



# HEALTHY POPULATIONS DESIGNING STRATEGIES TO IMPROVE POPULATION HEALTH

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Report of the WISH Healthy Populations Forum 2016

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## FOREWORD

As leaders in healthcare, we are constantly focused on improving people's health. However, through the levers of the healthcare system we only address a small portion of the factors that actually determine overall health outcomes. Factors such as living conditions, education, lifestyle, environment and transport all influence a population's health. But, they are often considered beyond the reach of health-care policymakers.

Population health strategies are needed to consider the full range of determinants of health, and to ensure that our efforts have maximum impact. A referral to a social support group may do more for a patient's wellbeing than prescribing more drugs, and investing in a water pump may contribute more to a community's health than a new hospital computer. While providing high-quality, universal healthcare services remains crucially important, there are many other ways we can have significant impact on population health.

Just as healthcare leaders need to branch out into other sectors, non-healthcare stakeholders need to play a greater role in health. City governments, employers and local community organizations can all have a positive impact on population health by developing healthy workplaces, investing in parks and cycle paths, or involving their community in sporting activities.

The factors that determine a population's health are numerous and intertwined, and so are the solutions. This World Innovation Summit for Health (WISH) report on healthy populations aims to bring clarity to this complex topic by providing a framework to design population health strategies. It is time we looked outside the narrow medical world to understand what it truly takes to create a healthy population.



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A handwritten signature in black ink, appearing to read 'Susan E. Siegel'.

**Sue Siegel**  
CEO, GE Ventures and Healthymagination

## EXECUTIVE SUMMARY

The health of a population is influenced by a wide range of factors, most of which lie outside the healthcare system. This includes social, economic and environmental factors, as well as individuals' behaviors.

Tackling the major health challenges facing populations across the globe – including the rise of chronic diseases and widening inequities in health – requires co-ordinated action between different parts of society. Yet approaches to improving population health are typically fragmented and imbalanced towards healthcare services.

This report sets out a framework for developing new strategies to improve population health that join up healthcare systems with other services and sectors. It focuses both on *what* the strategy should cover and *how* to make it happen in practice.

The *Healthy Populations* report makes five overarching recommendations for policymakers:

**1. Understand the problem and set clear goals for improvement**

This means using a range of data and involving the public to understand the health of the population and the needs of different groups. Long-term goals for improvement should be established and measured, and data on impact collected in real-time to support continuous learning and improvement.

**2. Focus on all determinants of health, not just healthcare**

Evidence from a variety of sources should be used to select interventions that will have the greatest impact on population health – recognizing that more healthcare does not always mean better health. In some cases, this will mean reallocating resources away from healthcare and towards other areas of our health.

**3. Generate shared accountability for improving population health**

Accountability for population health should be shared across a number of levels – from national governments down to communities and individuals. A combination of technical and relational approaches can be used to do this, such as new financing models and developing shared leadership.

**4. Empower people and communities and develop their capabilities**

Many of the tools for improving population health lie in the hands of people and communities, not policymakers and government. These community assets should be identified, promoted and developed, and policies and interventions should be designed around the things that really matter to local people.

**5. Embed health equity as a core part of a population health strategy**

This means taking action to improve health equity at national and local levels, using targeted approaches when needed. Health equity should be routinely measured and monitored, and seen as a key indicator of how healthy a population really is.

To translate good intentions into reality, population health must matter to every policymaker, not just those responsible for healthcare. It should matter to the rest of society too, as population health – good or bad – affects us all. Without new approaches, the major health challenges facing countries across the globe are likely to go unmet, and our healthcare systems will struggle to cope under the pressure.

# INTRODUCTION

Improving people's health is often seen as the job of healthcare services – doctors, nurses, medicines and technology. These services are a highly visible example of how health can be improved through the diagnosis, treatment and prevention of disease and ill-health. Realizing universal access to healthcare should be a priority for policymakers across the globe.<sup>1,2</sup>

But while healthcare plays an important part in determining people's health, it is only one part of the story. Evidence tells us that a greater role is played by our lifestyles, the local environment, and the wider social and economic determinants of health at play across society.<sup>3,4,5</sup> In other words, health is shaped by the conditions in which people are born, grow, live, work and age, as well as the inequities in power and resources that create those conditions.<sup>6</sup> So while healthcare plays a critical role in helping us when we are ill – by treating heart disease, for example, or supporting people to manage their diabetes – many other factors help to determine whether, when and why we'll need these services in the first place.

These broader aspects of health are often forgotten by policymakers when it comes to making investments or policy decisions. Too often, policies on health are seen primarily through the narrow lens of medical services – things that can be expensive and that the public often has great emotional attachment to. More systemic approaches are therefore typically lacking.

Our report is focused on helping policymakers and practitioners develop effective strategies to improve population health, by acting on the wider determinants of health as well as providing high-quality healthcare. It looks at how healthcare systems can be more closely linked with efforts to address these wider determinants of health (such as living environments and social factors). And it encourages policymakers to think about healthcare as just one part of a more comprehensive approach to improving population health.

The report is divided into four sections. The first describes what we mean when we talk about population health, and makes the case for why we need strategies to improve it. The second illustrates what this means in practice through case studies of systems and initiatives from different parts of the world. The third provides a framework for developing a strategy to improve population health, drawing on these case studies and lessons from research and practice. The final section of the report makes recommendations for policymakers and practitioners.

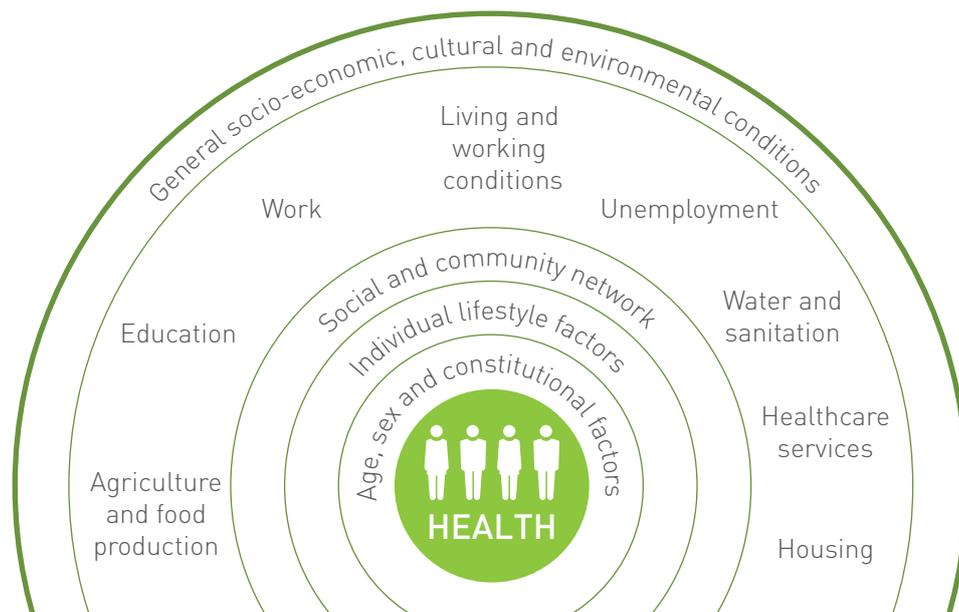
# SECTION 1: WHAT IS POPULATION HEALTH AND WHY DOES IT MATTER?

## Defining population health

Population health means different things to different people – a problem compounded by the term’s growing popularity.<sup>7</sup> In our report we refer to population health as the health outcomes of a group of individuals, including the distribution of health outcomes within the group.<sup>8</sup> We think this definition is important because it emphasizes the role of health equity – the avoidable differences in health outcomes among different groups in society – as a core part of understanding how healthy a population is.

