

4. How to understand interventions in welfare state policy context

Johanna Peltoniemi, Sanna Herkama, Sakari Karvonen and Anu Muuri

INTRODUCTION

The welfare state has undergone significant transformation over the past few decades, shifting from the traditional social protection welfare state to one that increasingly emphasises service provision and proactive interventions. This shift reflects broader changes in societal needs and economic conditions, such as the carrying capacity of the welfare state. For decades, welfare states have struggled to adapt to new social and economic realities. These challenges have been triggered by successive economic crises, demographic ageing, deindustrialisation, the rise of the service sector, globalisation and European Union market integration, technological change, climate change, and intensified migration (Hemerijck, 2020). Traditional welfare states, characterised by their emphasis on income support and risk mitigation, are gradually evolving into service-intensive welfare states that prioritise investments in human capital and preventive measures to enhance individual and collective well-being.

The investment-intervention approach represents a framework for understanding this transformation. In this chapter, we examine how extending the social investment framework with interventions can address the limitations of traditional welfare approaches. Central to this discussion is the recognition that mere income transfers and social investments are not enough; we also need interventions. Insights into intervention development, effectiveness, and cost-effectiveness evaluation as well as implementation demonstrate how such interventions can be converted into persistent investments.

As Erola, Moisio, and Peltoniemi (Chapter 2) point out, the intervention framework brings together insights from sociology, health sciences, and educational research, creating a more interdisciplinary approach than what the traditional social investment framework would explicitly outline. Therefore, it is necessary to test the framework in an interdisciplinary setting. In exploring

practical implications, this chapter outlines the necessary conditions and strategies for realising the potential benefits of the new investment-intervention framework. We discuss in detail the key components of the social investment-intervention framework, such as targeted investments in human capital, proactive and preventive interventions, and comprehensive insurance mechanisms.

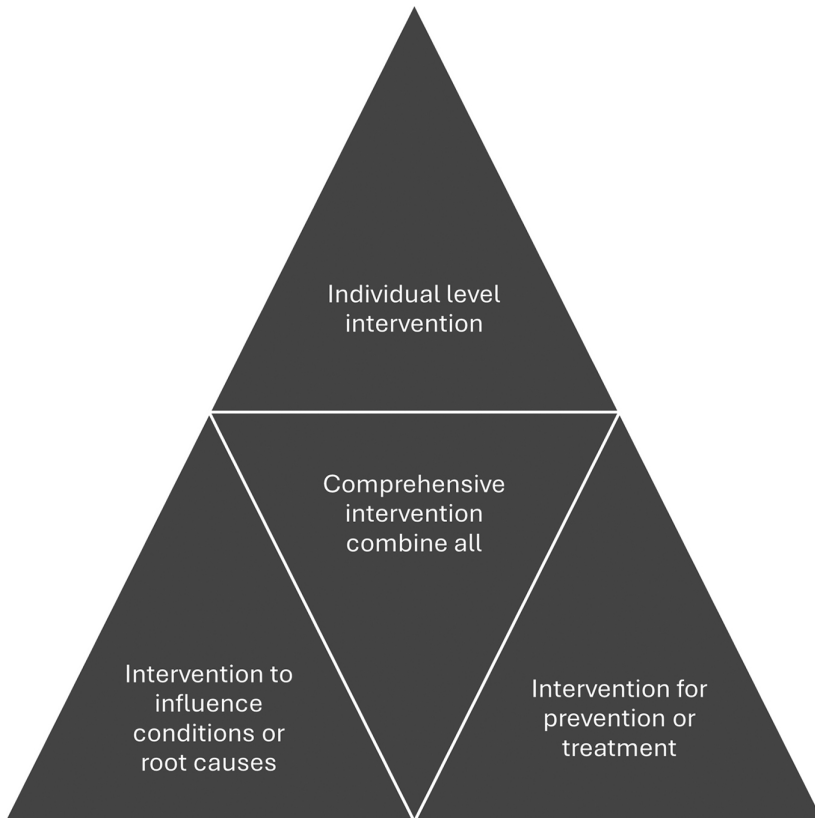
WHAT ARE INTERVENTIONS?

