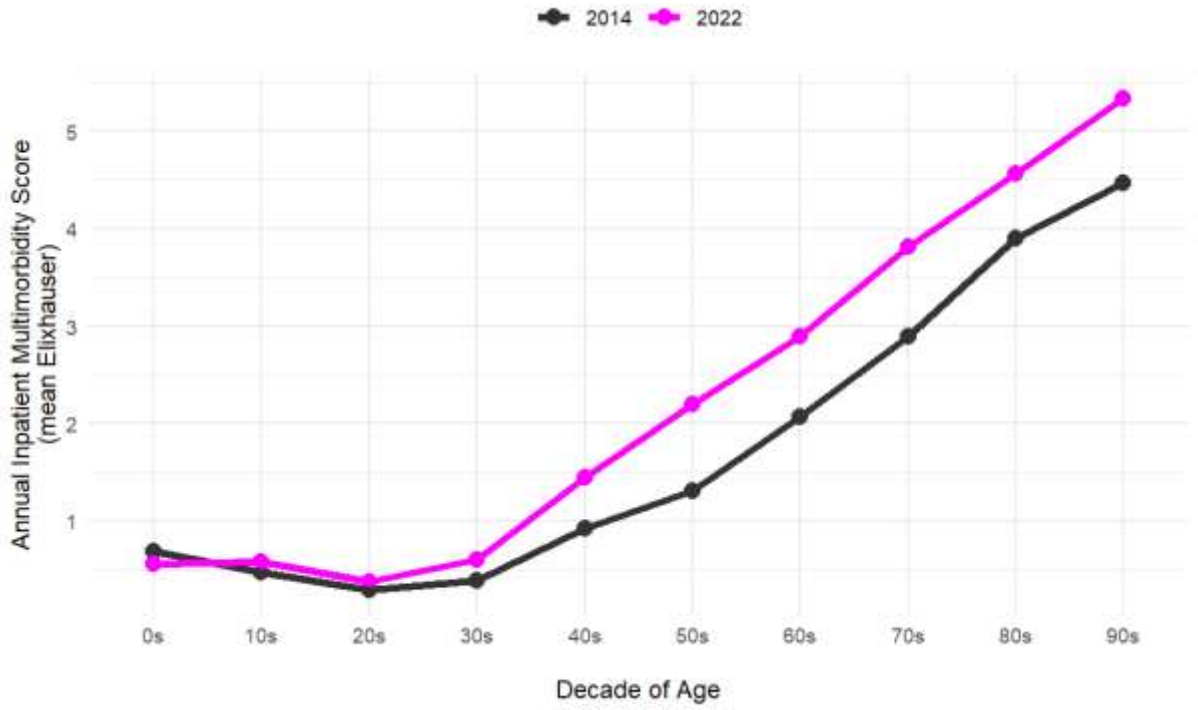


Figure 11. In-patient multimorbidity in Grampian by age group, 2014-2022.