Population health outcomes are determined by the complex interaction between our lifestyle, local environment, broader social and economic factors, access to health-care and other services, as well as our genes, age and sex (see Figure 1).

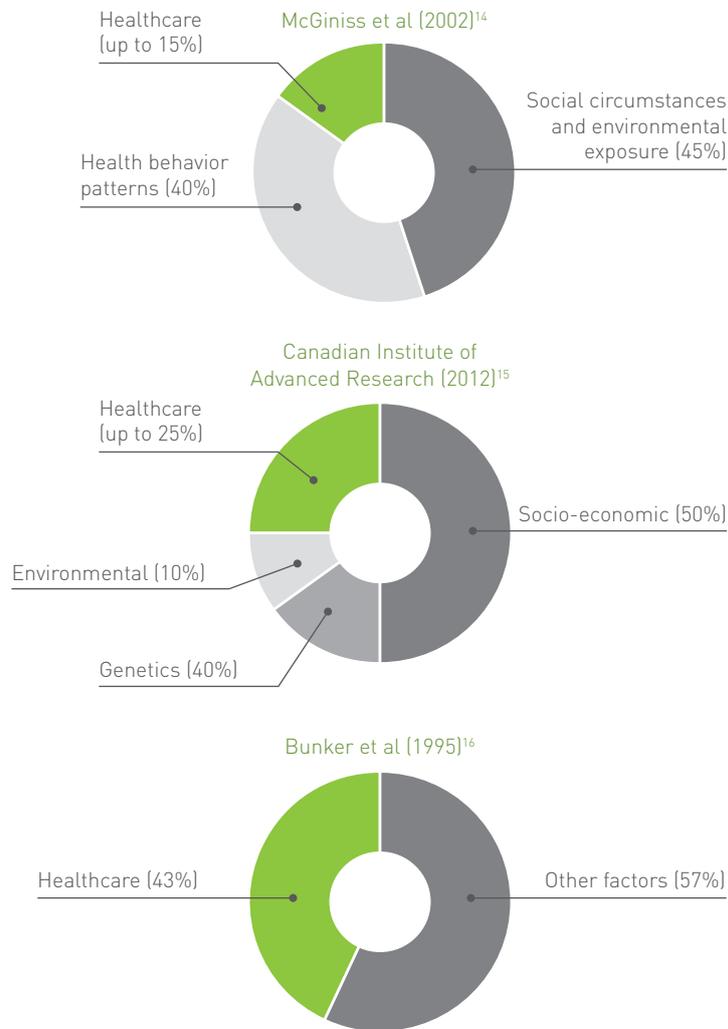
**Figure 1: Health is dependent on our genes, lifestyle, environment and healthcare**



Source: Adapted from Dahlgren and Whitehead (1993)<sup>9</sup>

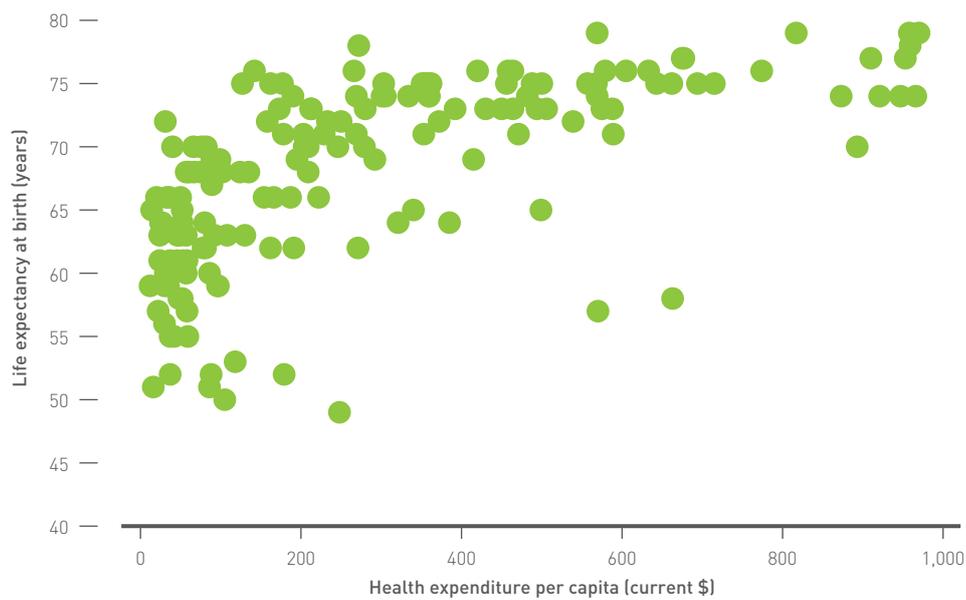
Several studies have tried to estimate the relative impact of these different elements on our health.<sup>10, 11, 12, 13</sup> While their estimates vary, most agree that the wider determinants of health are more important than healthcare services in determining how healthy we are (see Figure 2).

**Figure 2: Estimates on the impact of the wider determinants of health on population health**



Access to healthcare is still important, of course. At a global level, increased national spending on healthcare is associated with better overall health outcomes – especially for low-income countries, where relatively small increases in spending can make a big difference to people’s health (see Figure 3).<sup>17</sup> But the impact on health outcomes diminishes the more a country spends, and more healthcare does not necessarily mean better population health. The United States (US), for example, spends far more on healthcare than other high-income countries like Australia, Sweden and the United Kingdom (UK), but compares poorly on a range of health outcomes including life expectancy and prevalence of chronic conditions.<sup>18</sup>

Figure 3: Expenditure on health and life expectancy (2014)



Source: Data from the World Bank (2016)<sup>19</sup>

Because of the complex influences on our health, the reasons behind how healthy a population is are spread widely across society and communities. Instead of being the role of healthcare alone, improving population health requires collective action across different services, sectors and community groups, focused on improving health and reducing inequities for all of the people living within a particular area. To achieve this goal, these different services and sectors need to work together as *systems*, recognising that no single organization is able to act on these complex influences of health on their own. But in most countries, collective accountability for improving population health is typically lacking.

In some parts of the world, such as the US, the term population health has often been confused with more narrowly defined efforts to improve healthcare for groups of patients, rather than all people living in a defined geographical area.<sup>20</sup> These approaches often ignore factors like housing or economic development, and might be better referred to as 'population health management'.<sup>21</sup> While both approaches are important, confusing the two risks prioritizing healthcare over other services and sectors.

In a similar way, healthcare systems in many parts of the world are developing new ways to provide more integrated patient care. These efforts primarily involve coordinating services within the healthcare system to better meet people's needs – particularly older people and people with chronic conditions – and rarely extend into a concern for the broader health of local populations and wider determinants of health.<sup>22</sup> Ensuring that they do is part of the focus of this report.