Understanding the various forms and purposes of interventions is central to analysing their role in welfare state transformation. Interventions – defined broadly as strategies or actions designed to address specific challenges or enhance particular outcomes – span multiple domains such as healthcare, education, and social services. These can promote well-being, prevent emerging problems, or mitigate existing risks across different stages of the life course. However, developing effective interventions is resource-intensive and might take several years.

One possible way to classify health interventions is to group them according to their target group, time when they are provided, scope, and objective. The intervention with the narrowest target group is represented by interventions directly targeting the individual, of which there are also different types. At its narrowest, the goal of an intervention may be to influence an individual's behaviour, and the form of intervention is short-term guidance or intervention. For example, the so-called mini-intervention aimed at influencing the client's use of alcohol or other intoxicants represents this type (Salaspuro et al., 1998). In this mini-intervention, the doctor simply asks the client about their substance use patterns and due to this inquiry (some) clients have been found to have changed their behaviour. Education, upbringing, and influencing the level of knowledge are also directly aimed at the individual. In this case, the intervention aims to increase the subject's knowledge and skills so that the desired goal is achieved. For example, nutritional counselling represents such a type of intervention.

The second main group of interventions consists of actions aimed at influencing conditions or root causes of health issues. These interventions can be roughly divided into two types. One focuses on the environment (physical or social) where health is constructed, while the other targets normative structures, such as laws and regulations that have either direct or indirect health effects, or policies framing them. An example of an intervention aimed at environmental impacts could be to specify traffic arrangements so that mobility is safer. Interventions targeting normative structures, on the other hand, include tightening the Tobacco Act or decreasing the availability of alcohol by changing legislation.

Another way to group health interventions is to divide them according to the stage of disease prevention or treatment. These different stages are called primary, secondary, and tertiary prevention. As shown in Figure 4.1, primary prevention is when the goal is to prevent diseases from developing in the first place. Primary prevention includes, for example, vaccinations, the promotion of healthy lifestyles, and the reduction of health risks to the environment, such as ensuring the availability of sufficient clean drinking water. Secondary prevention, on the other hand, aims at the early detection or treatment of diseases to slow down or stop their progression. Different types of screening represent secondary prevention. Strongest Families parental intervention (Chapter 14)



Source: Authors' own.

Figure 4.1 Four groups of interventions

represents this type of health intervention as well. It combines early detection of children's conduct problems through nationwide screening at maternal clinics with digitally assisted training for early treatment. Tertiary prevention aims to prevent the disease from getting worse or causing complications. For example, rehabilitation or measures aimed at improving the patient's quality of life represent tertiary prevention measures.

The most comprehensive interventions combine all elements and both types. Firstly, they cover multiple target groups, have a wide scope, and include many objectives. Secondly, they aim to tackle all three stages of disease prevention or treatment. One well-known example of such an intervention is the North Karelia Project, which was carried out from 1972 to 1995 (Puska et al., 2009). The project was initiated to address the high rates of cardiovascular disease in the North Karelia region of Finland. It utilised a socio-behavioural framework that covered community-based interventions and national-level policy changes and legislation. The project targeted lifestyle changes as a means to alleviate cardiovascular disease risk factors. The project resulted in significant reductions in serum cholesterol levels, hypertension, smoking prevalence, and cardiovascular disease mortality. The adopted lifestyle interventions continued beyond the initial five years of the project duration and then expanded to all of Finland. The North Karelia Project demonstrates that successful population-based lifestyle interventions may serve as a sustainable public health solution to the growing chronic disease burden.