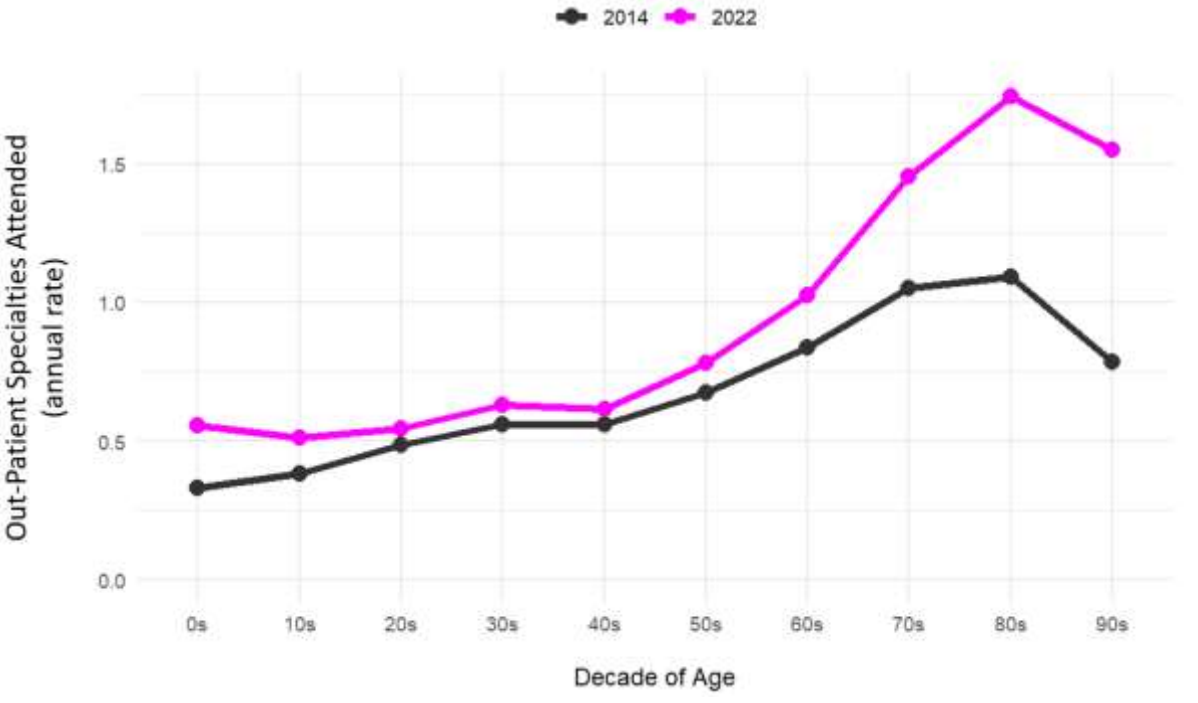


Figure 12. Out-patient specialty use in Grampian by age group, 2014-2022.

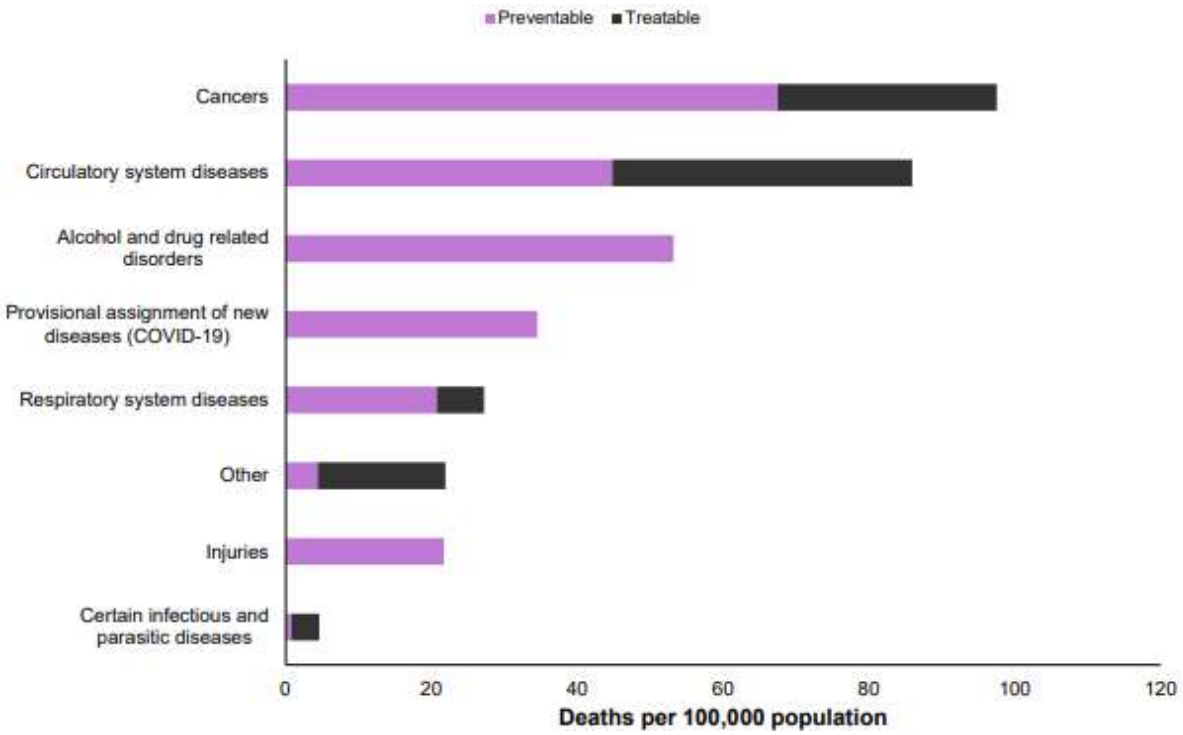


Figure 13. Avoidable mortality rates in Scotland, by cause, 2021[19].