## Why do we need to focus on population health?

There are very clear reasons why it is important for policymakers to take a broad approach to improving population health. While different countries and communities all face specific health challenges, they also face a number of common issues that illustrate the importance of thinking about health in the broadest possible terms. For example:

- Chronic diseases, such as cardiovascular diseases, cancer and diabetes, kill 38 million people across the world each year. About three-quarters of these deaths occur in low- and middle-income countries.<sup>23</sup> Many deaths are preventable because they are caused by modifiable unhealthy behaviors such as physical inactivity, unhealthy diets, tobacco use and harmful alcohol consumption.
- The impact of chronic diseases on population health is growing. In 2010, 54 percent of disability-adjusted life years lost across the world were caused by chronic diseases – up from 43 percent in 1990.<sup>24</sup> The prevalence of unhealthy behaviors that cause chronic diseases varies significantly between countries and social groups. In England, for example, men from unskilled backgrounds are five times more likely to lead unhealthy lifestyles in all of the previously mentioned areas (smoking, alcohol, physical exercise and diet) than men from professional groups.<sup>25</sup>
- Some of these risk factors are on the rise almost everywhere. The global prevalence of obesity, for example, has doubled since the 1980s.<sup>26</sup> While the fundamental cause of obesity is an imbalance between calories consumed and expended, the reasons behind the obesity epidemic – the ‘causes of the causes’<sup>27</sup> – are much broader, including policies related to agriculture, marketing, education, transport, employment, and many other areas.
- Treating these preventable diseases consumes an increasing proportion of a country’s spending, leaving less money to be spent elsewhere. The direct and indirect costs of diabetes, for example, to individuals, families, employers and governments are significant.<sup>28</sup> In India, a low-income family where one adult has diabetes could end up spending 25 percent of their income on diabetes care.<sup>29</sup>
- The burden of disease and disability is unevenly distributed within populations. Evidence shows that there are drastic and persistent inequities in health outcomes between different social groups. The poorest in society consistently experience the worst health. In Scotland, for example, people living in the poorest areas will experience multi-morbidity 10–15 years earlier than those living in the richest areas.<sup>30</sup> In the US, the poorest 1 percent will die 10–15 years earlier than the richest.<sup>31</sup> Evidence suggests that these inequities are consistent across countries, regardless of income.<sup>32</sup> And in many cases the gaps are growing.

The nature of these problems highlights the importance of co-ordinated action to improve people’s health, taking into account the wider determinants of health as well as taking action through healthcare systems.

Tackling these problems is fundamentally about improving health and health equity, but there is also growing evidence that investing in population health has economic benefits. This includes a range of studies in areas such as education, transport, urban development, food availability and marketing, and housing.<sup>33, 34</sup> These economic benefits can fall to different parts of society – including individuals, employers, businesses and governments.

## The need for new strategies

Improving population health is everybody's business. While healthcare systems have an important role to play in keeping people healthy, they must work closely with other services and sectors to act on the complex and multiple influences on our health. But doing this is not simple. Efforts to improve population health are often poorly co-ordinated and imbalanced towards healthcare services. Without more systemic approaches, the risk is that population health all too easily becomes everybody's and nobody's business.

## SECTION 2: CASE STUDIES OF APPROACHES TO IMPROVE POPULATION HEALTH

Improving population health is not a new idea. In countries across the world, communities, organizations and governments have used a range of measures to act on the multiple determinants of people's health. A variety of reports, such as the *Commission on Social Determinants of Health*,<sup>35</sup> have highlighted evidence on what can be done to promote different aspects of population health, with examples from research and practice.

Yet progress is typically slow, and the challenge often lies in translating knowledge into action. In this section we use a number of case studies to illustrate the action being taken in different parts of the world to improve population health.\* Because of WISH's focus on healthcare, we highlight examples of systems or initiatives that are committed to improving the health of the population they serve through interventions focusing on the wider determinants of health – such as people's behavior, social conditions and environment – alongside a focus on providing healthcare services. This means that all of the examples include a focus on healthcare, but seek to go beyond narrow, medically driven approaches.

The case studies focus mainly on local or regional action to improve population health, with the exception of work in Cuba (see Table 1). None of these examples provide a full picture of how to improve population health on their own, and we summarize only key aspects of their work. They do, however, illustrate what improving population health means in practice, offering lessons for policymakers and practitioners. These lessons are explored in Section 3: A framework for designing strategies to improve population health.

\* We identified these examples using the knowledge of the WISH forum and by contacting selected experts. Data about the examples was gathered from existing literature, unpublished documents from case study sites, and telephone interviews. We were not able to analyze or validate primary data used to evidence impact.

**Table 1: Characteristics of the case studies**

Example	Population size	Context	Elements described	Impact
 <b>Total Health, India</b>	70,000	Hospital-led community health initiative	<ul style="list-style-type: none"> <li>• Improving access to healthcare and other services</li> <li>• Food and nutrition services</li> <li>• Water and sanitation infrastructure development</li> <li>• Education, employment and skills development services</li> <li>• Encouraging physical activity</li> </ul>	Improved access to a range of services and improvements in selected health indicators
 <b>Gesundes Kinzigtal, Germany</b>	31,000	Regional health system	<ul style="list-style-type: none"> <li>• Encouraging healthy lifestyles</li> <li>• Workplace health partnerships</li> <li>• Targeted care management programs</li> <li>• Public involvement</li> </ul>	Improved health outcomes and experience of care and reduced healthcare costs
 <b>Jönköping, Sweden</b>	340,000	Regional government authority	<ul style="list-style-type: none"> <li>• Services for older people</li> <li>• Increasing social connections and peer support</li> <li>• Services for families and young children</li> <li>• Public involvement</li> </ul>	Among the highest performers in Sweden on a range of population health measures
 <b>Public health system, Cuba</b>	11,700,000	National health system	<ul style="list-style-type: none"> <li>• Community-based approach to health</li> <li>• Training for health sector professionals</li> <li>• Intersectoral action</li> </ul>	Life expectancy and infant mortality rates comparable to high-income countries, despite limited resources
 <b>Bromley by Bow Centre, London</b>	32,500	Community healthy living center	<ul style="list-style-type: none"> <li>• Social prescribing</li> <li>• Practical advice services</li> <li>• Education, skills and employment services</li> <li>• Creating community connections</li> </ul>	Improved access to a range of services and supporting people into employment



## Case study 1

# Total Health, Thavanampalle Mandal, India

## Background and context

Total Health is an initiative led by the Apollo Hospitals Group in India. It aims to improve the 'total health' of all people living in Thavanampalle Mandal in Chittoor District, Andhra Pradesh, by acting on the wider determinants of health as well as providing access to healthcare. Thavanampalle Mandal is a deprived, rural area where access to services has been limited. The program was launched in 2013 and covers 70,000 people. It was initiated as a result of legislation requiring companies to spend a proportion of profits on social development.<sup>36</sup>

## Approach and interventions

The initiative started with an assessment of the health, social and economic status of the community. This included a door-to-door survey, using the World Health Organization's (WHO) STEPwise approach.<sup>37</sup> A range of services were then introduced covering the five areas described below.

### Access to healthcare

A mobile clinic was introduced to provide access to basic healthcare services, and a satellite clinic to provide a wider range of services in the community. Targeted care programs have been developed for people with chronic diseases, and screening programs offered for different sections of the population, including for school children. Health education programs give advice on areas including nutrition, hygiene, and chronic disease risk factors.

### Food and nutrition

Nutrition centers were established to help prevent anemia and malnutrition in expectant mothers. They also provide education on hygiene and sanitation, childcare, and low-cost foods and recipes, as well as providing food for women from the community's poorest families. A separate nutrition center targets malnourished older people, combining medical support, counseling and advice on healthy lifestyles. Seeds for growing vegetables have been distributed to support healthy eating across the community.

### Water and sanitation infrastructure development

Portable water plants have been established to provide access to safe water, coupled with community education to encourage their use. Sanitation facilities have been provided in the most deprived communities where basic services were lacking.

## **Education, employment and skills development**

A training center offers vocational courses for women and young people. This includes training in jute bag manufacturing to create employment opportunities for women. More training opportunities will soon be offered through partnership with the local State Skills Development Corporation. Apollo Hospitals Group also invested in a new school benefiting over 550 children.

## **Physical activity**

Yoga classes are offered in one of the district's villages, and residents – including students and teachers from local schools – have been trained to lead yoga sessions in their own communities. Apollo also organized its first youth rural sports competition in June 2015.

## **Impact**

The initiative has improved access to a range of services for the local population. The mobile health clinic, for example, reaches 104 villages and portable water plants provide clean water to 20,000 people. Improvements in a number of health indicators have also been identified. Nutrition centers have provided services to 200 women, leading to an increase in the proportion of these women with a hemoglobin count of more than 12 (where less than 12 represents a low count) from 14 percent to 43 percent. Over 300 women have received training in jute bag manufacturing, creating employment opportunities and leading to an increase in their average income. More data will be published as the initiative progresses.



