



Health Reform Monitor

The national implementation of 'Proactive Health Support' in Denmark since 2017: Expectations and challenges for the telephone-based self-management program[☆]



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ABSTRACT

In Denmark, as in many other Western countries, a small group of people are major hospital users and account for a large proportion of health care spending. Proactive Health Support (PaHS) is the first national Danish program that aims to reduce health care consumption targeting people at risk of becoming major users of health services. PaHS was part of the government's *The sooner—the better* national health policy, which includes a focus on policy programs targeting the weakest and most complex chronic patients at risk of high health care consumption. PaHS is a telephone-based self-management support program that uses a prediction model to identify people at high risk of acute hospital admissions. Reducing preventable hospital admissions and enhancing quality of life are central policy goals. The Danish policy was inspired by a Swedish policy program, and PaHS has been implemented based on policy transfer with political expectations that the Swedish results can be replicated in Denmark. The effects of PaHS are currently under study, and time will show whether expectations can be met. This paper discusses institutional conditions and expectations related to replicating a policy program and its outcomes. In addition, it highlights implementation issues that may affect the success of the policy program.

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1. Introduction

In Denmark, around 1% of the population accounts for 30% of health care costs [1]. This small group of people has many acute contacts with the health care system. Such patients have extensive and complex health needs and many suffer from chronic conditions [1]. Numerous international studies have reported that health care spending is skewed, with a minority of the population driving a significant share of health care costs [2–4]. The hypothesis is that

health care spending for at least part of this group of patients can be reduced if prevention and treatment, in addition to the organization of patient pathways, are optimized. However, efforts to optimize the conditions for these patients pose both economic and organizational challenges for health care systems.

Several programs and intervention studies conducted in countries such as the United States, Sweden, Australia, Canada and the United Kingdom have targeted high-risk and high-cost populations to potentially prevent hospital admissions and to improve patient-reported outcomes [5,6]. These supportive interventions include coaching and self-management support aimed at changing patients' behavior within the healthcare system and case management with coordination of healthcare services. These studies have shown varying results with small positive effects on self-reported

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health status and patient satisfaction but no convincing reduction in the consumption of health care services [5,6].

In Denmark, initiatives to improve patient pathways in a cost-efficient way for this group of patients have long been a focus of Danish health care policy. This has led to a range of strategies and policies to improve chronic disease management and quality of life for such patients. These efforts have also shown varying effects, and few programs have provided conclusive results on the prevention of hospital admissions [7].

This paper presents and analyses the introduction and early implementation of the telephone-based self-management support program Proactive Health Support (PaHS) in Denmark (Danish: Aktiv Patientstøtte). PaHS is the first Danish national policy program aiming at reducing health care consumption targeting people at risk of becoming major users of health care services. It has been implemented based on policy transfer from Sweden, where a program called Proactive Health Coaching (Swedish: Aktiv Helsestyring) was first implemented in 2010 after being commissioned by the Region Stockholm Assembly [8]. This paper offers insights for countries facing similar challenges with potentially preventable health care consumption and health systems to address this issue by *policy transfer* [9]. This includes insights on institutional conditions and expectations related to replicating a policy program and its outcomes as well as possible implementation issues that may affect the success of a policy program. Policymakers need to pay close attention to the role of institutional conditions when implementing a new policy program based on transfer from another country. Critical assessment of the promised outcomes of a program transferred from another country should be made before large scale program implementation.

2. The Danish *The sooner—the better* policy

In 2014, PaHS was presented as part of the *The sooner—the better* (Danish: “Jo før—jo bedre”) national health policy, which among other purposes, focuses on developing policy programs targeting the weakest and most complex chronic patients at risk of high health care consumption [1,10]. The policy goals of PaHS are to reduce the number of preventable hospital admissions and to enhance quality of life and self-management skills by introducing a national self-management support program [10].

The expected target group of PaHS is depicted in Fig. 1, along with other initiatives that were launched with the *The sooner—the better* policy.