Yet another way of classifying interventions is to consider whether they are targeted to the whole population or to a specified, identified risk group. Some interventions are designed to benefit all individuals within a particular population, regardless of their risk level or specific needs. These interventions aim to promote general well-being and prevent problems before they arise – similar to primary prevention. Typically, many educational interventions in early childhood education and basic education include such strategies targeted to each and every student. Schools provide a promising arena for such interventions because practically the whole population is within reach. The goals of such interventions might be to enhance socio-emotional skills, reduce bullying, or promote well-being more generally. In contrast, targeted interventions focus on individuals or groups who are identified as being at higher risk for specific issues. These interventions are tailored to address the particular needs of these at-risk populations, providing more intensive support and resources. Targeted interventions are designed for those who already show early signs of a particular condition or are identified as being in a risk group, and in this way they could be classified as secondary or tertiary prevention. For example, in the context of bullying prevention, targeted interventions come into play when a bullying incident is detected (with the student being involved either as being bullied or bullying others) and more intensive measures are needed to

resolve it. All these types of interventions may be applied separately or they might be incorporated into one intervention. For example, the KiVa antibullying program developed in Finland (see Chapter 12) includes both components targeted to each and every student (e.g., preventive curriculum, awareness raising through visible symbols) and targeted components, which refer to a series of structured discussions that take place when a bullying case occurs.

EVALUATING INTERVENTIONS: EFFECTIVENESS AND COST EVALUATIONS

To assess whether interventions truly function as effective social investments, they must be evaluated using robust and appropriate study designs. Resources are wasted if ineffective practices are being implemented or the desired improvements are not taking place. More precisely, assessing the impact of an intervention involves systematically evaluating its effectiveness and outcomes. This process typically includes various study designs such as randomised controlled trials (RCTs), which are considered the gold standard for determining intervention effects by randomly assigning participants to either the intervention or control group and by exploring the possible emerging differences between the conditions after receiving the treatment. Effectiveness assessment is crucial as it ensures that interventions achieve their intended outcomes. By systematically evaluating an intervention's impact, stakeholders can make informed decisions about continuing, modifying, or discontinuing it. This process helps allocate resources efficiently. However, RCTs are often time-consuming and running them may involve high costs. Despite these challenges, the benefits of understanding an intervention's possible impact often outweigh the shortcomings related to RCTs, leading to more effective and evidence-based practices.

Yet, RCTs may not always be the most viable option for an intervention. In real-life situations they sometimes are not feasible either, especially when randomising participants would be unethical. For example, an educational trial in which some students receive traditional teaching and others receive a new method could be ethically questionable if the new method proves to be significantly more effective. In this case, the students who received the traditional teaching may be left behind.

In situations where randomised controlled trials are not feasible for ethical, research-question, or implementation reasons, a benchmarking controlled trial (BCT; Malmivaara, 2015) or quasi-experimental design (White & Sabarwal 2014) can be used. In this case, the focus is particularly on the analysis of everyday (real-world) effectiveness in a situation where an RCT is not feasible.

In a benchmarking controlled trial, benchmarking control refers to the selection of groups to be compared in such a way that they are as comparable

as possible in terms of observable background data. When randomisation is not possible, the initial conditions of the groups can be statistically standardised. For example, Luoto et al. (2018) used a naturalistic sample of psychiatric patients to compare the effectiveness of behavioural activation treatment with the usual treatment. In this case, the patients were matched at baseline using information from the depression inventory and alcohol use disorder test scores, among others.

Adequate information on clients or patients, interventions, and treatment outcomes is a prerequisite for evaluating everyday effectiveness. BCT studies complement randomised comparative trials and can answer the key questions of effectiveness: where and by what means can the best value be added for clients and patients?