## Case study 2

### Gesundes Kinzigtal, Germany

#### Background and context

Gesundes Kinzigtal is a joint venture between a network of physicians and a health-care management company, and is responsible for integrating healthcare services and improving the health of around half of the 71,000 people living in Kinzigtal, South West Germany. Since 2006, Gesundes Kinzigtal has been accountable for total health-care spending for this population, holding long-term contracts with two German sickness funds (insurers).<sup>38</sup> Around a third of this population has actively enrolled in Gesundes Kinzigtal, which is free to all those who are insured and gives them access to its health improvement programs.

#### Approach and interventions

Gesundes Kinzigtal focuses on achieving the 'triple aim'<sup>39</sup> of improving people's health, their experience of care, and reducing healthcare costs. It does this by integrating services within the health system while working with others to address the wider aspects of people's health. If healthcare costs are reduced as a result, Gesundes Kinzigtal shares the benefits.

#### Healthy lifestyles

Exercise courses are offered through collaboration with 38 sports clubs and six gyms in Kinzigtal. Dance classes, yoga, hiking clubs and aqua-aerobics courses are offered through partnerships with other community groups. Gesundes Kinzigtal also works closely with local government agencies to create healthier community environments – for example, by developing walking trails and promoting their use. It also works with schools to promote healthy lifestyles through health education classes, theatre and games.

#### Employee health

Gesundes Kinzigtal has established a 'healthy companies Kinzigtal' network to share learning and best practice about promoting health in the workplace. Support is offered to help people stay healthy in shift-work and reduce stress and anxiety. Companies are supported to create healthy working environments and work with employees to help them to return to work after illness. Health improvement programs are also offered to unemployed people.

## Care management programs

Targeted care management programs have been developed for the prevention and treatment of chronic conditions. Clinicians are trained in shared decision-making, and people are encouraged to set health goals that really matter to them. Medical services are combined with interventions focused on people's lifestyles and social factors. System-wide electronic patient records have been introduced to ensure that care is co-ordinated between different providers when people do need medical care. This also allows for segmentation and risk-stratification of the population to identify patients who would benefit from targeted support.

## Public involvement

Residents are represented in Gesundes Kinzigtal's governance structure and actively involved in designing its programs and services. To support community-led health initiatives, a community investment fund has been developed for local people to spend on initiatives of their choice. A health television channel and magazine raise awareness about Gesundes Kinzigtal's programs and activities, and 'patient university' classes provide health advice to support prevention and self-management of conditions.

## Impact

Gesundes Kinzigtal has improved health outcomes for the population it serves – most notably, reducing mortality rates for people enrolled in Gesundes Kinzigtal compared with those who are not enrolled.<sup>40,41</sup> There have also been improvements in the efficiency of health services and people's experience of care. Gesundes Kinzigtal has also been successful in slowing the rise of healthcare costs.<sup>42</sup> Between 2006 and 2010, Gesundes Kinzigtal generated a saving of 16.9 percent against the population budget for members of one of the sickness funds, compared with a group of its members from a different region.



## Case study 3

### Jönköping County Council, Sweden

#### Background and context

Jönköping County Council is a regional government authority serving 340,000 people in southern Sweden. It plans, funds and provides health services for the population, working in partnership with local government to ensure that these services are connected with other services and policies. Jönköping has a high degree of autonomy over decision-making as a result of Sweden's system of devolved government.

#### Approach and interventions

For more than 20 years, the Council has pursued a vision for its citizens of 'a good life in an attractive county'. This aim of improving quality of life, not simply improving healthcare, is embedded in the way that services are planned and delivered.<sup>43</sup>

#### Services for older people

Jönköping is well known for its work on improving care and support for older people. This includes efforts to co-ordinate health and social care services<sup>44</sup> and programs that address the wider aspects of older people's health. Jönköping's Passion for Life program,<sup>45</sup> for example, uses group meetings to increase older people's social connections and provide support to empower them to lead healthy lives. Meetings (called 'life cafés') are held in different places depending on the topic discussed – for example, in gyms if the focus is on exercise – and are supported by coaches and volunteers.

#### Social connections

The 'life café' model has been adapted to increase social connections for different population groups. This includes group meetings focused on the needs of minority populations, intergenerational issues, and connecting people with similar medical conditions so that they can support each other to manage their own health.

#### Families and young children

Fifteen family centers across Jönköping provide integrated services for families with young children – including child and maternal healthcare, social services and pre-school education.<sup>46</sup> Professionals work in multidisciplinary teams and connect families with other services and community groups. The aim of the centers is to support early childhood development and improve parents' and communities' ability to meet their children's needs.

## Public involvement

People are engaged in 'health dialogues' at different stages in their lives to discuss their own health. Nurses provide motivational interviewing to children in schools,<sup>47</sup> and primary care services do the same for adults. Motivational interviewing aims to identify intrinsic motivations that can be used to elicit healthy behaviors. When people do require support from health and social care services, professionals work in partnership with patients and their families to design services around the outcomes that matter to them.<sup>48</sup>

## Impact

Jönköping performs well on a range of population health measures when compared with other Swedish regions.<sup>49</sup> This includes having one of the the highest life expectancy and proportion of people reporting good health, and among the lowest policy-related avoidable mortality rates (such as deaths related to smoking). It also ranks highly in the number of people reporting having discussions about their lifestyles in primary care. The county's work on improving care for older people has led to significant reductions in hospital admissions for this group.<sup>50</sup>



## Case study 4

### Cuba's public health system

#### Background and context

Cuba is a middle-income country with a population of 11 million. Its government provides universal access to health services, which are closely integrated with other public services, policies and communities as part of a holistic approach to improving population health.

#### Approach and interventions

The fundamental principles of the Cuban health system include access to health-care as a basic right, integration of preventative and curative services, integration of healthcare services with broader socio-economic development, and public participation.<sup>51</sup> These principles are embedded throughout Cuba's approach to improving population health.

#### Community-based health

Around 500 polyclinics integrate a range of community health services under one roof – including primary care, specialist medical services, social services, counseling, and other services depending on local needs. Clinics serve between 30,000 and 60,000 people and house neighborhood-based family doctor and nurse teams.<sup>52</sup>

These teams are responsible for improving the health of smaller, geographically defined communities, by addressing the social, environmental and economic aspects of health, as well as providing medical services.<sup>53</sup> Some teams have been stationed in factories, schools, or even onboard ships to be embedded within their community. Teams assess the epidemiological profile of their community and visit every family at least once a year.

#### Professional training

Health professionals are taught about the wider determinants of health and multi-disciplinary team working as part of their core training. Public health and clinical medicine are essentially combined in training for family doctors and nurses – professionals who are trained to be community leaders with a responsibility for improving population health.<sup>54</sup>

## Intersectoral action

Cuba's approach to improving population health is supported by intersectoral action at a national and local level.<sup>55, 56</sup> Cross-government health priorities and national commissions that bring together different departments are used to encourage collaboration on health policies at a national level. Health councils provide an 'intersectoral space' for planning of health at a local level. Key policy areas where this approach is taken include action on physical environments, education, employment and working conditions, lifestyles, childhood development and gender equality.<sup>57, 58</sup>

## Impact

Despite being a country with limited resources, Cuba achieves impressive health outcomes. Life expectancy (at 78) and infant mortality rates (at 5 deaths per 1,000 births) are comparable to those in high-income countries.<sup>59</sup> These results have been achieved alongside a strong focus on health equity.<sup>60</sup> Many of these successes have been attributed to Cuba's focus on the social determinants of health, such as education and nutrition, rather than simply the performance of health services.<sup>61</sup> Cuba's literacy rates, for example, are among the highest in the world.<sup>62</sup>



## Case study 5

### Bromley by Bow Centre, London

#### Background and context

The Bromley by Bow Centre is a community-owned charity in Tower Hamlets in east London – one of the most deprived areas of England. Since 1999, the center has worked in partnership with general practitioners (GPs) and community groups to provide services to a population of 32,500 people, with the aim of supporting them to improve their skills, find employment, and lead healthy and happy lives. The center receives a mix of public, private and grant funding to support its work.

