

**The Aims of the Primary Health Care Reforms in Finland between 1993-2015: a systematic  
review**

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## Abstract

Empirical research has shown that a strong primary health care (PHC) system results in improved health outcomes in a variety of settings. Therefore PHC is considered an important part of a country's health system. PHC is an approach to delivering basic health services to the population, aimed ultimately at achieving “better health for all”. The idea of universally accessible PHC services was born in the late 1970s, when countries throughout the world committed to the Alma-Ata declaration. Both low-and-middle-income countries (LMICs) and high-income countries (HICs) began efforts towards moving from specialised care towards primary health care services. Strengthening of PHC emerged as one of the top priorities in the field of global health again in the beginning of the twenty-first century. This study used scoping and systematic review methods to analyse the PHC strengthening efforts in a high-income Nordic country, Finland. This study focuses on the aims of the PHC reforms and policies that have been implemented in Finland since the major health care reform of 1993. A Campbell style systematic review was conducted to analyse the aims of PHC reforms and policies. The results were organised under five themes, which were developed during the prior scoping review. The themes were: efficient governance and financing, adequate and equitable access, improved quality, increased patient choice and cooperation and integration of services. The reforms or interventions had a variety of aims, including: re-centralising health services and unification of smaller municipalities with bigger units; focusing on the importance of patient choice and health service integration. The results of the review showed that in Finland there has been lots of small changes implemented to PHC sector after 1993. The focuses of the policies have been narrow. Decentralisation is no longer the core value, and as some other European countries, Finland is moving towards privatisation and increased patient choice. Finally, the review will assess enablers and barriers for PHC policy implementations in order to share lessons for other countries with similar problems.

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**Declaration**

I, Dr. Sanna Malinen (MLNSAN007), hereby declare that the work in this dissertation is based on my original work (except where acknowledgements indicate otherwise) and has not, in whole or in part, been submitted towards another degree at this University or elsewhere.

I empower the University of Cape Town to reproduce, for research, either the whole or any portion of the contents in any manner whatsoever.

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**Date:** 1<sup>st</sup> of October 2017

## Acronyms

GP	general practitioner
HIC	high income county
HPSR	health policy and system research
LMCI	low and middle income county
MDG	Millennium Development Goal
NCD	non-communicable disease
NGO	non-governmental organisation
OECD	Organisation for Economic Cooperation and Development
PHC	primary health care
SDG	Sustainable Development Goal
UHC	universal health coverage
WHO	World Health Organisation

## Glossary

<b>Access</b>	Availability of affordable health care services close to target population.
<b>Alma Ata Declaration</b>	The Declaration of Alma-Ata (1978) addressed the importance of primary health care as core health policy.
<b>Comprehensiveness</b>	A wide range of preventive, promotive and curative health services.
<b>Continuity</b>	People have a continuous relationship with same health care provider over time.
<b>Health Policy and System Research</b>	Health policy and system research is a trans-disciplinary research field, oriented around context-relevant health systems issues.
<b>Primary Care</b>	Primary care is “first contact, continuous, comprehensive, and coordinated care provided to populations undifferentiated by gender, disease, or organ system” (Starfield, 1994)
<b>Primary Health Care</b>	Primary Health Care is “first element of a continuing health care process. Primary health care addresses the main health problems of the community, providing promotive, preventive and rehabilitative services accordingly” (WHO, 1978).
<b>Systematic review</b>	Systematic review is a literature review that collects and analyses research papers using systematic research methods which are chosen prior the research question is formulated. It seeks to find the best available research to answer to research question.
<b>Thematic analysis</b>	A data analysis process which descriptively analyses qualitative data under important themes

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## Part A: Protocol

### Primary Health Care reforms in Finland between 1993-2015: a systematic review

#### Introduction

Primary health care (PHC) is commonly regarded as the backbone of a well-functioning health system [1]. The Alma Ata Declaration of 1978 had ambitious goals to strengthen PHC globally. Despite of this intention, many countries have failed to provide and increase access to PHC services [2]. However, in recent years, there has been a renewed interest in strengthening PHC, especially in low-and-middle-income countries (LMICs). There are many reasons for this: many sub-Saharan African countries did not meet the Millennium Development Goals (MDGs), and there is a major shortage of skilled health professionals in many LMICs [3]. Also, many countries lack cost-effective health interventions and have a weak health system in general.

Even though the Alma-Ata Declaration presented the ideas of the PHC approach in the 1970s, adopting the PHC approach has not been the core health strategy for either high-income countries (HICs) or LMICs until the latest decade. The concept of primary care aims to improve both access to and the equitable distribution of health services, with lower costs than other health service delivery approaches [4]. Above all, the primary care approach has aimed not only to provide better basic health services but to strengthen the health system as a whole [5].

In addition, increasing globalisation is putting stress on national health systems, and they are not performing as well as they could – even though there have never been more resources available for health system strengthening than there is now [2]. Increased global traveling, immigration and urbanisation have enabled the spread of infectious diseases - and the World Health Organisation

(WHO) considers the key that the core answer approach to addressing these issues is to strengthen PHC [5]. After decades, the principles of Alma Ata have returned to prominence, and there is now a growing international renewed interest in strengthening PHC globally [2].

### *Defining PHC*

In 1978, the World Health Organisation held a conference in Alma Ata (Almaty, Kazakhstan), where PHC was set as a priority on the global health policy agenda [6]. In that conference, WHO representatives summarised PHC services as inclusive of essential, practical, scientifically proven health care services which were universally acceptable [1]. PHC addresses the main health problems of the community and provides promotive, preventive, curative and rehabilitative services according to the needs of the population [7]. The ultimate aim of PHC is to provide essential health services with a community-focused perspective [8] - although sometimes other interpretations have emerged (such as PHC being the 'lowest' level of service provision). For example, some definitions emphasise PHC as the first point of contact that individuals have with the health care system [9].

The main emphasis of the Alma Ata Declaration was on the provision of comprehensive, universal, equitable and affordable health care services for the entire population [10]. It adopted "a holistic view of health, going well beyond the traditional biomedical model" [5]. Alma Ata's concept of PHC called for a broad, system-wide approach to health care. Some other definitions emphasise PHC as the first point of contact that individuals have with the health care system [9].

PHC is guided by the principles of access, equity, appropriate technology, multi-disciplinary collaboration, quality and community participation [8]. The PHC philosophy highlights that "health and health services occur within particular physical environments and their historical, socio-

political, economic and cultural contexts that shape the social determinants of health for individuals, families, groups, communities, regions and countries” [11]. Therefore, PHC is equally concerned with the health of individuals as well as the overall social development of communities. The way in which PHC develops depends on the particular context.

The terms PHC and ‘primary care’ are frequently used interchangeably [9]. However, both concepts are also highly context specific. The definition of PHC varies between countries, largely dependent on what is included and excluded from the PHC service package. For example, in many HICs, PHC encompasses a broad range of sophisticated health care services, while in LMICs PHC may only consist of basic services or vertical health programmes [12]. Regarding the latter example, in some settings, even the implementation of programmes focused on sanitation and hygiene are considered to be ‘PHC services’ [12].

### *PHC in Finland*

In Finland, the development of the PHC system began in the 1970s. During this period, the health of the nation was poor, and cardiovascular mortality levels were one of the highest in Europe [13]. Prior to the 1970s, the idea of preventive health care did not really exist, and 90% of the medical doctors worked in hospitals in Finland [13].

The Public Health Act of 1972 obligated municipalities to organise PHC services for their citizens. The state helped municipalities to finance PHC in the form of earmarked state subsidies [14]. After the introduction of the Public Health Act, the PHC sector began to develop rapidly. Soon the WHO named Finland as a ‘PHC pilot country’, and deemed the implementation of PHC there as a success, especially in terms of cardiovascular diseases, which improved rapidly [15].

Currently in Finland, PHC is integrated in to the service package of the wider health care system, which consists of health promotion, sickness prevention, medical care, rehabilitation and terminal care [16]. 'Medical care' in this context includes both specialised care and PHC. Physicians working in PHC centres are the gatekeepers for specialised services, and provide referrals for specialised services when needed. In light of this, PHC is the first level of health care for the Finnish population [14].

Today, municipalities have the responsibility for organising PHC services for their citizens. At the beginning of 2017, there were 311 municipalities in Finland [17]. Municipalities are obligated by law to maintain health centres for the provision of PHC services [16]. They can organise PHC services either on their own or together with other municipalities. Municipalities can also purchase health services from other municipalities or hospital districts, or from private providers.

As PHC has been centred around health centres, in the Finnish language the term 'health centre' has become synonymous with PHC. The physical building – even though all health centres do not have the same full service package – has represented the wider PHC system for the Finnish population since the 1970s [13].

Despite these successes, in recent years, the Finnish PHC system has been said to be weakening [16]. Specialised care and hospitals have been highlighted, and the occupational health care sector has been growing [15]. However, the PHC sector has fallen behind this development. In PHC, it has been reported that waiting times have been growing – for example, in the 2000s, some municipalities had to outsource their services because of long waiting times and a lack of work force [14]. The division between PHC and specialised care has always existed, but it has increased in recent years.

*Problem statement and purpose of this study*

Health systems throughout the world have focused on offering specialised curative care more than preventive services [5]. However, the need for preventive health care is now greater than ever, especially in the ever-increasing ageing populations where the incidence of non-communicable diseases is high [2]. Also, the effects of poorly managed urbanisation and globalisation has enabled a global transmission of communicable diseases [5]. More people are suffering from multi-morbidity and countries are facing a double burden of disease [18]. As a result of all of these factors, the costs of health services are increasing beyond what LMIC or HIC countries can sustain.

Health systems in both LMIC and HIC contexts have fallen behind of the core objectives of PHC. This has resulted in renewed prioritisation for strengthening the PHC approach on the global health agenda [19]. However, the global focus on pushing the PHC agenda has focused mostly on LMICs – as has the developing field of health policy and system research (HPSR, see 20). We would argue that research on PHC in HICs is also warranted, and that there are likely opportunities for learning lessons across contexts in relation to PHC.

Such research could be used to inform policy and implementation efforts to strengthen LMIC and HIC PHC systems. For example, community participation and engagement have been emphasised, especially in LMICs, as a way to improve health goals in terms of service delivery, access and utilisation [21]. High-income countries could learn from successful examples in LMICs that utilise community engagement to reduce disease burden [22]. In Finland, PHC has lacked a traditional community accountability mechanism and the patients' involvement in their own healthcare has been limited prior 2011, and future reforms are emphasising the importance of patient participation [23].

In addition, the need for research on PHC in Finland is important because the successes and strengths of the Finnish system could be shared with other countries. Finland is a country which is reported to have created a strong PHC system within 40 years of intervention, and as a result, improved the health outcomes of the population significantly during that time [14]. It has been reported that in this period there were many achievements in strengthening the health system in this process [24]. However, during recent decades, the Finnish health system has faced new challenges and its performance has been decreasing [25].

This systematic review study will focus on the issues or ‘problems’ that the PHC reforms in Finland have tried to solve, and more specifically, how this relates to the stated intentions or aims of those PHC reforms. Said differently, it will systematically map the problems which the PHC system has faced, and describe the reforms which have been designed to solve them. Many other HICs deal with similar problems as those facing Finland, and therefore learning from Finland’s experiences is likely to be beneficial. Even though the concept of PHC depends on the context and one model does not fit all, other countries with similar problems can get insights and inspiration when planning their PHC reforms – especially in this global context of renewed prioritisation of PHC.

The performance of the Finnish health system has been decreasing during the last decade more than in other OECD (the Organisation of Economic Co-operation and Development) countries on average [25]. Policymakers and government officials have recognised this and are planning a reform – to take place in 2020 – which will change health care services in a profound way. When renewing health care services, it is important to keep in mind that the functioning of PHC services determines the extent of the ability of the system to provide robust health and social services. Therefore, it is time to put PHC strengthening back on the political and research agenda - and this

research is timely considering this upcoming reform.

### *Research question*

The main research question that this systematic review seeks to answer is: *“How has Finnish PHC system developed since political independence – and what lessons can be learned for other HIC and LMIC systems”*

The following sub-questions are:

- 1. What has Finland done to strengthen its primary health care system?*
- 2. What kind of reforms or policies have been implemented?*
- 3. What are the aims of these policies or reforms?*

A systematic review study will be undertaken to review the aims of the PHC reforms implemented in Finland in order to get more comprehensive picture of the challenges that the Finnish PHC has faced. It will seek to compare the aims of the reforms to other similar countries, so that they can learn lessons from the Finnish experiences.

### **Methodology**

This is a Campbell-style systematic review study, which is a systematic review approach considered suitable for topics related to interventions or the implementation of interventions [26]. This review will include two phases: the first phase is a scoping review, which will provide a background for understanding the development of PHC both internationally, and in Finland (reported in Part B). This will also provide a deeper understanding of the role of PHC in the Finnish health system. The second phase of the study will be a comprehensive systematic review (reported in Part C). The systematic review will have a more narrow focus on the challenges that the Finnish PHC system has

faced from 1993 on, and more specifically, it will look at the aims of PHC reforms and policies implemented from 1993 on.

A systematic review is a research method that draws together all the research that has carried out on the particular topic, and aims to assess the reliability of the previous studies, which can have conflicting results [27]. A systematic review aims to give an overall picture about a particular topic [28], has a specific methodology to search, appraise and synthesise findings of primary studies, and it has become very important in terms of policymaking, especially for best practice recommendations [29].

This systematic review will begin with a planning phase, in which the researcher will review what has previously been written about the topic [29]. This phase can also be regarded as a scoping review (see more below, Part B). This phase will help to recognise the gaps in current research and understand the need for the systematic review. After the scoping review, the research question and potential sub-questions will be sharpened.

The next step will be the systematic search. The search terms, MeSH terms and key words will be developed and relevant databases will be searched. The systematic search will be completed both electronically and manually, and the articles meeting inclusion criteria will be included in the study [29]. After the search, articles chosen will be read and analysed, in order to give a complete answer to the study question [29]. When the data is extracted and analysed, the results of the review will be reported. Conclusions will be made and potential recommendations will be given. The results need to be reported in as detailed but easily understandable manner as possible [29].

The systematic review method has been more popular in quantitative research than in qualitative

research, because of the associated methodological and epistemological challenges [28]. Qualitative research aims to gain knowledge about phenomena, which cannot be measured in quantitative figures, which can create challenges when synthesising the study results by using traditional systematic review methods [30]. Therefore, the synthesis of qualitative evidence should not be conducted in the same manner as a quantitative review [30]. Since this review is qualitative, it cannot adopt the traditional Cochrane systematic review method – hence the more appropriate Campbell systematic review style.

This review is situated in the field of health policy and system research (HPSR), since it examines challenges in the health system; and what kind of solutions have been created to tackle those challenges. Furthermore, it aims to contribute to health systems strengthening. HPSR is an emerging research field seeking to understand and improve how health services are organised in societies [31]. People are considered central to the health system and as such research within this field also focuses on how different actors interact in the policy implementation process [20]. It also focuses on the consequences (sometimes unintended) of health policy implementations and how they contribute to health outcomes [31]. Traditionally HPSR has focused more on LMICs rather than HICs [20].

In conducting a Campbell systematic review, it is important to include multiple databases into the search, which will help to ensure rigour of the study and protect against bias [32]. Campbell systematic reviews also include a search of grey literature, which will protect against publication bias. As said above, the first step in conducting a Campbell systematic review is a scoping review, and after that comes the systematic search.

### *Phase 1: scoping review*

A scoping review can be described as a “process of mapping the existing literature or evidence base” [33]. It provides a “synthesis and analysis of a wide range of research and non-research material to provide greater conceptual clarity about a specific topic of the field of evidence” [34]. It seeks to find the research gaps and summarise the current knowledge about the particular topic. Therefore it is considered as a crucial step when concluding a Campbell style systematic review as, and it helps to identify the keywords and terms before performing the actual systematic search [32].

To complete the scoping review, keyword searches in Pubmed, Medic, Scopus and Google Scholar will be conducted. Search terms used are broad, such as “primary health care” (and its variations such as “primary health”), which are then added to additional terms such as “development”, “concept”, “reform”, “intervention”, “policy”, and locators such as “LMICs”, “HICs”, “Finland”. Since the history of PHC begins from the early 20<sup>th</sup> century, there is no time limit for the publications included. However, the focus will be on studies examining the PHC concept after the Alma Ata Declaration.

### *Phase 2: systematic review*

The second phase of this study is the systematic search, which needs to include a complete and objective search that can be reproduced [35]. Also, multiple databases need to be utilised in order to improve the effectiveness of the systematic search [36]. The key to a successful systematic search is to utilise multiple search terms and conduct multiple searches from different bibliographic databases [37] to ensure confidence in coverage.

The databases, which will be included in this study, are Medline, Pubmed, Ebsco, Scopus, Medic

and Google Scholar. These electronic databases are selected because of their appropriateness to provide relevant articles in terms of the inclusion criteria. Both international (English language) and Finnish databases are included in the search. Non-academic search engines such as Google will be also be utilised in order to capture grey literature and a wider range of non-academic work. Key search terms are further refined from the scoping review and synonyms and alternative spelling for these terms are considered and used when conducting the search (see Appendix B).

The first step in conducting this systematic search is to use keywords and search terms to find relevant articles from databases. These keywords will be identified during the scoping review process. The search will include literature written in both English and Finnish and as a result, the key terms will be in both languages, when using the Finnish database Medic.

In the second stage of the systematic search, titles and abstracts of the articles found in the first step are screened against the pre-determined inclusion and exclusion criteria. Articles, which do not meet these criteria, will be excluded. The articles that do meet the criteria will be included and read in full.

The complete search strategy will be reported in Part C. Accurate documenting of the search strategy will enable future researchers to update the systematic review by repeating exactly the same search from that point in time [37].

### *Article selection*

It is important to choose the inclusion and exclusion criteria for the review carefully. The inclusion and exclusion criteria will affect the combination of results. The strict definition of the criteria may not generate enough data, and non-specific criteria may lead to a large and vague dataset [37].

This review will include both quantitative and empirical qualitative research. All study designs are accepted, as well as non-study material such as government reports. Full-texts of the papers need to have access under subscription of either the University of Cape Town or the University of Helsinki. Because this study is considering Finnish PHC policies, it will only include studies that focus on Finland. All study designs will be accepted.

Publications published from 1993 onwards will be included in the study. Even though the Finnish PHC existed a way before, this time limit was because in 1993 there was a significant reform in the Finnish health care sector [38]. The reform changed the financing of health care by introducing non-earmarked grants, which were given to the municipalities prospectively [38]. The reform also included further decentralisation, reduced the central governance of healthcare and made municipalities more autonomous in terms of organising healthcare services [38]. This review will consider the time-period after that reform, and will focus on the aims of PHC reforms that were implemented after 1993. This review will take into account national-level legislations and policies; guidelines and recommendations. It does not take local-level small reforms or pilot projects into account, because in the Finnish decentralised system, municipalities are able to do their own small projects, and the results could be fragmented or poorly generalisable if all small, local level initiatives would be taken into consideration.

The aim of this systematic review will be to analyse the aims of PHC reforms conducted in Finland. It will not focus on the effectiveness or the outcomes of these reforms, but it will seek to synthesise the available literature on the objectives of the reforms. Because of this, the papers included into this study must contain relevant information to the research question.

Articles, which will meet the pre-determined inclusion criteria, will be included in the study. The

excluded articles will also be noted. The included articles will be the review objects and they will go through to the systematic review process. Duplicates of identified articles will be screened and removed, and then titles and abstracts of remaining articles will be screened to exclude irrelevant articles. The articles selected for the study will be read in detail.

When conducting a qualitative systematic review, the quality appraisal of the research material can be a challenge [39]. There are several checklists or frameworks available, and the CASP (Critical Appraisal Skills Program) tool is one of the most widely utilised critical appraisal tool for systematic reviews – which will be applied here (see Appendix C).

#### *Data extraction*

Data extraction is an important phase when conducting a systematic review. A data extraction form can be used as an aid during this phase, as it helps to reduce human errors and bias, and it also provides a visual representation of the assessment [40]. It also acts as a historical record for the decisions made during the selection of relevant studies, and it will be the source of data that will be included in the review [41].

