A Collaborative Exploration of Population Health Across the HSE National Clinical Programmes

A Project Learning Report

Document Information

Acknowledgements:	The Project Team on behalf of the National Health Service Improvement (NHSI) Team, Public Health, HSE extends its gratitude to the members of the Project Working Group for their collaboration on and valued input to this project. This Group includes members of the NHSI Team, the HSE National Clinical Director for Integrated Care, HSE Clinical Design and Innovation, and the National Clinical Advisor and Group Lead for Chronic Disease The membership and roles of the Project Team, NHSI Team, and Project Working Group are outlined in Appendix A. The Project Team would also like to acknowledge and thank the HSE National Clinical Programmes (NCPs) involved in this project who generously gave their time and shared valuable insights on their programmes, particularly the Clinical Leads and Programme Managers of the three NCPs selected for the focused exploration undertaken as part of this project.
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We are dedicated to continuous improvement and learning, and we highly value your feedback on this document. Your insights provide an opportunity to refine our work and further enhance its impact.

About National Health Service Improvement, Public Health

The National Health Service Improvement Team aims to improve population health and health equity by designing, testing, implementing and learning from health service improvements. We do this through system leadership, taking an evidence-led approach and building improvement capabilities across the health services. At regional level, we work collaboratively with Departments of Public Health and other stakeholders, including patients, communities, and professionals in health and allied services, to address the health needs of the entire regional population. At national level, we focus on specific priority cohorts, including underserved populations, working closely with people with lived experience and other stakeholders, to deliver targeted interventions that address the unique needs of these groups. The National Health Service Improvement team can be contacted at: NationalHealthServiceImprovement@hse.ie

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Purpose of Report

This is a learning-focused report of the project titled ‘A Collaborative Exploration of Population Health Across the HSE National Clinical Programmes.’ This project was undertaken in 2024 for the HSE Chief Clinical Officer (CCO) by the National Health Service Improvement (NHSI) Team, Public Health, HSE, in collaboration with the HSE National Clinical Director for Integrated Care (NCDIC) and HSE Clinical Design and Innovation (CDI). This learning report, framing the project as a journey, is derived from an internal report of the project produced for the CCO. This report focuses on sharing the approach to the project, the overall cross-programme project learning and next steps.

Project at a Glance

Collaboratively Exploring Population Health Across the HSE National Clinical Programmes

A Project Collaboration between the National Health Service Improvement Team (NHSI) (Public Health, HSE), the HSE National Clinical Director for Integrated Care (NCDIC), and HSE Clinical Design and Innovation (CDI)

Project in Context
What is Population Health?

Population Health is about the health outcomes of a group of people.

Taking a population health approach means looking at health in a broader context, focusing on groups of people rather than individuals. A set of principles can underpin and guide a population health approach.

Project Aim
What was our project about?

Our collaborative project aimed to explore how the HSE National Clinical Programmes (NCPs) are currently aligning with a population health approach.

However, we learned as we started this project that there isn't an agreed definition for population health or a population health approach - in Ireland or internationally.

Project Approach
How did we do the project?

Step 1
First, we developed project definitions for population health and a set of population health principles.

How did we do this?
Through a rapid literature review, identifying themes & project group discussions.

Step 2
Next, we developed a population health principles checklist, for use in Step 3.

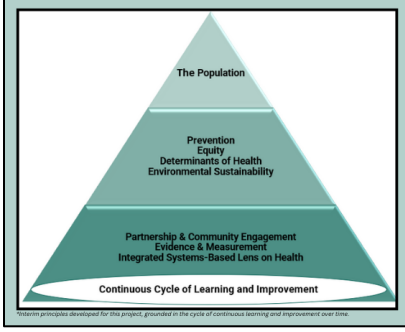
How did we do this?
By developing questions for each principle & creating a checklist document.

Step 3
We explored the current alignment of the NCPs with population health principles.

How did we do this?
Through a desktop review, interviews & gap analysis with 3 NCPs, & a survey of all NCPs.

Project Findings
What did we learn from the project?

A Population Health Approach
We identified eight principles, presented in the pyramid* below, to underpin and guide a population health approach.



*Interim principles developed for this project, grounded in the cycle of continuous learning and improvement over time.

Three Key Conclusions
We identified three key conclusions, presented below, that will inform the next steps arising from this project.

1. A common understanding of a population health approach is essential and needed.
2. There is an evolving understanding of and alignment with a population health approach by the NCPs.
3. Embedding and enabling consistency in a population health approach requires national leadership and support.

What's Next?

Defining Population Health Together

Public Health are leading a cross-sectoral, co-design project to produce in 2025 a consensus national definition for population health and principles underpinning a population health approach.

Enabling Population Health Together

NHSI are continuing to collaborate with CDI to build on this project, to enable and embed population health principles into clinical programme design going forward.

Image prepared by the NHSI Team on behalf of the Project Working Group. Contact us at: NationalHealthServiceImprovement@hse.ie

Starting the Journey: Introduction

What is Population Health?

While the concept of population health is increasingly prominent, there is no universally agreed definition of population health or a population health approach in Ireland or internationally. A widely cited definition proposed in 2003 by Kindig and Stoddart defines population health as 'the health outcomes of a group of individuals, including the distribution of such outcomes within a group' (1). More recently, in 2018, The King's Fund set out a vision for population health as 'an approach aimed at improving the health of an entire population... improving the physical and mental health outcomes and wellbeing of people within and across a defined local, regional or national population, while reducing health inequalities' (2). They described a 'population health system' as that which incorporates activity across four pillars - an integrated healthcare system, lifestyles and health behaviours, places and communities, and the wider determinants of health. In 2021, Thomas described how a population health approach focuses on 'populations rather than on individuals' and considers 'root causes and structural factors rather than exclusively focusing on treating the symptoms/conditions of an individual' (3).

At a high level therefore, a population health approach places health, and healthcare, in a wider context. In Ireland, the need to re-orient health service planning and delivery towards a population health approach, population needs, and prevention has been articulated in the Sláintecare policy vision for healthcare (4) and is highlighted in the 2023 HSE Health Regions Implementation Plan (5).

Project Rationale: Population Health and the National Clinical Programmes

Since their inception in 2010, as a strategic partnership between the HSE and the various postgraduate training bodies in Ireland, the HSE National Clinical Programmes (NCPs) have played a crucial role in enabling clinical leadership, transformation and standardisation of care across various health conditions and specialties in Ireland (6). The project presented in this report applied a population health lens to the HSE National Clinical Programmes (NCPs), given their central role in clinical design and service improvement. This was a collaborative project undertaken by the National Health Service Improvement (NHSI) Team, Public Health, HSE with the HSE's National Clinical Director for Integrated Care (NCDIC), and HSE Clinical Design and Innovation (CDI), for the HSE Chief Clinical Officer (CCO). It was timely in the context of ongoing major health system reform in Ireland, with an increasing focus on prevention and population health across health policy, service planning and delivery. In the absence of a consensus definitions for population health or a population health approach, the project presented an opportunity to simultaneously start the journey of defining these population health concepts, and to ensure that the principles underpinning a population health approach are optimally embedded in all NCPs. The work outlined in this report is, therefore, intended as the first steps in this journey, and as a baseline to inform how best to enable a population health approach to clinical programme design going forward.

The Intended Destination: Aims and Objectives

With the project rationale in mind, the aims and objectives of the project are outlined below.

Aims

- To explore the current alignment of the HSE NCPs with the principles of a population health approach
- To use the current alignment insights to identify opportunities for the NCPs to optimally align with population health principles to achieve the greatest impact on population health

Objectives

Objective 1

In the absence of a consensus definition for population health or a population health approach, the first objective was to define a working definition for population health and key principles of a population health approach to use in this project.