#### Approach and interventions

While the charity provides services to everyone, its primary focus is on supporting the most disadvantaged people. It does this by integrating a range of services around the needs of the community. Many of these services are co-located in the charity's 'healthy living centre', including primary care, public health programs, social care, employment services, education and skills training, and other advice and support services.

#### Social prescribing

GPs and other healthcare professionals connect their patients with the services provided in the center and the wider community. This includes support in areas such as welfare and housing, skills development services, and programs to encourage healthy lifestyles. GPs have access to a database of over 1,000 services and community groups and make 'social prescriptions' depending on people's needs. The program has now been rolled out across GP practices in Tower Hamlets.

#### Practical advice services

Practical advice services are offered alongside GP services at the 'healthy living centre' and other locations. Advice is given on welfare benefits (for example, helping people to understand their entitlements), financial issues (for example, setting budgets), and other areas like housing and immigration. Advisors speak a range of languages to accommodate the community's diversity.

## Education, skills and jobs

To help people overcome barriers to employment, vocational training courses are offered and support is provided in curriculum vitae writing and interview preparation. The center runs a job brokerage service to match people with local employers. For those with less education, the center supports people to build their basic skills and confidence through English language classes and numeracy and literacy courses. The center also provides support for local entrepreneurs. Its 'beyond business' program, for example, nurtures and launches new social enterprises, providing practical business advice and start-up capital investment.

## Community connections

Running throughout the center's approach is a focus on community connections. Programs are designed to reduce social isolation and create support networks within the community. The center's 'out and about' program, for example, supports older people to engage with others in the community through art classes, horticultural therapy and healthy living classes.

## Impact

The Bromley by Bow Centre's impact to date has been largely measured by access to services. Between 2009 and 2012, over 3,000 households received welfare and legal advice, 1,000 received financial capability support, and 5,000 adults were supported to adopt healthier lifestyles. The center incubated 62 social enterprises, with a turnover of more than £4 million – creating 325 jobs in the process. Since its roll-out across Tower Hamlets, 42,000 patients have been served by the social prescribing program. A multi-year evaluation of the center's work is currently underway.

## SECTION 3: A FRAMEWORK FOR DESIGNING STRATEGIES TO IMPROVE POPULATION HEALTH

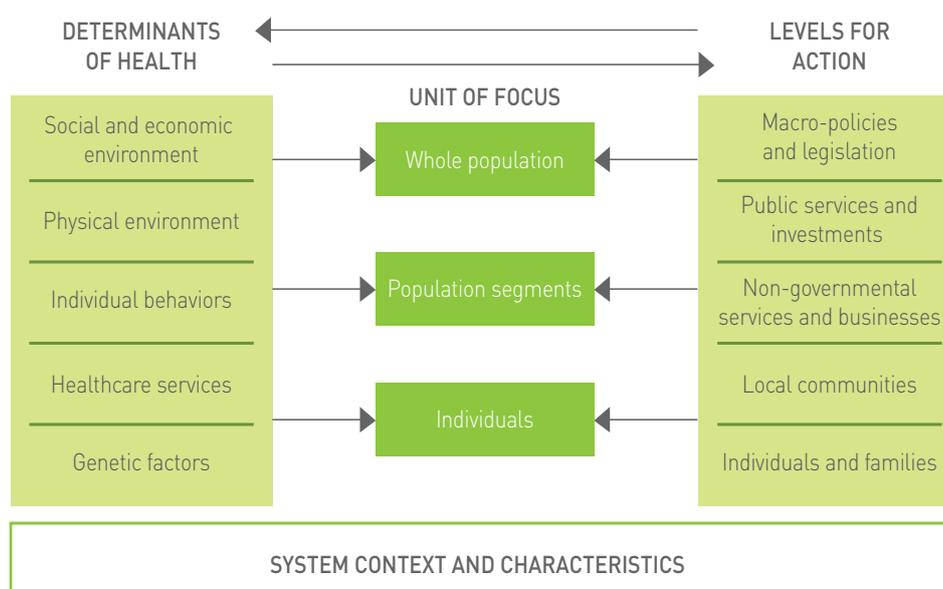
The examples outlined in the previous section highlight the variety of approaches being taken in different parts of the world to improve population health – both in high-income and low-income countries. These approaches vary greatly depending on local context, reflecting different levels of development and population health challenges. But what are the common areas for action on population health? And how can they be turned into reality?

Drawing on the case studies and lessons from research and practice, we suggest the following framework to guide the development of strategies to improve population health (see Figure 4). The framework builds on similar models<sup>63</sup> to describe three broad areas to consider when developing a population health strategy, including:

- the impact of the multiple determinants of health;
- the different levels for action; and
- the unit of focus for policies and interventions.

It also recognizes that local context is a key factor influencing the design of new approaches.

**Figure 4: A framework for designing strategies to improve population health**



We describe each area in turn below. We also focus on *how* to act on these areas in practice, describing the key steps needed to develop and implement a population health strategy (see Figure 5). These steps are summarized in boxes throughout the text, with links to relevant tools and resources.

## Determinants of health

As we set out in Section 1, the health of a population is influenced by multiple determinants of health. They include:

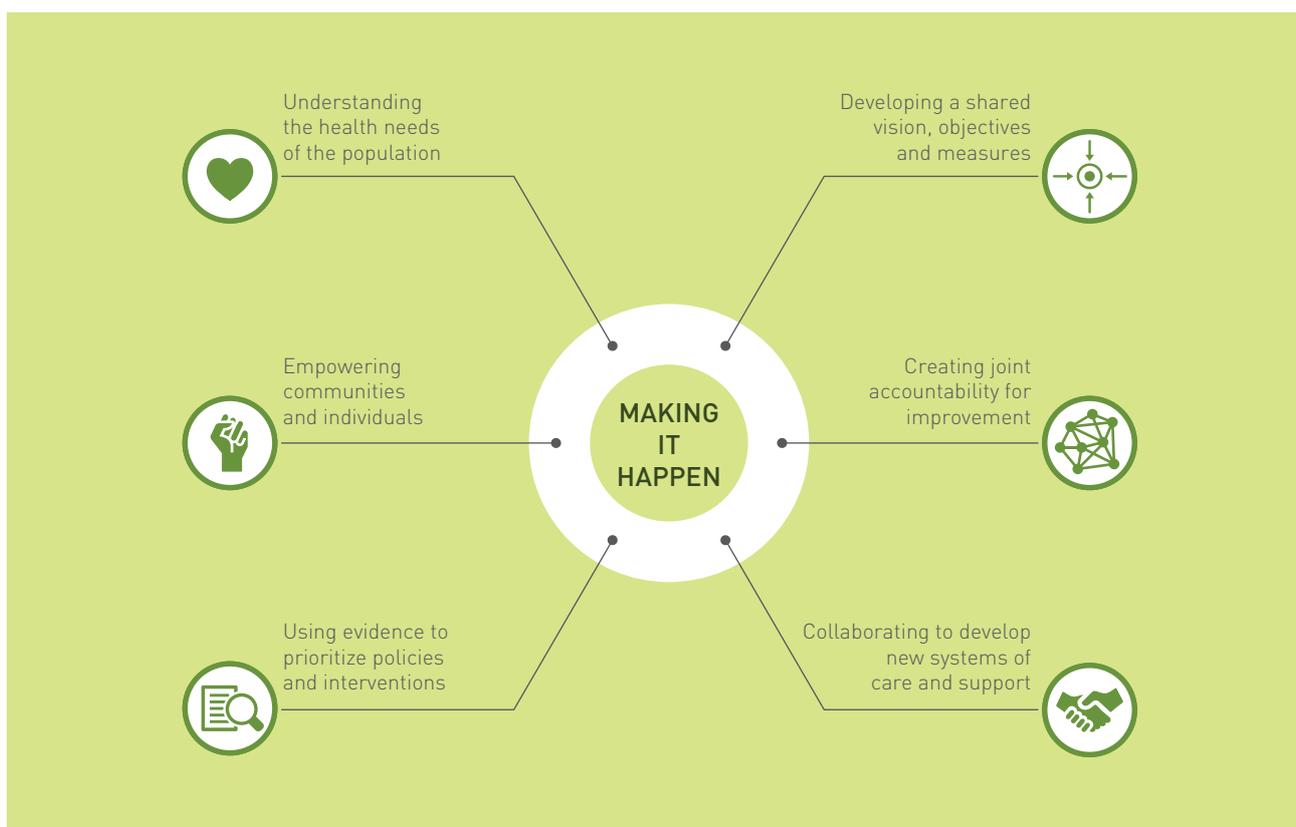
- social and economic environments – including people’s education, jobs and income, as well as their social connections and community assets;
- physical environments – including people’s houses and the physical space around them such as parks and roads;
- individual behaviors – including people’s diets, whether they smoke and drink alcohol, and how much they exercise;
- healthcare and other services – including both their availability and quality; and
- people’s age, sex and genetic factors.

