POLICY **BRIEF** 2024:24

Perspectives into topical issues in society and ways to support political decision making.

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Hospital-at-Home services in Finland

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Hospital-at-Home services cover 92 % of the Finnish population. Hospital-at-Home care is a cost-effective alternative in situations where the patient's condition allows remote monitoring or where 2-3 visits per day are sufficient for treatment. The development and evaluation of Hospital-at-Home services is challenged by the lack of standardized definition, information contents, pricing and outcome measures.

Introduction

Healthcare systems around the world are struggling with aging populations, increasing healthcare needs and expenditures, and the ongoing reduction of hospital beds and workforce. Hospital-at-Home (HaH) has been identified as an alternative model of care to deliver hospital-level care in patients' homes for a limited period of time (Leong et al., 2021).

HaH models of care aim to support early discharge and avoid unnecessary admissions by substituting hospital care. However, there is a lack of evidence of the effectiveness and cost-effectiveness of existing HaH models (Norman et al., 2023; Leong et al., 2021). In addition, the level of digital transformation is unknown (Denecke et al., 2023), although digitalization could offer great opportunities to supplement, replace, or even create new service models in HaH care.

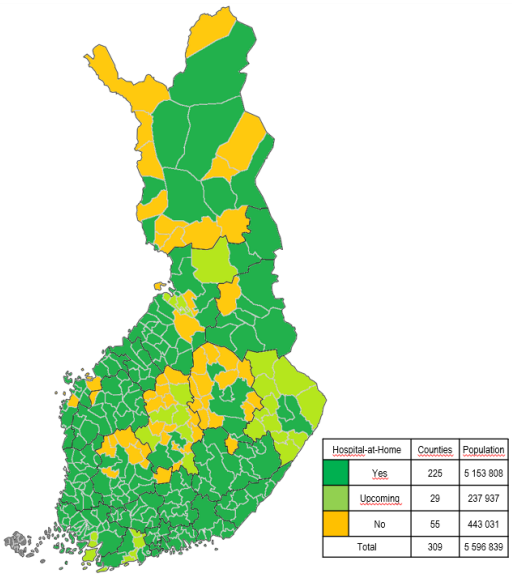
The aim of the exploration is to create a comprehensive, up-to-date overview of the status, effectiveness, and measurement of HAH services in Finland. The results can be used to guide prioritization in service planning, particularly for health systems that are struggling with capacity constraints and increasing costs.

Methods and materials

This exploration consisted of four work packages: 1) The first work package describes the current state of HaH services by wellbeing services counties as well as customer and service groups; 2) the second work package describes the use of digital services and related factors; 3) the third work package describes the benefits and costs of HaH services by service paths; and 4) the fourth work package summarizes the development needs. An extensive use of new and existing literature, which was supplemented with interviews and surveys of the public and private actors, was used in the exploration.

Results

The availability of HaH services (population coverage 92 %) has increased (Figure 1), but the total number of patients is indicative, due to varying statistics and reporting practices. There are several service models in wellbeing services counties, as HaH models have been developed according to regional needs.



Hospital-at-Home	Counties	Population
Yes	225	5 153 808
Upcoming	29	237 937
No	55	443 031
Total	309	5 596 839

Figure 1. The availability of HaH services in Finland in 2023.

The definition of the HaH and the service strategy guide patient selection. Wellbeing services counties need a clearer definition of the HaH, because the definition of the HaH is challenging in relation to other services provided at home.

HaH service models are in transition due to increasing healthcare needs and expenditures

The coordination and continuity of care is challenged by the deficiencies related to the identification of patients suitable for a HaH and referral process. The coordination and continuity of care is also challenged by the lack of up-to-date care plans, occasional ambiguities in the definition of care responsibility, and challenges in the health information exchange between HaH, emergency department, and homecare.