#### **Data analysis and synthesis**

The process of analysing and synthesising the data can begin when the systematic search is complete. All articles identified will be analysed in a similar way. The aim of a data analysis is to answer the research question in as comprehensive a way as possible. The selection of the data analysis and synthesis method depends on the heterogeneity, quality and nature of the data [29]. Data synthesis is a stage in which the evidence extracted from the data is combined together [42]. Narrative synthesis is a widely used synthesis method especially in the field of systematic reviews [23]. It is a method which can be used when evidence is gathered from multiple and mixed

sources, and it allows the researcher to interpret the evidence [42]. In this study, a thematic analysis approach will be followed.

### *Thematic analysis*

Thematic analysis is a data analysis method, which is widely used in qualitative research. It is "a method for systematically identifying, organising and offering insight into patterns of meaning (themes) across a data set" [44]. The patterns identified help to provide an answer to the research question addressed. These patterns are identified through a process of data familiarisation, data coding, and theme development and revision [45]. One of the advantages of thematic analysis is that it is theoretically flexible, and it can be used within different frameworks and to answer a wide range of research questions [45]. Braun and Clarke (2006) describe a six-phase process to conducting a thematic analysis. The first step is to become familiar with the data, which includes reading and re-reading the material in order to become very aware of the content of the data. The second step involves coding, which means generating robust labels that identify the key features of the data. The entire dataset needs to be coded, and after that, all the codes and relevant data extracts will be collected for later analysis [45]. The expressions meaning the same are put under the same labels [29].

The third step involves examining the codes and collated data to identify broader patterns of meaning, in other words searching for potential themes. The fourth phase refines the themes, which mean that the candidate themes need to be checked against the dataset in order to see if they answer to the research question [45]. The fifth step involves defining and naming the themes, and the sixth step includes the weaving together of the analytic narrative and data extracts, contextualising the analysis regarding the existing literature.

In this study, thematic analysis will be used when extracting the data. Before conducting a systematic search, existing literature will be searched. In Part B we will report on a scoping review of the existing literature. Based on the data of this scoping review, broad themes will be developed for the following systematic review. The data will be classified under different themes using codes, which are also drawn from the scoping review. It is likely that during the systematic review process the themes and codes can change and new codes or themes emerge.

### **Rigour**

Mays et al. (2005) advise on how to ensure rigour in systematic reviews. They identified a set of questions, which could be asked in different phases of the review in order to improve the quality of the study. These questions include, for example, describing the aim of the study very carefully, and detailed description of the methods used in conducting the review, such that another research team could repeat the review using the same methods [42]. Also, to ensure rigour, it is important to use sources of evidence, which are appropriate and fit to answer the research question.

Multiple methods will be used in order to ensure rigour in this review. The literature search will be conducted with the help of an information assistant, and a number of different databases will be used. The manual search for the grey literature will be also done to avoid publication bias. Methods used in conducting the review will be reported in detail, as well as inclusion and exclusion criteria. These criteria were decided before conducting the systematic search from the databases.

As mentioned already above, the following rigour considerations will be observed: multi-lingual searches (English and Finnish); multiple databases (Ebsco, Scopus, MEDLINE, Google Scholar, Medic); search term and data table checking (by supervisor and library assistant).

**Ethical considerations**

Since this systematic review will only use publicly available and published papers, there are no ethical considerations or confidentiality procedures required.

**Study limitations**

This systematic review has a few limitations. Firstly, the researchers own understanding and perspective can have an effect on the assessment and judgement of the suitability of selected studies which can lead to selection bias. The researcher will try to limit the selection bias by using the critical appraisal tool and the checklist developed by Mays et al. (2005). This review will exclude studies published in languages other than Finnish and English, which can be seen as a limitation. However, since this study focuses on the Finnish health system, most of the relevant studies are published in Finnish. The literature search will be limited to databases to which the University of Cape Town and the University of Helsinki have access, which might limit access to some studies.

Finally, this review study was conducted for thesis purposes, so was primarily carried out by one researcher. A systematic review is more reliable, when it has been conducted by more than one researcher, since researchers can end up having varying conclusions [46]. However, checking by supervisors and library assistants was applied to counter-act this.

**Budget**

This research was done for the purpose of a Master of Public Health degree. It is self-funded, and the investigator declares that there is no conflict of interest.

Item	Cost
Pens	R 50
Notebooks	R 100
Printing	R 1000
Access to Helsinki University Library (off-hours)	R 500
Incidental costs	R 500
<b>Total</b>	<b>R 2150</b>

### Timeline

Component	Activity	Date
<b>Part A: Protocol</b>	Subject Formulation	August 2016
	Drafts	January 2017
	Edits	June 2017
<b>Part B: Literature Review</b>	Research	November 2016
	Drafts	March 2017
	Edits	August 2017
<b>Part C: Journal Article</b>	Drafts	June 2017
	Edits	September 2017
	Intention to submit	September 2017
	Submission	October 2017

### Dissemination

The findings of this study will be disseminated in thesis format and also in the form of a summary article. The article aims for publication in a relevant journal having professionals (local health care

sector policymakers, managers and other professionals) as readers.

## References

1. Starfield B. Is primary care essential? *The Lancet*. 1994 Oct 22;344(8930):1129-33.
2. WHO Commission on Social Determinants of Health, World Health Organization. Closing the gap in a generation: health equity through action on the social determinants of health: Commission on Social Determinants of Health final report. World Health Organization; 2008.
3. Lewin S, Lavis JN, Oxman AD, Bastías G, Chopra M, Ciapponi A, Flottorp S, Martí SG, Pantoja T, Rada G, Souza N. Supporting the delivery of cost-effective interventions in primary health-care systems in low-income and middle-income countries: an overview of systematic reviews. *The Lancet*. 2008 Sep 19;372(9642):928-39.
4. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives. *Social Science & Medicine*. 2010 Mar 31;70(6):904-11.
5. Van Lerberghe W. The world health report 2008: primary health care: now more than ever. World Health Organization; 2008.
6. World Health Organization. The world health report 2003: shaping the future. World Health Organization; 2003.
7. World Health Organization, Unicef. Primary health care: report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978.
8. Shultz J, Hatcher PA. Looking beyond primary care to primary health care: An approach to community-based action. *Nursing outlook*. 1997 Jan 1;45(1):23-6.
9. Muldoon LK, Hogg WE, Levitt M. Primary care (PC) and primary health care (PHC): what is the difference? *Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique*. 2006 Sep 1:409-11.
10. Hall J, Taylor R. Health for all beyond 2000: the demise of the Alma-Ata Declaration and primary health care in developing countries. *The Medical Journal of Australia*. 2003 Jan 6;178(1):17-20.

11. Tanko AI, Momale SB. Kano: environment, society and development. 2014.
12. Labonté R, Pooyak S, Baum F, Schaay N, Packer C, Laplante D, Vega-Romero R, Viswanatha V, Barten F, Hurley C, Ali HT. Implementation, effectiveness and political context of comprehensive primary health care: preliminary findings of a global literature review. *Australian Journal of Primary Health*. 2008;14(3):58-67.
13. Teperi J, Porter ME, Vuorenkoski L, Baron JF. The Finnish Health Care System. A Value-Based Perspective. Helsinki, Finland: Sitra. 2009.
14. Vuorenkoski L, Mossialos E. Health systems in transition. *Health*. 2008;10(4).
15. Terveyskeskukset Tienhaarassa [Internet]. *Julkari.fi*. 2017 [cited 14 September 2017]. Available from: <http://www.julkari.fi/bitstream/handle/10024/114586/Terveyskeskukset%20tienhaarassa.pdf?sequence=1>
16. Terveystenhoito Suomessa [Internet]. *Julkari.fi*. 2017 [cited 2017 Jan 24]; Available from: [http://www.julkari.fi/bitstream/handle/10024/104557/URN\\_ISBN\\_978-952-00-3389-7.pdf?sequence=1](http://www.julkari.fi/bitstream/handle/10024/104557/URN_ISBN_978-952-00-3389-7.pdf?sequence=1)
17. Kuntanumerot ja kuntapohjaiset aluejaot | Kuntaliitto [Internet]. *Kunnat.net*. 2017 [cited 2016 Dec 8]; Available from: <http://www.kunnat.net/fi/tietopankit/tilastot/aluejaot/kuntien-lukumaara/Sivut/default.aspx>
18. Boutayeb A, Boutayeb S, Boutayeb W. Multi-morbidity of non-communicable diseases and equity in WHO Eastern Mediterranean countries. *International Journal for Equity in Health*. 2013 Aug 20;12(1):60.
19. Lawn JE, Rohde J, Rifkin S, Were M, Paul VK, Chopra M. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise. *The Lancet*. 2008 Sep 19;372(9642):917-27.
20. Sheikh K, Gilson L, Agyepong IA, Hanson K, Ssengooba F, Bennett S. Building the field of health policy and systems research: framing the questions. *PLoS medicine*. 2011 Aug 16;8(8): e1001073.
21. Molyneux S, Atela M, Angwenyi V, Goodman C. Community accountability at peripheral health facilities: a review of the empirical literature and development of a conceptual framework. *Health Policy and Planning*. 2012 Jan 25;27(7):541-54.
22. Bitton A, Ratcliffe HL, Veillard JH, Kress DH, Barkley S, Kimball M, Secci F, Wong E, Basu L, Taylor

C, Bayona J. Primary Health Care as a Foundation for Strengthening Health Systems in Low-and Middle-Income Countries. *Journal of General Internal Medicine*. 2017 May 1;32(5):566-71.

23. Junnila M, Hietapakka L, Whellams A. Hallintoalalaisesta aktiiviseksi valitsijaksi: Valinnanvapauden muotoutuminen sote-palveluissa. Raportti: 2016\_011.

24. Koskinen S, Aromaa A, Huttunen J, Teperi J. Health in Finland. Kansanterveyslaitos= National Public Health Institute; 2006.

25. OECD Health Statistics [Internet]. *Country Note: How does health spending in Finland Compare?*. 2016 [cited 2016 Dec 25]; Available from: <https://www.oecd.org/els/health-systems/CountryNote-FINLAND-OECD-Health-Statistics-2015.pdf>

26. Campbell Collaboration. What is a systematic review? [Internet]. [Campbellcollaboration.org](http://www.campbellcollaboration.org). 2017 [cited 17 February 2017]. Available from: [http://www.campbellcollaboration.org/what\\_is\\_a\\_systematic\\_review/index.php](http://www.campbellcollaboration.org/what_is_a_systematic_review/index.php)

27. How to do a systematic review? [Internet]. 2017 [cited 2016 Dec 25]; Available from: <https://www.stir.ac.uk/media/schools/management/documents/centregradresearch/How%20to%20do%20a%20systematic%20literature%20review%20and%20meta-analysis.pdf>

28. Dixon-Woods M, Bonas S, Booth A, Jones DR, Miller T, Sutton AJ, Shaw RL, Smith JA, Young B. How can systematic reviews incorporate qualitative research? A critical perspective. *Qualitative research*. 2006 Feb;6(1):27-44.

29. Johansson K, Axelin A, Stolt M, Ääri RL. Systemaattinen kirjallisuuskatsaus ja sen tekeminen. Turku: Turun yliopisto. 2007.

30. Jones K. Mission drift in qualitative research, or moving toward a systematic review of qualitative studies, moving back to a more systematic narrative review. *Qualitative Report*. 2004 Jan 3;9(1):95-112.

31. WHO | Primary health care [Internet]. [Who.int](http://www.who.int). 2017 [cited 26 June 2017]. Available from: [http://www.who.int/topics/primary\\_health\\_care/en/](http://www.who.int/topics/primary_health_care/en/)

32. Hammerstrøm K, Wade A, Jørgensen AM, Hammerstrøm K. Searching for studies. *Education*. 2010 Jun 6; 54:11-3.

33. Armstrong R, Hall BJ, Doyle J, Waters E. 'Scoping the scope' of a cochrane review. *Journal of Public Health*. 2011 Mar 1;33(1):147-50.

34. Davis K, Drey N, Gould D. What are scoping studies? A review of the nursing literature. *International Journal of Nursing Studies*. 2009 Oct 31;46(10):1386-400.
35. Lefebvre C, Manheimer E, Glanville J. Searching for studies. *Cochrane handbook for systematic reviews of interventions: Cochrane Book Series*. 2008:95-150.
36. Akobeng AK. Understanding systematic reviews and meta-analysis. *Archives of disease in childhood*. 2005 Aug 1;90(8):845-8.
37. Bown MJ, Sutton AJ. Quality control in systematic reviews and meta-analyses. *European Journal of Vascular and Endovascular Surgery*. 2010 Nov 30;40(5):669-77.
38. Häkkinen U. The impact of changes in Finland's health care system. *Health Economics*. 2005 Sep 1;14(S1)
39. Jackson N, Waters E. Criteria for the systematic review of health promotion and public health interventions. *Health Promotion International*. 2005 Dec 1;20(4):367-74
40. Tranfield D, Denyer D, Smart P. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*. 2003 Sep 1;14(3):207-22.
41. Higgins JP. S. *Cochrane handbook for systematic reviews of interventions version 5.0. 2* [updated September 2009]. The Cochrane Collaboration. 2008.
42. Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. *Journal of Health Services Research & Policy*. 2005 Jul;10(1\_suppl):6-20.
43. Rodgers M, Sowden A, Petticrew M, Arai L, Roberts H, Britten N, Popay J. Testing methodological guidance on the conduct of narrative synthesis in systematic reviews: effectiveness of interventions to promote smoke alarm ownership and function. *Evaluation*. 2009 Jan;15(1):49-73.
44. Clarke V, Braun V. Thematic analysis. In *Encyclopedia of critical psychology 2014* (pp. 1947-1952). Springer New York.
45. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*.

2006 Jan 1;3(2):77-101.

46. Pudas-Tähkä SM, Axelin A. Systemaattisen kirjallisuuskatsauksen aiheen rajaus, hakutermit ja abstraktien arviointi. Teoksessa Johansson, K., Axelin, A., Stolt, M. & Ääri, RL.(toim.). Systemaattinen kirjallisuuskatsaus ja sen tekeminen. 2007:46-57.

## Part B: Scoping Review

### The role of PHC as the basis of an effective health system – the implementation and development of PHC in Finland

#### Introduction

The World Health Organisation (WHO) defines health systems as “all the organisations, institutions, and resources that are devoted to producing health actions” [1]. The main goal of health system is improved responsiveness to the population's health needs and greater cost-effectiveness [2]. Strong primary health care (PHC) is often seen as the backbone of well-functioning health systems [3]. PHC is an approach to delivering basic health services to the population. The ultimate aim of PHC is “health for all”; to provide universal access to health care services [4]. Starfield (1994) describes four pillars for PHC: first-contact of care; continuity of care over time; comprehensiveness; and coordination with other parts of the health system. So, in an ideal situation, PHC is an integral part of the country's health system [5].

PHC came to prominence in the late 1970s, when countries throughout the world committed to the Alma-Ata declaration. Both low-and-middle-income countries (LMICs) and high-income countries (HICs) tried to switch effort from specialised care towards PHC services. However, regardless of these efforts, the Alma-Ata's goal of universally accessible PHC services was not achieved [6]. Even the most developed countries fell short of meeting the objectives of the Declaration [1].

Since the turn of the twenty-first century, the strengthening of PHC has once again become one of the top priorities in the field of global health (see more below). LMICs are especially suffering from the results of fragmented health systems and vertical health programmes [7]. PHC development

has also become popular in HICs, which have noticed that a PHC approach is a more cost-effective strategy to improving population health than specialised level services [8, 9]. Countries all over the world are trying to find sustainable and effective solutions to create stronger PHC systems.

This scoping review will focus on Finland, which is a HIC located in Northern Europe. Finland is a country that has evolved from a developing country to an industrialised country in just a few decades (approximately from the mid 1940s to the 1970s), and at the same time managed to develop what is said to be a strong PHC system integrated within country's health system [10] providing an useful learning and comparison tool for other countries and researchers.

This scoping review will provide the basis for a more detailed systematic review. It intends to provide comprehensive information on the role that PHC plays in a health system. The aim is to gain understanding of the history and development of PHC both globally and in the Nordic region, and especially in Finland. It will explain how the PHC system was successfully implemented or built in Finland and highlights what challenges the Finnish health system, and specifically the implementation of PHC reforms, has faced in recent years. Broad themes developed here will be applied in the systematic review that follows.

## **Methods**

A scoping review maps the existing literature, synthesises and analyses research and non-research material in order to provide a comprehensive understanding of a particular topic [11, 12]. Scoping reviews are useful especially when the area is complex or it has not been reviewed broadly before [13]. They are also conducted in order to assess research gaps or determine whether it is reasonable to conduct a full systematic review. This scoping review was conducted because of the wide scope of the research question. Multiple databases, including Scopus, Ebsco, OVID Medline

and Google Scholar, were used to gather data. In addition, the Finnish database Medic was also included in the search.

No time limit was set, and publications both in English and Finnish were sought. Search terms included broad terms regarding PHC as a concept, its history and applications. Search terms were clustered in two areas: those relating to 'PHC' (with variations such as 'PHC development', 'PHC concept', 'PHC implementation', 'PHC innovation', 'PHC system'); and those relating to the 'Finnish health system' (with variations such as 'Finland', 'Scandinavia', 'Nordic', 'European', 'HIC', 'LMIC'). PHC Finnish translations of these terms were also applied. Regarding the latter, while no geographical limitation was set (since this review focused on the development of PHC through the world globally), the intention was to give specific attention to PHC development and implementation in Finland (framed couched in an understanding of PHC development globally). PHC Finnish translations of these terms were also applied. Besides journal articles, other literature was included, such as policy briefs and institutional reports. No year limit was placed on the scoping review (also because of the historic nature of this review and PHC development).

Articles were selected for possible full text reading based on title or abstract. Articles, which considered some of the topics of the scoping review were included. The objective of this scoping review was to gain a comprehensive understanding of the development of PHC; what role PHC plays in the health systems of both HICs and LMICs; and furthermore, how PHC has developed in Finland and what kind of challenges it is facing today. This review aimed also to develop broad themes around the intended aims of PHC policies that can be used during the data analysis of the systematic review that will follow.

## **The global history of PHC**

PHC has been considered an approach to providing a basis for an effective, efficient and equitable health system since the early 1900s [14]. In 1920 the very first notion of a community oriented health care was born [15]. The British government commissioned a report to advocate ways to structure health system investments, and the commission chairman proposed three hierarchical levels of care: primary, secondary, tertiary [15]. Primary care was recognised as the most fundamental level of the health system, providing care for simple and common problems [15].

After the 1920s, it took many decades for the concept of PHC to evolve further and spread to the rest of the world. In the 1940s, there were some successful examples of a community-oriented primary care. For example, in South Africa, the Pholela region health centre provided an innovative approach of integrated curative and preventive health services in a comprehensive community-based package [16]. This experiment provided promising results, but unfortunately, the approach did not evolve as common practice within the country. Similar attempts to community-oriented PHC were made in China, India, and Uganda [17].

The Alma Ata Declaration of 1978 inspired many countries throughout the world to create national goals to establish preventive healthcare through the delivery of basic services. The WHO gave solid support to this movement with the focus on LMICs. However, after the Alma Ata Declaration, both in HICs and LMICs, the actual emphasis in service delivery and implementation ultimately remained on strengthening vertical and disease specific services instead of creating a strong PHC system [18].

Ambitious goals of strengthening PHC were all but forgotten for decades until PHC became the focus of international interest again in the 2000s. It was the main theme of the World Health

Report in 2008 and a topic for many significant conferences. There were many reasons for this renewed interest for PHC: for example, many sub-Saharan African countries had fallen behind and were unlikely to achieve MDGs, and there was a major shortage of health workers and consistently weak health systems in many resource constrained LMICs [7]. The focus began to shift from narrow, disease-focused programmes to wider, health system-focused perspective.

### *Different PHC approaches in LMICs and HICs*

According to the WHO, the ultimate goal of PHC is to provide better health care for the whole population, ultimately improving health outcomes [19]. Five key elements towards achieving these goals are: improving universal coverage, providing services based on a population's needs, integrating health into all sectors, increasing stakeholder participation and pursuing collaborative models of policy dialogue [20]. These key elements are the basis of the PHC approach globally.