Especially in sociological studies on health, there is a well-documented so-called paradox of inequality. According to the paradox of inequality, measures aimed at everyone in general benefit the most vulnerable the least. Thus, for example, an equally accessible intervention can produce different results depending on the characteristics of the target group or their socio-economic status. Importantly, sociological analyses of interventions suggest that social status as well as social and cultural context are strongly linked to the impact of interventions. Individuals' resources, opportunities, and potential vary according to their social status and they may also depend on the context, which is also reflected in the effectiveness of interventions (Frohlich & Potvin 2008). Further, when viewing an intervention as an investment, there is a risk that those who are already vulnerable – for example, population groups that are disadvantaged due to their labour market position – will benefit less from the investment than others, which may further marginalise them. When the health of these groups is inherently worse than others, the return of the targeted health investment remains weak. When it comes to care investments, the so-called reverse care law refers to a slightly similar phenomenon: those who least need it receive the most care. This is due to the unequal practices of the health service system (Tudor Hart, 1971).

Alongside evaluating the impact of a particular intervention, its costs to society can be assessed. This provides valuable insights on how interventions might turn into investments over time. Cost-effectiveness analysis (CEA) refers to the evaluation of the economic efficiency of an intervention by comparing its costs to the magnitude of change achieved, such as the number of bullying cases prevented. It helps in determining whether the outcomes achieved justify the expenses incurred. By evaluating how cost-effective a particular intervention is, policymakers and practitioners can prioritise interventions that provide benefits at reasonable costs, ultimately leading to better health, educational, or social outcomes on a larger scale. In contrast, cost-benefit analysis (CBA) evaluates the financial costs of an intervention against the monetary value of its

benefits (see for more on CEA and CBA, Levin & McEwan, 2015). It is based on the monetisation of short- and long-term outcomes of the participants who have taken part in the intervention. For example, a cost-benefit analysis of an anti-bullying intervention could take into account the impact of the intervention on graduation rates, then on labour market participation, early parenting, mental health outcomes, etc.

IMPLEMENTING INTERVENTIONS

Although a particular intervention has been evaluated in rigorous studies with promising results, it is not guaranteed that it will ever be implemented broadly. Indeed, research knowledge does not transfer into community practices on its own; it is often a long process in which various contextual factors play a significant role (Bauer & Kirchner, 2020). Implementation research, or research on implementation, is a relatively young field of study that examines and promotes the use of research knowledge in various operational environments (Eccles & Mittman, 2006). During the past decades, the field has evolved and more attention has been paid to how evidence-based interventions, methods, and practices are implemented and sustained as part of daily practices in various sectors of society.

It has been argued that it can take nearly 20 years for a practice or an intervention found effective in evaluation studies to become embedded in routine healthcare and educational practices, and only some of these interventions ever reach widespread dissemination and benefit society at large (see for more Morris et al., 2011). Intervention development includes various steps and the process might contain several time lags. Such steps in healthcare, for example, typically include identifying known risk factors in epidemiological studies, developing and piloting an intervention, moving from efficacy trials to effectiveness studies, developing guidelines, and moving towards clinical practice. Finally, in order to evaluate the possible broader impact of a particular intervention on well-being, the uptake of effective interventions in healthcare services is also needed.

Brownson and colleagues (2022) introduce three different types of evidence related to developing practices. The first type concerns the problem itself, its prevalence, and its effects. This involves gathering data on the prevalence of the problem, identifying the most affected populations, and understanding its short- and long-term consequences on individuals and communities. A clear picture of the problem helps develop interventions to address critical aspects of the phenomenon at hand. The second type of evidence focuses on the effectiveness and cost-effectiveness of interventions. This involves examining existing evidence on the effectiveness of interventions aimed at addressing the problem and the costs relative to the benefits achieved. The third type of evidence

focuses on the implementation of the intervention in its intended context. This includes examining how a specific intervention fits into the functioning of a particular context and how it is sustained over time. All these types of evidence are needed to make an impact when developing interventions to reduce a known risk factor and its consequences, build the capacities of future citizens, and turn intervention efforts into investments. The chapters on bullying prevention (Chapter 12), treating children's behavioral problems (Chapter 14), and providing support to refugee children (Chapter 13) provide examples of how this might look in practice.