While these determinants can be listed separately, in practice, population health is determined by their complex interaction over people’s lives. What happens in childhood in particular has a lifelong impact on our health.<sup>64</sup> And as people age, these factors interact to determine how healthy we are. Strategies to improve population health must be designed to reflect this – acting on the range of influences on our health and the links between them.

This is illustrated by the various case studies of successful approaches described in Section 2. Take the Total Health initiative in Thavanampalle Mandal as an example. The initiative focuses on providing education and skills training for all children in the area, as well as targeted training for women to help them gain new skills and employment. There has also been action on the community’s physical environment together with interventions to encourage healthy lifestyles. Improving access to high quality healthcare is just one part of a much broader approach.

The starting point for a strategy to improve population health must therefore involve gaining a detailed understanding of the health needs of the population – the problem being addressed – recognizing the contribution of the wider determinants of health to overall health outcomes (see Box 1). This should include data about the distribution of health outcomes within the population, as well as the voices of individuals about what really matters to them.

Figure 5: Making it happen



## Box 1 – Making it happen: understanding the health needs of the population

A range of data can be used to understand the health needs of a population. This includes data about the burden of morbidity and mortality, people’s social circumstances and living conditions, services available to meet people’s needs, and the priorities of local people. Data should also be collected to help understand the assets available within communities to improve people’s health and wellbeing, and how they can be developed (see Box 4).

More data will be available in some countries than others, and in some cases new data collection will be required. In Thavanampalle Mandal in India, for example, WHO’s STEPwise approach<sup>65</sup> was used to identify chronic disease risk factors. In other countries, a range of data will already be available to understand the local population’s health – such as County Health Rankings published in the US.<sup>66</sup>

As well as understanding the overall picture of a population’s health, data should be disaggregated to identify inequalities in outcomes between different social groups – for example by income, gender or ethnicity. This can support the prioritization of interventions depending on the needs of different groups.

(Box 1 continued)

Health needs assessments are not a new idea. But one of their main challenges is that they typically rely on currently available data, which is often limited, or focused on things that are most easily measured but not the most meaningful. It is therefore critical to ensure the voices of individuals and communities are heard to understand what really matters to them.

Different methods are available to support engagement with local communities in defining priorities and improving services – from consultations through to full community control.<sup>67</sup>

Data about people's preferences when they come into contact with health services can also be used to gain a greater understanding about the needs and wants of the local community.<sup>68, 69</sup>

Another issue with health needs assessments is that they often rely on data that is only available after a long time lag – for example, at the end of every year. Where possible, 'real-time' data should be used to help gain a better understanding of people's needs on a continuous basis.

Based on this understanding of the population's needs, shared goals and objectives should be developed identifying areas for improvement (see Box 2). This should include a mix of long-term goals that extend well beyond traditional political and policy cycles, as well as shorter-term objectives where progress can be made more quickly. These should be underpinned by a set of measures to understand whether goals are being met, as well as to provide feedback on the effectiveness of different interventions to inform further improvements.

In considering the right balance of objectives and investment, it is worth recognizing that the framework as presented in Figure 4 artificially places equal weight on the different determinants of health. As we describe in Section 1, this is not the case in reality. Different elements contribute to health outcomes in different ways, and healthcare plays a smaller role in producing these outcomes than the wider determinants of health. Yet too often, investment is imbalanced towards healthcare services. Where this is the case, policymakers should address this imbalance by considering the best allocation of resources to meet population health goals, which is likely to mean reallocating resources between different services and population groups.<sup>70</sup>



## Box 2 – Making it happen: developing a shared vision, objectives and measures

Shared vision and objectives form the foundation of a strategy to improve population health. This vision needs to be supported by senior leaders from government and the local community, and can be used to convince relevant stakeholders about the need for action. A clear vision can also be used to articulate population health goals to the public – such as in Jönköping County Council’s vision of ‘a good life in an attractive county’.

While objectives should ultimately reflect local needs, the UN Sustainable Development Goals provide a framework of objectives and targets of global relevance.<sup>71</sup> These goals are deliberately long-term – set in 2015 to be achieved by 2030 – reflecting the constancy of purpose needed over a sustained period to make improvements in population health happen.

Underpinning population health objectives should be a systematic approach to measuring progress and reporting results, including to the public. This should involve agreement on a small set of measures to assess overall progress – which could be called a ‘population health dashboard’ – supported by a larger set of metrics to allow different partners to understand how they are contributing to individual goals. This should include measuring and monitoring changes in health equity. A range of tools and frameworks are available to help do this in different national contexts.<sup>72, 73, 74, 75, 76</sup>

Data about the impact of policies and interventions on these goals should be used to create a learning loop for policymakers and practitioners, allowing approaches to be assessed and (re)designed in response to the data. Drawing on new technologies and informatics methods, the aim should be to create a ‘learning health system’, able to collect data in real-time to provide a foundation for continuous improvement.<sup>77, 78</sup>

## Levels for action

Addressing these multiple determinants of health requires action at a number of levels – from macro-policies and legislation down to individuals and families. Different resources and approaches can be used to improve population health at each of these levels, and an effective strategy should seek to create joint accountability for improvement between them (see Box 3).

At the level of macro-policies and legislation, governments have a critical role to play in embedding a focus on population health throughout their policies and programs, in addition to creating an enabling environment for local population health initiatives to emerge. This is often called a ‘health in all policies’ approach.<sup>79</sup> In Cuba, for example, national health policies are developed through collaboration across sectors, and cross-government priorities on improving population health are established and monitored.



### Box 3 – Making it happen: creating joint accountability for improvement

Because of the complex influences on our health, the tools required to improve population health are spread widely across society – not held within government departments or healthcare organizations. New models of governance are therefore needed to create joint accountability for improving population health between different groups.

A range of evidence and examples exist showing how ‘smart’ forms of governance can be used to translate good intentions on improving population health into action.<sup>80, 81, 82</sup> This includes the role of governments in using legislation and other means to set requirements for different stakeholders to deliver agreed population health goals, as well as strengthening the capacity of governments and communities to hold these stakeholders to account.<sup>83</sup>

There are various frameworks that set out the necessary steps for successful inter-sectoral action at a national and local level.<sup>84</sup> They emphasize key factors such as identifying shared interests, engaging key partners from the start of initiatives, ensuring that leadership and rewards are shared among partners, and focusing on concrete objectives and visible results.