HaH care is primarily provided by nurses. According to the survey, the average patient-to-nurse ratio is approximately 4.4. The number of employees and the structure of personnel is affected by the variable use of purchasing and consulting services, and the regions are not able to provide accurate and up-to-date information on the number of employees nor the structure of personnel.

Working in HaH requires versatile skills. Additional training needs emphasize dealing with behavioral disorders, treating people with substance abuse problems, and functional assessment skills. The increase and expansion of HaH services require new kinds of competencies.

HaH care is a cost-effective alternative to inpatient care especially in cases where part of the care can be provided remotely

Based on the cost simulation, HaH care is a cost-effective alternative to inpatient care in situations where the patient's condition allows remote monitoring or 2-3 visits per day. Especially if the intensity of care can be reduced during the HaH care period, HaH is more affordable than inpatient care. The cost simulation analyzed example patients provided in Figure 2. Regional differences in population structure, living environment and living conditions challenge the provision of HaH services, but close cooperation between other stakeholders can increase cost-efficiency and customer orientation across sector boundaries.

Figure 2. Patient groups and example patients selected for analysis

1. Patients requiring acute hospital care

Description:
Group 1 includes patients with, for example, infections or those needing wound care or intravenous treatment. This group also includes patients requiring care after surgery or injury.

Example patient:

A generally healthy working-age patient who needs acute hospital-level care.

2. Patients receiving regular services

Description:
Group 2 includes patients who receive regular home care or are in residential care services, such as the elderly and disabled individuals.

Example patient:

An elderly inhabitant of a residential care unit with a permanent decline in functional capacity and an acute condition requiring hospital-level care.

3. Patients receiving palliative and end-of-life care

Description:
Group 3 includes patients who receive palliative care or end-of-life care. Palliative care provides comprehensive care for a terminally ill patient and their relatives, aiming to prevent and alleviate suffering, as well as to maintain quality of life. Palliative care, on the other hand, focuses on the last days and weeks of life, when functional capacity has significantly diminished.

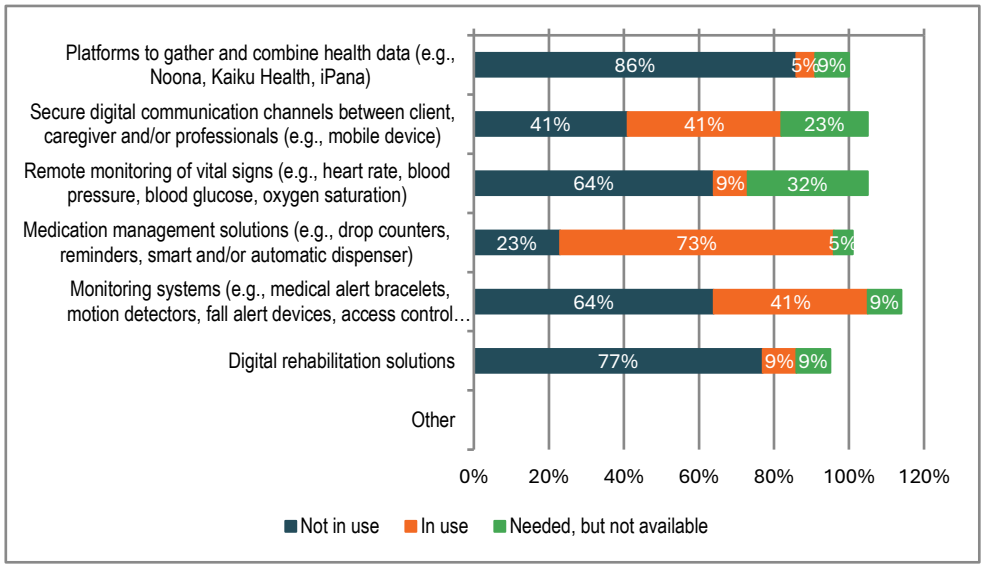
Example patient:

a) A patient with early palliative care needs alongside disease-focused treatment, b) a patient in the palliative care phase, and c) a patient in end-of-life care.