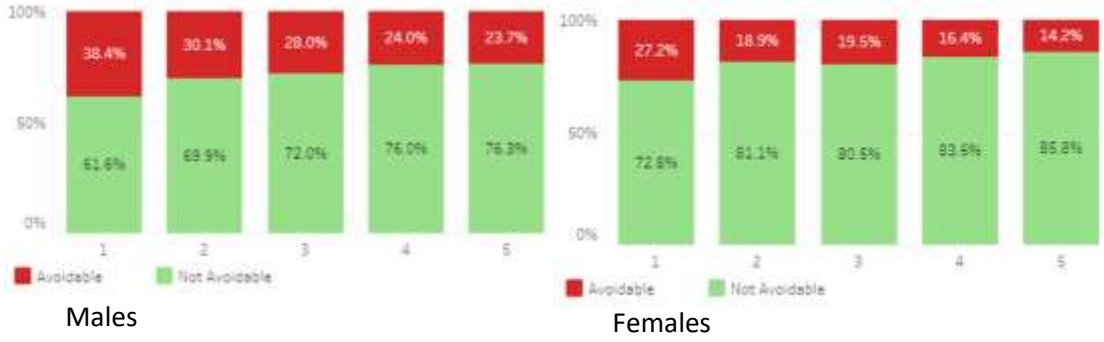


Figure 14. Percentage of all-cause deaths deemed avoidable by deprivation quintile & sex

The current health and care delivery model is unsustainable[20]. Current demand for health and social care is a manifestation of unmet need in the determinants of health. We need to find a better balance across the four pillars of population health if our health and care system is to be sustainable, safe, effective, and meet population needs. Prevention is key to improving people's quality of life, enabling wellness and maximising the proportion of their life spent in good health. Prevention is one of the most cost-effective interventions the NHS and wider system can make in relation to improving population health and reducing inequalities. We can address these challenges by sharpening our focus on embedding prevention at all levels within the

NHS and transforming the delivery of services to shift towards community-based models of care.

Transformation will require partnership working to shift the focus from acute services towards community services and primary care. Some examples of transformation have already taken place, for example General Paediatric Outpatient Cluster Clinics were introduced to reduce long waits for assessment at the Children's Hospital. We are going to build upon learning from this work, examples elsewhere and what our communities (citizens and staff) tell us to inform how we take this forward through initiatives such as Community Appointment Days.

Case study: Waiting well service

The Waiting Well Service delivered by Healthpoint started in June 2022 and supports the wellbeing needs of elective patients on waiting lists. The service aim is to: help improve quality of life while waiting, prepare people better for treatment, reduce their length of stay in hospital, and enable them to recover faster.

The Healthpoint team contacts patients by telephone and has a 'wellbeing' conversation where they listen to the patient and look at practical ways to support them to 'wait well' and help them to access local services/groups. They discuss vaccination and screening too, encouraging uptake. Details are updated as required and those who disclose a deterioration in symptoms have a follow up call from a nurse to provide support and/or escalation to clinical teams if necessary. From June 2022 to July 2024 17,145 patients have been supported.

The evaluation found (one and four weeks after the initial Waiting Well conversation) that 22% of the respondents said they had already made changes that contributed to their health, with a further 27% planning or at least thinking about changes to improve health or wellbeing. Most people expressed positive views about the service and the information they received. 85% thought the information they received was useful or might be useful in the future, and an additional 9% reported that the information they received had already led to improvements in their life. Most appreciated the call and were reassured to know they had not been forgotten.

Case Study: Ice Crew Gritting Scheme

An analysis of falls attendances at Aberdeen Royal Infirmary (ARI) and Royal Aberdeen Children's Hospital (RACH) emergency departments during the two recent cold snaps in 2022 and 2023 identified two Aberdeen City postcode areas (AB15/16) which experienced very high numbers of falls. Further analysis identified Hilton, Stockethill, Cults and Bieldside as having the highest incidence within those postcodes. Aberdeen City Council (ACC)'s footway gritters operate in these areas but are not sufficient alone to prevent falls in high numbers. A self-help scheme has operated across the city for several years, whereby one tonne salt bags can be obtained, but it is not intelligence-led, and how the bags are used is not monitored. Through engagement with Community Councils, ACC and NHS Grampian, it was proposed that the three areas create volunteer 'winter resilience rapid response task forces', which later became known as 'Ice Crews' for winter 2023/24.