Objective 2

Using the population health principles defined in Objective 1, the second objective was to develop a population health principles checklist that could be used to support an 'As-Is' exploration of the current alignment of the NCPs with a population health approach (i.e. Objective 3).

Objective 3

The third and final objective was to conduct a mixed-methods 'As-Is' exploration of the alignment of the NCPs with the principles of a population health approach defined for this project, including a gap analysis to identify opportunities to enhance alignment.

Key Steps in the Journey: Methods

Overview

In this project, there were five key steps in the journey, reflecting work undertaken from March to December 2024. These steps are summarised in **Figure 1** below, followed by a description of each step.

Figure 1. The Project Journey: Five Key Steps.

Step 1: Establish the Project Collaboration, Governance and Approach

March – June 2024

The key actions taken as part of Step 1 are presented by month in **Figure 2** below. A full description is included as **Appendix B** for reference.

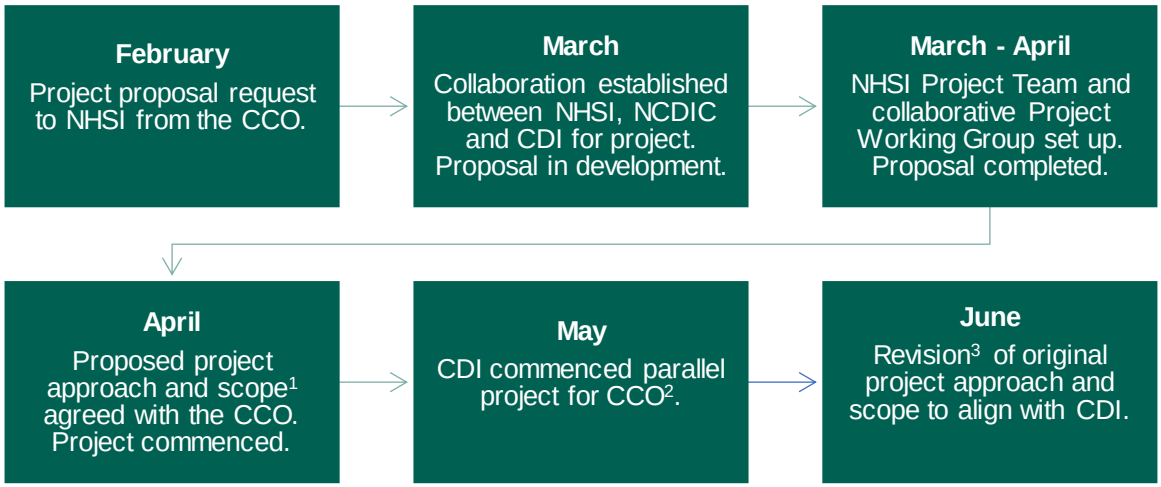


Figure 2. The Project Journey: Five Key Steps.

Figure 2 notes: [1]The project scope options did not include the implementation, impacts or costs of the NCPs in relation to alignment with population health. [2]The parallel CDI project focused on the development of a new, standardised approach in design and development of clinical designs and models of care. [3]The original proposal and scope were revised to change from six objectives over two phases to three key objectives undertaken in one phase of work.

Step 2: Objective 1 - Define Population Health

April - June 2024

Without an existing consensus definition for population health, the first objective in this project was to define, and agree with the Project Working Group, a definition for population health and for principles underpinning a population health approach. The Objective 1 process is summarised in **Figure 3.**

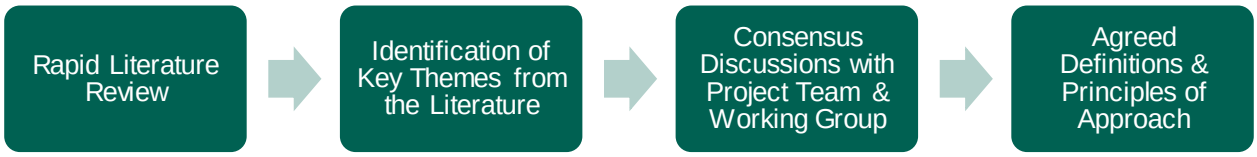


Figure 3. Key Steps to Achieve Objective 1.

Step 3: Objective 2 - Develop a Population Health Principles Checklist

June 2024

Objective 2 centred on the development of a population health principles checklist document, for use in the Objective 3 'As-Is' exploration. The checklist development process is summarised in **Figure 4**.

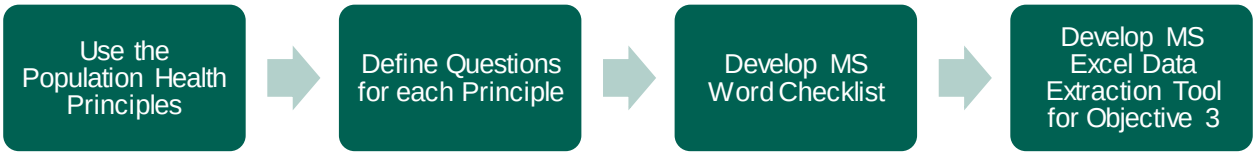


Figure 4. Key Steps to Achieve Objective 2. (MS = Microsoft).

Step 4: Objective 3 - Explore 'As-Is' Population Health Alignment Across the NCPs

June - August 2024

The third and final objective of the project was to undertake an 'As-Is' exploration of the alignment of the NCPs with the principles of a population health approach, including a gap analysis to identify high-level opportunities to enhance existing alignment. A mixed-methods approach was taken for Objective 3, as summarised in **Figure 5** below, and described in further detail next. A short description of the mixed-methods approach is included after **Figure 5**, with a full methodological description provided for reference in **Appendix C**.

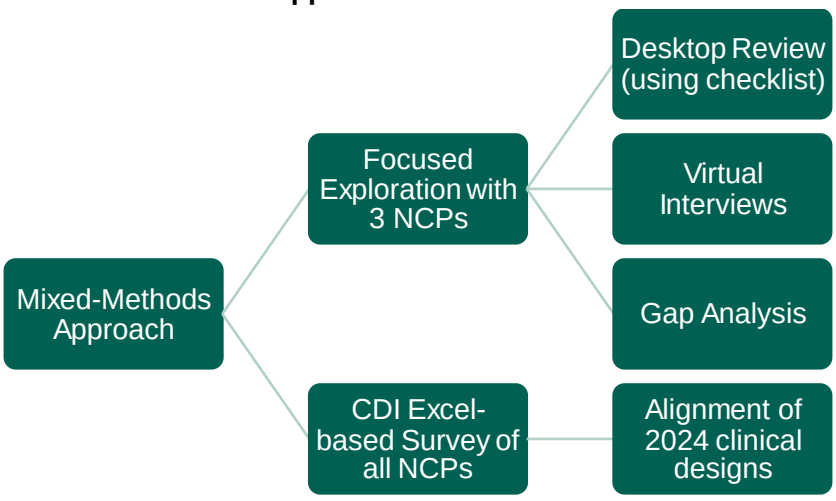


Figure 5. Objective 3 Mixed-Methods Approach.

Focused Exploration with a Sample of NCPs

Focused Exploration Approach

The first component of the mixed-methods approach was a focused exploration of the alignment of a sample of NCPs with the principles of a population health approach. Three NCPs were purposively selected for inclusion by CDI based on their different stages of maturity. This report summarises cross-programme learning from the focused exploration with the sample of NCPs, as opposed to individual NCP-specific learning.

The focused exploration included a desktop review and interviews, followed by the gap analysis. For the desktop review, NCP Models of Care and Clinical Pathway documents were reviewed using the population health principles checklist developed in Objective 2. These clinical design documents were selected based on the criterion of having achieved 'Level 3' approval, per the CDI document approval model. Semi-structured interviews were conducted with NCP Clinical Leads and (if in post) Programme Managers, for each of the three NCPs selected. Interviews were conducted virtually over approximately 1 hour using an interview guide developed for the project. The questions (included as **Appendix D**) were grouped under three headings - Understanding of Population Health, Exploring Alignment with a Population Health Approach, and Enablers and Barriers for Aligning a Population Health Approach.