However, there are certain differences in what the concept of PHC consists of, and how PHC services can be delivered between HICs and LMICs. In LMICs, PHC approaches often focus on increased access to basic care, such as maternal and child health care services [7]. PHC systems may also deal with improved sanitation and hygiene in low-and-middle-income settings, addressing wider determinants of health in LMICs. Therefore, in LMICs, PHC services tend to be selective programmes targeting specific, usually vulnerable groups such as women and children [7]. In HICs, PHC usually means equitable access to a wide range of health services delivered by a physician. PHC services in these countries are more comprehensive, and PHC can be seen more as the first level of care [2]. General practitioners act as gatekeepers and refer patients to specialised services as required.

One of the core elements of PHC in both HICs and LMICs is that the services should be easily

accessible to the whole population [20]. Services should be both physically and financially accessible to the target population. Access to PHC services has generally been better in HICs than in LMICs, but there are notable exceptions, and some LMICs, such as Thailand, have managed to implement relatively effective PHC system [4]. Weak infrastructure, poor governance, shortage of health workers and sparsely located service delivery points make it challenging to access and utilise PHC services in some LMICs [4].

As mentioned, in many LMICs PHC interventions are targeted towards specific groups, and as a result, the health outcomes are also seen among those populations. In many LMICs, PHC is associated with decreased infant and under-5 mortality and maternal mortality rates, leading to improvements in life expectancy rates at birth [7]. This targeted approach is actually somewhat of a contradiction with the notion and ethos behind PHC and universal coverage [21]. In HICs, PHC offers a wide range of preventive services and the target is the whole population rather than specific groups. In HICs, PHC is associated with reduced laboratory costs, lower hospitalisation rates, improved use of multi-disciplinary teams and more disease prevention and health promotion activities compared to other health care approaches [22]. Besides the association with lower health care costs, studies in OECD countries have shown that improved numbers of GPs is associated with lower mortality rates and fewer life years lost due to preventable cardiovascular diseases [7, 23].

### **PHC in the Nordic region**

The Nordic countries are located in Northern Europe and consist of five countries: Finland, Sweden, Norway, Denmark, and Iceland.<sup>1</sup> The Nordic countries share some similar features, mostly because of the historical background of the Kalmar Union in 1397-1523. Since the Union, the

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<sup>1</sup> Scandinavian countries are not a synonym for Nordic countries; Sweden, Norway and Denmark form Scandinavian countries.

countries were united in different configurations, until they all gained their independence in the early 1900s [18]. Historical ties are the background for similar customs, traditions, and norms.

PHC is a core element of the health system in Nordic countries. There are many similarities in the way in which Nordic countries organise their PHC services. In all Nordic countries, PHC services (as well as specialised health services) are mainly tax-funded [18].<sup>2</sup> Also, the governance of the health system has traditionally been very decentralised, and decisions have been taken at the municipal level. The degree of decentralisation is varied, and there has been a gradual movement towards centralisation during the last decade.

The aims of PHC in Nordic countries are similar to the objectives of the Alma-Ata Declaration. PHC services are intended to provide good and equal access to preventive health services for the entire population acting as the first point of contact to the health sector for citizens, with referral to specialised care as needed [24]. Overall, the PHC approach aims to treat the population with a holistic approach.<sup>3</sup>

As noted, in Nordic countries, the governance of PHC is mostly decentralised [18]. Finland has the most decentralised system, with approximately 300 municipalities responsible for organising the PHC services for the population within their catchment areas [25]. In Denmark, the administrative structure for health care services consists of five regions and approximately 100 municipalities [24]. In Sweden, the County Councils are responsible for organising PHC services. PHC has traditionally had a marginal role in Sweden compared to other Nordic countries, and citizens have been used to using specialised services instead of PHC [26]. In Iceland, the state manages PHC

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<sup>2</sup>Health care expenditures represent approximately 9% to 11%, Denmark represents the highest, Finland the lowest share

<sup>3</sup>Rather focusing only on medical conditions, holistic approach takes into consideration wider social context

through eight health institutions with health clinics providing the services to the population [24]. In Norway, general practitioners (GPs) work via contracts with the municipalities based on a national set of capitation [24].

The role of GPs as gatekeepers varies between Nordic countries. In Denmark and Norway, a referral from a GP is needed in order to obtain specialised services. Referral is also needed in Finland, but it can be from any doctor, also from the private sector [24]. The situation is different in Sweden and Iceland, where no formal gatekeeping system exists. In Sweden, patients can go directly to specialists, with the exception of a few county councils where referral is needed. However, there are some guidelines in accessing the specialist services. For example, co-payments are higher for patients entering to specialised care without a referral [26]. Icelandic patients also have the right to seek services directly from specialists.

The Nordic countries share similar health problems with other HICs. An ever-increasing ageing population puts pressure on both preventive and specialised services, and the number of lifestyle-related diseases are high [18]. Patients have also become more demanding which resulted in long waiting times [18]. Also, in sparsely populated Nordic countries like Sweden, Finland, and Norway, the geographical inequities in terms of accessing health services has become a significant issue [24]. To tackle these problems, Nordic countries have implemented several reforms in PHC sector: for example, increased patients' choice and privatisation has been implemented in Sweden [27]. In Denmark, organising and governance of health services have been re-centralised [24].

**Table 1: Finnish health system development (until 1993)**

Year	Event
1917	Finland gained its independence
1930s	The building of a hospital network began
1939-1944	World War II
1943	The law of general medical health
1944	The law of maternal and child health clinics
1950s	Re-building of hospitals
1963	Sickness Insurance System was established
1972	PHC Act, building of health centres began
1978	Occupational Health Care Act: the birth of occupational health care system
1986	The Health for All by 2000.
1993	The State Subsidy Reform: the responsibility for the provision of health care placed more on municipalities

Source: Author [27, 28, 29]

Finland gained its independence from Russia in 1917, and the early years of independence were unstable because of civil war. Conflicts and infectious diseases killed many people in this period – especially as the country did not have a nation-wide healthcare system [28]. In the 1930s, Finland began to develop its health sector by building a district hospital network [29]. Unfortunately, the country was then drawn into World War II, and these promising developments were delayed.<sup>4</sup>

After World War II, there was an emerging need for health services, and the first serious steps towards implementing universal health coverage (UHC) were taken. The Act of District Hospitals was accepted in the Parliament of Finland in 1943, and Finland was divided into 20 hospital districts [29]. Another new Act was introduced shortly after the World War II to regulate municipal health services. According to the act, every municipality had to contract GPs, midwives and public health nurses [25]. In 1944, mothers and young children were given free access to health services,

<sup>4</sup>Finland fought against Russia 1939-1940 and 1941-1944.

which resulted in a radical increase in female life expectancy in the next decade [30].

Regardless of the attempts made after the war, in the 1950s, the Finnish health system was still relying on curative services and prevention had only a small role. With economic development, the burden of non-communicable diseases increased quickly, and the existing, hospital-driven system could not respond to it. In order to address the imbalance between curative and preventive services, a National Health Insurance (NHI) scheme was introduced in 1963 [25]. The scheme covered a portion of the costs of drugs and medical care, and provision for sickness days and maternity allowances were included in the scheme [25]. However, despite the introduction of NHI the inequities in accessing health care services remained since the majority of the services were located in urban areas, an issue that many LMICs are facing today. The scheme also excluded funding for health prevention services, such as family planning and immunisation, which weakened the position of preventive care [25].

The PHC Act was introduced in 1972, and it established municipal-level health centres as the provider of PHC services [25]. The objective of the legislation was to provide all permanent Finnish citizens with equal access to health care services, regardless of where they lived or their ability to pay. Providing primary medical care, a variety of preventive services, home nursing, family planning and dental care was now a legal responsibility of every municipality [10]. As a result, more than 200 health centres were set up throughout the country, and previously under resourced and neglected rural areas benefited from the Act.

The Act of Occupational Health Care in 1979 began the development of occupational health services [25]. Before setting the Act, some employers were already providing some level of health services to their workers through private providers, so the occupational health care system already

existed [31]. However, the Act made it compulsory for employers to provide health services to their workers.

In the late 1980s, the gradual movement of decentralisation of the health services began. The Finnish health care system had always been quite decentralised because of the municipal-run health services. However, before the late 1980s, the central level had held the overall responsibility of health care funding and decision-making. In the late 1980s, Parliament began to develop a reform, which aimed to shift the responsibility of decision-making from the central level to the municipalities [31].

Until the 1990s, the national economy had been growing, and the quality of health services had been improving. However, in the early 1990s, the Finnish economy fell into a recession [32]. The recession of the 1990s was one the worst economic crises in Finland's history<sup>5</sup>. This caused cuts in the state budget, and also health care legislation changed in fundamental way. A package of changes in legislation, planning, and financial incentives were introduced with the main objective to create economic incentives for municipalities to offer more effective health services [25, 32]. The act also made it possible for municipalities to purchase health services from private providers [25].

The reform in 1993 was followed by several cuts in health care resources, especially to the number of health workers. Also, the intake into state funded medical and dental training was reduced, even though the demand for health services increased [25]. In general, the Finnish health system survived the recession quite well, and health outcomes did not significantly deteriorate [30]. The shortage of health workers was more significant in PHC, and the system has not yet fully recovered

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<sup>5</sup>During the recession, GDP sank 13% and unemployment rose from 3,5% to 18,9%

from it.

### **PHC implementation in Finland**

As described earlier, the birth of the Finnish PHC approach occurred in the 1970s. The 1970's was a decade when the whole world was starting to switch its focus from specialised services towards preventive, PHC services, reinforced by the Alma Ata declaration of 1978. In Finland, the implementation of PHC was understood to have been successful, as will be discussed below in detail [10, 25]. The following paragraphs will focus on the factors that are said to have contributed to successful implementation of PHC in Finland – including the ideological climate, economic development, and the role of strong governance.

#### *Ideological climate*

In Finland, an ideological shift towards PHC occurred in the 1970s. Policy makers had started to recognise the increasingly poor health outcomes especially in terms of non-communicable diseases. The need for change was evident in order to improve the health of the nation, and preventive health services were placed as a high priority on the national political agenda. This change in political ideology led to the creation of the Public Health Act in 1972 [33].

Policy makers were not the only ones interested in preventive medicine at this time. There was also a growing interest in the field of public health amongst academics and medical doctors [33]. One example of this is the North Karelia Project, which was started in 1972 as a national pilot and demonstration programme for prevention of cardiovascular diseases [34]. The North Karelia Project was a comprehensive community-based intervention that involved health services, NGO's, industry and media, and it was conducted in the region, where the cardiovascular mortality was the highest in the country.

### *Economic development*

In the 1970's, the socio-economic situation also favoured the development of PHC. The Second World War ended in 1945, after which the state had to pay heavy war reparations. Payments for military compensation were made through the forest and metal industry, which led to strong industrial development. Because of war reparations, the quality of industry had improved, and exports to other Western countries began to grow [35].

After the war, the focus shifted back to the building of the hospital network, which was delayed because of the war [29]. The healthcare for women and children also became one of the health priorities in the 1940s Finland [10]. The stable post-war growth in the national economy enabled the development of the healthcare system [33]. After the reconstruction of the hospital network had occurred, financial resources were released for developing of other health care services.

The government also made political attempts to improve financial protection for health care. The National Health Insurance Scheme was introduced in 1963, and all Finnish inhabitants were covered by this mandatory scheme [25]. Before NHI, only workplace-related voluntary funds had provided insurance coverage only for a small proportion of the population [25].

Since the NHI scheme was not enough to redress inequities, the government introduced other policies which aimed to improve both financial protection and access to health care services [25]. A national planning system for PHC with a five-year plan was introduced. The state covered 40-70% of the operating expenses of health services, and funded the building and equipping of facilities [25].

### *Strong governance*

One of the most important factors for successful PHC implementation in Finland, was a strong political will [10]. Once the idea of the PHC approach was brought on to the national agenda, the national resources were gathered and targeted on the development of the PHC system. From the birth of the Finnish PHC, decentralisation has always been a key goal, and the Public Health Act in 1972 put each municipality in charge of organising health care, and brought decision-making closer to citizens [10]. In a sparsely populated country, this meant improvements in access to health care services.

### **The Finnish PHC today: key elements**

The Finnish health care system has some similar features to health systems in other Nordic countries, but it also differs from them - for example in terms of parallel funding. As in other Nordic countries, public health services are funded by the state and by tax revenue. However, in Finland, health services are provided through three different provision systems: the municipal health care, occupational health care and private health care [30]. The funding for these services flows down through two main sources: municipal funding and National Health Insurance [25]. In addition to public funding, households pay out-of-pocket payments for using health services, and the employers must pay compulsory insurance fees [18]. Municipalities can independently choose whether they charge out-of-pocket payments or not. Out-of-pocket payments can consider for example a charge for a GP appointment in a health centre or a daily hospital fee for inpatient care [25].

The Ministry of Social Affairs and Health is responsible for health policy guidelines, and it sets and oversees their implementation [36]. It is responsible for the guidelines of health policy, prepares

legislation and steers the implementation of the reforms. Two ministers, the Minister of Social Affairs and Health and the Minister of Health and Social Services, lead the work of the Ministry of Social Affairs and Health [25]. The government has the decision-making power regarding national strategies and priorities and proposes bills to be discussed by Parliament [25]. The national administration does not organise health services itself, but rather defines the policy guidelines according to which the municipalities should provide the health services. According to the Finnish Constitution, every permanent citizen of Finland has the right to access health services regardless of their ability to pay or where they live. Public authorities need to guarantee social, health and medical services to everyone and promote the health of the population [37].

### *Municipalities*

Municipalities are responsible for organising PHC services for the citizens living in their catchment area, and each municipality needs to be a member of a hospital district [36]. Hospital districts are larger areas, which provide the specialised healthcare services to the population, and municipalities buy services that they need from the hospital districts. Each hospital district has a university hospital and a number of smaller hospitals [32]. PHC services are supposed to cover the whole population, but many people in their working age use occupational healthcare services. In Finland, the employer is obliged to provide the employee with preventative healthcare [25]. The employer can also provide medical care services to the employees, but that is not mandatory.

In 2016 there were 313 municipalities [35]. The average population for a municipality was 17 310 inhabitants, but the median size was only 6068 inhabitants. Slightly more than half of the Finnish municipalities are small ones with a population less than 6000 [35]. Throughout the 2000s, there has been a trend for smaller municipalities to unite, combining resources and to centralise the organisation of the services.

The PHC Act obligates the municipalities to have health care centres, which provides preventive and PHC services to its permanent citizens. Larger cities usually have several health centres, some smaller municipalities can cooperate when providing health services, and many municipalities can have one shared health centre, which provides services to all cooperating municipalities [30]. Some municipalities buy PHC services from private providers. Every municipality is free to determine its own scope of services it covers following the national policies and guidelines [33].

### *Health centres*

The backbone of the Finnish PHC are municipal run health centres, which were established by the law of 1972. The law defines the services that health centres need to provide. The Finnish PHC has always included a wide range of health services provided under a same roof [10]. Today, the Finnish primary healthcare includes variety of services, such as consultation by GP or public health nurse; health counselling, preventive work, vaccinations; dental healthcare; maternity and child health clinics; school and student healthcare; home nursing; laboratory and imaging services; inpatient care to some extent [38]. In Finland, PHC provides some services that are usually provided at a specialised level in other European countries. For example, especially in rural areas, the GPs can do endoscopies or some small surgical procedures. In only a few other industrialised countries is the coverage of the primary health services as wide as in Finland [33].

Professionals from many different fields work in health centres, including: GPs, public health nurses, physiotherapists and psychologists. Health centres have traditionally been heavily GP-focused, and GPs have been in charge of treatment of the patients. However, recently there has been a modest trend toward of task-shifting and nurses have gained more responsibility. Also, collaboration and teamwork between different professions have become more popular [33]. The

majority of the GPs working in health centres for a long time have completed a six-year specialisation to general medicine.

The unique feature of the Finnish primary care system is the local GP run hospitals<sup>6</sup>. Usually, these hospitals are located in the same building as PHC centres. These hospitals were set up in the middle of 20th century, at a time when transport between the towns was bad and services needed to be close to the population [33]. GP run hospitals used to offer even surgical operations until the late 60s [33]. Today, the local hospitals are used mostly as long-term units for the elderly. They also provide short-term care for people suffering from acute illnesses or for post-hospitalisation care for patients recovering from surgical operations.

### **Challenges to the Finnish health system in the last decade**

In 1993, a new era in the development of the Finnish PHC began. The government removed the health earmark from the state subsidies, and municipalities were given the independence to use the given resources as they wanted [39]. Also, the amount of the subsidies decreased because of the economic recession in the early 1990s [32]. The decrease in funding weakened the status of the PHC system as a part of the whole health system. During the 2000s, some PHC centres had to outsource their services because of the lack of workforce [39]. At the same time, the occupational health sector has been strengthening and developing rapidly. The challenges that the Finnish health system is facing are described in the following paragraphs.

#### *Inequities*

Due to the independent role of the municipalities, there is a lot of variation in accessing health services across the country. Poorer and rural areas tend to have worse public health services, and

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<sup>6</sup>Local GP run hospitals are nowadays more popular in rural areas.

furthermore, in those areas there is not the wide range of alternative private service provider either [30]. Private clinics are usually set up in cities and more affluent areas and the use of private services is quite expensive when only the wealthy population can afford to use those services, deepening the existing accessibility inequalities between the socio-economic groups.

Also, the existence of occupational health services causes inequity between socio-economic groups. When employees are covered by both municipal and occupational health care, they can choose which services to use. Employers can buy occupational health services either from a private provider or from municipal providers. In general, the waiting times for occupational services are much shorter and as a result; many people prefer to use occupational health care rather than municipal health care [25]. Unemployed, children and pensioners are not covered by occupational health, so if they do not have private insurance, they can only access municipal services with longer waiting times. To some extent, the inequalities between the socio-economic groups can be seen as due to the fact that occupational health care is provided for free when the municipal health care collects moderate user fees [30]. This exacerbates already existing inequity when the unemployed and people belonging to vulnerable groups have no option in terms of choice and are subjected to paying user fees.

The geography of Finland also results in differences between municipalities. Finland is a very sparsely populated country, and especially in the Northern areas, the distances can be very long. People living in those areas have to drive hundreds of kilometres to get even basic services and supplies. People living in different parts of the country are certainly in an unequal position in accessing the services: one living in Helsinki gets the best tertiary care in minutes, and the another

living in rural Lapland gets the same services after hours<sup>7</sup>.

### *Ageing populations*

As noted, the population of Finland is one of the most aged populations in Europe with a population average age of 42,6 [40]. An ageing population creates many challenges for the health system: they require more health care services both in primary and secondary level and also the need for long-term care is rising [41]. In addition, when the number of people retiring continues to increase relative to the working population, there will be less public tax revenue to pay for public health services.

### *Decentralisation*

As mentioned, the Finnish health system is considered one of the most decentralised in the OECD countries [25]. In 2016 there were over 300 municipalities in charge of organising health care services for quite small populations. Recently, the working population has been moving from rural municipalities to cities, which has led rural populations to age at a faster rate than populations in the cities. This trend has resulted in some small municipalities struggling to organise health care services [30]. Also mentioned earlier, in Finland funding for health care comes from several sources. Multi-channel funding mechanisms create fragmentation and also breeds inefficiency when each funding party aims to optimise operating conditions from their perspective. No one bears the overall responsibility, which leads to weaker performance and outcomes [30].

### *Patients' passive role*

As in other Nordic countries, in Finland, the state has the responsibility for organising health services, and individuals are given social rights. This model runs the risk of turning individuals into

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<sup>7</sup>For example, the distance from one of the northernmost municipalities, Utsjoki, to the nearest tertiary level hospital is approximately 450 kilometres.

passive service recipients' rather active consumers. However, improvements in information technology have made people more aware of their own medical conditions and treatments, which have resulted in the more active role of individuals [18].

### *PHC and challenges*

Since the new millennium, the focus of healthcare development in Finland has been on improving specialised health services. The focus of PHC has begun to disappear, and the hospitals have pushed more and more new duties to PHC [38]. With the increase in responsibilities to PHC systems there has not been a simultaneous increase in allocated resources, which has further stretched a struggling system [38]. The Finnish PHC continues to suffer from a chronic lack of health personnel, with more and more workers shifting to private and specialised care [42]. Furthermore, because specialised health services and PHC are under different governance, communication between them has been poor

### *Future reform*

The Finnish health system is going to face a profound reform in the near future when a package called "the healthcare, social welfare, and regional government reform<sup>8</sup>" is going to be implemented in 2020. It will be one of the most profound administrative and operational reforms in the history of Finnish healthcare. The performance of the health system has been decreasing for over a decade: health care spending compared to the increase of GDP has increased more than in OECD countries in average [43]. Also, the disparities in accessing the health services between socio-economic groups have become wider [43]. The system favours high-income groups since they have the choice of using private services and occupational services. Waiting times to health services also varies a lot between municipalities or wider geographical areas [44]. The reform will

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<sup>8</sup>So-called "SOTE-uudistus"

need to reduce these inequities and reduce the costs of health care services. It has been estimated that the suggested reform can save 3 billion Euros annually by the year 2030 [45].