Therefore, research is needed not only on the problem itself but also on the effectiveness and cost-effectiveness of interventions and how interventions become integrated into everyday practices and are maintained. Unfortunately, when developing, for example, psychosocial interventions targeted at children and adolescents, resources have primarily been used for developing new interventions rather than focusing on their implementation under real-life conditions.

DISCUSSION

Extending the social investment framework with the idea of intervention represents a pivotal rethinking of how socio-economic challenges can be addressed through targeted interventions and investments in human capital. This approach emphasises both proactive and preventive measures, aiming to respond to both the immediate needs of the population and to create conditions for sustainable well-being and socio-economic development over the long term. The question of what constitutes an effective implementation in a welfare state context lies at the heart of the new paradigm and involves synthesising empirical insights and theoretical frameworks to design, deliver, and sustain impactful interventions.

From a societal perspective, education, healthcare, and social welfare services clearly function as broad investments, with measurable long-term benefits such as reduced healthcare costs, increased productivity, and enhanced social cohesion. At the same time, many of the measures and services contain elements of intervention in the sense that they aim to intervene in the everyday lives of individuals and their families. Yet, whether an individual perceives a particular service as an investment or an intervention is a more complex question. For example, while unemployment services aim to enhance employability or social assistance supporting basic income, individuals may perceive them as mechanisms of control rather than empowerment. Similarly, the effectiveness of certain interventions, such as anti-bullying interventions, can be judged differently depending on perspective: while saving even one child from bullying is undeniably impactful from a human and ethical standpoint, such an outcome

may not necessarily meet cost-effectiveness criteria when viewed through the lens of societal-scale resource allocation. Bridging this perception gap requires nuanced communication and service delivery, empathetic policy design, and active engagement with both individual and collective stakeholders to ensure that interventions are not only effective but also resonate positively with those they aim to support.

Best practices in cost-effectiveness and implementation offer valuable lessons for turning interventions into persistent investments. Comprehensive cost-benefit analyses are essential for demonstrating the value of interventions, not only in terms of immediate outcomes but also through their long-term socio-economic impacts. Early childhood interventions, for instance, may require significant upfront investment but yield considerable returns over time through increased labour market participation and reduced reliance on welfare systems. In this vein, one crucial element of any intervention to be perceived as an investment concerns time: evidence of societally significant effects – or returns on the investment – takes time and often requires patience and persistence from implementation. This often goes against the grain of policy- and decision-making where short-term gains are stressed over longer-term effects. Additionally, prioritising evidence-based interventions ensures that resources are directed toward initiatives with proven efficacy, maximising their impact on target populations.

Significant challenges remain even though guidelines for best practices are widely recognised. Preventive interventions often require decades to produce measurable returns, which can make it difficult to secure funding and political support. Immediate crises frequently overshadow preventive measures in budget allocations, undermining the long-term benefits of early intervention. Furthermore, it is difficult to estimate savings through prevention, for example, as these comprise unrealised costs. Moreover, the paradox of inequality complicates measures targeted to the whole population, as these interventions may disproportionately benefit privileged groups while marginalising others. Addressing such disparities requires careful design and targeted approaches that ensure equitable access and outcomes.

Empirical findings reveal that integrating interventions into mainstream systems is essential for persistence. Programs like the North Karelia Project, which successfully addressed high rates of cardiovascular disease in Finland, exemplify the power of combining multiple strategies and integrating them comprehensively into public health systems. Similarly, the KiVa antibullying program's incorporation of universal and targeted measures highlights the importance of flexible designs that can adapt to the specific needs of youth. These examples demonstrate the potential of well-designed interventions to achieve significant societal benefits. The broader implications of the investment-intervention model extend to both individuals and the state. For

citizens, the model provides access to resources, skills, and support systems that enhance their ability to lead fulfilling and productive lives. Interventions targeting mental health, for instance, can significantly improve individual well-being while reducing the social and economic costs associated with untreated conditions. From the state's perspective, investing in human capital and preventive measures fosters socio-economic resilience, reduces long-term dependency on welfare systems, and creates conditions for sustainable growth.