Focused Exploration Analysis

The analysis of the focused exploration included the following key steps:

- Content analysis of information gathered from the desktop review using the checklist
- Adapted thematic analysis of the qualitative data from the interviews (adapted from (7))
- Combination of desktop review and interview content to create a summary of alignment with population health principles for each NCP, under the same headings as the interview question guide
- Identification of key alignment observations across the three NCPs
- Identification of opportunities to enhance alignment across the NCPs by comparing these summary observations against the checklist questions

High-Level Survey of All NCPs

Survey Approach

CDI issued an Excel-based survey to all NCPs in June 2024 as part of their parallel project, as noted in Step 1, to capture current and planned programme clinical design documents (excluding those approved for publication before or on June 19th, 2024). To align the survey with this project, respondents were asked to also indicate which, if any, population health principle(s) their clinical design documents addressed, and to share any examples to support this alignment. An explanation of each of the population health principles was provided in the Excel-based survey to support the NCPs in their responses.

Survey Analysis

Analysis of these data focused on the population health principles that NCP respondents self-reported their document(s) would address.

Step 5: Identify and Share Project Learning

September - December 2024

Bringing all of the Objective 3 results together, three key reflections were identified from this project – these are described in the 'Reflecting on the Journey: Discussion' section of this report (pg. 19). An internal report of the project was then developed for the CCO. This was followed by this report to share the learning from the project externally. The Project Working Group also identified that a self-assessment tool would be of potential benefit to the HSE National Clinical Programmes (NCPs) to guide them in exploring their own alignment with a population health approach, and to help shape their thinking as to opportunities to enhance existing alignment. This tool is in development as of the date of this report and is described further in the final 'Next Steps Ahead' section (pg. 23).

Insights From the Journey: Results

Objective 1: Define Population Health

Definitions and principles for population health were identified for use in this project through the steps outlined previously.

Population Health Definitions

With consideration of the literature on defining population health, two definitions were developed to encompass what defines population health for this project, defining population health as a noun (health status) and as a verb (approach).

Population Health (noun)

Population health is the physical, mental and social **health status** of a group of individuals. It is determined by socioeconomic, environmental, cultural, behavioural and healthcare factors, and is also influenced by the distribution of health and these factors across the population.

Population Health (verb)

A cross-sectoral and interdisciplinary **approach** to prevention and optimising the physical, mental and social health status of, and equity within, a given population. It considers socioeconomic, environmental, cultural, behavioural and healthcare factors in improving population health and wellbeing and is underpinned by evidence-based action.

Principles of a Population Health Approach

Six population health principle themes were identified from the literature. Through consensus discussion, two further principles were identified (numbers 6 and 7 below), resulting in a total of eight population health principles to underpin this project:

1. A Population Perspective to Improving Health
2. Prevention
3. Equity in Health
4. The Determinants of Health
5. Partnership and Community Engagement
6. Environmental Sustainability
7. Integration of Care
8. Evidence and Measurement for Population Health Improvement

What Do We Mean by These Principles?

A brief explanation for each of the eight principles is outlined next in this section.

Principle 1: The Approach Takes a Population Perspective to Improving Health

Definition
A population health approach seeks to improve the health status of entire populations (or subpopulations), not just individuals or groups of individuals who seek healthcare.
What does this mean?
A population health approach aims to make all members of a population healthier, not just those who attend healthcare services.

Principle 2: The Approach Emphasises Prevention

Definition
A population health approach places emphasis on prevention of ill-health and optimisation of health and wellbeing (physical, mental and social), through a long-term, life-course perspective. This includes all levels of prevention i.e. primary prevention to prevent onset of ill-health with (for example) health behaviour interventions, secondary prevention focusing on early detection, and tertiary prevention to limit the impact of existing conditions.
What does this mean?
A population health approach focuses on preventing illness and promoting overall health and wellbeing (physical, mental, and social) throughout a person's life. It includes all types of prevention: stopping illness before it starts, detecting it early, and managing it to reduce complications.

Principle 3: The Approach Prioritises Equity in Health

Definition
A population health approach contributes to improving health equity through efforts to reduce or eliminate these unnecessary, unfair and avoidable differences in health status across the population of interest, and prioritising underserved groups within it.
What does this mean?
A population health approach helps make health more equal by working to reduce or remove unfair and avoidable differences in health among people. It focuses on supporting underserved groups in the population.

Principle 4: The Approach Recognises the Fundamental Importance of, and Addresses, the Determinants of Health

Definition
A population health approach acknowledges and addresses the many determinants of the health of populations, and recognises that these determinants are multiple, complex, interrelated, and exist at the individual/collective and downstream/upstream level.
What does this mean?
A population health approach understands and tackles the various factors that affect people's health. It recognizes that these factors are many, complex, and interconnected, and they can influence health both on an individual level and within the broader community.

Principle 5: The Approach is Based on Partnership and Community Engagement

Definition
A population health approach is based on cross-sectoral collaborative partnerships with key stakeholders across population health improvement. The approach recognises that population health is a shared responsibility across many sectors, and as such, a foundation of partnership is key to enable coordinated, integrated and multi-faceted efforts to improve population health. This crucially includes partnership and engagement with communities to ensure their needs and preferences are central to any work undertaken.
What does this mean?
A population health approach relies on partnership, teamwork and cooperation among different groups and sectors. It understands that improving health is a shared job that requires everyone to work together. Partnerships and community involvement are essential to ensure that the voices of those that need, use and deliver services are represented and central to work undertaken.

Principle 6: The Approach includes Consideration of Environmental Sustainability

Definition
A population health approach prioritises environmental sustainability through integration of environmental considerations, so that current population needs are met without compromising the capacity to meet future needs.
What does this mean?
A population health approach focuses on environmental sustainability by considering the environment. It aims to meet today's health needs without harming the ability to meet future needs.

Principle 7: The Approach Prioritises Integration of Care

Definition
A population health approach prioritises integration and coordination of care around the needs of the population. This requires a joined-up, systems-based lens on health, with consideration of all those working to improve population health.
What does this mean?
A population health approach focuses on organizing and coordinating care based on the needs of the whole community, so that the right care is provided in the right place, at the right time. It is also about looking at health as a whole system.

Principle 8: The Approach is Underpinned by Evidence and Measurement for Population Health Improvement

Definition
A population health approach is underpinned by measurement of what matters. Data, including key population health process and outcome indicators, informs evidence-based decision-making, planning, implementation and evaluation of actions, policies, practices and interventions to improve population health and reduce health inequities. Measurement also supports intersectoral accountability for population health outcomes.
What does this mean?
A population health approach is guided by measuring important data. This information helps make informed decisions and plans for improving health and reducing inequalities. Measuring results also ensures that different sectors are held accountable for health outcomes.

Visualising a Population Health Approach

Bringing a health service improvement ethos to this work, it was also identified that a population health approach should be grounded in the cycle of continuous learning and improvement over time. A visual representation was developed to illustrate how these principles can combine to form a high-level approach to improving population health (**Figure 6**).