Digital services replace only a small part of physical visits

The adoption of digital services is scarce (Figure 3) due to the lack of incentives, digital strategies, and funding models. The implementation of digital services is also challenged by the level of function of patients and cognitive accessibility of digital services. In line with previous literature, the digital maturity of HaH is low. However, there is a growing need in the regions to develop digital services that increase the promptness, uniformity, and availability of HaH care.

Figure 3. Existing digital services in HaH care.



Patients' satisfaction seems to be positive in the HaH care, but deficiencies in the systematic collection of patient and especially family feedback challenge the development of customer-oriented services in the integrated service paths.

Conclusions

In the future, HaH will be seen as a growing and even primary form of service model instead of traditional inpatient care. According to the interviewees, HaH care should be increased and expanded into a nationwide network. However, increasing and expanding HaH care requires establishing and clarifying HaH as part of an integrated service system. Increasing and expanding operations also requires changing traditional thought patterns of the delivery of hospital-level care, transforming HaH into a new '*frontline service*'.

To ensure this, HaH requires a clearer definition, which has effects on the integrated service models (incl. responsibility for care, division of labor), pricing (incl. customer fees), statistics (incl. standardized information content) and evaluation (incl. standardized outcome measures). Currently, the HaH visits are irregularly recorded in primary (AvoHilmo) or specialized healthcare visits in the Care Register for Healthcare (Hilmo), hampering the evaluation of HaH services in and across regions.

Recommendations

National recommendations

1. **A clearer definition as a part of an integrated service system**

   The Finnish Institute for Health and Welfare must define HaH more clearly. The role of the HaH should be described as a part of an integrated service system across sector boundaries.

2. **Definition of standard information contents and outcome measures**

   Standardized information contents and outcome measures (incl. functional status and quality-of-life questionnaires) must be defined in order to evaluate and monitor HaH care as a separate service entity.

   Key data contents are especially the intensity of the care as well as the number of patients, care episodes, visits, and procedures.

   The pricing of HaH care (incl. customer fees) needs to be described more transparently and comparably by defining the principles for calculating performance costs.

   The accounting principles must consider equipment, supplies, medical transport, and medicine costs as well as personnel (incl. travel costs) and administrative costs.

3. **National support and guidance**

   The quality recommendations and competence requirements of the HaH must be defined at the national level. An expert group must be appointed for the assignment.

   At the national level, the networking and cooperation of HaH operators should be promoted and expert support in the interpretation of legislation should be offered.

Regional recommendations

1. **Support for continuity and coordination of care**

   Wellbeing services counties must prepare service descriptions within and between regions and define the roles of different service providers.

   Health information exchange must be secured by interoperable information systems.

   Every patient must have an up-to-date care plan. Every palliative patient must also have a proactive care plan for the end of life.

2. **Systematic and comprehensive identification of suitable patients**

   Wellbeing services counties must identify suitable patients for the regional HaH care more systematically and comprehensively.

   Wellbeing services counties must also define care pathways to increase awareness of HaH services at various levels of the service system, thereby improving the efficiency of referrals and collaboration among stakeholders.

3. **Ensuring sufficient competence**

   The wellbeing services counties must ensure versatile expertise along the entire service path (Incl. assessment, updating, development of expertise).

   Education should focus on confronting those with behavioral disorders, treating those with substance abuse problems, and assessing functional capacity.

   Education should also focus on digital competencies.

4. **Digital leap to renew traditional service models**

   The wellbeing services counties must prepare a digital strategy that supports, supplements or replaces traditional service models.

   The wellbeing services counties must also employ incentives to encourage the adoption of digital services and solutions.

5. Customer-centeredness as part of the service system

Customer-centeredness must be strengthened in the planning, implementation, and evaluation of HaH care.

Feedback needs to be collected from patients and their family about the quality of care, results, and experiences as part of an integrated service system.

Quality indicators should be considered when collecting feedback from families.

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