Volunteers were sourced by the communities involved during the autumn months and the delivery of the equipment needed was coordinated through Public Health and the Roads Department. The Community Councils advertised across their communities and sourced high-visibility vests for the crews and one liaised with their local primary school to help name their group and the gritters. 15 volunteers were out gritting, spread across the 3 community council areas. The crews were sent intelligence from the council when road surface temperatures were due to drop below zero, at which point they used hand gritters and salt bags provided by the council to grit the pavements where the highest number of falls were seen the previous winter. These areas include sheltered housing as well as community venues used by vulnerable members of the community. Gritting took place on many occasions during the winter and anecdotal evidence shows the affected communities were appreciative and it helped to build a level of community resilience and spirit. Early analysis suggests that A&E attendances had fallen in some areas but a more robust analysis is currently being undertaken. The 23/24 winter was less cold with far less sustained periods of ice forming than 22/23 which makes it difficult to detect changes directly attributable to the project. Some of the community councils are already future planning, thinking about next winter and where they can access funding to ensure this project continues. This has led to a CPP objective to roll the project out to other communities in the City.

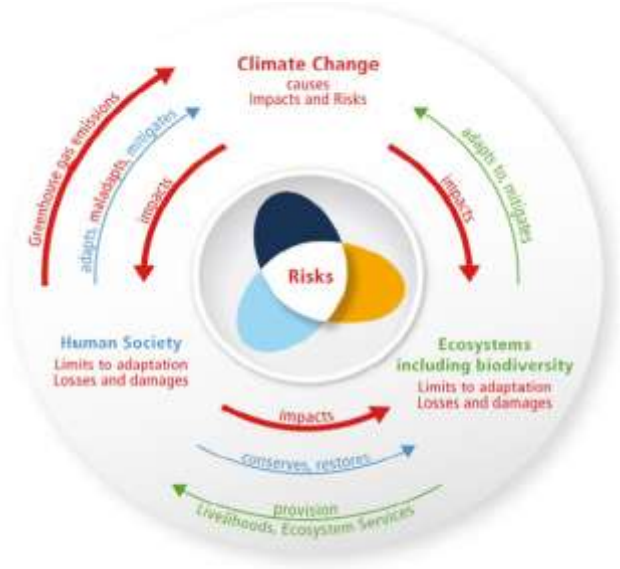
Case study: Community Appointment Days
To innovate new models of care through developing equal partnerships with communities, NHS Grampian's Putting People First programme aims to test Community Appointment Day (CAD) approaches which bring clinicians together with community assets in community settings. CADs are not just about hosting services closer to home - they enable wellbeing by taking a strengths-based, cross-system and community-powered approach to identify and address non-medical needs in addition to providing specialist medical input in the same environment. As well as providing what people need to enable wellbeing, they have also been shown to reduce waiting lists by one third and improve patient and clinician satisfaction.

Planning for CADs is already taking place across Grampian with the first CAD planned in Elgin in September around musculoskeletal services; and a second to follow in Aberdeen City around chronic pain. In these early stages, different approaches will be tried in the different areas in order to evaluate the benefits and challenges of different models. As the programme progresses, we aim to move from CADs focused on particular services to a model which starts with specific communities, identifying their needs, aspirations and strengths and working with them to provide the supports they need to enable better health and reduce inequalities.

Climate Change and Sustainability

The threat to the health of the people of Grampian from climate change, environmental damage, and bio-diversity loss requires concerted action to protect planetary and human health. The Health Effects of Climate Change in the UK report[21] has provided the most comprehensive overview of the challenge and necessary actions (summarised in the diagram below). Two mechanisms can help to minimise health harms: mitigating climate change impacts and adapting to them.