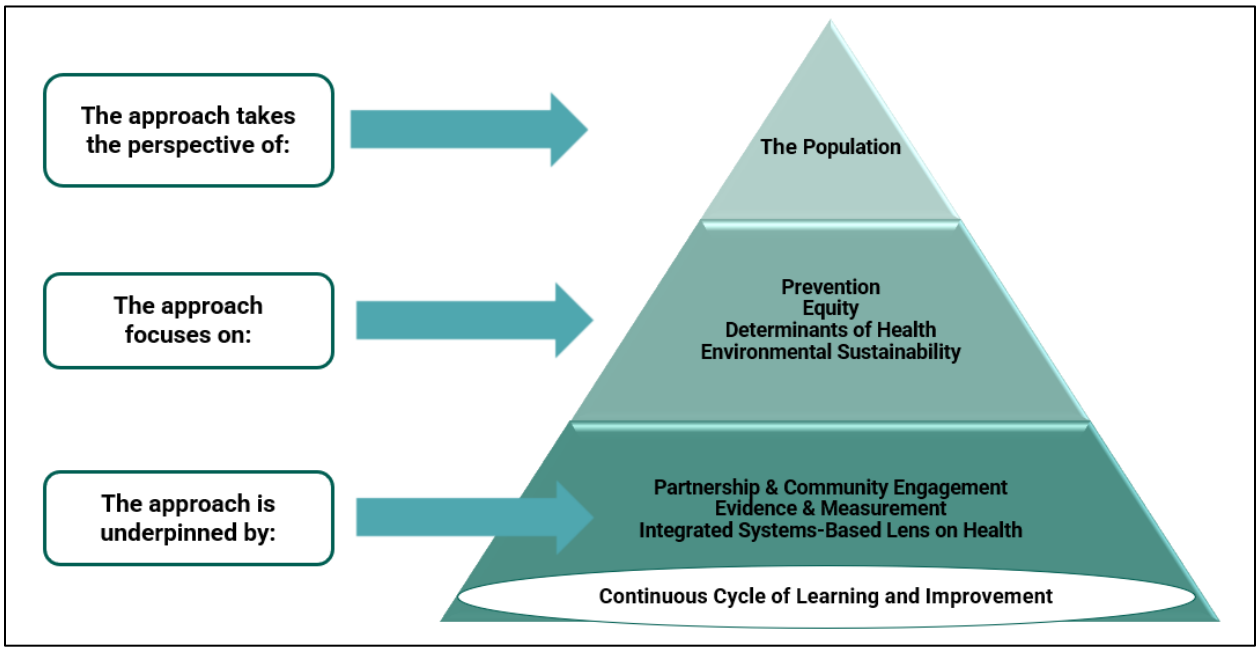


Figure 6. A Population Health Approach (interim approach developed for this project).

Objective 2: Develop a Population Health Principles Checklist

The Objective 2 Population Health Principles Checklist questions are available in full in **Appendix E**. In brief, the checklist asked key questions specific to each of the eight principles. For all principles, the checklist also asked if there were any examples to capture in relation to alignment with the respective principles.

Objective 3: Explore 'As-Is' Population Health Alignment Across the NCPs

Focused Exploration: Key Insights

The key insights from the focused exploration are presented next, under the headings of the interview question guide:

- Understanding of Population Health
- Exploring Alignment with a Population Health Approach
- Enablers and Barriers for Aligning with a Population Health Approach

Understanding of a Population Health Approach: Key Themes

From the interview component of the focused exploration with three NCPs, key themes of understanding of population health and a population health approach were identified across these programmes, providing a useful insight into how the NCPs currently understand these concepts. These are presented in **Figure 7**.

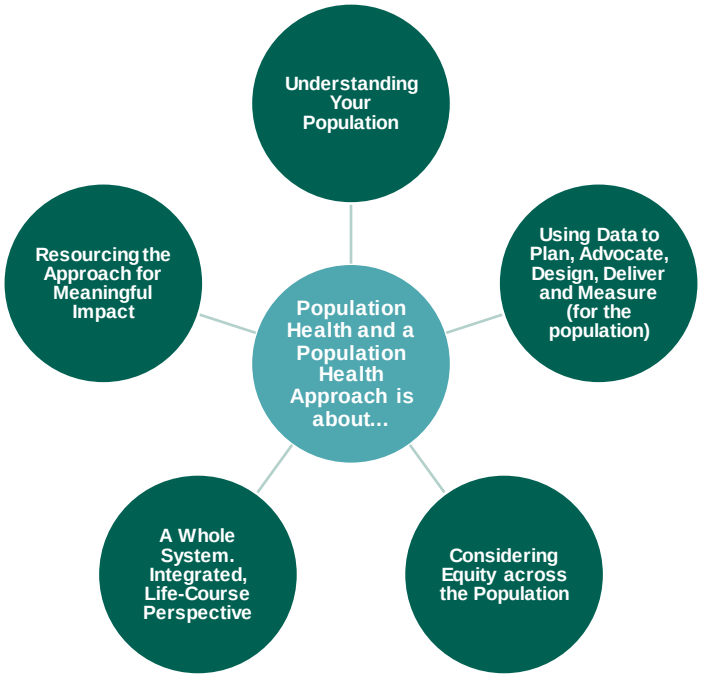


Figure 7[1]. Understanding of Population Health: Key Themes from the Focused Exploration

Alignment with a Population Health Approach: Observations and Opportunities

The focused exploration with the sample of NCPs provided valuable insights into how these programmes currently consider and/or are incorporating population health principles into their programmes, which helped to identify potential opportunities to build on, as summarised in **Table 1**. The overall observation from this component of the project was that there was an evolving understanding of, and alignment with, the population health principles. Further, there were similarities and differences in alignment across the three programmes. These observations are explored further in the next section 'Reflections from the Journey: Discussion' (pg. 19).

[1] Figure 7 represents a slightly revised version of the themes presented in the internal project report, with rationalisation during the writing of this report of two of the original six themes into one (Using Data to Plan, Advocate, Design, Deliver and Measure (for the population)), resulting in the five themes above.

Table 1. Key Alignment Observations and Opportunities Identified from the Focused Exploration.

Alignment Observation	Alignment Opportunity
All Principles	
There was varied and evolving understanding and incorporation of the principles.	To define (through co-design), disseminate and raise awareness regarding consensus principles of a population health approach to promote a shared understanding for national and regional stakeholders.
Principle 1: A Population Perspective	
The NCPs identify, and aim to improve the health of, the population(s) that they serve and highlighted various sources of information used to inform their understanding of their population. Some population information gaps were also highlighted.	To support the NCPs in the identification, quantification and definition of population groups such that the full relevant population is recognised. This includes those who are well but may have risk factors, to those with a diagnosis that is well-managed, to those with more complex advanced disease, to inform service planning.
Principle 2: Prevention	
The NCPs placed emphasis on prevention, though the description of activities across the three levels of prevention (primary, secondary, tertiary) varied. Under-resourcing of some prevention activities was highlighted.	To support the NCPs to describe and address all levels of prevention in service design and delivery, as applicable to the condition(s) of interest, including enhancing prevention in primary and community care settings.
Principle 3: Equity	
The NCPs mostly referred to equity in terms of geographical equity of access to services, with some identification of specific groups in the population in need of more targeted attention/intervention.	To support the NCPs to expand their perspective on equity, particularly to consistently identify and prioritise specific underserved groups in service design and delivery.
Principle 4: Determinants of Health	
While the NCPs discussed different determinants of health at interview, there was limited description of these in programme documents. Some examples were shared regarding initiatives NCPs are involved in to address specific determinants, e.g. employment.	To enhance both understanding and inclusion of this principle in service design, by supporting the identification of priority determinants and encouraging clinical leadership and participation in cross-sectoral work to address these determinants.
Principle 5: Partnership and Community Engagement	
NCPs recognised the importance and value of partnership and engagement with stakeholders, including those who need, use and deliver services. Some examples were shared to support this.	To support the NCPs to build on the existing emphasis on partnership and patient involvement by consistently including co-design with those who need, use and deliver services, and across disciplines and sectors.
Principle 6: Environmental Sustainability	
While environmental sustainability was recognised as an important consideration by the NCPs when discussed at interview, the NCPs noted it has not formally been included in the programmes to date. The potential for telehealth options to have positive environmental impact was highlighted by NCPs.	To support the NCPs to identify and incorporate environmental sustainability considerations in service design and delivery.
Principle 7: Integration of Care	
Achieving integration of care was a clear focus across the NCPs, with different approaches and designs described in the Models of Care. Some current priorities to further strengthen integration were described.	To support the NCPs to incorporate a focus on achieving integration across the different dimensions of health and social care e.g. healthcare settings, sectors and disciplines, particularly for patients with multi-morbidity.
Principle 8: Evidence and Measurement for Population Health Improvement	
NCPs shared insights into current measures. Service activity-focused measures were most described. Some other measures were described, for example, access to services.	To support the NCPs to define and incorporate quantitative and qualitative measures of population health outcomes that matter to those who need, use and deliver services, within a measurement framework that identifies and aligns to NCP aims, objectives and activities.