3. Setting—the Danish health care system

The Danish health care system provides tax-financed universal coverage for all inhabitants. It is relatively decentralized, consisting of three administrative and political levels: the state, five regions, and 98 municipalities. The Ministry of Health provides the financial and regulatory framework for the health care system, including the overall policy framework and financing of PaHS. In Denmark, hospitals are run and governed by five regions that enter into financial agreement with the general practitioners who work as gatekeepers to specialist care. These five regions share joint responsibility for the implementation and operation of PaHS. The municipalities are responsible for rehabilitation outside hospitals, as well as health promotion and disease prevention [11]; they are not directly involved in the PaHS program. However, the municipalities are important partners because the patients are expected to benefit from an increased use of municipal services. PaHS is regarded a supplement to the existing services in the Danish health care system. The program is run by a national program management.

4. Content of PaHS

PaHS is a telephone-based self-management support program provided by registered and specially trained nurses over a period of 6–9 months. The purpose is to enhance participants' self-management strategies and optimize their ability to navigate the Danish health care system. Therefore, one important element of PaHS is supporting and empowering participants to make the necessary contacts with relevant health care professionals with the aim of preventing health deterioration. The nurses have no treatment responsibility and cannot refer their patients to other health care professionals. Citizens are included in the program through a prediction model that identifies citizens at high risk of acute hospital admission within 3 months [5]. The identified citizens are invited and decide whether they will participate, potentially after dialogue with registered nurse. As such, the program differs from many previous strategies to prevent hospital admissions in Denmark because it does not target a specific disease group, such as patients with chronic obstructive pulmonary disease or specific age groups such as frail older patients [7]. Instead, PaHS targets a wide range of citizens over the age of 18 years at high risk of hospital admission. Thus, the design of the self-management support program is generic [12]. The program is expected to include at least 15,000 participants. The main components of the program are listed in Table 1 below.

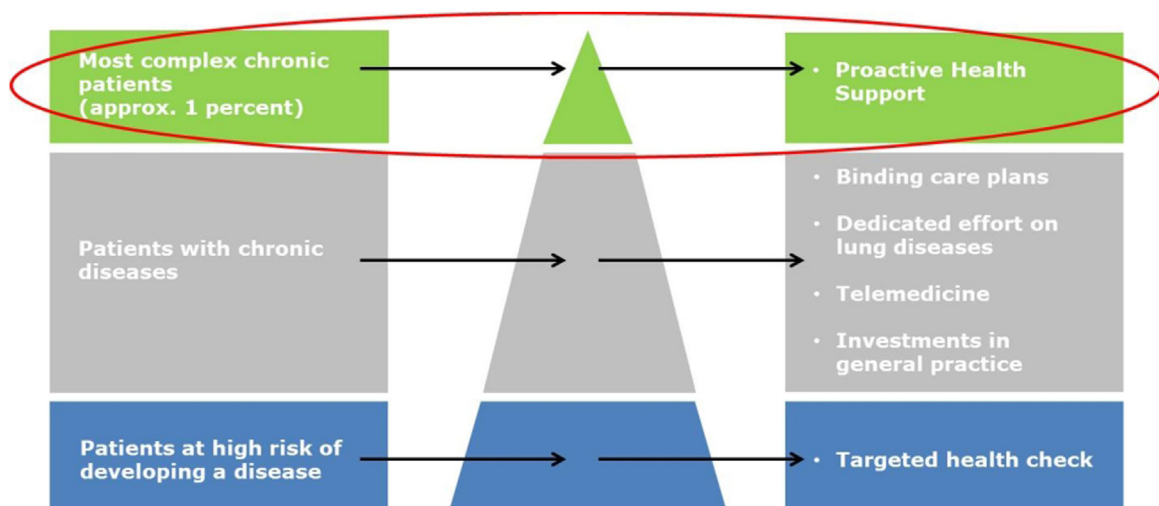


Fig. 1. “Initiatives targeting people with chronic conditions” (own translation) [1].

Table 1
Main components of the PaHS program [5].