As explained earlier, the Finnish health system has traditionally been very decentralised. The suggested reform will make a big shift back towards centralisation, and will move the responsibility of organising health care from municipalities to larger regions (so-called “SOTE areas”) [44]<sup>9</sup>. SOTE areas will be responsible for organising the public social welfare and health care services. They can provide the services themselves or use private or third sector providers [44]. The use of private providers is intended to lead to improved competition, which will, in turn, improve the production of cost-effective services [46].

The state will introduce a money-follows-the-patient principle, which means that the state will fund the SOTE areas with a fixed-sum based on the estimated needs of the area’s population. Another important principle will be the freedom of choice [44]. The patients’ will be able to choose between public or private PHC centres. Patients need to sign up for a health centre of their choice for a period of at least six months<sup>10</sup>. The chosen health centre will assess the need for the patients and act as a gatekeeper to access specialised health services [47].

### **Perceived benefits of PHC**

In the last thirty years, a number of studies have been conducted examining the potential benefits of the worldwide PHC systems [see 48, 49, 50]. There is empirical evidence that the relative strength of a PHC system is associated with improvements in a population's health outcomes both in LMICs and HICs. Strong PHC systems have decreased maternal and child mortality, increased life-expectancy, and improved health outcomes for some chronic conditions [8, 48, 50]. In addition to

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<sup>9</sup>At the moment, the government is planning to create 18 “SOTE-areas” but the final number is not yet decided

<sup>10</sup>The details of the freedom of choice are still under work.

public health benefits, studies have shown, that a strong PHC system can positively affect the costs of health care [8, 50]. For example, care for common illnesses such as pneumonia is cheaper when it is provided by a GP rather than a specialist [52]. Also, the countries with a strong PHC system tend to have lower health-care costs [51].

A PHC focus can reduce socio economic disparities in health [2, 49]. In studies conducted both in LMICs and HICs, a strong PHC system was found to improve access to health services especially among the population with lower socio-economic status. Increased access to health services leads to improved several health outcomes among them [2, 51, 52]. Overall, a strong PHC system does not only improve the health of the population, but it strengthens the whole health system. A summary of key papers describing the benefits of PHC (globally) is in Table 2 below.

**Table 2: Key papers describing the benefits of PHC (global)**

Authors	Paper	Country	Purpose	Main results
Macinko et al. 2003	The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development countries, 1970–1998.	10 OECD countries	Assess contribution of primary care systems to wider health outcomes	Strength of a country's PHC system decreased all-cause mortality, all-cause premature mortality and cause-specific premature mortality from some NCDs.
Kruk et al. 2011	The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives	14 LMICs	To evaluate major primary care initiatives and how those initiatives contributed to the health and health systems	PHC initiatives improved access to health care, reduced child mortality, improved financial equity
Engström et al. 2001	Is general practice effective? A systematic literature review	Industrialised countries	To evaluate the cost-effectiveness and quality of the work done by physicians in primary care in HICs.	PHC increased access, contributed in better health outcomes, lowered the costs of the health system.
Franks & Fiscella 1998	Primary care physicians and specialists as personal physicians: health care expenditures and mortality experience.	USA	To examine whether persons using a primary care physician have lower expenditures and mortality than those using a specialist as their personal physician	Patients using a primary care physician compared with those using a specialist had 33% lower annual adjusted health care expenditures and lower adjusted mortality.
Kringos et al. 2013	Europe's strong primary care systems are linked to better population health but also to higher health spending	Countries of European Union	To analyse comparative primary care data collected in 2009–10	PHC was associated with better population health; lower rates of unnecessary hospitalisations; lower socioeconomic inequity; and lower growth in health care spending
Shi 1994	Primary care, specialty care, and life chances.	USA	To analyse the relationship between the availability of primary care and specialised care and certain life chance factors	Higher ratios of primary care physicians to population had better health outcomes; lower rates of all causes of mortality: mortality from heart disease, cancer, or stroke; infant mortality; low birth weight; and poor self-reported health
Shi et al. 2003	Primary care, income inequality, and stroke mortality in the United States: a longitudinal analysis, 1985-1995	USA	to test whether primary care reduces the impact of income inequality on stroke mortality	Primary care was negatively associated with stroke mortality in models including all covariates.
Gulliford et al. 2004	Availability and structure of primary medical care services and population health and health care indicators in England.	England	To evaluate whether measures of the supply and structure of primary medical services are associated with health and health care indicators	Each additional general practitioner per 10,000 population is associated with about a 6 percent decrease in mortality

Starfield 1991	Primary care and health: a cross-national comparison.	11 industrialised countries	To examine the association of primary care with health outcomes through an international comparison	The score for the practice characteristics was highly correlated with the score for the policy characteristics. The countries with low primary care scores as a group had poorer health outcomes, most notably for indicators in early childhood, particularly low birth weight; post neonatal mortality.
Bixby 2004	Assessing the impact of health sector reform in Costa Rica through a quasi-experimental study	Costa Rica	To assess the impact of health sector reform in Costa Rica on that country's child and adult mortality rates and on the people's access to PHC	PHC reform was associated with an overall 8% reduction in deaths among children and with a 2% reduction in deaths among adults, 14% reduction in deaths from communicable diseases a 0% reduction in deaths from socially-determined causes, and a 2% reduction in deaths from NCDs
Jones et al. 2003	How many child deaths can we prevent this year?	Global	To review the state of the evidence for interventions to reduce child mortality for each of the major direct and underlying causes of death in children younger than 5 years	An analysis of preventable deaths in children concluded that in the 42 countries accounting for 90 percent of child deaths worldwide, 63 percent could have been prevented by the full implementation of primary care
Rosser 1996	Approach to diagnosis by primary care clinicians and specialists: is there a difference?	USA	To compare the costs of healthcare between primary care and specialised care	Care for illnesses common in the population, was more expensive if provided by specialists than if provided by generalists, with no difference in outcomes
Starfield&Shi 2002	Policy relevant determinants of health: an international perspective	13 industrialised countries	To compare the strength of PHC system to the costs of health care	The stronger the primary care, the lower the costs. Countries with weak primary care infrastructures have poorer performance on major aspects of health
Castro et al. 2000	Public spending on health care in Africa: do the poor benefit?	7 African countries	To examine whether PHC can reduce socio economic disparities	For primary care services, the ratio of rich to poor in the distribution of government expenditures was notably lower
Starfield et al. 2005	Contribution of Primary Care to Health Systems and Health		To summarise the evidence of the benefits of PHC	

Source: author

## Summarising key themes in the literature on PHC reform – the way to assess PHC reforms

A number of different frameworks have been developed to assess health sector reforms, providing a tool for analysis. Two will be discussed here as examples. Kutzin's framework suggests a three-step approach to evaluating health reform. These three stages are: identification of the key contextual factors driving the reform, description of the reform itself and its objectives, and lastly highlighting the process by which the reform was implemented [60]. Another example of a framework for applied political analysis is known as 'Policy-Maker'. This framework enables a systematic analysis of the policy reform process, analysing both positions of support and opposition taken by key agents and taking into consideration the different interests of the agents [61]. Such frameworks were reviewed and considered in relation to the systematic review that follows (Part C). However, none were found to exactly match the intended objectives of this review study. Instead, we identified key themes from the literature, and through thematic framework analysis developed our own 'framework' to apply in the systematic review process.

From this scoping review, five themes were identified that reflect key 'aims' (targets or intentions) of PHC reform, namely: adequate and equitable access, efficient financing and governance, integration and cooperation of services, patients' choice and quality of care. These themes are based partly on the WHO's key goals for PHC, but also on the reported benefits of the PHC approach, mentioned above (and see Table 2). In addition, the key goals of PHC reform in Nordic countries were taken into consideration when forming these themes. These themes also reflect the key challenges that the Finnish PHC approach and overall health system have faced in recent decades.

Equitable access: Adequate and equitable access to health care services is a core principle of the

PHC approach [1]. As highlighted above, one of the most important benefits of PHC has been improved and more equitable access to health services. As mentioned earlier, access to PHC services has been a real challenge for Finland throughout the existence of PHC, especially related to socio-economic and geographic terms [30, 43]. Therefore, adequate and equitable access is chosen as one theme.

**Efficient financing and governance:** When health policies are formed and implemented, the governance and financing of health services play major roles [1]. As discussed above, both in Finland and in other Nordic countries finance and governance have been under reforms in recent years.

**Integration and cooperation of services:** One of the key goals of a well-functioning PHC system is to provide comprehensive, people-centred health services [1]. One way to increase patient centeredness is to improve health service integration - especially patients with co-morbidities have been benefitting from this approach [62]. 'Integration' as a term refers here to cooperation between different services providers, for example, between primary and secondary care, or between the health sector and the social care sector.

**Patients' choice:** Patient participation is one of the key elements of a strong PHC system [20]. As discussed earlier, In Finland, patient participation has perhaps been the most neglected area of PHC. Freedom of patients to choose their health service provider has traditionally been quite limited in Finland, but the patients' rights have been well promoted. In 1993, the act on the status and rights of patients came into force. Finland was one the first countries in Europe which wanted to improve the patients' legal security [46]. Increasing patients' rights does not automatically refer to increased freedom of choice, but recognition of the rights of patients' results in patients

becoming more active users of health services. Patients' freedom to choose was selected as one of the themes because it is one of the key elements of PHC, but also an area that the Finnish PHC system struggles. Patients' choice has also been a key policy theme in other Nordic countries [24].

Quality of care: Finally, improved quality of care, which is a complex idea, and it can refer to several different aspects. For example, it can be assessed through patient satisfaction [63], or it can also refer to the technologies available for a health system, or practice-guidelines for physicians.

## **Conclusions**

It has been shown that a strong PHC system is important for a well-functioning health system. It is a cost-effective approach to improving the health of the population both in LMICs and HICs. Comprehensive PHC initiatives are associated with lower total health-care costs. A strong PHC system has also been shown to reduce health related socio-economical inequities. Health systems throughout the world are facing new challenges and supported by strong evidence of the benefits of PHC on the population's health, strengthening of the PHC system is the key strategy when coping with these challenges.

Finland is one of the Nordic countries, having an internationally acclaimed health system. Finland developed from an underdeveloped country to an industrialised country over a thirty-year period, and during that time, the country managed to create a well-functioning PHC system [10]. In the 1960s, Finland had some of the worst health outcomes in Europe, but after successful PHC implementation, the health of the nation improved so well, that the WHO nominated Finland as 'pilot country' for PHC [64]. Given the history of Finland and its health system, Finland can be a useful learning and comparison country for both LMICs and HICs. However, like other countries,

the Finnish health system and PHC has faced new challenges. Many of those challenges have emerged after a significant reform was implemented in 1993.

In this scoping review, the role of PHC in health systems strengthening was considered. As described earlier, the review identified five key themes (or 'aims') of PHC reforms from the existing literature. In the next phase of this research, major Finnish PHC reforms will be assessed against these themes. The variation of the aims of PHC policies over time can provide insight into changing priorities. By analysing the aims of reforms and policies it will be easier to obtain a comprehensive understanding of the challenges that a particular health system has faced. Policymakers in Finland and in other countries that face similar problems will benefit from this information when planning new initiatives and reforms to strengthen PHC system in their country. Furthermore, by assessing the aims of the PHC policies and comparing them to outcomes, enablers, and barriers for implementation can be identified.

## References

1. WHO Commission on Social Determinants of Health, World Health Organization. Closing the gap in a generation: health equity through action on the social determinants of health: Commission on Social Determinants of Health final report. World Health Organization; 2008.
2. Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Affairs*. 2013 Apr 1;32(4):686-94.
3. Starfield B. Is primary care essential? *The Lancet*. 1994 Oct 22;344(8930):1129-33.
4. Walley J, Lawn JE, Tinker A, De Francisco A, Chopra M, Rudan I, Bhutta ZA, Black RE, Lancet Alma-Ata Working Group. Primary health care: making Alma-Ata a reality. *The Lancet*. 2008 Sep 19;372(9642):1001-7.
5. Hall J, Taylor R. Health for all beyond 2000: the demise of the Alma-Ata Declaration and primary health care in developing countries. *The Medical Journal of Australia*. 2003 Jan 6;178(1):17-20.

6. Rawaf S, De Maeseneer J, Starfield B. From Alma-Ata to Almaty: a new start for primary health care. *The Lancet*. 2008 Oct 18;372(9647):1365-7.
7. Labonté R, Pooyak S, Baum F, Schaay N, Packer C, Laplante D, Vega-Romero R, Viswanatha V, Barten F, Hurley C, Ali HT. Implementation, effectiveness and political context of comprehensive primary health care: preliminary findings of a global literature review. *Australian Journal of Primary Health*. 2008;14(3):58-67.
8. Engström S, Foldevi M, Borgquist L. Is general practice effective? A systematic literature review. *Scandinavian Journal of Primary Health Care*. 2001 Jan 1;19(2):131-44.
9. Franks P, Fiscella K. Primary care physicians and specialists as personal physicians: health care expenditures and mortality experience. *Journal of Family Practice*. 1998 Aug 1;47(2):105-1
10. Koskinen S, Aromaa A, Huttunen J, Teperi J. Health in Finland. *Kansanterveyslaitos= National Public Health Institute*; 2006.
11. Davis K, Drey N, Gould D. What are scoping studies? A review of the nursing literature. *International Journal of Nursing Studies*. 2009 Oct 31;46(10):1386-400.
12. Armstrong R, Hall BJ, Doyle J, Waters E. 'Scoping the scope' of a cochrane review. *Journal of Public Health*. 2011 Mar 1;33(1):147-50.
13. Wilson MG, Lavis JN, Guta A. Community-based organizations in the health sector: a scoping review. *Health Research Policy and Systems*. 2012 Nov 21;10(1):36.
14. World Health Organization, 2003. Primary health care: 25 years after ALMA-ATA.
15. Bitton A, Ratcliffe HL, Veillard JH, Kress DH, Barkley S, Kimball M, Secci F, Wong E, Basu L, Taylor C, Bayona J. Primary Health Care as a Foundation for Strengthening Health Systems in Low-and Middle-Income Countries. *Journal of General Internal Medicine*. 2017 May 1;32(5):566-71.
16. Kautzky K, Tollman SM. A perspective on Primary Health Care in South Africa: Primary Health Care: in context. *South African Health Review*. 2008 Jan 1;2008(1):17-30.
17. Frenk J. Reinventing primary health care: the need for systems integration. *The Lancet*. 2009 Jul 11;374(9684):170-3.

18. Magnussen J, Vrangbaek K, Saltman R. Nordic Health Care Systems: Recent Reforms And Current Policy Challenges: Recent Reforms and Current Policy Challenges. McGraw-Hill Education (UK); 2009 Sep 1.
19. World Health Organization, Unicef. Primary health care: report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978.
20. WHO | Primary health care [Internet]. Who.int. 2017 [cited 26 June 2017]. Available from: [http://www.who.int/topics/primary\\_health\\_care/en/](http://www.who.int/topics/primary_health_care/en/)
21. Unger JP, De Paepe P, Green A. A code of best practice for disease control programmes to avoid damaging health care services in developing countries. *The International Journal of Health Planning and Management*. 2003 Oct 1;18(S1).
22. Yalnizyan A. Canada's commitment to equality: A gender analysis of the last ten federal budgets (1995-2004). Canadian Feminist Alliance for International Action; 2005.
23. Gulliford, M. C., Jack, R. H., Adams, G., & Ukoumunne, O. C. (2004). Availability and structure of primary medical care services and population health and health care indicators in England. *BMC Health Services Research*, 4(1), 12.
24. Olsen KR, Anell A, Häkkinen U, Iversen T, Ólafsdóttir T, Sutton M. General practice in the Nordic countries. *Nordic Journal of Health Economics*. 2016 Apr 26;4(1):pp-56.
25. Vuorenkoski L, Mladovsky P, Mossialos E. Finland: Health system review. *Health Systems in Transition*. 2008;10(4):1-68.
26. Anell A. The public–private pendulum—patient choice and equity in Sweden. *New England Journal of Medicine*. 2015 Jan 1;372(1):1-4.
27. Fotaki M. Patient choice in healthcare in England and Sweden: From quasi-market and back to market? A comparative analysis of failure in unlearning. *Public Administration*. 2007 Dec 1;85(4):1059-75.
28. Harjula M. Health Citizenship and Access to Health Services: Finland 1900–2000. *Social History of Medicine*. 2016 Apr 6;29(3):573-89.
29. Saarivirta T, Consoli D, Dhondt P. Suomen terveydenhuoltojärjestelmän ja sairaaloiden kehittyminen-vaatimattomista oloista modernin terveydenhuollon eturintamaan. *Kasvatus & Aika*. 2009;3(4):25-41.

30. Teperi J, Porter ME, Vuorenkoski L, Baron JF. The Finnish Health Care System. A Value-Based Perspective. Helsinki, Finland: Sitra. 2009.
31. Mattila Y. Suuria käännekohtia vai tasaista kehitystä? Tutkimus Suomen terveydenhuollon suuntaviivoista.
32. Häkkinen U. The impact of changes in Finland's health care system. *Health economics*. 2005 Sep 1;14(S1).
33. Kokko S. Integrated primary health care: Finnish solutions and experiences. *International Journal of Integrated Care*. 2009 Jun 25;9(2).
34. Puska P. Successful prevention of non-communicable diseases: 25 year experiences with North Karelia Project in Finland. *Public Health Medicine*. 2002;4(1):5-7.
35. Kuntanumerot ja kuntapohjaiset aluejaot | Kuntaliitto [Internet]. *Kunnat.net*. 2017 [cited 2016 Dec 8]; Available from: <http://www.kunnat.net/fi/tietopankit/tilastot/aluejaot/kuntien-lukumaara/Sivut/default.aspx>
36. Terveydenhuolto Suomessa [Internet]. *Julkari.fi*. 2017 [cited 2017 Jan 24]; Available from: [http://www.julkari.fi/bitstream/handle/10024/104557/URN\\_ISBN\\_978-952-00-3389-7.pdf?sequence=1](http://www.julkari.fi/bitstream/handle/10024/104557/URN_ISBN_978-952-00-3389-7.pdf?sequence=1)
37. Constitution Finnish. The Constitution of Finland. Helsinki: Ministry of Justice. 1999 Jun.
38. Mäntyranta T, Kaila M, Mattila J, Risikko P. Serving primary health care: a national action programme for primary care in Finland. *Journal of Management & Marketing in Healthcare*. 2011 Feb 1;4(1):40-6.
39. Erhola M, Jonsson PM, Pekurinen M, Teperi J. Jonottamatta hoitoon: THL:n aloite perusterveydenhuollon vahvistamiseksi: Luonnos 3.10. 2013.
40. World Population Clock: 7.5 Billion People (2017) - Worldometers [Internet]. *Worldometers.info*. 2017 [cited 15 September 2017]. Available from: <http://www.worldometers.info/world-population/>
41. Groenewegen PP, Dourgnon P, Greß S, Jurgutis A, Willems S. Strengthening weak primary care systems: steps towards stronger primary care in selected Western and Eastern European countries. *Health Policy*. 2013 Nov 30;113(1):170-9.