NCPs = National Clinical Programmes

Enablers and Barriers for Aligning with a Population Health Approach: Summary

From the interview component of the focused exploration, a number of high-level enablers and barriers for aligning with a population health approach were identified by the NCPs. These are captured as a high-level summary in **Table 2** below[2].

Enablers represent factors that the NCPs identified which would help them to align with a population health approach, while barriers represent challenges to alignment. One enabler was described in reference to specific population health principles (a shared care record as an enabler for integration of care and measurement for improvement).

Table 2. Enablers and Barriers for a Population Health Approach: High-Level Summary.

Enablers	Barriers
• Collaboration and partnership • Staff resilience • Greater integration across the health system • A shared electronic patient care record • Integration of mental health into all NCPs • Sponsorship of senior decision-makers • NCPs under Clinical Design and Innovation • Permanency of the NCP Programme Manager role • Adequate resources • Use of Healthlink	• Lack of adequate integration • Lack of appropriate data systems • Limited national research on certain conditions • Lack of sufficient and consistent funding • Lack of clarity as to who key decision-maker stakeholders are • Turnover of staff • Stigma regarding certain conditions • Lack of adequate resources • Recognition of certain conditions as chronic diseases

NCP = National Clinical Programme.

High-Level Survey of All NCPs

A total of 87 clinical design documents were submitted to CDI for review in response to the Excel-based survey. **Figure 8** presents the population health principles that the NCPs stated their clinical design document(s) would address, ranked from the highest to the lowest proportion of responses. The principle of Equity was most frequently reported as the principle that NCP stated their document(s) would address, followed by Integration of Care.

The survey provides a high-level insight across all NCPs, giving a general, future-focused sense of the population health principles the NCP respondents stated their clinical design document(s) would address. Survey limitations are outlined in the section on 'Project Strengths and Limitations' (pgs. 21-22). The table underpinning **Figure 8** is included as **Appendix F**.

[2] Table 2 represents a slightly revised summary of enablers and barriers from the internal project report, to focus on summary cross-programme enablers and barriers.

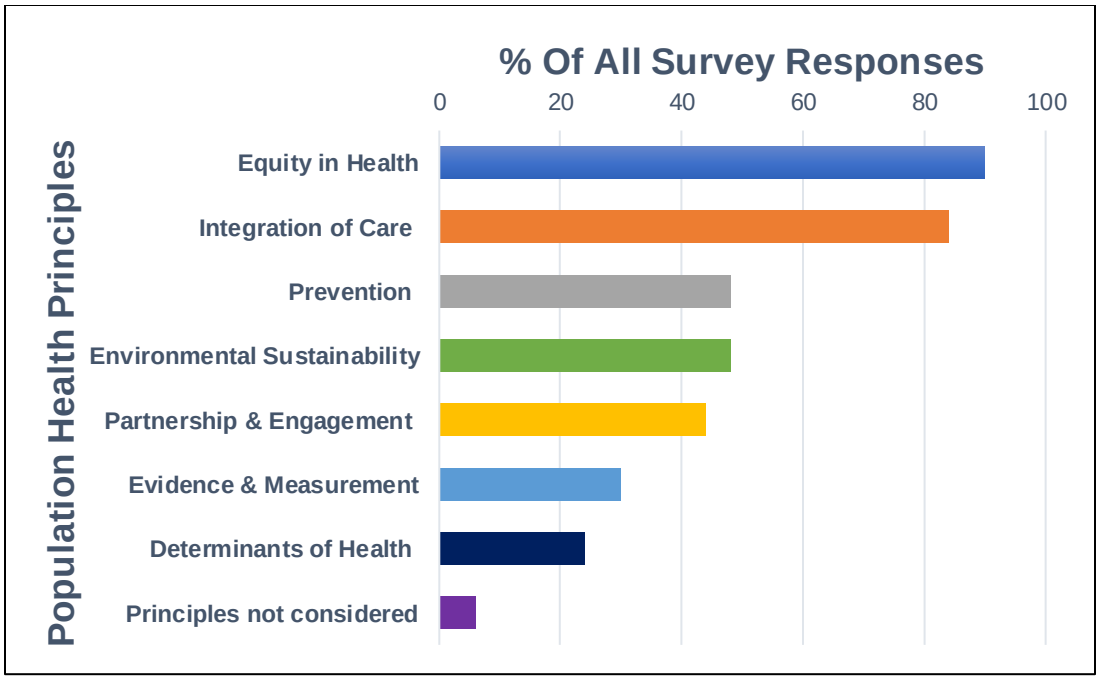


Figure 8*. Bar Chart of Population Health Principles to be Addressed within NCP Clinical Design Documents, as Self-Reported by NCPs (Ranked Highest to Lowest).

**Figure 9 Notes: Population Health Principle 1 (Population Perspective) was excluded as it was assumed that all NCPs would be focused on the health of a specific population. For five documents, NCPs ticked 'principles not considered.' Respondents could select more than one principle per document.*

Reflecting on the Journey: Discussion

Project Recap

This report presents the learning from a collaborative health service improvement project between the National Health Service Improvement (NHSI) Team and Clinical Design and Innovation (CDI) which aimed to explore the concepts of population health and a population health approach across the HSE National Clinical Programmes (NCPs). In the absence of national or international consensus definitions for population health, a pragmatic structured approach was taken to:

- Define population health and population health principles for the project
- Design a mixed-methods project approach for data collection and analysis
- Deliver an 'As-Is' exploration of population health alignment across the NCPs, and
- Reflect on the project learning and use this to inform next steps

The Key Project Reflections

There were three key reflections identified from this project that may be informative to readers, particularly the NCPs and others beginning their own journey in understanding of the concepts of population health and a population health approach.

1) A common understanding of a population health approach is essential

It is important to note the context for this first key reflection – namely, the absence to date of a consensus understanding of population health, and of guidance for those working to improve population health (including the NCPs). In order to design and deliver this project, a necessary first step was to define population health and a population health approach. It was observed that while the NCPs are thinking about the population health principles identified for this project, there were some differences in awareness and understanding of them, and in how the principles are incorporated into programme design and activities. This project also observed that individual population health principles may apply differently depending on the programme, its population and the health condition(s) of interest, as well as the capacity to align with a population health approach.

Why does this matter?

Everyone working to improve population health should have a consistent understanding of what a population health approach means. While there isn't necessarily a 'one-size fits all' alignment with a population health approach, it is still crucial that there is consistency in the approach and a collective understanding around it, with space to tailor to the needs of different populations. This is the rationale for establishing a national consensus definition and approach for population health. The planned next steps by NHSI to achieve this are described in the final 'Next Steps Ahead' section of this report (pg. 23).