Structure	<ul style="list-style-type: none"> • Face-to-face start-up session with needs assessment and relationship building • Telephone-based follow-up sessions • Lasts 6–9 months
Tools	<ul style="list-style-type: none"> • Development of one or more personal goals • Assessment of risk of hospitalization at each session
PaHS nurses' roles	<ul style="list-style-type: none"> • Caregiver • Coach • Healthcare professional • Knowledge about disease and treatment
Content	<ul style="list-style-type: none"> • Coping and strategies • Self-help • Need for healthcare services

Nurses screen the patients identified by the prediction model by telephone. The subsequent telephone sessions with participants are initiated with a face-to-face start-up meeting. The program management collaborates with a private consulting firm in training the nurses. The training program equips the nurses to support, empower, and coach the participants using telephone-based coaching and counseling. Furthermore, the nurses participate in peer, individual, and group supervision [5]. To ensure progress and uniformity of the program across regions, the program is described in a practice guide. The practice guide describes standards to be followed, the workflow processes and program methods [5]. Performance management and a record system help to ensure that the practice guide is followed accordingly. An exception is Region Zealand, which has its own introduction program, practice guide, record system, and approach to performance management.

The program is organized in specially established PaHS units that are independent of hospital clinical departments. PaHS has seven support units located in Denmark, employing approximately 95 nurses in total. Here, the nurses have most of the telephone sessions with participants. The face-to-face start-up meetings with participants are held throughout the country.

5. Implementation process and stakeholder engagement

The implementation of PaHS in Denmark is based on policy transfer from Sweden, where the Proactive Health Coaching program was developed by the for-profit company, Health Navigator. The Swedish program was first implemented in 2010 in Stockholm County, and later expanded to other counties. Health Navigator gained the attention of the Danish Government and inspired it to implement PaHS in Denmark. Commissioned by the Ministry of Finance and the Ministry of Health, Health Navigator was hired to investigate the relevance of the program in a Danish context. They analyzed healthcare consumption for Danish citizens with complex health needs. It was concluded that the problem was also present in a Danish context [13]. In 2014, the program was preceded by a development period beginning in the Region Zealand in collaboration with Health Navigator. The focus in this period was to

develop the PaHS program and the algorithm for identifying participants at risk of hospital admission [5]. The national program was enacted through financial agreements between the regions and the government in 2016 [14].

Health Navigator was expected to be a central collaborator. In the original design, Health Navigator was expected to be highly involved in running the PaHS program. However, during negotiations between the central government and the regions to establish the full-scale program, it was decided that the regions should have overall responsibility for the implementation of PaHS. Owing to disagreements about the organizational setup, the collaboration between Health Navigator and the Danish Regions was suspended, and Health Navigator was no longer part of the program in the Danish context.

The central government decided that PaHS should be implemented in all five regions in Denmark beginning in 2017. The central government required the PaHS program to follow the principles of the Swedish program with the aim of copying its results [15]. Moreover, the program was required to be accompanied by a research program [10]. Joint responsibility for implementing and operating the program was delegated to the five regions. Therefore, a national program management was established. It was responsible for implementing the policy program, the overall framework and managing the program. In Denmark, it is the first example of a self-management support program to be developed and managed as a national program.

The five regions had the authority to develop, implement, and organize PaHS in accordance with the guidelines and an overall framework that was jointly developed and laid down by the program management. Thus, the program was organized independently with different characteristics in all five regions and placed under different administrative departments. Even though the implementation process was initially characterized by a top-down, government-endorsed approach, the opportunity for local adaption led to a more bottom-up designed and flexible implementation process, with stakeholders given the chance to influence the organization and implementation of PaHS within the framework formulated by the program management. Thus, the program has undergone development in Denmark. This has led to variations across regions primarily at an organizational level. To ensure uniformity in practice, organizational variation was only allowed based on the prerequisite that the regions follow the practice guide. With good experience, nurses have been exchanged between units across regions. This indicates a high level of uniformity in the content of the program.