42. Tynkkynen LK, Chydenius M, Saloranta A, Keskimäki I. Expanding choice of primary care in Finland: much debate but little change so far. *Health Policy*. 2016 Mar 31;120(3):227-34.
43. OECD Health Statistics 2015. (2016). *Country Note: How does health spending in Finland Compare?* [online] Available at: <https://www.oecd.org/els/health-systems/Country-Note-FINLAND-OECD-Health-Statistics-2015.pdf> [Accessed 28 Aug. 2016].
44. In-depth reform of the healthcare system in Finland [Internet]. *European Commission*. 2017 [cited 2017 Aug 9]; Available from: <http://ec.europa.eu/social/BlobServlet?docId=15887>
45. Kinnula P, Malmi T, Vauramo E. Miten sote-uudistus toteutetaan? Kaks-Kunnallisan kehittämissäätö. Tutkimusjulkaisu-sarjan julkaisu nro. 2015;91.
46. Junnila M, Hietapakka L, Whellams A. Hallintoalamaisesta aktiiviseksi valitsijaksi: Valinnanvapauden muotoutuminen sote-palveluissa. Raportti: 2016\_011.
47. Brommels M, Aronkylä T, Kananoja A, Lillrank P, Reijula K. Valinnanvapaus ja monikanavarahoituksen yksinkertaistaminen sosiaali- ja terveydenhuollossa: Selvityshenkilöryhmän loppuraportti. 978-952-00-3821-2. 2016 May 31.
48. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998. *Health Services Research*. 2003 Jun 1;38(3):831-65.
49. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives. *Social Science & Medicine*. 2010 Mar 31;70(6):904-11.
50. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *The Milbank Quarterly*. 2005 Sep 1;83(3):457-502.
51. Starfield B, Shi L. Policy relevant determinants of health: an international perspective. *Health Policy*. 2002 Jun 30;60(3):201-18.
52. Rosser WW. Approach to diagnosis by primary care clinicians and specialists: is there a difference? *Journal of Family Practice*. 1996 Feb 1;42(2):139-45.
53. Shi L, Macinko J, Starfield B, Xu J, Politzer R. Primary Care, Income Inequality, and Stroke Mortality in the United States. *Stroke*. 2003 Aug 1;34(8):1958-64.

54. Shi L. Primary care, specialty care, and life chances. *International Journal of Health Services*. 1994 Jul;24(3):431-58.
56. Starfield B. Primary care and health: a cross-national comparison. *Jama*. 1991 Oct 23;266(16):2268-71.
57. Bixby LR. Assessing the impact of health sector reform in Costa Rica through a quasi-experimental study. *Revista Panamericana de Salud Pública*. 2004 Feb;15(2):94-103.
57. Jones, G., Steketee, R. W., Black, R. E., Bhutta, Z. A., Morris, S. S., & Bellagio Child Survival Study Group. (2003). How many child deaths can we prevent this year? *The Lancet*, 362(9377), 65-71.
58. Castro F, Dayton J, Demery L, Mehra K. Public Spending on Health Care in Africa: do the poor benefit?'. *Bulletin of the World Health Organization*. Canada. 2000.
60. Kutzin J. Health financing reform: a framework for evaluation. Revised working document. Geneva: World Health Organisation. 1995.
61. Glassman A, Reich MR, Laserson K, Rojas F. Political analysis of health reform in the Dominican Republic. *Health Policy and Planning*. 1999 Jan 1;14(2):115-26.
62. Tinetti ME, Fried TR, Boyd CM. Designing health care for the most common chronic condition—multimorbidity. *Jama*. 2012 Jun 20;307(23):2493-4.
63. Baltussen R, Ye Y. Quality of care of modern health services as perceived by users and non-users in Burkina Faso. *International Journal for Quality in Health Care*. 2005 Oct 18;18(1):30-4.
64. Terveyskeskukset Tienhaarassa [Internet]. Julkari.fi. 2017 [cited 14 September 2017]. Available from: <http://www.julkari.fi/bitstream/handle/10024/114586/Terveyskeskukset%20tienhaarassa.pdf?sequence=1>

**Part C: Journal Manuscript**

**The aims of the primary health care reforms in Finland between 1993-2015: a systematic review**

Targeted Journal: Scandinavian Journal of Public Health

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**Abstract**

*Aims:* Empirical research has proven that a strong primary health care (PHC) system produces better health outcomes and therefore, PHC is an important part of a country's health system. This systematic review focuses on the intended aims and targets of PHC reforms conducted in Finland from 1993 onwards. It describes the challenges that the Finnish PHC system has faced, comparing the objectives and the problem with other similar countries, providing lessons from the Finnish experiences for other countries. *Methods:* A Campbell-styled systematic review was conducted. Databases including Ebsco, Pubmed/MEDLINE, Scopus, Google Scholar and a Finnish health science database Medic were searched. The keywords and MeSH Terms for the review included terms relating to 'health systems', 'primary care', 'reform', and 'Finland' (see Appendix B). English terms were used when using Medline, Scopus and EBSCO, and both Finnish and English terms were used when using Medic. Reference lists of included papers were also searched. Data was extracted and analysed by utilising thematic analysis. *Results:* 13 relevant papers were found that dealt with PHC policies or reforms implemented in Finland between 1993 and 2015. The aims of the reforms were classified under five themes, which were developed based on a prior scoping review and then tested during data extraction. The themes were: efficient governance and financing, adequate and equitable access, improved quality, increased patient choice and cooperation and integration of

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<sup>1</sup>For the purposes of this thesis, this student is the sole and first author of this article

services. **Conclusions:** A number of policies and reforms have been implemented which have directly or indirectly aimed to strengthen the Finnish PHC system. Some policies have intended to strengthen PHC overall while others have focused on only one aspect or challenge. There has recently been a strong tendency to re-centralise health services, and the importance of patient choice and service integration have become increasingly important. Integration and cooperation of different service providers is one of the newest solutions when finding ways to strengthen weak PHC systems. This study shows that in policy success context matters. PHC strengthening needs to be high on the political agenda, and enough resources are needed. This study showed that there have been few durable or sustainable solutions, and further research is needed especially from the overall health systems perspective.

**Keywords:** health system, primary health care, primary care, primary service, reform, Finland, Nordic, OECD

## **Introduction**

Strong primary health care (PHC) supports the functioning of a health system, and has an important role in dealing with the challenges that low-and-middle-income (LMIC) and high-income countries (HIC) face, such as chronic diseases, inequities in health and rising costs of health care [1, 2]. For these reasons, strengthening PHC systems has been on the policy agenda in most countries for decades.

It has been shown that robust PHC systems result in improved health outcomes [1, 3]. In studies conducted in both LMICs and HICs, a strong PHC system has been associated with, for example, lower maternal and child mortality increased life expectancy, and decreased non-communicable disease mortality [3, 4, 5]. A well-functioning PHC system also contributes to improved equity in

accessing health services and improved health of lower socio-economical groups [6]. In addition, in order to reach today's global health targets including Universal Health Coverage (UHC), integrated people-centred health services (IPCHS), and the health related Sustainable Development Goals (SDGs), a strong PHC system is needed [7].

A robust PHC system is characterised by easy access, comprehensive services coordinated through all health care levels and continuous patient- caregiver relationships [6]. However, the PHC structure and how the PHC services are delivered, depends on the context – such as the historical background of the country, the health care problems, the functioning of the health system, and other country characteristics [6].

This paper reports on a systematic review study that examines PHC reform in Finland, a country that is reported to have a relatively well-functioning tax-funded public health care system [8]. Finland developed from an under-developed country to an industrialised country over a thirty-year period, and during that time, the country managed to create a relatively well-functioning PHC system [8]. In the 1960s Finland was one of the countries with the poorest health outcomes in Europe, but quite soon after PHC implementation in 1972, the health of the nation improved so quickly, that the World Health Organisation nominated Finland as a 'pilot country' [9].

The findings of this systematic review are context specific, so the generalisability of them may be limited. However, the results highlight the importance of identification of context-specific challenges that must be taken into account when implementing reforms locally. Given the history of Finland and its health system, Finland can be used as a useful learning and comparison country for both LMICs and HICs. However, the promising development began to slow down at the end of 21st century, and the performance of the health system has decreased in Finland more than in the

countries of the Organisation for Economic Co-operation and Development (OECD) on average [10]. The development has slowed down especially in PHC, since the focus has been more on the development of specialised healthcare and occupational healthcare [9]. This subsequent change can also be a useful learning experience.

### **Background to the Finnish health system and PHC**

Finland is a high-income country located in Northern Europe. It gained its independence from Russia in 1917 and is now one of five Nordic countries, and has been a member of European Union since 1995. Finland is a sparsely populated country, and the majority of the population lives in towns with approximately one quarter of the population living in rural areas [11]. Finland started to construct its health system in the 1930s [12], during which time main focus was on curative hospital-level services, and not much attention was paid to preventive services [13]. The first serious steps towards universal health coverage (UHC) were taken after World War II (WW II) when women and children were given free access to preventive health services [12]. This caused almost a nine-year increase in female life expectancy in the following decade [14]. However, the hospital system could not respond to the increasing burden of non-communicable diseases, and by the 1960s it was observed that the preventive health care services were badly needed [15].

The 'national sickness insurance scheme' was established in 1963 to strengthen outpatient care, it covered all permanent residents of Finland, and no compensation was paid for hospital care [8]. However, the sickness insurance did not solve the problems regarding outpatient care, and inequities in accessing health services remained [14]. During that time (late 1960s), Finland had one of the worst health outcomes in terms of cardiovascular diseases, and one of the lowest health worker densities in Europe [9].

The imbalance between specialised care and preventive care was the starting point for the development of preventive health services in Finland, and there was also a strong political will to develop the PHC sector which was supported by steady economic growth [15]. The Public Health Act of 1972 was the birth of the modern Finnish PHC system. According to the Act, each municipality was obligated to set up a health care centre for its population. Health care centres focused on preventive services, but they also offered small surgery services, maternity and childcare, dental care and long-term inpatient care [8].

In 1993, the Finnish health system underwent a profound reform. The state subsidy system was reformed, so that the payments allocated to municipalities were paid based on the estimation of the needs of the population [16]. Also, the earmarking fund to health care services dropped. Municipalities were given more responsibility on how they wanted to organise health care services [8]. All these reforms were carried out during the deep economic recession, which also had its effects in the health care sector; for example, there was physician unemployment for the first time in the history [17]. The year 1993 marked the beginning of a new era for the Finnish health system.

Today, the Finnish health care system offers a wide range of quality services to its population, and the coverage is almost universal [8]. The Finnish health system has some similar features to the health systems in other Nordic countries, but it differs from them for example in terms of parallel funding [13]. Health services are provided through three different provision systems: the municipal health care, occupational health care and private health care [18]. The funding for these services flows down through two main sources: municipal funding and National Health Insurance [15]. In addition to public funding, households pay out-of-pocket payments for using health services, and the employers must pay compulsory insurance fees [18]. After the reform of 1993, municipalities have carried the main responsibility for organising PHC services in Finland, and they have a lot of

autonomy in terms of organising health care services [16].

## Method

A Campbell-style systematic review study was conducted to assess the aims of PHC reforms implemented in Finland between 1993-2015 [19]. Figure 1 below presents a summary of the systematic search process. A systematic review methodology was chosen because the systematic method can limit bias, and allows the quality of included studies to be systematically assessed [20]. The systematic review was preceded by an initial scoping review in order to deepen the understanding of the role and development of PHC in Finland – from which themes for data analysis and extraction were developed (see Part B).

This review as health policy and system research (HPSR), since it examines challenges in the health system; and what kind of solutions have been created to tackle those challenges. Furthermore, it aims to contribute to health systems strengthening. HPSR is an emerging research field seeking to understand and improve how health services are organised in societies [21]. HPSR is also focused on how different actors interact in a complex policy implementation processes and how health policy implementations contribute to outcomes [21].

The systematic search included both Finnish and English literature. As is expected in a Campbell-style review, both peer reviewed and grey literature were included into the study. The geographical area was restricted to Finland. Databases that were utilised in this review included: Pubmed/Medline, Scopus, EBSCO, Medic and Google Scholar.<sup>2</sup> Medic is a Finnish health science database, which includes scientific articles, PhDs, and theses, reports from different research

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<sup>2</sup> The Google Scholar search was ranked according to relevance to search terms and restricted to the first 50 items.

institutes and books, published in Finland. The keywords and MeSH Terms for the review included terms such as "Finland", "finnish", "terveydenhuolto", "sote", "uudistus". "health care reform", "health service reform". English terms were used when using Medline, Scopus, and EBSCO, and both Finnish and English terms when used when using Medic. Search strategy, search terms and variations for each database can be found in Appendix B. The papers identified were transferred to a reference manager, Mendeley. The reference list of all the included papers were scanned (a snow-balling search approach), in order to capture all potentially relevant additional resources, until the systematic search was refined and until literature saturation point was reached.

The inclusion criteria limited studies from 1993 to 2017, and the timeline for policy implementations was from 1993 to 2015. Even though the history of the Finnish PHC begins from the 1970s, this review was more focused on more recent major reforms implemented at a national level. As noted, in 1993, the Finnish PHC underwent some profound changes, which makes it a useful 'watershed' moment for review limitation. This review took into account national level legislations and policies; guidelines and recommendations. It did not include smaller local-level reforms or pilot projects. The studies considering the upcoming health care reforms (for example "SOTE-uudistus") were excluded. After some consideration, this review did not apply a pre-existing analysis framework (such as 'Policy-Maker'), as it was deemed too restricting. In order to improve the quality of this review the CASP (Critical Appraisal Skills Program) was applied as a critical appraisal tool in data analysis phase (see Appendix C).

In this study, the aim of the thematic analysis was to classify the data in order to answer the research question. Themes and codes for thematic coding process were developed according to the results of the scoping review. Identified papers went through the coding process, in which

codes generated during the scoping review phase were used as presented in the literature. After that, the codes were grouped based on the themes identified earlier.

Since this study utilised only published and publicly available literature there were no ethical considerations or confidentiality procedures required.

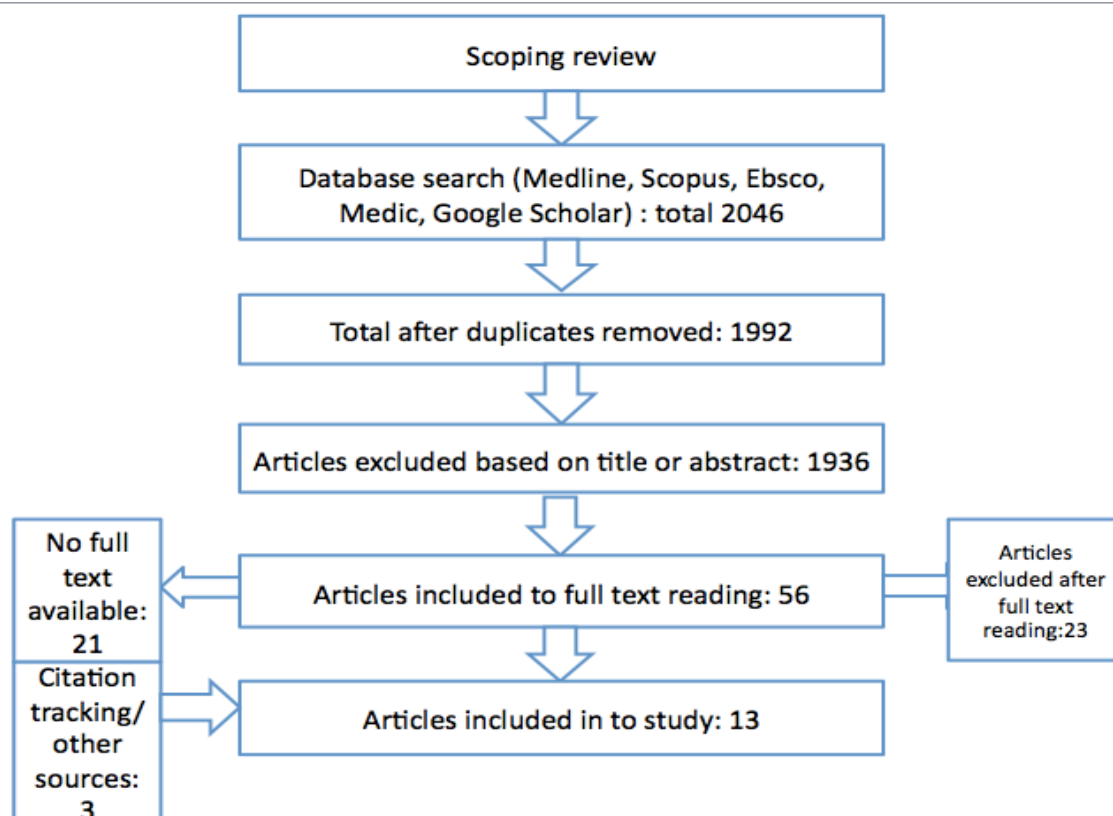


Figure 1. Systematic review process

## Results

The initial database search identified 2046 documents in total across all databases. After duplicates were removed, the number of documents was 1992. These papers were screened by assessment of the title and abstract – after which 56 papers were scrutinised in detail. Of these, 44 of them were rejected (mainly because of lack of relevance, but some did not have full text available, so

that was an added consideration to relevance factors) since there was no full text available and 23 were excluded because they did not answer the research question. In total, 10 papers were found to meet inclusion criteria and were included in the analysis process. In addition, 3 further papers were located using citation tracking (snow-balling). In total, 13 papers met the final inclusion criteria for the study (see Figure 1).

It was noticed again, that in some papers that were written from 2010 to 2017, the upcoming health care reform was considered (being prepared by the government at the moment). Because the reform has not yet been implemented and there are still a lot of details in it which are unclear, the papers considering the upcoming reform were excluded. Some papers analysed both policies or reforms which were done before 1993 and after 1993, so from those papers, only the sections analysing reforms carried out after 1993 were taken into consideration. Many policies had some other agendas, for example strengthening specialised care, besides strengthening the PHC, but in this review, only the aims targeting or affecting PHC were taken into consideration. However, sometimes it was difficult to be exact, as number of policies had various aims, not just focused on PHC. Papers, which discussed reforms or policies considering only some parts of PHC, for example, dental care or home care, were also excluded.

The research question for this study was: *what kind of problems has the Finnish PHC system faced and what kind of initiatives have the Finnish government taken in order to strengthen PHC?* More specifically, what were the aims of those reforms. Thematic analysis of the data collected was used in order to answer the research question. As noted above, preliminary codes were drafted in the scoping review process which preceded the systematic review. These codes were clustered under themes, which were: adequate and equitable access, efficient financing and governance, improved quality, freedom of choice for patients, and cooperation and integration of services. However,

during the analysis, some new codes emerged. For example, under the theme “efficient financing and governance” new codes were added such as “re-centralisation” and “re-structuring”. This was because before 1993 the tendency had been to decentralise decision-making, and attempts for centralisation occurred later. The coding template can be found in Appendix H.

Policy	Year	Aim
Guidelines for quality assurance	1995; 1999	To improve the quality of provided care (patient orientation, knowledge strengthening)
Changes in State subsidies	1997	Subsidies from State to municipalities started to be paid based on a number of inhabitants, age structure and morbidity
Health for All 2015	2001	Public health programme to decrease the inequity of health outcomes between socio economical groups; improved health outcomes in general, patient satisfaction
Legal Guarantees for Access to Care	2005	To improve access by setting national time limits
Nurse-GP -team	Early 2000s	To improve access to health centres
Outsourcing of PHC services	Mid 2000s	To decrease the shortage of staff, to gain savings, to improve access
The Act on Health and Social Service Vouchers	2005	To improve patients' opportunities to choose private providers instead of the services provided by municipal health centres
Restructuring municipalities launched	2005	Increasing efficiency in municipal services and structures. In addition to the population base requirement, also aims at creating and strengthening regional co-operation over services and at promoting co-operation between social and health services.
Decision made on national electronic patient record and e-prescription made	2007	To improve the quality of care
The National Development plan for Social Welfare and Health (KASTE)	2008	To address social and geographical inequities
National Action Programme	2008	Mission clarification to PHC (health outcomes), patient to the centre, recruiting personnel
The Health Care Act	2011	To allow residents to change their primary care provider within or between municipalities and to choose the hospital at which they wanted to be treated; to increase cooperation between specialised level and PHC

Table 1. A Summary of included PHC related policies or reforms between 1993-2015.

### Aims for PHC reform in Finland

As noted already, the scoping literature review (see part B) identified five key 'aims' of PHC reform from the global literature. Themes are adequate and equitable access, efficient financing and governance, improved quality, freedom of choice for patients, and cooperation and integration of

services. In next section, we apply these themes to the Finnish PHC reforms.

### *Adequate and equitable access*

The most common aim for reforms was solving access problems, and four policies were identified in this category. As previously mentioned, one of the key components of a well-functioning PHC system is easy to access [6]. In Finland, socio-economic and geographical inequities in accessing PHC services has been increasing since the 2000s [10]. Therefore, several different levels of reforms have been implemented to improve equity.