2) There is an evolving understanding of, and alignment with, a population health approach by the NCPs

Population health is not a new concept, but is increasingly prominent from a health service policy, planning and delivery perspective in Ireland. As noted in the first reflection, it is also a concept that does not have a uniform definition, nationally or internationally. While certain population health principles identified in this project, such as equity in health and integration of care, have always been understood as key factors underpinning the work of the NCPs, it is still important to highlight that the definitions and principles developed for this project were not previously in existence when the NCPs were first established in 2010.

With this context in mind, this project identified that there is an evolving understanding of and alignment with the principles of a population health approach evident across the NCPs. While the selection of three NCPs as a sample for a focused exploration cannot be considered representative of all NCPs, the learning from this component of the project, combined with the high-level insights from the Excel-based survey of all NCPs, does show that the NCPs are considering population health principles. Further, these insights reflect which principles have been more longstanding considerations for the NCPs, such as equity in health and integration of care, and those that are more recent considerations, such as environmental sustainability.

Why does this matter?

The potential opportunities identified in the gap analysis present suggestions to build on and enhance existing alignment with a population health approach within NCPs. While this is partly about defining and providing a common understanding of a population health approach (as mentioned in the first reflection), it is also about enhancing the awareness and understanding of this approach across the NCPs. In the future, this will help to enable and embed population health principles into NCP design, planning and delivery, for optimal population health impact. This is discussed further in the 'Next Steps Ahead' section of this report (pg. 23).

3) Embedding and enabling consistency in a population health approach requires national leadership and support

Building on the previous two key conclusions, this project demonstrated the important role of national teams to enable and embed consistency in the approach to improving population health.

Why does this matter?

National leadership, collaboration and guidance will be critical to build a common understanding for a population health approach, and to enable cohesive incorporation of the principles of this approach. This applies not only across clinical programmes and the populations they serve, but also more broadly across the six HSE Health Regions, and the many sectors and disciplines involved in improving population health.

Project Strengths and Limitations

Strengths

An important starting point

This project represents an important starting point in the journey to build a common understanding around population health and a population health approach in Ireland, and to inform how best to enable this approach within clinical programme design into the future.

A valuable collaborative approach

The collaborative approach to this project between NHSI and CDI was crucial from the perspective of mutual sharing of expertise, feedback and learning across the teams as well as avoiding duplication of work, and optimising engagement with the NCPs.

Positive engagement from the NCPs with this project

There was positive engagement with the project by all NCPs involved. This was evident from the engagement by the three NCPs selected for the focused exploration, and from the high volume of responses from all NCPs to the CDI survey. This suggests that there is appetite across the NCPs for more engagement on the concepts of population health and principles of a population health approach.

Limitations

Absence of a national consensus definition for population health

As highlighted previously, in the absence of a national consensus definition for population health, a rapid literature review was undertaken as the basis for creating definitions and principles for this project specifically. Plans by NHSI to address this need for a national consensus definition are described in the 'Next Steps Ahead' section (pg. 23).

Methodological approach to the 'As-Is' exploration

Regarding the focused exploration:

- The sample of three NCPs purposively selected by CDI is not considered representative of all 33 programmes[3]

Regarding the survey:

- The responses were self-reported by NCP respondents
- The responses reflect clinical design documents in development or planned for development post-June 19th, 2024
- The responses reflect only the intention by NCPs for the document(s) to align with the principle(s)
- NCP respondents could submit more than one document in their response
- Interpretation of the meaning of the population health principles may have varied by NCP respondent, although an information sheet was provided to support consistency in this

[3] Total number of NCPs as confirmed with CDI on November 26th 2024.

Timing of the exploration

The focused exploration with the three NCPs is based on published NCP documentation included in the desktop review and interviews conducted in July 2024. Therefore, the service designs and structures described in this report reflect the document content as published, and as shared at interview as of July 2024, and do not include any service changes anticipated with the implementation of the six HSE Health Regions.

Scope of project

It is also important to note that this project did not have the scope to explore the implementation, impacts or costs of the NCPs in relation to alignment with population health. The results presented for the focused exploration with the three NCPs reflect the intentions articulated in the Models of Care and Clinical Pathways for how services would be delivered for the population, and the views and insights expressed by NCP representatives at interview in relation to their programme.

The Next Steps Ahead

Starting the Population Health Journey: Defining population health together

Population health places health, and healthcare, in a broader context. The absence of a national or international consensus as to what constitutes population health, and a population health approach, is a gap that must be filled to enable progress on the journey to align with this approach. Public Health have already commenced a cross-sectoral, co-design project to address this gap, by producing in 2025 a consensus national definition for population health and principles underpinning a population health approach, to enable a cohesive understanding of these concepts in Ireland.

Continuing the Journey: Co-designing and developing guidance and tools for NCPs to embed a population health approach within clinical design

This project identified an evolving understanding of and alignment with population health principles in general, and variation by principle, with some having received more attention to date than others. The project identified potential opportunities to build on and enhance this existing alignment. Furthermore, there was enthusiasm across programmes to do so.

In addition to this learning-focused report, there are a number of next steps being planned to support NCPs and others in understanding and embedding a population health approach.

An internal report of this project has been produced for the CCO. A 'Population Health Alignment Self-Assessment Tool' is in development, which will support clinical programmes to undertake their own 'As-Is' assessment of alignment with the principles of a population health approach and identify a starting point upon which to build for the future.

CDI has commenced work, with Trinity College Dublin as an academic partner, in the design and development of a service and quality improvement framework for planning and executing national clinical designs using an evidence-based, participatory, design-led approach, and importantly, incorporating population health principles within each step of clinical design.

The Destination: A health service orientated to maximising population health impact

These collective next steps are key to progressing the journey to achieve a more population health-oriented approach to healthcare. There is an important national role to establish, embed and enable a consistent population health approach across programmes, disciplines, sectors and Health Regions. Continuing the valuable collaboration between CDI and NHSI, co-design with those who need, use and deliver services, and adequate resourcing are all crucial enablers to undertake the important and multifaceted work involved in enabling and embedding a population health approach, so that the HSE achieves maximal population health improvements for the communities and patients it serves.

References

1. Kindig D, Stoddart G. What Is Population Health? [Internet]. Vol. 93, American Journal of Public Health. 2003. Available from: http://www.cihr-irsc.gc.ca/
2. Buck D, Baylis A, Dougall D, Robertson R, for The King's Fund. A vision for population health: towards a healthier future. 2018. Available from: https://www.kingsfund.org.uk/insight-and-analysis/reports/vision-population-health
3. Thomas RK. Population Health and the Future of Healthcare. Springer International Publishing. 2021.
4. Department of Health. Sláintecare Action Plan 2023. 2023. Available from: https://www.gov.ie/en/publication/49c5c-slaintecare-action-plan-2023/
5. Department of Health. HSE Health Regions - HSE Health Regions Implementation Plan. 2023. 2023. Available from: https://www.gov.ie/en/publication/4eda4-slaintecare-regional-health-areas-rhas/#hse-health-regions-implementation-plan
6. Health Service Executive. National Clinical Programmes. 2024. Available from: https://www.hse.ie/eng/about/who/cspd/ncps/
7. Saunders CH, Sierpe A, von Plessen C, Kennedy AM, Leviton LC, Bernstein SL et al. Practical thematic analysis: a guide for multidisciplinary health services research teams engaging in qualitative analysis. British Medical Journal. 2023;381:e074256