As mentioned above, the government furthermore required PaHS to be implemented as a research project [10,16]. There were two reasons for this. First, a research project was necessary owing to existing Danish health legislation. Health professionals are currently only allowed to contact citizens when directly involved in their care and treatment. Otherwise, permission can be granted for research purposes and a well-documented general interest of society. In the case of PaHS, the potential participants are not in direct contact with health professionals when they are contacted. Second, a randomized controlled research design was required to evaluate the program and compare the results with those of similar programs, including those from Sweden [10].

A national research program running from 2017 to 2021 investigates the effects and implementation of PaHS. The program has all the features of a complex intervention, as defined by the British Medical Research Council guidelines [17]. To reflect the program's complexity, the research is organized as an interdisciplinary formative dialogue research program. As such, a process evaluation is nested within a trial to assess the fidelity and quality of implementation, clarify causal mechanisms, and identify contextual factors associated with possible variations in outcomes [18].

6. Anticipated effects

The central government has four overall policy objectives for implementing PaHS in Denmark. First and most significant, the number of preventable hospital admissions should be reduced among the weakest and most complex patients at risk of high health care consumption. The implementation agreement of the policy program reflects political expectations of reducing health care consumption among participants by up to 25% [10]. This is based on Health Navigator's oral and written dissemination of the results of the Swedish program. The second explicit objective is to achieve an increased self-perceived quality of life in the participants [10]. Third, the policy is expected to support intersectoral collaboration. The current structure of the Danish health care system, with separation of responsibility for health services between the regions and the municipalities, is the consequence of a large-scale structural reform enacted in 2007. This has raised concerns about the possibility of fragmentation, and led to a demand for coordination between municipalities and regions [19]. Although the interpretation of this third objective is less clear in the policy documents, PaHS is a program that extends to other health sectors (e.g., municipalities, general practitioners) through the nurses supporting and empowering the participants to navigate the health care system more effectively [10,20]. Furthermore, it is specified in the implementation agreement that the program be implemented within the framework of intersectoral collaboration [10].

The fourth objective of PaHS is to increase health care equality in Denmark, which has long been on the overall political agenda. Even though the Danish health care system is universal, social inequality in health is a comprehensive challenge [1].

7. Challenges to the expectations

PaHS targets several well-recognized problems, and there is broad political consensus on the need to reduce health care consumption for people at risk of becoming major users of health care services in Denmark. However, it is difficult to predict whether the program informed by the *The sooner—the better* policy will succeed in the Danish health care system achieving the results expected by the politicians. A basic political assumption behind the decision to implement the program in a Danish context was the expectation that the Swedish results could be replicated in Denmark, achieving up to a 25% reduction in health care consumption for the participants. However, two central challenges to these expectations exist: (1) transfer and implementation issues make it unclear whether results can be achieved, (2) the political expectations may surpass the actual outcomes of the policy program.

The first challenge concerns the possibility of replicating the results from Sweden and relates to mechanisms of policy transfer. This includes the practical challenges concerning the transferability of a policy program into practice. It is well established in the literature that policy transfer across borders is not an all-or-nothing process [21]. How the transfer occurred, who the key actors were in this process [21], and modification and adaption to context [22] affects the degree of transfer [21]. In this case, the transferred program has undergone extensive development in its move from Sweden to Denmark. This may be attributed to the possibility of adapting the organization of PaHS to local contexts, and to a lack of important information exchange platforms between borrowers and lenders in the transfer process. During the implementation of the program in Denmark, very few platforms were established to allow exchange of knowledge between central stakeholders in Sweden and Denmark. In the literature, the success of policy transfer among other factors rests on establishing platforms that allow informed transfer between borrowers and lenders [9,23]. However,

the disconnected collaboration with Health Navigator made it difficult to establish these platforms.

Clearly, the transfer of PaHS has not been a static process. The intent of the central government may have been to copy the Swedish program as well as its results, in what can be described as a hard policy transfer, entailing the direct transfer of a specific program and its implementation [24]. However, the transfer has evolved over time and during implementation. The degree of policy transfer between the countries seems better described as a soft policy transfer, where the basic ideas behind the Swedish program has been transferred, with the program adjusted for the reasons explained earlier in this paper [21].