In 2005, the government restricted the municipal autonomy and implemented The Legal Guarantees for Access to Care policy. The policy set the national maximum waiting times for treatment in PHC and specialised care in order to improve access to health services and to offset, in particular, regional disparities in access to health service [22]. According to the Legal Guarantees of Access to Care, there must be immediate access to a health centre by telephone. A healthcare professional (for example a nurse or a physician) assesses the need for treatment on the phone. If the assessment requires a visit to the health centre, the appointment must be received within three working days of contact [22]. Specialised medical care must be provided within six months. Health centres and hospitals which do not meet the criteria are penalised. The ultimate aim of Legal access to care was to address inequities in access between municipalities [22].

One key issue, which has created access problems for PHC since the early 1990s, was a shortage of health workers, especially physicians. Waiting times for non-urgent appointments began to increase in the 1990s [23]. Rural municipalities particularly suffered from a lack of physicians. In the mid-2000s, outsourcing became a popular phenomenon in solving access problems [24]. The policy, which enabled municipalities to buy health services from the private sector was

implemented soon after the subsidy reform of 1993. However, it was not before the early 2000s when the outsourcing of PHC services was widely implemented [25]. Many remote municipalities decided to outsource part of their PHC service, such as emergency services [24]. Outsourcing was done by hiring doctors through a private company [25]. Hired doctors brought many problems to the system: they were more expensive than permanent GPs, and the continuity of patient care suffered when patients were treated by a doctor who only worked in a health centre for a day or two [25, 26].

For some municipalities, to outsource their PHC services was an objection to the government's push towards centralisation [24]. Rather than uniting together with the neighbouring municipality, these municipalities contracted out their PHC services to a private company [24]. Some municipalities managed to improve the cost-effectiveness of their health services by using the private company as their service provider, but most of them did not [24].

In the mid-1980s the solution for access problems was a reform called the “personal doctor system” [22]. The reform worked in some municipalities; waiting times shortened and patients were satisfied [27]. Regardless of the success, the reform was not implemented widely because many municipalities suffered from a lack of doctors. However, the results of the personal doctor system led to a new reform, a reform called 'personal responsibility', which was implemented in the early 2000s [27]. In personal responsibility, a doctor and a nurse form a team, which is responsible for a population living in the specific area. This reform aimed to solve access problems in the same way than the personal doctor system did. However, this reform was not implemented in all municipalities [22].

The National Development Plan (KASTE) is a governmental level health project, which is reinitiated

every four years. The project has several aims regarding the populations health and social welfare. One of the most important aims of the project has been to improve the access to health services in all parts of the country [26]. KASTE has focused especially on aspects of access; social and geographical inequity.

### *Efficient financing and governance*

Finance and governance are key parts of a well-functioning health system. An effective health financing system raises funds for health services and ensures that people can use services without a fear of financial burden [28]. Efficient governance is responsible for organising health services and ensuring that strategic policy frameworks exist [28].

The financing system of the Finnish health care was profoundly changed in the 1993 reform, and after that, there have been no fundamental changes. In 1997, the system of calculating the subsidies changed slightly; subsidies from State to municipalities were paid based on a number of inhabitants, age structure and morbidity, but this did not change the system as significantly as the reform of 1993 [22].

As explained earlier, the Finnish health care system has always been very decentralised, and the municipalities have had the authority to organise health care services [29]. Decentralisation was at its peak in the mid-1990s when there were 275 independent health centres in the country [29]. However, the high level of decentralisation created problems, especially in economic terms. Many small municipalities had a deficit budget in 2006, and they struggled to provide health services to their citizens [26].

After the 2000s the tendency of reforms has been to re-centralise services. The government has

established several policies, aimed at either organisational unification between municipalities. The unions between the municipalities have been voluntary, but the government has encouraged it by giving united municipalities economic incentives [26].

The policies aimed at of re-centralisation of health services have had many intended objectives. The main aim of these structural reforms has been to improve efficiency especially in terms of financing, and to increase the general efficiency of municipal level health services such as PHC [30]. Especially small municipalities struggled to provide adequate health services for the catchment populations, and restructuring them would have made them economically stronger [26]. The fundamental aim of these efforts has been improving the access to municipal level health care services.

In 2008, the National Action Programme was launched and it aimed to strengthen the PHC system in many ways. The previous national level programme, the Legal Guarantees of Access to care focused on PHC, but it was more widely implemented eventually to consider specialised level services [31]. The National Action Programme had several different aims including how to improve the performance of PHC. Emphasis was on solving access problems. The National Action Programme focused on the waiting times for telephone contact and emphasised that the patients should be able to have first contact with a health centre without delay [31]. The programme wanted also that both service providers and users would realise the maximum waiting times for access to care better. The National Action Programme aimed to improve access also by solving recruitment challenges [31]. The Programme included the introduction of nurse prescribing, improvements in working conditions and professional education [31]. All this was aimed at improving the operation of health centres suffering from the lack of physicians.

*Freedom of choice for patients*

Active community participation and patient empowerment have been seen as the key structures of PHC [32]. Active participation of patients has been linked with better health outcomes, and more appropriate and preferable health services [33]. Except the Right of the Patients' Act in 1993, patients have had quite a passive status in the Finnish health system. Patient rights have been promoted, but prior to 2011, the patients were unable to choose their service provider, and they had to use the services provided by the nearest health centre [31].

In 2004, the government established the Act on Health and Social Service Vouchers [24]. The Act was first introduced to cover social services, but it was expanded to cover also health services in 2009 [34]. The city of Helsinki began to use Service Vouchers in spring 2010 [34].

This provided the opportunity for municipalities to use service vouchers in health service delivery [23]. By using service vouchers, patients could buy health services from the private sector at a cheaper price, if they did not want to queue at public facilities. Services bought by using Service Vouchers were not free, and patients needed to pay a deductible fee. The objective of the act was to increase the patients' opportunities to choose private health care providers instead of municipal PHC services [24]. The Act can be seen as a step towards improved patient choice, since before the Act patients had to either queue or pay the whole fee if they wanted to use the private sector.

Patients' freedom to choose was furthermore improved in 2011. Prior to 2011, people were obligated to use the health centre and hospital in the area they lived [31]. The Health Care Act of 2011 promoted patients' right to choose: according to the Act, patients were able to choose the health centre they wanted to use within the municipality of residence [24]. In 2014 freedom of choice was further extended, and patients were allowed to choose the PHC service provider within

the whole country [24]. However, In Finland, there are no incentives directly linked to freedom of choice for service providers or staff in Finland [35].

### *Cooperation and integration of services*

One of the key components of a strong PHC is involvement of other sectors and cooperation with other service providers such as specialised care and social services [32]. Health service integration is a broad term and has many implications [32]. In this context, the term integration refers to the collaboration of different providers who provide services in the same geographic area. Service integration aims to increase patient orientation, and patients with chronic conditions especially benefit from this approach [36].

The integration of health services has been quite advanced in Finland, as the services provided by public PHC are extensive compared to many other countries [35]. However, cooperation and communication between PHC and especially specialised health care have been weak. Prior to the Health Care Act 2011, PHC and specialised care were guided by different legislations [26]. The development of PHC, social services, and specialised health services was also separate. The Health Care Act was targeted to tackle these problems, and one of the aims of the bill was to improve cooperation between PHC services and social services, especially regarding services provided to risk populations [31].

The Health Care Act of 2011 was one of the first policies to have strong integration goals. It merged together with the PHC Act from 1972 and the Act on Specialised Medical Care from 1989 into a one comprehensive Health Care Act [18]. By merging both PHC and specialised services under the same legislation, the cooperation between these two service providers was intended to increase. In this way, the health system could work more effectively and improve its quality [26].

Governments effort to merge small municipalities have also had objectives regarding improved cooperation [22]. In these efforts, the increased cooperation was intended to happen at the municipal level; for example, two municipalities could share PHC services. Small neighbour municipalities could create a stronger organisational and financial basis for providing PHC services [22].

### *Improved quality*

Improved quality of health care services can be seen as a core target for all health care policies. The quality of health services can include many aspects: medical quality of care, cultural acceptability; a patient safety and satisfaction [37].

In 1995 and 1999, the Ministry of Social Affairs and Health published guidelines on quality assurance in health and social welfare [27]. The guidelines were made by the Finnish Medical Society Duodecim and various medical specialists [22]. The goals of these guidelines were to promote health care quality in health workers daily work [27]. The guidelines emphasised the use and strengthening of knowledge as a ground of quality medical work, and they promoted patient-orientation in service provision [27]. Later the guidelines were easily accessed for physicians through the Internet, which helped to provide to deliver quality care in health centres.

Health 2015 was a public health policy launched by the Finnish government in 2001 [17]. The policy set the guidelines for public health policy for decision-makers and for PHC for the next 15 years. The policy focused on health promotion instead of health system development [15]. The policy built on the Health for All policy of the WHO, and it had various public health goals related mainly to improving the different health outcomes of the population [38].

Electronic patient files were implemented in Finland from the early 2000s [15]. Municipalities implemented electronic patient reports at different times. Electronic patient reports have improved the quality of care, but the problem has been that different municipalities have different programmes in place, and the programmes do not communicate with each other. Also, a hospital within the same municipality may have a different system in use than the health centre. The decision to implement integrated electronic patient systems was made in 2007 to improve the quality of care [22]. Unfortunately, it has not been successful in establishing a unified system, even though the decision was made ten years ago.

### **Lessons to share outside of Finland**

Although empirical research has demonstrated the effectiveness of PHC, many countries have failed to implement a well-functioning PHC system. The most frequently referred to countries are LMICs, but it is noticeable that many HICs also struggle to provide PHC services to their populations [39]. Both HICs and LMICs are building their PHC systems with the same aims: to provide better health care for the whole population, ultimately improving health outcomes at lower costs [3]. When seeking solutions to PHC strengthening, countries need information about the performance of their health system, and what are the barriers and enablers for these potential initiatives [7]. Despite contextual differences between HICs and LMICs, there are important lessons to learn from the experiences of the implementation of PHC reforms in Finland. An assessment of the issues acting as barriers and enablers for policy success in the case of Finland, are useful to share with other countries seeking similar reforms. However, when sharing lessons between countries, the recognition of the context is crucial.

As found by this review, since the major reform in 1993, there has not been another large health

care reform in Finland subsequently. However, there have been a series of smaller policy changes and adaptations. Some of these reforms have intended to affect PHC only, while others also seek to strengthen specialised care or social services. A number of these reforms addressed issues of access in different ways, for example, by outsourcing PHC services, setting maximum waiting times or increasing centralisation through unification of municipalities [23, 26]. Only a few policies addressed issues regarding improved technological quality of care.

Another interesting trend has been the growing importance of patients' choice. As explained earlier, in Finland, patients held the very limited power to choose their health services [31]. Patients' rights have been supported, but otherwise, patients have not had much power and they have been seen as passive consumers rather than active participants. The Health Care Act of 2011 particularly promoted the patients the freedom of choice [31]. Integration of health services particularly among chronically ill patients has also become one of the most important trends in PHC reforms [40].

This examination of the aims of the policies and reforms show that Finland has suffered from the same problems year after year. For example, inequities in accessing PHC services have remained a challenge, even though various policies have been implemented to tackle this problem – suggesting that resolution was not found, and that solutions, which have been made, have not been sustainable [24, 31].

PHC implementation require complex innovations, and usually involves a lot of change in different sectors [41]. When implementing such a complex change, contextual issues matter. Therefore, there is no solution which will be appropriate for every country, and the socioeconomic and political realities of the country needs to be taken into account when forming policies and reforms.

However, when the reforms are analysed systematically, important policy lessons can emerge from experiences of introducing PHC reforms in various contexts.

Finland is a country with a population of only 5.5 million. The low population level of the country may have acted as an enabler to the implementation of health care policies. It is easier to roll out PHC reforms in a country with a population of approximately 5 million. High population countries, especially if they have a challenging age-structure, might face other challenges. Countries with high-populations might need to consider different strategies when implementing PHC reforms.

In addition, the similarity with other Nordic countries may have facilitated in the process of policy formulation as the Finnish health policies shared similar features with policies in other Nordic countries [42]. Finland has been particularly inspired by changes in Sweden in the 2000s, especially in terms of patient choice, which has been an important policy trend also in some other European countries, for example, in England and the Netherlands [43]. Over the last few years, other countries have also increased the level of competition between healthcare providers. These countries have aimed to enhance of quality, efficiency, equality and customer orientation of services [43].

The studies included in this review indicate that the recent series of PHC reforms and interventions since 1993 have not had the same level of success to those in the 1970s, when Finland was hailed as a 'pilot country'. In the 1970s, when PHC was enrolled in Finland, it was a great nationwide effort and an internationally acclaimed success story [9]. Similar rapid evolvement of the health sector has not been seen subsequently. When PHC was established in Finland, the political climate was favourable for change. The policy-makers were an enthusiastic group of public health pioneers and young doctors [29], and PHC was the top priority on the Finnish political agenda with a strong

political will to develop PHC [15]. After 1993, there has not been a similar window of opportunity or enthusiasm for PHC strengthening in Finland. Emphasis has been on the development of occupational health services and specialised services at the expense of PHC [15].

Unlike in the 1970s, PHC has not been a core value for the society, and there has not been a similar level of advocacy for PHC strengthening in Finland [8]. From these experiences we can learn, that a favourable political climate is vital for policy success. PHC strengthening needs to be one of the top priorities on the country's political agenda. In addition to the favorable political climate, the urgency of change may affect the success of policy implementation. In the 1970s, public health in Finland was one of the worst in Europe [8], and therefore changes were needed quickly. There has not been similar no overriding need for change in health and public health during the recent decades. However, at the moment, the increased health care spending has brought PHC strengthening back into political discussion [44]. Therefore, there may be a more favourable context for PHC reform coming up.

In order for the health system to function well, all of its components – leadership and governance, service delivery, health workers, medicines and technology, information and financing - must be in balance and work together [28]. This is supported by the experience of Finland. It has been demonstrated that if complex innovation is implemented, but some parts of the system are not functioning well, then the policy may have unintended consequences. Weaknesses in the health system can result in barriers to policy implementation [43].

As a high-income country, Finland has been able to provide high-technology PHC services [8]. A strong health system in terms of technology, medicines, and finance offers a great basis for policy implementations, compared to for example LMICs, which might lack for example electronic patient

files and laboratory services. Political stability and appreciation of health care in Finland, also assists implementation. A well-resourced and balanced health system enables system level changes [28], and it can be easier to implement reforms within a system with enough resources available. However, some HICs – including Finland - with high-technology resources have focused more on the development of specialised services, and development of PHC has been neglected [39]. In Finland, the division between PHC and specialised care increased in the late 1990s, because more resources was given to specialised level than PHC system [40].

In Finland, specialised care has benefitted from larger number of health workers than PHC [39]. Human resources are one of the most important components of a well-functioning health system [28]. In Finland, some PHC implementations were hindered because of a lack of health workers, especially physicians, such as those seeking to address access problems. In addition, the workload of PHC services increased, when specialised services transferred tasks to PHC [31]. Implementing changes in under staffed units is challenging. It was only in 2008 that changes were initiated that were intended to affect the resource shortage; for example, nurse prescribing was introduced, and policy makers focused on making health centres attractive jobs for doctors [31], but they have not had the intended success. The Finnish experience demonstrates that if adequate human resources are not available, then it is challenging to implement policies which are aimed to improved access. This highlights that the entire system and all of its components need to be considered when designing and implementing policies.

Decentralisation has been a core element of PHC policies throughout the World, aiming to align services to the local setting. In Finland, decentralisation increased further after 1993, when more decision-making power was given to the municipalities [16]. The responsibility for organising PHC services spread to hundreds of decision-makers [16]. Such a high-degree of decentralisation can be

a strength for PHC in ensuring services are context specific according to size and population structure. In a sparsely populated country, decentralisation enables health services to be located close to the population. Centralisation in service organisation – runs the risk that services are mainly located in big cities.

However, it can also create significant problems in the policy implementation process. As seen from the results, a high-degree of decentralisation can result in low commitment to policies, different policy interests and different implementation practices between municipalities. It can also increase geographic inequities further, since the diversity of local and regional authorities make it difficult to create uniform practices. In a decentralised system, it is challenging for PHC to develop as a coherent sector, resulting in wide variation in the services available to patients and therefore not addressing the fundamental issue of equity. For many countries, decentralisation is a goal and key factor when tailoring local-preferred services. These countries can learn from the Finnish PHC experience that the problems extreme decentralisation can create in the system.

One barrier to implementing re-structured policy was that municipalities did not share the same values<sup>3</sup>. As discussed above, the municipalities have decision-making power in terms of PHC organisation [14], and had the authority whether to implement some policies or not. For example, the government recommendations of unification of small municipalities did not have much success [23], and even raised so much opposition in some municipalities that they preferred to outsource PHC services to the private sector rather than merging with another municipality [23]. The main reason for this resistance was that municipalities had traditionally been very autonomous in decision-making<sub>z</sub> and organising services for the population, and unification with another municipality would have decreased their decision-making power [26]. However, some

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<sup>3</sup> Meaning a top priority, high interest

municipalities managed to merge successfully, partly because of economic incentives given by the state [26]. Mandatory policies, such as maximum waiting times, succeeded much better. This experience shows us that especially in highly decentralised health systems, all actors must share the same vision and be accountable for policy success. These experiences of 'over-decentralisation' could be perhaps avoided if decision-making units had shared standards or guidelines.

During the last five years, the interest in increased patient participation has increased in Finland. Finland has been inspired by some other European countries, which have a high degree of patient choice, such as Sweden and England [45]. However, in Finland, there are no incentives directly linked to freedom of choice for service providers or staff [35]. In addition, private service provision is a competitive activity of the municipalities, where the municipality determines what kind of service production is desired and where it is located [35]. It is, therefore, likely that the impact of the current system of freedom of choice in Finland on the quality of services will be less than expected. When the patient choice is tied to economic incentives, it can increase the competition between service providers and through that, improve efficiency and finally, save money, as has been demonstrated in other countries [35].

Patient participation has also been one of the highest priorities for health systems strengthening in LMICs [46]. Studies have shown, instead of being passive consumers, more active role of patients has produced preferable health services, and contributed to improved health outcomes [47]. Considering this, HICs like Finland could also take into account this aspect when forming the patient's freedom of choice reforms. Patients are an underutilised resource in service planning, and like LMICs, active patient participation in health service planning could produce more patient-friendly services.

As stated before, the key goals of PHC are the same in LMICs as in HICs. However, LMICs have had a history of selective, disease-focused health care – largely driven by donor priorities [48]. Among LMICs, vertical health programmes were popular and the goals of Alma Ata were neglected until the late 2000s. The call for PHC strengthening has been stronger among LMICs and global focus has been on them [49]. Therefore, LMICs have had more system-wide focus on developing PHC services than some HICs. As can be seen from the results, Finnish PHC strengthening has been quite narrow, and the focus has been on one problem at the time. Finland, as well as other HICs, would surely benefit from a more comprehensive approach to health system implementation, policy development and research.

The above experiences drawn from the experiences of the other countries highlight that many reforms to the PHC system in Finland have been too narrow. No major system-wide reform has been made since 1993. A series of separate initiatives have been implemented, and most of these reforms have focused on single issues rather than the whole system. It seems that for policy-makers, the aim of the reform has become the most important thing, but there is no reflection on what to look at when it comes to doing so. PHC has been blamed for poor access, and several reforms have been made to address this issue but no resources have been added. As a result, some of these implementations have not been successful. Based on the results, it seems that the trend has been to change one aspect without considering the whole health system. Ignoring other problems in the system has been an obstacle to the success of these reforms.

## **Conclusions**

We have argued in this paper that Finland managed to create a strong PHC system in the 1970s. However, the performance of the PHC system started to decrease especially after the 1990s. No major PHC reform has been implemented since 1993, but a number of small changes have been

introduced to try to improve the PHC system. This review contributes to existing literature by systematically presenting some of the enablers and barriers to these minor reforms to the PHC system since 1993. Important policy lessons have emerged which can be shared with other countries introducing PHC reforms.