Appendices

Appendix A: Membership of Groups Involved in the Project

Project Team **Role:** *Leading and undertaking the work of the project on behalf of the NHSI Team.*	
Name	**Title**
Jennifer Martin	Director of NHSI, Public Health, HSE (Director Oversight to Project Team)
Ciara Kelly	(Project Lead) Consultant in Public Health Medicine, special interest Health Service Improvement, NHSI Team, Public Health, HSE
Caoimhe O'Sullivan*	(Active Project Team Member) Public Health Specialist, RCSI Hospitals & Honorary Senior Lecturer, RCSI University of Medicine & Health Sciences *Involved from May 2024 (active member)
Tríona McNicholas**	(Former Project Team Member) Specialist Registrar in Public Health Medicine **Involved from June to October 2024
Philippa White***	(Former Project Team Member) Specialist Registrar in Public Health Medicine ***Involved from April to July 2024
Project Working Group **Role:** *Provision of oversight and input to project, and co-ordination of collaborative aligned approach between NHSI and CDI parallel projects.*	
Name	**Title**
Project Team as listed above	
Sarah O'Brien	National Clinical Advisor and Group Lead for Chronic Disease, Consultant in Public Health Medicine, special interest Health Service Improvement
Siobhán Ní Bhriain	HSE National Clinical Director Integrated Care
Tim Carey	Assistant National Director, CDI
Anne Horgan	General Manager, CDI
Elaine Dobell	General Manager, CDI
Serena Brophy	Planning and Performance Lead, CDI
National Health Service Improvement Team, Public Health, HSE **Role:** *Provision of ad hoc HSI expertise into the progression of the project over time.*	
Name	**Title**
Project Team as listed above	
Mary Browne	Consultant in Public Health Medicine, special interest Health Service Improvement, NHSI Team
Claire Buckley	Consultant in Public Health Medicine, special interest Health Service Improvement, NHSI Team
Aparna Keegan	Consultant in Public Health Medicine, special interest Health Service Improvement, NHSI Team
Aileen Kitching	Consultant in Public Health Medicine (Health Inequalities and Social Inclusion), National Public Health Lead for Social Inclusion
Siobhán Reynolds	General Manager, NHSI Team
Stephen Barrett	Executive Assistant, NHSI Team

NHSI = National Health Service Improvement Team; HSE = Health Service Executive; RCSI = Royal College of Surgeons in Ireland; CDI = Clinical Design and Innovation.

Appendix B: Full Description of Project Step 1

Establish Project Collaboration and Governance

In February 2024, the HSE Chief Clinical Officer (CCO) requested a proposal for this project from the Director of National Health Service Improvement (NHSI), Public Health, HSE. At high level, the project was to explore the current alignment of the NCPs with the principles of a population health approach. Following this, in March 2024 a collaboration was established for this project between the NHSI Team, the HSE National Clinical Director for Integrated Care (NCDIC) and HSE Clinical Design and Innovation (CDI). This was particularly important for this project given the HSE National Clinical Programmes (NCPs) sit under the members of the CDI team within the HSE.

A Project Team was formed within NHSI to lead on and undertake the work on behalf of the NHSI Team. A Project Working Group was established to provide oversight of and input to the project, as well as to co-ordinate a collaborative aligned approach. The Working Group included the NHSI Project Team, the NCDIC, CDI and the National Clinical Advisor and Group Lead for Chronic Disease (NCAGL). Membership of the Project Team and Project Working Group is as outlined in **Appendix A**.

Develop, Agree and Align Project Approach

NHSI developed a project proposal in collaboration with CDI, and the project approach and scope were then agreed with the CCO. The project scope options did not include the implementation, impacts or costs of the NCPs in relation to alignment with population health.

Subsequent to project initiation, CDI commenced a project in May 2024 for the CCO, focused on the development of a new, standardised approach in design and development of clinical designs and models of care. To best align these two parallel projects, the original proposal and scope for the project described in this report was revised in June 2024, with a change from six objectives over two phases to three key objectives undertaken in one phase of work (as described in the report as Steps 2, 3 and 4).

Appendix C: Objective 3 Methodology – Full Description

Focused Exploration of Three NCPs

NCP Desktop Exercise

The Objective 2 checklist was used to undertake the desktop review. Published NCP outputs were selected based on the criterion of having achieved 'Level 3 Approval' (per the CDI document approval model). NCP Models of Care and Clinical Pathways were included based on this criterion. The document review process was as follows:

- There was one Excel-based data extraction document used per NCP, with individual tabs for each document that was included in the review (listed in the table below).
- Documents were reviewed by the project team member assigned to that NCP (one team member assigned to each NCP), and the Excel-based data extraction tool was populated as part of the review with answers captured for each of the checklist questions, as applicable.
- Project team members compared and discussed findings for their respective NCP in a triangulation session prior to completion of their review.
- The content of data extraction documents was then finalised.

NCP Interviews

Interviews were arranged with the Clinical Leads and (if in post) Programme Managers of each NCP. Where a Programme Manager was in post, the Clinical Lead and Programme Manager were interviewed together. All interviews were conducted over July 2024.

The interviews were designed to be semi-structured in type – i.e., guided by a series of mostly open questions with flexibility in ordering of the questions. An interview question guide was developed for the interviews (see **Appendix D**), which included three key sections:

- Understanding of Population Health
- Exploring Alignment with a Population Health Approach
- Enablers and Barriers for Aligning with a Population Health Approach

There were 10 overarching questions in the interview guide, some of which had sub-questions. The aim was to ask all questions during the interview, as time allowed. Feedback from the Project Working Group was incorporated before finalisation of the interview guide. The guide was also reviewed after each interview, with minimal changes required over time.

The interviews were conducted virtually using Microsoft Teams over approximately 1 hour with flexibility to extend this as needed on the day. The Project Lead acted as the interviewer, with a Project Support Team Member in attendance. Interviewees were contacted by email to invite them. A summary sheet was shared in advance with key project information including an explanation of the population health principles defined for this project. Interviews were recorded[4] in Microsoft Teams with provided interviewees agreed (which all did), with associated transcription of interview content.

[4] Recordings expired by default 60 days after interview.

Analysis of data for each interview was undertaken through a practical thematic analysis approach adapted from Saunders et al.[5], as summarised below:

- Review and cleaning of the raw interview transcript (Project Lead)
- Creation of memos, then coding of cleaned interview transcript (Project Lead)
- Population Health alignment review derived from codes (Project Lead)
- Review of memos, codes, and alignment (Project Team Member)
- Analysis discussion between Project Lead and Team Member

Combining the Desktop Review and Interview Findings

The Project Lead created case study-style summaries for each of the NCPs to summarise the combined findings of the desktop review and interviews under the three key headings chosen for the interview guide:

- Understanding of Population Health
- Exploring Alignment with a Population Health Approach
- Enablers and Barriers for Aligning with a Population Health Approach

These three summaries were then reviewed individually by two Project Team Members, followed by Project Team discussion to consider all views on, and agree, the content. The finalised summarises were used to create the Results outputs, as listed below[6]:

- Understanding of Population Health:
    - Key themes across the three NCPs
- Exploring Alignment with a Population Health Approach:
    - Individual tables for each NCP
    - Summary table incorporating all three NCPs
    - Narrative summary of key observation and alignment examples
    - Summary table of the gap analysis
- Enablers and Barriers for Aligning with a Population Health Approach:
    - Key themes across the three NCPs

[5] Saunders CH, Sierpe A, von Plessen C, Kennedy AM, Leviton LC, Bernstein SL et al. Practical thematic analysis: a guide for multidisciplinary health services research teams engaging in qualitative analysis. British Medical Journal. 2023;381:e074256

[6] Note: While all outputs were included in the internal project report, the most relevant outputs from an overall learning perspective were selected for this learning report.

Appendix D: Objective 3 Interview Question Guide

Understanding of Population Health

- ★ **Q1.** First, I will start by asking, what do you understand by the term 'Population Health'?

Exploring Programme Alignment with a Population Health Approach

Principle 1: A Population Perspective to Improving Health

- ★ **Q2.** Next, I'd like to ask you about the 'population' aspect of a population health approach. How do you identify members of the population that your Programme serves, and their needs, to inform the design and delivery of care provided by the Programme?