Others have outlined ‘design principles’ for local organizations that want to collaborate to improve population health.<sup>85</sup> This work draws on seminal research by Elinor Ostrom on managing common pool resources,<sup>86, 87</sup> and highlights the combination of technical elements (such as new financing models) and relational elements (such as developing system leadership) needed to develop effective forms of collaboration.

A dedicated team, sometimes called a ‘backbone organization’,<sup>88</sup> can be put in place at a local level to co-ordinate the activities of a range of stakeholders and community groups around common goals.<sup>89, 90</sup> Dedicated teams are also likely to be the route to greater innovation in ways of working to deliver these goals.<sup>91</sup>

Governments can also use legislation to act on particular areas where health could be improved – for example, by taking action on the causes of chronic diseases.<sup>92</sup> Smoke-free legislation introduced in a number of countries is one example where this has been done, leading to improvements in population health.<sup>93, 94</sup> In policy areas where health is not the primary objective – such as welfare reform, or infrastructure development – health impact assessments can be used to ensure that policies are actively promoting population health.<sup>95</sup>

While national policies and legislation are important, local action is essential for population health initiatives to work in practice. The right geographical unit for local action will depend on local context and the problems being addressed. City-wide action, for instance, is often needed to address the impact of urban living.<sup>96</sup> In many cases, this action is led by public services – such as in Jönköping and Cuba – but should involve non-governmental services, businesses and local communities too.

The Bromley by Bow Centre, for example, is based on a partnership between a community-owned charity and local GPs, and much of its work involves connecting individuals with groups and networks across the local community. Voluntary and community sector organizations in particular often play a critical role in tackling health inequalities by tailoring services for marginalized groups.<sup>97</sup> At *Gesundes Kinzigtal*, businesses have also been engaged as key partners in improving health by acting on people's working environments.

Businesses can also play a leading role in wider efforts to improve population health by looking beyond their employees and out into the broader community. In Cincinnati in the US, for example, General Electric (GE) has led efforts to join up health plans, healthcare providers, large employers and community organizations to improve health and healthcare for the local population.<sup>98</sup> Other employer-led initiatives are also starting to focus on the broader health of local communities, providing leadership for cross-sector collaboration.<sup>99</sup>

At whichever level action is taken, local communities, families and individuals should be at the heart of efforts to improve population health (see Box 4). A person's health and wellbeing is strongly influenced by their community, social networks and other forms of social capital.<sup>100</sup> Approaches to improve population health should therefore seek to promote and develop these 'community assets' – the positive capabilities held within individuals and communities that can be harnessed and developed to promote health and wellbeing.<sup>101</sup>



## Box 4 – Making it happen: empowering communities and individuals

Empowering people to take control of their health is often talked about but rarely done in practice. A number of approaches can be used to turn this rhetoric into reality.

At an individual level, 'patient activation' approaches can be used to understand people's capabilities to manage their health and select interventions to improve them. These range from simple signposting of information to more intensive coaching and support.<sup>102</sup>

A key element of patient activation approaches involves improving people's 'health literacy' – their level of skill, understanding and confidence in navigating health and social care information and services. Approaches to doing this include early years education, peer support, and training for health professionals.<sup>103</sup> People from deprived social groups are more likely to have limited health literacy,<sup>104, 105, 106, 107</sup> so addressing these capability gaps is critical to help reduce inequities.

When people do come into contact with healthcare services, shared decision-making should become the norm for how professionals engage with patients, and a range of practical approaches are available to help do this.<sup>108</sup> Shared decision-making means working together to select the right care and support based on clinical evidence and patients' informed preferences. Levels of shared decision-making should also be measured to support improvements in care.<sup>109</sup> Survey tools like *colaboRATE*<sup>110</sup> and other decision quality measures<sup>111</sup> can be used to do this.

(Box 4 continued)

At a wider community level, peer support networks are an important way for people to support each other to manage their own health – as in Jönköping’s Passion for Life program, for example. There is growing evidence of their effectiveness.<sup>112, 113</sup>

In every community there will be a range of ‘assets’ available that should be harnessed to promote health and wellbeing. This can include things like people’s time and skills, existing support groups or social networks, and buildings or physical spaces. Tools are available to help policymakers understand the assets available within communities, how they can be harnessed, and the impact of policies and investment in supporting them.<sup>114, 115</sup>

Policymakers should also actively involve individuals and communities in decisions about how services are planned and delivered. At *Gesundes Kinzigtal*, for example, residents are represented in the system’s governance structure and are involved in decisions about services and community investments. The *Nuka System of Care* in Alaska offers another powerful example of community ownership of a health system.<sup>116, 117</sup>

This focus on community assets is reflected in the case studies described in Section 2. In Jönköping, for example, programs have been designed to increase people’s social connections and establish peer support networks for people with common health needs. A similar approach is taken at the Bromley by Bow Centre, where programs aim to reduce social isolation and improve people’s capabilities to manage their own health.

At each of these different levels – from macro-policies and legislation to action at a local level – the selection and prioritization of interventions should ultimately be driven by evidence about what works to best meet the local population’s needs (see Box 5). This includes evidence from a range of sources, including consulting local people about what matters to them.



## Box 5 – Making it happen: using evidence to prioritize policies and interventions

Evidence about what works can be found in a range of different places – including systematic reviews, examples of good practice, peer-reviewed studies, and reports from charities, think tanks and NGOs. As well as looking elsewhere for examples, evidence will also exist from the experience of local strategies and their impact to date.

Using evidence to inform policy is not a new idea, but too often evidence is not adequately built into the process of policy planning and implementation.

At the same time, it is worth recognizing that in some cases there may be little evidence to show whether a particular policy or intervention will be effective. This might be because of a lack of evaluation, because the benefits are hard to measure, or simply because the idea has not been tried yet. Evidence for action on the wider

(Box 5 continued)

determinants of health in particular is not always available to the same standard as clinical or randomized controlled trials. And most funding for health research is focused on biomedical rather than social factors.

It is also worth recognizing that cost-effectiveness evaluations in healthcare rarely take into account equity or measure the full range of social benefits in their analyses.<sup>118</sup>

This means that evidence from multiple sources, including the knowledge of individuals, should be integrated to ensure that excluded groups are heard.<sup>119</sup> And, where possible, local and national action should be evaluated to inform future strategies.

Selecting appropriate interventions is one thing, but prioritizing them can be even more challenging – often involving difficult decisions between worthwhile programs, many of which may have little data to assess comparative effectiveness.

Approaches that can be used to prioritize public health interventions include:<sup>120</sup>

- prioritizing by size and scope of the problem;
- prioritizing by the interdependence of the causes of the problems;
- prioritizing by impact and cost-effectiveness of intervention; and
- prioritizing through public engagement.

## Unit of focus

By its very definition, a strategy to improve population health should be focused on the whole of a population living in a defined geographical area. But this does not mean that the policies and interventions should always be designed with everybody in mind.

At a broad level, interventions can be designed to focus on:

- the whole population – for example, universal healthcare or action to improve physical environments for a whole community;
- defined population segments – for example, services to improve the health of children and families, or people with complex health needs; or
- individuals – with interventions tailored to meet a person’s specific needs.

See WISH 2016  
Behavioral Insights  
and Precision  
Medicine reports

All the case studies outlined in Section 2 combine a mix of interventions at each of these three levels. Separate **WISH reports on Behavioral Insights and Precision Medicine** explore a variety of other approaches to designing services at an individual level.