A key remaining challenge in the investment-intervention approach is the significant difficulty of implementing its principles. Preventive efforts often struggle to gain traction because their success is measured by the absence of problems – a concept that can be difficult to convey to policymakers and the public. Moreover, the need to balance evidence-based practices with innovation adds complexity, as interventions must continuously evolve to address emerging societal needs.

Despite these challenges, we argue that the investment-intervention approach has the potential to reconfigure the welfare state as a dynamic, service-intensive system that aligns individual, communal, and societal goals. By treating services as interventions, this model offers a transformative approach to enhancing well-being and decreasing socio-economic disparities. While achieving this vision requires addressing significant challenges, such as resource allocation, equity, and public perception, the potential rewards are undeniable. Through evidence-based practices, long-term planning, and active engagement with various stakeholders, the new paradigm has the potential to steer modern welfare states towards fostering resilience, opportunity, and prosperity in the future.

REFERENCES

- Bauer, M. S., & Kirchner, J. A. (2020). Implementation science: What is it and why should I care? *Psychiatry Research*, 283, 112376. <https://doi.org/10.1016/j.psychres.2019.04.025>
- Brownson, R. C., Shelton, R. C., Geng, E. H., & Glasgow, R. E. (2022). Revisiting concepts of evidence in implementation science. *Implementation Science*, 17(26). <https://doi.org/10.1186/s13012-022-01201-y>
- Eccles, M. P., & Mittman, B. S. (2006). Welcome to implementation science. *Implementation Science*, 1(1), 1. <https://doi.org/10.1186/1748-5908-1-1>
- Frohlich, K., & Potvin, D. (2008). Transcending the known in public health practice. *American Journal of Public Health*, 98, 216–221. <https://doi.org/10.2105/AJPH.2007.114777>
- Hemerijck, A. (2020). Comparative welfare state research in a bind? *Stato e Mercato*, 119, 229–256.
- Levin, H. M., & McEwan, P. J. (2015). Cost-effectiveness and cost-benefit analysis. In J. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), *Handbook of practical program evaluation* (4th ed.). Wiley. <https://doi.org/10.1002/9781119171386.ch24>

- Luoto, K. E., Lindholm, L. H., Paavonen, V. et al. (2018). Behavioral activation versus treatment as usual in naturalistic sample of psychiatric patients with depressive symptoms: A benchmark controlled trial. *BMC Psychiatry*, 18, 238. <https://doi.org/10.1186/s12888-018-1820-x>
- Malmivaara, A. (2015). Benchmarking controlled trial—a novel concept covering all observational effectiveness studies. *Annals of Medicine*, 47(4), 332–340.
- Morris, Z. S., Wooding, S., & Grant, J. (2011). The answer is 17 years, what is the question: Understanding time lags in translational research. *Journal of the Royal Society of Medicine*, 104(12), 510–520. <https://doi.org/10.1258/jrsm.2011.110180>
- Puska, P., Vartiainen, E., Laatikainen, T., Jousilahti, P. & Paavola, M. (2009). The North Karelia Project: From North Karelia to national action. Helsinki: National Institute for Health and Welfare (THL), in collaboration with the North Karelia Project Foundation.
- Salaspuro, M., Kiiänmaa, K., & Seppä, K. (1998). *Päihdelääketiede*. Kustannus Oy Duodecim.
- Tudor Hart, J. (1971). The inverse care law. *The Lancet*, 297(7696), 405–412. [https://doi.org/10.1016/S0140-6736\(71\)92410-X](https://doi.org/10.1016/S0140-6736(71)92410-X)
- White, H., & Sabarwal, S. (2014). *Quasi-experimental design and methods, methodological briefs: Impact evaluation 8*. UNICEF Office of Research.