This review shows that for successful implementation of policy, it is important that all decision makers and policy actors share similar values, interests and goals. When there are many decision-makers with different interests – for example, lots of municipalities which vary from each other in terms of health-needs and requirements - the result is not uniform. If there are many stakeholders who have decision-making authority on the design or implementation, it is vital to ensure that they become committed to the change [50]. This is an important lesson for other countries currently going through transition and seeking to implement PHC reforms, especially for those countries who are planning to increase decentralisation as Finland in 1993.

This review also indicated that a favourable political climate facilitates the success of policy changes and reforms and vice versa. If the development of PHC services is not the top priority on the political agenda, the success of the reforms is uncertain. It has also been shown in other studies that political timing can impact on the success of a policy [51]. The 1970s in Finland was marked by a strong national will to develop preventative health services, which helped to create a window of opportunity for PHC implementation. As seen from the results of this study, similar collective enthusiasm has not been seen since or in implementation of the post-1993 reforms.

The findings of this study provide useful lessons for other countries on how to strengthen their PHC system; what issues enable the change and what might hinder them. In the light of the upcoming and significant health reform in Finland, this study also provides important lessons for

health system decision and policy makers in Finland. This review demonstrated that there has been minimal other systematic review work on this topic prior to this study. Further research is needed to assess enablers and barriers to PHC implementation in more detail – in particular, closer empirical research of individual policy implementation experiences and outcomes.

This research is extremely timely in Finland's health system development. It demonstrates that context plays a major role in policy success and that past achievements and challenges should be noted [52, 53]. In terms of upcoming reform, Finland has been inspired by other countries with a high-level of patient choice and privatisation [35]. However, policy-makers need to keep in mind the unique composition of the Finnish health system as well as wider social, political and economic factors to ensure reforms are context appropriate. The goals and implementation of a policy need to be adapted to the context, not vice versa. More research regarding the issues such as patient choice, privatisation and service integration is needed, especially from a whole systems perspective. The seemingly unique shift to centralisation in the context of PHC seems to deserve further research. Finland could look at examples from LMICs which have created unique ways to enhance patient participation in resource-constrained settings [46].

One thing is clear: This study has highlighted that the time for separate reforms with narrow goals is over. Finland needs to focus on strengthening the whole system instead of looking at single problems. All parts of the health system need to be taken into consideration when planning a policy aimed at PHC strengthening. A health system is a complex adaptive system, in which the actions of individuals or organisations affect each other [54]. This unpredictable interaction can in the policy implementation process result in unintended consequences or policy resistance, which can ultimately impact on the policy success [55]. At the moment, the upcoming health care reform is highly focused on privatisation and increased patient choice, and it seems that the original vision

– strengthening of PHC in the health system- is becoming blurred. It seems that privatisation has become more important than the actual goal, and those promoting the policy should examine other experiences to try and predict the unintended consequences that this may have in the future.

In Finland – as well as in most other countries – not much is known about the service delivery domains of PHC such as comprehensiveness, continuity, coordination, and people-centeredness [56]. These are important domains in high-quality PHC, and examining them can help explain performance disparity in all settings [56].

For these reasons, Finland would benefit from further research within the field of HSPR; a multidisciplinary field which aims to identify the interconnections between policies and the system, and which emphasises the wider context, hoping to result in more successful health policy implementation [49]. Traditionally, HPSR has focused on LMICs, and not as much on HICs [49]. At the moment, research of PHC development and implementation is a popular topic especially among LMICs. For example, the Primary Health Care Performance Initiative (PHCPI) and the Alliance for Health Policy and Systems Research (“the Alliance”) at the WHO, are developing a Primary Health Care Measurement and Implementation Research Consortium, seeking to bring together researchers and policy makers to accelerate progress in PHC research in LMICs [57].

In Finland, there has certainly been little of HSPR style research carried out. However, considering the complexity of the Finnish health system, there is a need for research utilising the HPSR approach. Future research should take better account of the health system as a whole, and HSPR approaches and perspectives would fit well with this. More comprehensive research is particularly important given the upcoming reform that is intended to revolutionise the social and health sector.

Finally, the earlier PHC reforms in the 1970s were widely applauded. However, the more recent reforms assessed here in this review study appear to be strangely disconnected from that past. This study demonstrates the importance of drawing on the history of health systems, in research and in policy-development. There is some risk that the previous successes of PHC systems development are de-prioritised in the face of new global health priorities, and that key historical and cross-country lessons are not considered in the fullness of time. We are entering a new era in which PHC is again edging into the spotlight. This review demonstrates the importance of simultaneously 'grabbing the moment' and the momentum - and pulling on the past – to move forwards towards more effective health systems strengthening for all.

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### **Conflict of interest**

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### **References**

1. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998. *Health Services Research*. 2003 Jun 1;38(3):831-65.

2. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *The Milbank Quarterly*. 2005 Sep 1;83(3):457-502.
3. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives. *Social Science & Medicine*. 2010 Mar 31;70(6):904-11.
4. Engström S, Foldevi M, Borgquist L. Is general practice effective? A systematic literature review *Scandinavian Journal of Primary Health Care*. 2001 Jan 1;19(2):131-44.
5. Shi L. Primary care, specialty care, and life chances. *International Journal of Health Services*. 1994 Jul;24(3):431-58.
6. Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Affairs*. 2013 Apr 1;32(4):686-94.
7. Improving Quality Primary Health Care [Internet]. 2017 [cited 2017 Sep 25];Available from: [http://www.euprimarycare.org/sites/default/files/primary\\_health\\_care\\_-\\_from\\_measurement\\_to\\_improvement.pdf](http://www.euprimarycare.org/sites/default/files/primary_health_care_-_from_measurement_to_improvement.pdf)
8. Koskinen S, Aromaa A, Huttunen J, Teperi J. Health in Finland. *Kansanterveyslaitos= National Public Health Institute*; 2006.
9. Terveyskeskukset Tienhaarassa [Internet]. *Julkari.fi*. 2017 [cited 14 September 2017]. Available from:<http://www.julkari.fi/bitstream/handle/10024/114586/Terveyskeskukset%20tienhaarassa.pdf?sequence=1>
10. OECD Economic Surveys. 2017 [cited 14 September 2017]. Available from:

<https://www.oecd.org/eco/surveys/Overview-OECD-Finland-2016.pdf>

11. Tilastokeskus - Väestönkehitys itsenäisessä Suomessa -kasvun vuosikymmenistä kohti harmaantuvaa Suomea [Internet]. Stat.fi. 2017 [cited 14 September 2017]. Available from: <http://www.stat.fi/tup/suomi90/joulukuu.html>
12. Saarivirta T, Consoli D, Dhondt P. Suomen terveydenhuoltojärjestelmän ja sairaaloiden kehittyminen-vaatimattomista oloista modernin terveydenhuollon eturintamaan. *Kasvatus & Aika*. 2009;3(4):25-41.
13. Teperi J, Porter ME, Vuorenkoski L, Baron JF. The Finnish Health Care System. A Value-Based Perspective. Helsinki, Finland: Sitra. 2009. OECD Economic Surveys Finland [Internet].
14. Harjula M. Health Citizenship and Access to Health Services: Finland 1900–2000. *Social History of Medicine*. 2016 Apr 6;29(3):573-89.
15. Vuorenkoski L, Mossialos E. Health systems in transition. *Health*. 2008;10(4).
16. Häkkinen U. The impact of changes in Finland's health care system. *Health Economics*. 2005 Sep 1;14(S1).
17. Vänskä J, Hyppölä H, Halila H, Virjo I, Mattila K, Kumpusalo E, Kujala S, Isokoski M. *Lääkäri* 2003. Kyselytutkimus vuosina. 1992;2001.
18. Magnussen J, Vrangbaek K, Saltman R. *Nordic Health Care Systems: Recent Reforms And Current Policy Challenges: Recent Reforms and Current Policy Challenges*. McGraw-Hill Education (UK); 2009 Sep 1.

19. Campbell Collaboration. What is a systematic review? [Internet]. Campbell collaboration.org. 2017 [cited 17 February 2017]. Available from:  
[http://www.campbellcollaboration.org/what\\_is\\_a\\_systematic\\_review/index.php](http://www.campbellcollaboration.org/what_is_a_systematic_review/index.php)
20. Hunt DL, McKibbin KA. Locating and appraising systematic reviews. *Annals of Internal Medicine*. 1997 Apr 1;126(7):532-8.
21. WHO | Primary health care [Internet]. Who.int. 2017 [cited 26 January 2018]. Available from:  
[http://www.who.int/topics/primary\\_health\\_care/en/](http://www.who.int/topics/primary_health_care/en/)
22. Järvelin J, Rico A, Cetani T, World Health Organization. Health care systems in transition: Finland.
23. Tynkkynen LK, Keskimäki I, Lehto J. Purchaser–provider splits in health care—The case of Finland. *Health Policy*. 2013 Aug 31;111(3):221-5.
24. Tynkkynen LK, Chydenius M, Saloranta A, Keskimäki I. Expanding choice of primary care in Finland: much debate but little change so far. *Health Policy*. 2016 Mar 31;120(3):227-34.
25. Laamanen R, Simonsen-Rehn N, Suominen S, Øvretveit J, Brommels M. Outsourcing primary health care services—How politicians explain the grounds for their decisions. *Health policy*. 2008 Dec 31;88(2):294-307.
26. Vartiainen P. Changes and challenges in Finnish health care management. *Society and Economy*. 2010 May 25;32(1):123-36.
27. Vartiainen P. Wicked health care issues: an analysis of Finnish and Swedish health care reforms. In *International Health Care Management* 2005 Nov 10 (pp. 159-182). Emerald Group Publishing Limited.
28. WHO Commission on Social Determinants of Health, World Health Organization. Closing the gap in a generation: health equity through action on the social determinants of health: Commission on Social Determinants of Health final report. World Health Organization; 2008.

29. Kokko S, Heinämäki L, Tynkkynen LK, Haverinen R, Kaskisaari M, Pekurinen M, Tammelin M. Kunta- ja palvelurakennemuutoksen toteutuminen: Kuntakysely sosiaali- ja terveyspalvelujen järjestämisestä ja tuottamisesta. Raportti/Terveystieteiden tutkimuskeskus (THL): 36/2009. 2009.
30. Kokko S. Integrated primary health care: Finnish solutions and experiences. *International Journal of Integrated Care*. 2009 Jun 25;9(2).
31. Mäntyranta T, Kaila M, Mattila J, Risikko P. Serving primary health care: a national action programme for primary care in Finland. *Journal of Management & Marketing in Healthcare*. 2011 Feb 1;4(1):40-6.
32. World Health Organization. The world health report 2003: shaping the future. World Health Organization; 2003.
33. Cornwall A, Lucas H, Pasteur K. Introduction: accountability through participation: developing workable partnership models in the health sector. *Health Affairs*. 2000 Jan 1;19(1):1-3.
34. Mattila Y. Suuria käännekohtia vai tasaista kehitystä? Tutkimus Suomen terveydenhuollon suuntaviivoista. 2011.
35. Sinervo T, Tynkkynen LK, Vehko T. Mitä kuuluu perusterveydenhuolto? Valinnanvapaus ja integraatio palveluiden kehittämisen polttopisteessä. Raportti: 2016\_016. 2016.
36. Tinetti ME, Fried TR, Boyd CM. Designing health care for the most common chronic condition—multimorbidity. *Jama*. 2012 Jun 20;307(23):2493-4.
37. Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. *Inquiry*. 1988 Apr 1;15:25-36.
38. Palosuo H, Sihto M, Lahelma E, Lammi-Taskula J, Karvonen S. Sosiaaliset määrittäjät WHO: n ja Suomen terveyspolitiikassa. Raportti: 2013\_014. 2013.

39. Junnila M, Hietapakka L, Whellams A. Hallintoalamaisesta aktiiviseksi valitsijaksi: Valinnanvapauden muotoutuminen sote-palveluissa. Raportti: 2016\_011.
40. Kaila M. Yleislääkäri, yleislääketiede ja sote. Lääketieteellinen aikakausikirja Duodecim. 2017;133(13):1237-8.
41. Atun RA, Kyratsis I, Jelic G, Rados-Malicbegovic D, Gurol-Urganci I. Diffusion of complex health innovations—implementation of primary health care reforms in Bosnia and Herzegovina. *Health Policy and Planning*. 2007 Jan 1;22(1):28-39.
42. Olsen KR, Anell A, Häkkinen U, Iversen T, Ólafsdóttir T, Sutton M. General practice in the Nordic countries. *Nordic Journal of Health Economics*. 2016 Apr 26;4(1):pp-56.
43. Whellams, A. (2016). Valinnanvapaus Englannin sosiaali- ja terveydenhuollossa. Työpaperi: 2016\_002.
44. J Rao M, Pilot E. The missing link—the role of primary care in global health. *Global health action*. 2014 Dec 1;7(1):23693.
45. Haines A, Kuruvilla S, Borchert M. Bridging the implementation gap between knowledge and action for health. *Bulletin of the World Health Organization*. 2004 Oct;82(10):724-31
46. Molyneux S, Atela M, Angwenyi V, Goodman C. Community accountability at peripheral health facilities: a review of the empirical literature and development of a conceptual framework. *Health Policy and Planning*. 2012 Jan 25;27(7):541-54.
47. Standing H. Understanding the 'demand side' in service delivery. Definition, frameworks and tools. London: UK Department of International Development. 2004 Mar.
48. Victora CG, Hanson K, Bryce J, Vaughan JP. Achieving universal coverage with health interventions. *The Lancet*. 2004 Oct 29;364(9444):1541-8.
49. Sheikh K, Gilson L, Agyepong IA, Hanson K, Ssengooba F, Bennett S. Building the field of health

policy and systems research: framing the questions. *PLoS Medicine*. 2011 Aug 16;8(8):e1001073.

50. Lipsky M. *Street-level bureaucracy, 30th ann. Ed.: dilemmas of the individual in public service*. Russell Sage Foundation; 2010 Apr 8.

51. Glassman A, Reich MR, Laserson K, Rojas F. Political analysis of health reform in the Dominican Republic. *Health Policy and Planning*. 1999 Jan 1;14(2):115-26.

52. Walt G, Gilson L. Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning*. 1994 Dec 1;9(4):353-70.

53. Gilson L, Raphaely N. The terrain of health policy analysis in low and middle income countries: a review of published literature 1994–2007. *Health Policy and Planning*. 2008 Jul 23;23(5):294-307.

54. De Savigny D, Adam T, editors. *Systems thinking for health systems strengthening*. World Health Organization; 2009.

55. Sterman JD. Learning in and about complex systems. *System Dynamics Review*. 1994 Jun 1;10(2-3):291-330.

56. *Improving Quality Primary Health Care* [Internet]. 2017 [cited 2017 Sep 25]; Available from: [http://www.euprimarycare.org/sites/default/files/primary\\_health\\_care\\_from\\_measurement\\_to\\_improvement.pdf](http://www.euprimarycare.org/sites/default/files/primary_health_care_from_measurement_to_improvement.pdf)

57. *Request for Proposals – Primary Health Care | Ariadne Labs* [Internet]. [Ariadnelabs.org](http://Ariadnelabs.org). 2017 [cited 2017 Sep 28]; Available from: <https://www.ariadnelabs.org/resources/articles/news/request-for-proposals-primary-health-care/>

## Appendices

## Appendix A: Review Table

Document details	Date of retrieval & details	PHC policy	Aims of the policy	Theme
Kokko S, Heinämäki L, Tynkkynen LK, Haverinen R, Kaskisaari M, Pekurinen M, Tammelin M. Kunta- ja palvelurakennemuutoksen toteutuminen: Kuntakysely sosiaali- ja terveyspalvelujen järjestämisestä ja tuottamisesta. Raportti/Terveystieteiden tutkimuskeskus (THL): 36/2009. 2009.	Citation tracking 21/06/17	1. The Act on Restructuring Local Government and Services	increasing efficiency in municipal services and structures In addition to the population base requirement, the law also aims at creating and strengthening regional co-operation over services and at promoting co-operation between social and health services.	1. Efficient finance and governance; Cooperation and integration of services
Kokko S. Integrated primary health care: Finnish solutions and experiences. International Journal of Integrated Care. 2009 Jun 25;9(2).	Google Scholar 21/06/17	1. Legal guarantees of access to care 2. Restructuring municipalities	1. Improve access by setting national time limits 2. Reorganise PHC centres to serve larger catchment populations	1. Adequate and equitable access 2. Efficient financing and governance
Vartiainen P. Changes and challenges in Finnish health care management. Society and Economy. 2010 May 25;32(1):123-36.	Scopus 20/06/17	1. The New Health Care Act 2. The National Development plan for Social Welfare and Health (KASTE) 3. The project to restructure local government and services 4. Legal guidelines for access to care 5. Outsourcing	1. Outdated legislation, need for structural changes -> cooperation between primary and specialised care 2. Geographical and social inequity 3. Help municipalities provide better services by uniting together 4. Improve access by setting national time limits 5. Improve access	1. Efficient financing and governance; Cooperation and integration of services 2. Adequate and equitable access 3. Efficient financing and governance; 4. & 5. Adequate and equitable access
Vartiainen P. Wicked health care issues: an analysis of Finnish and Swedish health care reforms. In International Health Care Management 2005 Nov 10 (pp. 159-182). Emerald Group Publishing Limited.	Scopus 20/06/17	1. Quality assurance in social welfare and health care in 1995, 1999 2. the Government Resolution on the Health 2015 3. "personal responsibility" concept (nurse and GP form a team)	1. quality of provided care (patient orientation, knowledge strengthening) 2. decrease the differences between patients' access to care by introducing criteria for access to non-urgent treatments 3. access problems	1. Improved quality 2. Adequate and equitable access 3. Adequate and equitable access
Tynkkynen LK, Chydenius M, Saloranta A, Keskimäki I. Expanding choice of primary care in Finland: much debate but little change so far. Health policy. 2016 Mar 31;120(3):227-34.	Medline 20/06/17	1. The Act on Health and Social Service Vouchers 2. The Health Care Act 2011	1. to improve patients' opportunities to choose private providers instead of the services provided by municipal health centres 2. To allow residents to change their primary care provider within or between municipalities and to choose the hospital at which they wanted to be treated	1. Freedom of choice for patients 2. Freedom of choice for patients
Tynkkynen LK, Keskimäki I, Lehto J. Purchaser-provider splits in health care—The case of Finland. Health Policy. 2013 Aug 31;111(3):221-5.	Medline 20/06/17	1. Purchaser-provider split (at PHC level): contracting out	1. To increase work force, improve access, solve management problem	1. Efficient financing and governance Adequate and equitable access