Climate change mitigation involves reducing the release of greenhouse gases increasing global temperatures, driving climate change. A degree of climate change is already "locked in" and will lead to significant impacts globally. In all plausible scenarios considered as part of the 2018 UK Climate Projections[22], UK temperatures are likely to breech the target of limiting the increase in temperature to 1.5°C above pre-industrial temperature before 2050. In this context, it is essential to meet the Net Zero targets set nationally.



Components of climate risk and the Interactions between climate change, human society and ecosystems

For NHS Grampian, the work to deliver Net Zero is one of four areas of the *Climate Emergency & Sustainability Strategy: Reimagining the Health Service for People & Planet 2023-2028*[23]. Key areas already targeted in achieving Net-Zero greenhouse gas emissions within NHS Grampian's direct (Scope 1) and indirect (Scope 2) control are the electricity and heat used within NHS Grampian's buildings (which accounts for 86.8% of its carbon footprint[4]) and its transport use (3.3% of the carbon footprint).

Greening the Health System is the second area considered. Work underway here includes contribution to national initiatives such as the Green Theatre Programme where the carbon released from anaesthetic gases alone accounts for 7% of the organisational carbon footprint. Potential further action to mitigate greenhouse gas consequences of NHS care is an important area for development, not least as part of the Realistic Medicine initiative, approaches to prescribing, and waste management.

The two remaining areas within the strategy consider Greening Places and Communities and NHS Grampian's collaboration across national and local systems. Work on the former includes Community Planning Aberdeen's Sustainable City Group which is focusing on waste management, including a more collaborative approach to tackling food waste. Other examples include the development of human and planetary health co-benefits sought through Local Development Planning arrangements in Aberdeen, and supporting the evidence-base for environmentally sustainable development within Aberdeenshire.

As well as mitigation, we need to create systems which are adapted to expected changes in climate and ecosystems. This will include a focus on creating health ecosystems and establishing communities that are climate-resilient, healthy and equitable places. The early stages of adaptation will be guided by the Scottish National Adaptation Plan (SNAP).[24]

Places and Communities

Thriving communities in healthy places are essential for good health and wellbeing, both individually and collectively. As mentioned previously, positive social relationships and community networks are vital for our health and particularly impact on our mental health. Beyond this, putting communities at the heart of what we do can:

- Empower people to have a greater say and agency in their lives and health;
- Build and strengthen connected, resilient, inclusive and cohesive communities;
- and engage those most at risk of poor health, tackling inequalities[25].

"Place" is increasingly recognised as crucial to the health and wellbeing of individuals and communities. Taking a place-based approach means considering not only the physical elements that make up a place, but also economic, social, cultural etc. and how these elements interact. A national Place and Wellbeing Collaborative[26] has produced a collection of evidence-based[27] Place and Wellbeing Outcomes which form a helpful foundation on which the quality of a place can be thought of and assessed. The outcomes fall into five themes:

- Movement (public transport, active travel, traffic and parking)
- Spaces (streets and spaces, natural spaces, play and recreation)
- Resources (services and support, work and economy, housing and community)
- Civic (identity and belonging, feeling safe)
- Stewardship (care and maintenance, influence and control)[28]

Through this agreed set of outcomes, we can take a common, cross-system approach to complex issues of place which will differ from community to community.

A second symposium was held in November 2023 at Haddo House under the heading of "Using Place as a Lens to Improve Health". There remains a focus of interest on nature-based activities to improve health and the environment within the context of the cost-of-living crisis, climate change and widening inequalities. There is a groundswell of interest in enabling community-led developments alongside the structural supports that come from leadership and policy. The symposiums have increased networking, building relationships and inspiring action; and the Place and Wellbeing Network which developed following the first symposium continues to meet and thrive. This year, two key priorities for the network are Social Prescribing and connection to nature, particularly focusing on children and young people.

Case Study: Social Prescribing

Social prescribing is a means of identifying non-medical social needs and connecting people to community assets which can provide non-clinical support. This is done through co-production of a social prescription, “a non-medical prescription, to improve health and wellbeing and strengthen community connections.” This could be a transformational approach changing the way health services interact with communities, de-medicalising issues which are driven by wider determinants. It has potential to shift power from clinic to community, where people recognise individual and collective strengths and assets to benefit the lives of themselves and their communities.