The second challenge concerns the government's expectation that PaHS will be able to reduce the health care consumption of participants by up to 25% [10]. This expectation is founded in oral and written presentations from Health Navigator, but it is not supported by the published results of the Swedish program. A pilot study of the Swedish program, carried out as a Zelen randomized controlled trial (RCT), reported a small positive effect on health care costs because of decreased numbers of outpatient visits and hospital days [25]. A subsequent large-scale follow-up study using both a Zelen and a traditional RCT design provided inconclusive results [26]. None of the Swedish studies examined how participation in the program affected the patients' use of services in other sectors of the health care system. In addition, the running costs of the program and whether they are counterbalanced by the reduction in health care consumption were not considered. Furthermore, international studies of similar programs have shown varying results, and none have reported a convincing reduction in the consumption of health care services [6,25–28].

Currently, the Danish research program is studying whether the potential financial gains obtained from implementing PaHS in Denmark will outweigh the immediate costs of implementation, as well as the potential costs to other parts of the health care system. Moreover, the organizational setup of the program may influence its outcome. The organization of a complex intervention and its outcomes are closely connected [17,18]. However, studies on the program in Sweden pay less attention to its organization. In Denmark, the national strategy for the implementation of PaHS entailed providing the five regions with an overall design, albeit with possibility of adopting the organization of the program to fit local health care organizations. Therefore, studies of the organizational implementation of PaHS are included in the Danish research program.

There is a remarkable discrepancy between the political expectations that PaHS could reduce health consumption among participants by up to 25% and the results of studies in Sweden. This case is an example of policy transfer, where the political expectations may have surpassed the actual outcomes of the transfer of a policy program. However, the Danish program is followed closely, and the results of the interdisciplinary research program are scheduled for early 2021.

8. Conclusion

In 2014, the Danish government presented PaHS as part of their broader *The sooner—the better* national health policy strategy. The implementation of PaHS is based on policy transfer from Sweden, where a similar program has been implemented. The case is an example of a national program designed to reduce health care consumption by the weakest and most complex chronic patients at risk of becoming major users of health services. The case is also an example of policy transfer and may contribute important knowledge concerning challenges and opportunities for policy transfer leading to changes in health services. This process illustrates a political

expectation of hard policy transfer, while the early implementation process shows indications of a soft transfer. Time will show whether the government and regions set the right course for the target group in question. For the time being, PaHS will remain in operation until the end of 2020. A decision as to whether the program should be continued (potentially in an adjusted format) is continuously under debate. A decision is expected in 2021 and will be partly based on the forthcoming research results. For policymakers and researchers, the paper demonstrates how close attention needs to be on the role of institutional conditions when implementing a new policy program based on transfer from another country. Furthermore, the paper concludes that critical assessment of the promised outcomes of a program transferred from another country should be made before large scale program implementation.

CRedit authorship contribution statement

Mia Fredens: Conceptualization, Methodology, Investigation, Formal analysis, Project administration, Writing - original draft. **Morten Deleuran Terkildsen:** Investigation, Methodology, Formal analysis, Writing - review & editing. **Stina Bollerup:** Investigation, Formal analysis, Writing - review & editing. **Jens Albæk:** Conceptualization, Methodology, Investigation. **Nina Konstantin Nissen:** Project administration, Conceptualization, Writing - review & editing. **Susanne Winther:** Conceptualization, Methodology, Writing - review & editing. **Mette Grønkjær:** Conceptualization, Supervision, Writing - review & editing, Validation. **Maja Kjær Rasmussen:** Conceptualization, Methodology, Writing - review & editing. **Kirstine Skov Benthien:** Conceptualization, Methodology, Writing - review & editing. **Ulla Toft:** Conceptualization, Supervision, Writing - review & editing, Validation. **Louise Hjarnaa:** Conceptualization, Methodology, Writing - review & editing. **Knud Rasmussen:** Conceptualization, Supervision, Writing - review & editing, Validation. **Camilla Palmhøj Nielsen:** Conceptualization, Project administration, Methodology, Supervision, Writing - review & editing, Validation.

Declaration of Competing Interest

None declared.

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