Mäntyranta T, Kaila M, Mattila J, Risikko P. Serving primary health care: a national action programme for primary care in Finland. Journal of Management & Marketing in Healthcare. 2011 Feb 1;4(1):40-6.	Google Scholar 21/06/17	<ol style="list-style-type: none"> <li>1. Restructuring municipalities</li> <li>2. Health Care Act 2011</li> <li>3. National Action programme 2008</li> </ol>	<ol style="list-style-type: none"> <li>1. Centralisation, uniting municipalities in order to equal access</li> <li>2. Improve the status of the patient, more cooperation between phc and specialised care and social services, integration</li> <li>3. Mission clarification to PHC (health outcomes), patient to the centre, recruiting personnel</li> </ol>	<ol style="list-style-type: none"> <li>1. Efficient financing and governance</li> <li>Adequate and equitable access</li> <li>2. Freedom of choice for patients</li> <li>Cooperation and integration of services</li> <li>3. Efficient financing and governance</li> </ol>
Laamanen R, Simonsen-Rehn N, Suominen S, Øvretveit J, Brommels M. Outsourcing primary health care services— How politicians explain the grounds for their decisions. Health policy. 2008 Dec 31;88(2):294-307.	Citation tracking 21/06/17	<ol style="list-style-type: none"> <li>1. Outsourcing of PHC services in municipalities</li> </ol>	<ol style="list-style-type: none"> <li>1. To decrease the shortage of staff, to gain savings, to improve access</li> </ol>	<ol style="list-style-type: none"> <li>1. Efficient financing and governance</li> </ol>
Magnussen J, Vrangbaek K, Saltman R. Nordic Health Care Systems: Recent Reforms And Current Policy Challenges: Recent Reforms and Current Policy Challenges. McGraw-Hill Education (UK); 2009 Sep 1.	Ebsco 20/06/17	<ol style="list-style-type: none"> <li>1. Outsourcing</li> <li>2. Maximum waiting times and guidelines to access to elective treatment in special care</li> <li>3. PARAS (primary care and social services is to be provided by organisations covering at least 20 000 inhabitants)</li> <li>4. Health for all 2015</li> </ol>	<ol style="list-style-type: none"> <li>1. To decrease the shortage of staff, to gain savings, to improve access</li> <li>2. Improve access by setting national time limits</li> <li>3. Restructuring: financial gains, equity, improved access</li> <li>4. Cooperation, improved status of patients</li> <li>4. Public health improvements, equity</li> </ol>	<ol style="list-style-type: none"> <li>1. Adequate and equitable access</li> <li>2. Adequate and equitable access</li> <li>3. Adequate and equitable access;</li> <li>Efficient financing and governance</li> <li>4. Improved quality</li> </ol>
Mattila Y. Suuria käännekohtia vai tasaista kehitystä? Tutkimus Suomen terveydenhuollon suuntaviivoista.	Medic 20/06/17	<ol style="list-style-type: none"> <li>1. Health and Social Service Vouchers</li> <li>2. Legal guarantees of access to care</li> <li>3. Restructuring municipalities</li> <li>4. Health Care Act 2011</li> </ol>	<ol style="list-style-type: none"> <li>1. to improve patients' opportunities to choose private providers</li> <li>2. Improve access by setting national time limits</li> <li>3. Restructuring: financial gains, equity, improved access</li> <li>4. Cooperation, improved status of patients</li> </ol>	<ol style="list-style-type: none"> <li>1. Freedom of choice for patients</li> <li>2. Adequate and equitable</li> <li>3. Efficient financing and governance;</li> <li>Adequate and equitable access</li> <li>4. Adequate and equitable access;</li> <li>Cooperation and integration of services</li> </ol>
Palosuo H, Sihto M, Lahelma E, Lammi-Taskula J, Karvonen S. Sosiaaliset määrittäjät WHO: n ja Suomen terveyspolitiikassa. Raportti: 2013_014. 2013.	Medic 21/06/17	<ol style="list-style-type: none"> <li>1. Health 2015</li> </ol>	<ol style="list-style-type: none"> <li>1. Public health programme to decrease the inequity of health outcomes between socio economical groups; improved health outcomes in general, patient satisfaction</li> </ol>	<ol style="list-style-type: none"> <li>1. Adequate and equitable access;</li> <li>Cooperation and integration of services</li> </ol>

Vuorenkosky L, Mladovsky P, Mossialos E. Finland: Health system review. Health systems in transition. 2008;10(4):1-68.	Medic 21/06/17	<ol style="list-style-type: none"> <li>1. Waiting time guarantee 2005</li> <li>2. The project of restructuring municipalities</li> </ol>	<ol style="list-style-type: none"> <li>1. Improve access by setting national time limits</li> <li>2. a solution to the problems of municipalities' increasing financial difficulties and the future impacts of the ageing population in the future</li> </ol>	<ol style="list-style-type: none"> <li>1. Adequate and equitable access</li> <li>2. Adequate and equitable access</li> </ol>
Järvelin J, Rico A, Cetani T, World Health Organization. Health care systems in transition: Finland.	Citation tracking	<ol style="list-style-type: none"> <li>1. Quality Guidelines</li> <li>2. Legal Access to Care</li> <li>3. National patient records</li> <li>4. Restructuring municipalities</li> </ol>	<ol style="list-style-type: none"> <li>1. quality of provided care (patient orientation, knowledge strengthening)</li> <li>2. Improve access by setting national time limits</li> <li>3. Decision made on nation-wide patient records</li> <li>4. Restructuring: financial gains, equity, improved access</li> </ol>	<ol style="list-style-type: none"> <li>1. Improved quality</li> <li>2. Equitable Access</li> <li>3. Improved quality</li> <li>4. Efficient governance</li> </ol>
Sinervo T, Tynkkynen LK, Vehko T. Mitä kuuluu perusterveydenhuolto? Valinnanvapaus ja integraatio palveluiden kehittämisen polttopisteessä. Raportti: 2016_016. 2016.	Google Scholar 21/06/2017	- Health Care Act 2011	Increased patient choice, service integration	<ol style="list-style-type: none"> <li>1. Freedom of choice for patients</li> </ol>

## Appendix B: Search Terms

Database	Key words and search history
Medic	<p>"health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* 1222 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* 1993 - 2017 1082 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* AND tavoit* aim aims goal goals  target* objectiv* tarkoit* 1993 - 2017 68 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* 1993 - 2017 1082 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* kokotekstit 1993 - 2017 531 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* AND sosiaalilääket*  (lehti_issn_isbn) 1993 - 2017 34 kpl  "health care reform" terveydenhuoltouud* sote*  terveydenhuoltoreform* polic* 1993 - 2017 1082 kpl</p>
Scopus	<p>Scopus: 82 document results  ( TITLE-ABS-KEY  ( ( health* AND care* AND reform* ) OR ( health* AND servi  ce* AND reform* ) ) AND TITLE-ABS-KEY  ( finland* OR finnish* OR nordic* ) ) AND NOT INDEX  ( medline )</p>
Ebsco	<p>Ebsco: 349  ((health*AND care* AND reform*) OR (health*AND service*  AND reform*)) AND ((finland* OR finnish* OR nordic*))</p>
MEDLINE	<p>-----  1 health care reform finland {Including Related Terms} (10014)  2 limit 1 to five stars (66)  3 exp Health Care Reform/ (32191)  4 (health* and care* and reform*).mp. [mp=title, abstract,  original title, name of substance word, subject heading  word, keyword heading word, protocol supplementary concept  word, rare disease supplementary concept word, unique  identifier, synonyms] (43095)  5 (health* and service* and reform*).mp. [mp=title, abstract,  original title, name of substance word, subject  heading word, keyword heading word, protocol supplementary  concept word, rare disease supplementary concept word,  unique  identifier, synonyms] (19471)  6 3 or 4 or 5 (46039)</p>

	<p>7 (finland* or finnish* or nordic*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] (53644)</p> <p>8 6 and 7 (129)</p> <p>9 2 or 8 (133)</p>
Google Scholar	<p>"Finnish health care reform", "primary care reform Finland", "perusterveydenhuolto uudistus", "Suomen perusterveydenhuollon uudistus", "Sote uudistus", "Terveyskeskus uudistus"</p> <p>(restricted to first 50 according to relevance)</p>

## **Appendix C: Assessment Criteria / Quality Appraisal tool**

### Screening Questions

1. Was there a clear statement of the aims of the research?
2. Is a qualitative methodology appropriate?

Is it worth continuing?

3. Was the research design appropriate to address the aims of the research?
4. Was the recruitment strategy appropriate to the aims of the research?
5. Was the data collected in a way that addressed the research issue?
6. Has the relationship between researcher and participants been adequately considered?
7. Have ethical issues been taken into consideration?
8. Was the data analysis sufficiently rigorous?
9. Is there a clear statement of findings?

## Appendix D: SAGE Vancouver reference style

### 6.2 SAGE Vancouver

#### 1. General

1. Reference numbers have full points in the reference list.
2. Please ensure that publications are referenced in the order in which they appear in the text.
3. Journal titles should be abbreviated according to the standard in the Index Medicus. If unsure, please check for any inconsistencies within reference lists. For STM journals, please refer also to the following: <http://scieng.library.ubc.ca/coden/>.
4. Do not separate initials with spaces or full points, but add a full point after last initial before the title.
5. Up to three authors may be listed. If more, then list the first three authors and represent the rest by et al. Fewer author names followed by et al. is also acceptable. Where et al. is used, it should always be upright, not italic in both references and textual citations.
6. Last Names containing de, van, von, De, Van, Von, de la, etc. should be listed under D and V respectively. List them as: De Roux DP and not Roux DP, de. When cited in the main text without the first name, use capitals for De, Van, Von, De la, etc. (Van Dijk, year)
7. Names containing Jr or II should be listed as follows:
  - Author Last Name Initial Jr (year)
  - Author Last Name Initial II (year)

#### 2. Text citations

Please use superscript numerals *after* the punctuation (STM) or numbers in square brackets (HSS), and check that it corresponds to the correct number in the reference list.

#### 3. Reference styles

##### Book

1. Huff D. *How to lie with statistics*. 4th ed. London: Penguin, 1991, p.51.

##### Chapter in book

1. Huff D and Black TL. Comprehensive statistics. In: Miller C and Smith H (eds) *How to lie with statistics*. 4th ed. London: Penguin, 1991, pp.51–55.

##### Journal article

1. Ludbrook J, Miller T and Russel A. Musculo-venous pumps in the human lower limb. *Am Heart J* 1966; 71: 635–641.
2. Araki C, Black TL, Patberg FT, et al. Significance of calf muscle pump function in venous ulceration. *J Vasc Surg* 1994; 20: 872–879.

##### Journal article published ahead of print

1. Ludbrook J. Musculo-venous pumps in the human lower limb. *Am Heart J*. Epub ahead of print 12 June 2011. DOI: 10.1177/095443271167940.

##### Website

1. Smith JR. Choosing your reference style. *Online Referencing* 2(3), <http://orj.sagepub.com> (2003, accessed 12 October 2008).
2. National Center for Professional Certification. Factors affecting organizational climate and retention, [www.cwla.org/programmes/triechmann/2002fbwfiles](http://www.cwla.org/programmes/triechmann/2002fbwfiles) (2002, accessed 10 July 2010).

##### Conference paper

1. Peters J. Musculo-venous pumps in the human lower limb. In: *ASME conference on automatic transmissions* (ed A O'Brien), Pisa, Italy, 29 May–2 June 2003, paper no. GE1234, pp.4–10. New York: ASME.

*Thesis/dissertation*

1. Clark JM. <i>Referencing style for journals</i> . PhD Thesis, University of Leicester, UK, 2002.
---

*Patent and patent applications*

1. Smith ST. <i>Referencing styles for journals – a new method</i> . Patent 12346-ZH, USA, 2011.
--

2. Jones P. <i>Referencing styles for journals – a new method</i> . Patent application 12346-ZHA, USA, 2011.
--

*Report (published/unpublished)*

1. MacDonald S. <i>The state of social welfare in the UK</i> . Report, University of Durham, UK, June 2011.
---

2. Citigroup Ltd. <i>How to make your money work for you</i> . Report for the Department of Finance. Report no. 123345, 13 June 2011. Oxford: OUP.
--

*SAE/USAE etc. papers*

1. Clark JM. <i>A new exhaust gasket manifold for powertrains</i> . SAE paper 2002-0101234, 2002.
---

*Newspaper/magazine*

1. Clark JM. <i>Referencing style for journals</i> . <i>The Independent</i> , 21 May 2006, p.10.
--

*Package insert (medical etc.)*

1. Eisai Inc. <i>Aloxi (package insert)</i> . New York: Eisai Inc, 2008.
--

*Manual (automotive etc.)*

1. Fiat. <i>Driver's manual, Fiat Uno 4-litre diesel model</i> , December 2010.
---

*Standard*

1. ISO 27799:2008. <i>Information security management in health</i> .
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## Appendix E: Journal Style Guide

### Manuscript Submission Guidelines: *Scandinavian Journal of Public Health*

(Copied from: <https://us.sagepub.com/en-us/nam/journal/scandinavian-journal-public-health#submission-guidelines>)

#### 1. What do we publish?

##### 1.1 Aims & Scope

Before submitting your manuscript to *Scandinavian Journal of Public Health*, please ensure you have read the Aims & Scope.

##### 1.2 Article Types

*Scandinavian Journal of Public Health* publishes original research, review and study design articles on all aspects of public health. The Journal considers the following kinds of article for publication:

1. Original articles, describing new experimental findings.  
*Word limit: 3000 words. This does not include text in the abstract, headings, references, figures and tables. For manuscripts exceeding five printed pages (including abstract, tables, figures and references) the charge is \$100 USD (excluding VAT) per excess page. As a guide, one journal page is approximately 800 words.*
2. Literature Review articles. *Word limit: 6000 words and 60 references. This limit does not include text in the abstract, headings, references, figures and tables. For manuscripts exceeding six printed pages (including abstract, tables, figures and references) the charge is \$100 USD (excluding VAT) per excess page. As a guide, one journal page is approximately 800 words.*
3. Design articles. The Editors wish to encourage the submission of study design articles. These articles should include the rationale for the study, design and measurement procedures, population and sample size considerations and some basic characteristics of the study. The articles should end with a discussion on the potential of the study.  
*These articles should not normally exceed 3000 words. The word limit does not include text in the abstract, headings, references, figures and tables. For manuscripts exceeding six printed pages (including abstract, tables, figures and references) the charge is \$100 USD (excluding VAT) per excess page. As a guide, one journal page is approximately 800 words.*
4. Letters to the Editors. The decision to publish is made by the Editors.  
*Word limit: 800 words*
5. Short communications, Debate articles.  
*Word limit: 1200 words and have no more than 3 tables/figures.*
6. Supplements. Thematic sets of papers, symposium reports as well other documents of Public Health relevance may be published as supplements, the full cost being borne by the authors. Please contact the Editorial Office for further information.
7. Glossary. Manuscripts containing definitions of relevant terms in a defined field of public health, which relate to one of the key areas of SJPH (see Aims & Scope here). Longer glossaries may be considered in agreement with the E-i-C.
8. Commentary. Manuscripts either in the form of a critical analysis of an article published in the journal or in the form of a research piece presenting new thoughts (either conceptually, theoretically or methodologically) related to one or several of the key areas of the journal (see Aims & Scope here).

##### 1.3 Writing your paper

The SAGE Author Gateway has some general advice and on how to get published, plus links to further resources.

### 1.3.1 Make your article discoverable

When writing up your paper, think about how you can make it discoverable. The title, keywords and abstract are key to ensuring readers find your article through search engines such as Google. For information and guidance on how best to title your article, write your abstract and select your keywords, have a look at this page on the Gateway: [How to Help Readers Find Your Article Online](#).

## 2. Editorial policies

### 2.1 Peer review policy

*Scandinavian Journal of Public Health* operates a conventional single-blind reviewing policy in which the reviewer's name is always concealed from the submitting author. Decisions of publication of full length original contributions are generally reviewed by at least two external reviewers. All manuscripts are reviewed as quickly as possible, we endeavour to reach an editorial decision within 3 months, though on average it takes just 30 days to reach a decision.

Authors are requested to suggest the names, affiliations and contact information, including email address, of 3-4 individuals who may be suitable to serve as reviewers. These individuals should have no conflict of interest, i.e. close links with the study or author and preferably be from a different country to the author(s). However, the Editors are under no obligation to use any of the suggested individuals as reviewers.

All manuscripts are reviewed initially by the Editors and only those papers that meet the scientific and editorial standards of the journal, and fit within the aims and scope of the journal will be sent for outside review.

#### Recommended Reviewers

As part of the submission process you will be asked to provide the names of peers who could be called upon to review your manuscript. Recommended reviewers should be experts in their fields and should be able to provide an objective assessment of the manuscript. Please be aware of any conflicts of interest when recommending reviewers. Examples of conflicts of interest include (but are not limited to) the below:

As part of the submission process you will be asked to provide the names of peers who could be called upon to review your manuscript. Recommended reviewers should be experts in their fields and should be able to provide an objective assessment of the manuscript. Please be aware of any conflicts of interest when recommending reviewers. Examples of conflicts of interest include (but are not limited to) the below:

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- The reviewer should not have recently collaborated with any of the authors
- Reviewer nominees from the same institution as any of the authors are not permitted

Please note that the Editors are not obliged to invite any recommended/opposed reviewers to assess your manuscript.

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Papers should only be submitted for consideration once consent is given by all contributing authors. Those submitting papers should carefully check that all those whose work contributed to the paper are acknowledged as contributing authors.

The list of authors should include all those who can legitimately claim authorship. This is all those who:

4. Made a substantial contribution to the concept or design of the work; or acquisition, analysis or interpretation of data,
5. Drafted the article or revised it critically for important intellectual content,
6. Approved the version to be published,
7. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

Authors should meet the conditions of all of the points above. When a large, multicentre group has

conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript. These individuals should fully meet the criteria for authorship.

Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship, although all contributors who do not meet the criteria for authorship should be listed in the Acknowledgments section. Please refer to the International Committee of Medical Journal Editors (ICMJE) authorship guidelines for more information on authorship.

### **2.3 Acknowledgements**

All contributors who do not meet the criteria for authorship should be listed in an Acknowledgements section. Examples of those who might be acknowledged include a person who provided purely technical help, or a department chair who provided only general support.

Any acknowledgements should appear first at the end of your article prior to your Declaration of Conflicting Interests (if applicable), any notes and your References.

#### **2.3.1 Writing assistance**

Individuals who provided writing assistance, e.g. from a specialist communications company, do not qualify as authors and so should be included in the Acknowledgements section. Authors must disclose any writing assistance – including the individual's name, company and level of input – and identify the entity that paid for this assistance. It is not necessary to disclose use of language polishing services.

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*Scandinavian Journal of Public Health* requires all authors to acknowledge their funding in a consistent fashion under a separate heading. Please visit the [Funding Acknowledgements](#) page on the SAGE Journal Author Gateway to confirm the format of the acknowledgment text in the event of funding, or state that: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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It is the policy of *Scandinavian Journal of Public Health* to require a declaration of conflicting interests from all authors enabling a statement to be carried within the paginated pages of all published articles.

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Medical research involving human subjects must be conducted according to the World Medical Association Declaration of Helsinki.

Submitted manuscripts should conform to the ICMJE Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals, and all papers reporting animal and/or human studies must state in the methods section that the relevant Ethics Committee or Institutional Review Board provided (or waived) approval. Please ensure that you have provided the full name and institution of the review committee, in addition to the approval number.

For research articles, authors are also required to state in the methods section whether participants provided informed consent and whether the consent was written or verbal.

Information on informed consent to report individual cases or case series should be included in the manuscript text. A statement is required regarding whether written informed consent for patient information and images to be published was provided by the patient(s) or a legally authorized representative.

Please also refer to the ICMJE Recommendations for the Protection of Research Participants.

All research involving animals submitted for publication must be approved by an ethics committee with oversight of the facility in which the studies were conducted. The journal has adopted the Consensus Author Guidelines on Animal Ethics and Welfare for Veterinary Journals published by the International Association of Veterinary Editors.

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The relevant EQUATOR Network reporting guidelines should be followed depending on the type of study. For example, all randomized controlled trials submitted for publication should include a completed CONSORT flow chart as a cited figure and the completed CONSORT checklist should be uploaded with your submission as a supplementary file. Systematic reviews and meta-analyses should include the completed PRISMA flow chart as a cited figure and the completed PRISMA checklist should be uploaded with your submission as a supplementary file. The EQUATOR wizard can help you identify the appropriate guideline.

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## **2.9 Data**

SAGE acknowledges the importance of research data availability as an integral part of the research and verification process for academic journal articles.

*Scandinavian Journal of Public Health* requests all authors submitting any primary data used in their research articles alongside their article submissions to be published in the online version of the journal, or provide detailed information in their articles on how the data can be obtained. This information should include links to third-party data repositories or detailed contact information for third-party data sources. Data available only on an author-maintained website will need to be loaded onto either the journal's platform or a third-party platform to ensure continuing accessibility. Examples of data types include but are not limited to statistical data files, replication code, text files, audio files, images, videos, appendices, and additional charts and graphs necessary to understand the original research. The editor may consider limited embargoes on proprietary data. The editor can also grant exceptions for data that cannot legally or ethically be released. All data submitted should comply with Institutional or Ethical Review Board requirements and applicable government regulations. For further information, please contact the editor at [terje.eikemo@ntnu.no](mailto:terje.eikemo@ntnu.no)

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## **6. On acceptance and publication**

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## **7. Further information**

Any correspondence, queries or additional requests for information on the manuscript submission process should be sent to the *Scandinavian Journal of Public Health* editorial office as follows: Editor: Terje Andreas Eikemo

### Appendix G: Coding Template

Theme	Codes
Equity in access	Access to care Waiting times Patient queues Geographical inequities
Efficient financing and governance	Subsidies Taxation Management Decentralisation Fragmented decision making Re-structuring
Improved quality of care	Quality Efficiency The effective use of resources Quality guidelines
Freedom of choice for patients	Patients' rights Patients' choice Freedom of choice
Cooperation and integration of services	Integration Cooperation Coordination