Principle 2: The Approach Emphasises Prevention

- ★ **Q3.** Next, I'd like to ask you about prevention. Is prevention something you look at as part of your Programme?

Principle 3: The Approach Prioritises Equity in Health

- ★ **Q4.** Next, I'd like to ask you about equity in health. Is optimising equity in health something you look at as part of your Programme?

Principle 4: The Approach Acknowledges and Addresses the Determinants of Health

- ★ **Q5.** Next, I'd like to ask you about the determinants of health. Are the determinants of health something you look at as part of your Programme?

Principle 5: The Approach is Based on Partnership and Community Engagement

- ★ **Q6a.** Next, I'd like to ask you about partnership and community engagement. Is partnership and/or community engagement something you bring into your Programme?
- ★ **Q6b.** Who would you consider to be your key partners in the Programme?
- ★ **Q6c.** How are patient / service user / citizen representatives involved in your Programme?

Principle 6: The Approach includes Consideration of Environmental Sustainability

- ★ **Q7.** Next, I'd like to ask you about environmental sustainability. Is environmental sustainability something you look at as part of your Programme?

Principle 7: The Approach Prioritises Integration of Care

- ★ **Q8.** Next, I'd like to ask you about integration of care. Is integration of care something you look at as part of your Programme?

Principle 8: The Approach is Underpinned by Measurement for Population Health Improvement

- ★ **Q9a.** Next, I'd like to ask you about measurement for improvement. Is measurement for improvement something you look at as part of your Programme?
- ★ **Q9b.** What data does your Programme collect and how is it used?
- ★ **Q9c.** Whether within the current dataset or not, what does your Programme consider to be the most important thing to measure, and why?

Enablers and Barriers for Aligning with a Population Health Approach

- ★ **Q10a.** Thinking about these eight principles, what do you think are the key things that would help your Programme to optimally align with a population health approach?
- ★ **Q10b.** Thinking about these eight principles, what do you think are the key challenges against aligning with a population health approach, for your Programme?

Appendix E: Objective 2 Output – A Population Health Principles Checklist

Checklist Content

Programme and Document Details Captured

- National Clinical Programme (NCP) Name
- Document title
- Document type
- Publication date
- Document version

Checklist Questions

Principle 1: The Approach Takes a Population Perspective to Improving Health

Principle-Specific Questions
• What is the population served by the NCP? • How does the NCP define the population that it serves? (e.g., are there specific clinical, demographic, and/or other criteria used to define it) • How does the NCP identify the population that it serves? (i.e., case finding) • Does the NCP identify an aim to improve the health status of the population? • Is design and delivery (or elements of same) informed by an understanding of the population's health status and needs, and how is this achieved? (e.g., Health Needs Assessment).
Measurement of the Principle
• How does the NCP measure the improvement in health status for the population it serves?   ○ For example, are there any aspects of health status identified as measures for improvement?
Examples
• Are there any examples to capture?

Principle 2: The Approach Emphasises Prevention

Principle-Specific Questions
• Is disease prevention integrated into the work of the NCP? (e.g., into the programme strategy, policy, Model of Care, and/or programme activities). This includes activities across all levels of prevention.   ○ ***If yes*** - Record how prevention is addressed through the work of the NCP (e.g., does the NCP deliver any service that focuses on preventing disease?)
Measurement of the Principle
• If described, how is this principle measured?   ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 3: The Approach Prioritises Equity in Health

Principle-Specific Questions

• Is improving health equity integrated into the work of the NCP? (e.g., into the programme strategy, policy, Model of Care, and/or programme activities)
  ○ ***If yes –*** Record details as to how equity is defined by the NCP, and how it is integrated into the work of the NCP, including any activities the NCP is engaged in.
• Are any underserved groups in the population identified and prioritised through the activities of the NCP?
  ○ ***If yes*** – Record details as to how this is described.

Measurement of the Principle
• If described, how is this principle measured?   ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 4: The Approach Acknowledges and Addresses the Determinants of Health

Principle-Specific Questions

• Does the NCP acknowledge the determinants of health in its work? (e.g., within the overarching strategy policy, framework, Model of Care, descriptions of activities)
  ○ ***If yes*** - Record how this is acknowledged, and which determinants.
• Does the NCP describe, as part of its work, any actions or activities undertaken to address the determinants of health?
  ○ ***If yes*** - Record the actions/activities, and which determinants are addressed.

Measurement of the Principle
• If described, how is this principle measured?   ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 5: The Approach is Based on Partnership and Community Engagement

Principle-Specific Questions

• Does the NCP identify their key stakeholders?
  ○ ***If yes*** - Who are the key stakeholders identified for the NCP?
• Is partnership and/or community engagement described as a recognised part of the work of the NCP?
  ○ ***If yes*** – Record who are the partners / community or communities described.
  ○ Record how NCP describes how partners / communities are engaged with.
• Are patient / service user / citizen representatives involved in the work of the NCP?
  ○ ***If yes*** – Record how involvement is described, and how they are represented.
• Are any partnerships / engagement with other NCPs described to achieve the work of the programme? (e.g., working in collaboration for activities across the life-course, multimorbidity)
  ○ ***If yes*** – Record which NCPs, the reason for partnership/collaboration.

Measurement of the Principle
• If described, how is this principle measured?   ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 6: The Approach includes Consideration of Environmental Sustainability

Principle-Specific Questions
• Are environmental sustainability considerations integrated into the work of the NCP? (e.g., within the overarching strategy policy, framework, Model of Care, descriptions of activities)   ○ ***If yes –*** Record how environmental sustainability considerations are integrated into the work of the NCP. (e.g., through specific initiatives, education and training, communication, cross-sectoral collaboration as part of the work of the programme)
Measurement of the Principle
• If described, how is this principle measured?   ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 7: The Approach Prioritises Integration of Care

Principle-Specific Questions
• Is there an integrated, joined-up approach to the care provided by the NCP, so that the right care is provided in the right place at the right time? For example, as potential question prompts to answer this: ○ Is the patient / service user placed at the centre of service design and delivery? ▪ ***If yes –*** Record details. ○ Are steps being taken to re-orient services towards primary and community care? (e.g., through delivery of care at the lowest appropriate level of complexity) ▪ ***If yes –*** Record details ○ Are the care pathways that are defined by the NCP demonstrating a joined-up approach across the spectrum of care, so that those who use and deliver services can do so easily? ▪ ***If yes –*** Record details. ○ Are there any governance structures described for integration of services? (e.g., joint acute/community groups) ▪ ***If yes –*** Record details.
Measurement of the Principle
• If described, how is this principle measured? ○ For example, are there any process / outcome measures for this principle?
Examples
• Are there any examples to capture?

Principle 8: The Approach is Underpinned by Measurement for Population Health Improvement

Principle-Specific Questions
• What measures are included in the core minimum dataset of the NCP? ○ Record details as available, including what indicators are used, why they were selected, how often data is collected and data sources, as available. ○ If described, how is the data collected used? (e.g., to inform decision-making / action for improvement / policy / intervention / benchmarking etc.)
Examples
• Are there any examples to capture?

Appendix F: Table of NCP Responses to Excel Survey

Table: Population Health Principles to be Addressed within NCP Clinical Design Documents, as Self-Reported by the NCPs* in the Excel-Based Survey (Ranked Highest to Lowest).

Principle	Response Count	% of All Documents Submitted**
Equity in Health	78	90
Integration of Care	73	84
Prevention	42	48
Environmental Sustainability	42	48
Partnership & Community Engagement	38	44
Evidence & Measurement for Improvement	26	30
Determinants of Health	21	24

*Note: Principle #1 (Population Perspective) was excluded as it was assumed that all NCPs would be focused on the health of a specific population. *For five documents, NCPs ticked 'principles not considered.'*
***Respondents could select more than one principle per document.*