The Place and Wellbeing Network has been investigating the possibility of a consistent Social Prescribing model which could apply across the whole of the North East. This seeks to take Social Prescribing beyond primary care and the existing Community Link Worker (CLW) model, to incorporate secondary care and other areas of the health system. Current models and initiatives locally involve myriad partners working together from Macmillan Cancer Support to Healthpoint Teams and Digital Health and Care Innovation (DHI). This complex environment means there is a wealth of activity and experience to learn from and build upon, identifying aspects which could be applied universally.

Case Study: Connecting Young People to Nature

The network's second priority is to promote young people's connection to nature and greenspace. There is a large and growing body of evidence that suggests that more time spent in nature and a richer connection with nature as a child have significant benefits for health and wellbeing of both people and planet including:

- Exposure to greenspace and greater engagement with nature are associated with more physical activity, increased fitness and reduced risk of overweight or obesity.
- Immersive experiences of nature and access to greenspace are associated with improved mental health outcomes in children and adolescents.
- Natural environments are associated with children's ability to form positive relationships, socially adaptive behaviours, emotional management/expression, and overall socioemotional adaptation.
- Positive experiences of nature as a child and care for nature modelled by someone close to the child are the most important determinants of pro-environmental behaviours as an adult.
- More time spent in nature as a child is associated with more pro-environmental attitudes/action and feelings of being connected with the natural world as an adult.

A small group has now been formed to identify areas for action. Early discussions have highlighted the so-called "Teenage Dip" in nature connection whereby younger children demonstrate high connection with nature, but this drops in the teenage years. A growing consensus suggests a focus on meaningful connection with nature could have greatest benefit for the health of young people and the environment. The next steps will be to identify opportunities for action locally.

Conclusion

This year's DPH report highlights the breadth of excellent work undertaken with partners across Grampian. Our work this year has put in place the foundations to mitigate the threats to population health from the rising cost of living, infectious diseases, climate change and the increasing need and demand for health and social care. Key to this is the work we do as an Anchor organisation to support our local communities and the work we do collectively to build strong, resilient and connected communities.

The work we do with communities is vital to keeping people safe, enabling healthy living, supporting good mental health and preventing adverse health outcomes that may require hospital admissions. Underpinning all of this work is strong collaboration and partnership working across all sectors. Through working together we have learned that there is more we can do to increase the impact of our collective activities. This includes considering how we can better share data and information across organisations for action that will supports people and their families in a holistic way. There is also more we need to do to understand what works when we

implement new interventions, how we capture our learning, share and use this in a systematic way to continue to drive our ambitions to improve population health and reduce inequalities.

Building on our strong foundations of working in partnership we need to continue to shift our focus upstream, recognising that so much of an individual's health and health forming behaviours and actions are determined by their circumstances, wider influences and environments. By creating healthy environments and connected systems that put people first, we can work together make health happen so that everyone in Grampian can live healthy fulfilled lives.

Case Study: Working Together to Achieve Healthy Weight

Obesity is the single biggest health behaviour-related cause of death and ill health in Scotland, causing 23% of all deaths* (more than smoking). Two thirds of adults in Grampian are categorised as having overweight, including 29% living with obesity*. More worryingly, 12.5% of P1 pupils are at risk of overweight, and 10.6% at risk of obesity. In 2015 the Lancet Global Commission on Obesity came to a clear and unambiguous conclusion on the cause of the global obesity pandemic that began in the early 1980s*. It is not caused by people becoming lazier, greedier, or lacking in motivation - it is a normal response of normal human beings to an environment that has become extremely abnormal. What has changed dramatically over the last 40 years is the amount of high energy, high fat, very high sugar and ultra-processed food that surrounds us. In Scotland we live in a highly obesogenic environment and it is difficult for us not to gain excess weight.

The solution then is to directly target our obesogenic environment. The most impactful interventions (e.g. mandatory reformulation, sugar taxes, restrictions on advertising) require policy and legislative action at national level. However there is much we can do locally. Working with communities, we can provide political leadership, challenge commercial interests, and create and galvanise public demand for policy action at both local and national level. We can do this effectively by taking a Whole Systems Approach (WSA).

A WSA targets actions at multiple causes at the same time. Obesity Action Scotland has been working with early adopter areas, including Aberdeenshire, to pilot a WSA approach developed in England*. It is too early to tell if these are having an impact on obesity, but they have shown that it is possible to apply the approach to identify co-ordinated actions across the system, and the process was positively evaluated by Public Health Scotland. Examples of actions being taken by other areas are shown in the table below.