To help understand which groups might benefit from different policies and interventions, data should be used to segment populations based on common characteristics like age, health status, or health risks.<sup>121</sup>

At *Gesundes Kinzigtal*, for example, data from electronic medical records is used to identify people who would benefit from targeted programs of support. This includes people with specific lifestyle factors or those at risk of developing chronic diseases. Services are tailored to the needs of individuals within these groups, based on people's health goals and the priorities that matter to them. New approaches are also currently being developed to segment populations by underlying motivations and behaviors alongside data about their health.<sup>122</sup>

The London Health Commission, which reported<sup>123</sup> to the London Mayor in 2015, is another example where a range of data was used to segment a population based on common health needs (see Figure 6). Fifteen distinct population groups were identified based on analysis of patient-level data and engagement with professional and public groups.

**Figure 6: Population segmentation in London**

	Age 0–12	Age 13–17	Age 18–64	Age 65+
 <b>'Mostly' healthy</b>	'Mostly' healthy children	'Mostly' healthy young people	'Mostly' healthy adults	'Mostly' healthy older people
 <b>One or more physical or mental long-term conditions</b>	Children and young people with one or more long-term conditions or cancer		Adults with one or more long-term conditions	Older people with one or more long-term conditions
 <b>Cancer</b>			Adults and older people with cancer	
 <b>Severe and enduring mental illness</b>			Adults and older people with severe and enduring mental illness	
 <b>Learning disability</b>	Children with intensive continuing care needs	Young people with intensive continuing care needs	Adults and older people with learning disabilities	
 <b>Severe physical disability</b>			Adults and older people with physical disabilities	
 <b>Advanced dementia, Alzheimer's etc.</b>	N/A		Adults and older people with advanced dementia and Alzheimer's	
 <b>Socially excluded groups</b>	Homeless individuals and/or families (including children, young people, adults and older people), often with alcohol and drug dependencies			

Source: Adapted from the London Health Commission (2014)<sup>124</sup>

Whichever approach is taken to defining population groups, improving the health of each population segment will require the involvement of different skills and resources from across the community. Children and young people with learning difficulties, for example, will not require the same set of support services as older people living

with long-term conditions. This means that different partners and services will need to collaborate to develop new systems of care and support for different population groups (see Box 6).

After the London Health Commission's report, a series of transformation programs were established bringing together stakeholders from across healthcare, social care and other services to develop tailored programs to address the specific needs of different population segments. The important task for policymakers is to ensure that the activities of different groups form part of a coherent, mutually reinforcing approach, rather than becoming a disjointed set of initiatives.

While action is needed for all population groups, it should be recognized that disadvantages and risks to people's health start before birth and accumulate throughout people's lives.<sup>125, 126</sup> Therefore, particular policy attention must be placed on giving every child the best start in life to improve health and reduce inequities across the whole population.<sup>127</sup>



## Box 6 – Making it happen: collaborating to develop new systems of care and support

Existing models of care and support are typically designed around organizational or service boundaries, rather than the needs of populations. This can lead to fragmented services and poor outcomes. Making improvements in population health will require organizations and services from different sectors to collaborate to develop new systems of care and support.<sup>128</sup>

This is reflected in the variety of approaches described in Section 2. In Jönköping, for example, family centers integrate child and maternal health services, social services and pre-school education, as well as connecting families with other services depending on their needs. While in *Gesundes Kinzigtal*, programs to encourage healthy lifestyles are offered through collaboration with gyms and sports clubs, and action to create healthier community environments has been taken through partnership with local government agencies.

The same principles for intersectoral action<sup>129</sup> described in Box 3 can be used to establish a foundation for collaboration between different organizations and groups. So too can technical elements like population-based budgets and risk-sharing agreements to align incentives behind population health goals.<sup>130</sup>

In designing new systems of care and support, it is important to recognize the critical role that healthcare services can play in connecting people with a wide range of support services depending on their needs. This is particularly true in primary care, where people seek medical advice but would often benefit from social support instead.<sup>131</sup> The Bromley by Bow Centre's model of 'social prescribing' is an example of how this can be done in practice. GPs actively refer patients to services like debt advice, welfare services and skills training, using an electronic database listing over 1,000 community-based groups.

## SECTION 4: POLICY RECOMMENDATIONS

Improving population health should matter to every policymaker – not just those responsible for healthcare services. It should matter to the rest of society too, because the tools and resources to improve population health lie far beyond the realms of policymakers and government.

This report has:

- explained what population health means and why we need new approaches to improve it;
- described what this means in practice by using examples of systems and initiatives from around the world; and
- set out a framework for developing a strategy to improve population health, which focuses both on *what* the strategy should cover and *how* to make it happen.

Inevitably, the *Healthy Populations* report has not covered everything – and we have focused in particular on how healthcare systems can be more closely linked with efforts to address the wider determinants of health. This means that there are many areas that we have not included, such as the role of redistributive policies or fair employment in promoting population health. But our aim is to have provided a practical framework to support healthcare policymakers to design new approaches.

Based on this framework, we make five recommendations for policymakers. These recommendations will have different implications in different contexts. For example, in some low-income countries, access to healthcare services may be the greatest route to improved health, while in many high-income countries, investment in other areas may have a greater impact. For this reason, the recommendations offer a set of principles to be applied locally:

### **1. Understand the problem and set clear goals for improvement**

- Use a range of data to understand the health of the population. Involve the public to understand what matters to them, and segment the population based on the needs of different groups.
- Set clear goals for improvement, establish shared measures against these, and report on progress regularly. Use this data to evaluate policies and interventions in real-time to support continuous learning and improvement.
- In setting health goals, think long-term – recognizing that improving population health requires commitment extending beyond typical political and policy cycles.

## **2. Focus on all of the determinants of health, not just healthcare**

- Take action across all of the determinants of health, including social and economic environments, physical environments, individual behaviors and genetic factors, as well as healthcare and other services.
- If necessary, rebalance time and investment on improving population health away from healthcare services and towards the other determinants of health.
- Use evidence to understand which interventions work, which do not, and which should be prioritized to improve population health. Gather data to build the evidence base.

## **3. Generate shared accountability for improving population health**

- Place goals for improving population health at the highest level in government and establish mechanisms for holding different departments to account for improvements.
- Use new forms of governance to generate shared accountability for improving population health at a local level. This should include promoting the role of non-governmental services, businesses and community groups alongside public services.
- Design new systems of care and support based on population health goals rather than organizational or service boundaries, using a combination of technical and relational approaches to encourage intersectoral action.

## **4. Empower people and communities and develop their capabilities**

- Place people and communities at the heart of a population health strategy – from understanding their health goals to involvement in ongoing decision-making.
- Develop the capabilities of individuals to manage their own health, including by training health professionals in shared decision-making and measuring whether this happens in practice.
- Identify, promote and develop the range of assets held within communities to support improvements in population health and wellbeing.

## **5. Embed health equity as a core part of a population health strategy**

- Embed a focus on improving equity as a core part of all policies and programs on population health, using targeted approaches to do this as required.
- Ensure that the voice of marginalized groups is heard in setting population health goals and designing services.
- Measure and monitor health equity at a national and local level, seeing equity as the core measure for how healthy a population really is.

## Will it happen?

This report stands in a long line of others – dating back decades rather than years – aimed at encouraging policymakers to think about health in ways that extend well beyond the performance of healthcare services. However efficient and effective healthcare services are, the evidence is clear that action is needed on the wider determinants of health to make a real difference to people’s lives. Yet there remains a significant gap between evidence and reality. So will it be any different this time? Hope lies in the simple truth that there is no other option. The common challenges facing populations across the globe – including the growing burden of chronic diseases and widening inequities in health – require collective action across government and society. Without new approaches, these gaps will simply grow – and healthcare services will struggle to cope under the pressure. The framework outlined here can help policymakers develop these new approaches to move towards healthier populations.

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Any errors or omissions remain the responsibility of the authors.

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## WISH PARTNERS



## NOTES

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