Local authorities, Health & Social Care Partnerships (HSCPs) and Community Planning Partnerships (CPPs) are uniquely positioned to lead communities and partners to promote healthy weight. Indeed, many individual interventions described above are already being implemented across the North East. A WSA requires all of these and more to be delivered at scale across the system. In 2021, Aberdeenshire started implementing a WSA under the banner 'Healthy Eating, Active Living' (HEAL); Aberdeen City CPP has agreed to adopt a WSA; and discussions are underway in Moray. Turning the tide on the obesity epidemic will not be achieved overnight. It will take a decade or more of concerted effort by everyone, but it is achievable, and the benefits in terms of improved quality and length of life are enormous.

Examples of actions taken as part of a WSA to healthy weight			
Wider Determinants	**Healthy Living**	**Places & Communities**	**Health Services**
- Planning policies restricting fast food takeaways opening near schools. - Workforce development for planners, transport engineers and architects. - Restrictions on advertising high fat, sugar & salt foods on public-owned assets, events, transport networks. - Designing guidelines for public amenities.	- Securing 'healthier catering commitments' from food retailers, schools, hospitals, council, university caterers. - Supermarkets to remove confectionary from checkouts and deals on unhealthy products. - Supporting convenience stores to promote healthier options and to provide fresh fruit and vegetables. - Supporting food banks to provide healthier products. - Water-only schools and nurseries. - Increasing uptake of school meals.	- Local Development Plans address the physical obesogenic environment. E.g. encouraging developers to make housing estates more cycle and walk friendly; integrating urban design, transport and land use policies. - Improving access to quality green and open space, green networks, blue space, active recreational space, play spaces and sports amenities. - Encouraging and supporting all primary schools to run the Daily Mile. - All public spaces, businesses and workplaces to be breastfeeding-friendly. - Introducing signposted cycle 'quietways'.	- All maternity services are UNICEF Baby Friendly, and all public spaces, businesses and workplaces are breast-feeding friendly. - Seeking opportunities through health board workplace teams to provide leadership for workplace policies.

Abbreviations

ABCD	-	Asset-Based Community Development
ACC	-	Aberdeen City Council
ACE	-	Adverse Childhood Experience
ADP	-	Alcohol and Drugs Partnership
ARI	-	Aberdeen Royal Infirmary
BF	-	Breastfeeding
CAD	-	Community Appointment Day
CEYP	-	Care-Experienced Children and Young People
CLW	-	Community Link Worker
CPIH	-	Consumer Prices Index including owner occupiers' housing costs
CPP	-	Community Planning Partnership
DHI	-	Digital Health and Care Innovation
DPH	-	Director of Public Health
DWP	-	Department of Work and Pensions
HEAL	-	Healthy Eating Active Living
HECC	-	Health Effects of Climate Change
HLE	-	Healthy Life Expectancy
HMRC	-	His Majesty's Revenue and Customs
HPT	-	Health Protection Team
HSCP	-	Health and Social Care Partnership
HV	-	Health Visitor
IPCC	-	Intergovernmental Panel on Climate Change
JHPP	-	Joint Health Protection Plan
LCPAR	-	Local Child Poverty Action Report
LE	-	Life Expectancy
MAT	-	Medication Assisted Treatment
MenB	-	Meningitis B
NEPHA	-	North East Population Health Alliance
NESTRANS	-	North East of Scotland Transport Partnership
NRS	-	National Records of Scotland
ONS	-	Office for National Statistics

PAR	-	Participatory Action Research
PCV	-	Pneumococcal Conjugate Vaccine
PIN	-	Public Involvement Network
RACH	-	Royal Aberdeen Children's Hospital
SIMD	-	Scottish Index of Multiple Deprivation
SNAP	-	Scottish National Adaptation Plan
TSO	-	Third Sector Organisation
UKCP18	-	UK Climate Projections 2018
UNCRC	-	United Nations Convention on the Rights of the Child
UNICEF	-	United Nations Children's Fund
WEMWBS	-	Warwick Edinburgh Mental Wellbeing Scale
WHO	-	World Health Organisation
WSA	-	Whole System Approach

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