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International Society for Evidence-Based Health Care

Hospital at Home Care

From Health Technology Assessment to Structured Research and Implementation

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Background and aims



Hospital at Home

What is Hospital at Home?

Hospital-level acute care delivered in the patient's home as an alternative to conventional inpatient care.

Growing interest and implementation

Increasing adoption worldwide, driven by hospital capacity constraints and the need for more resource-efficient care.

Need for evidence-based decision making

Sahlgrenska at Home

A long-term strategic programme to move specialised hospital care from the hospital to the patient's home through new technology, new ways of working and collaboration across healthcare providers.

Our contribution:

Health Technology Assessment to guide structured research and evidence-based implementation.

Methods

Systematic search

June 2024 and updated March 2026

Databases: PubMed, Embase, CINAHL, Web of Science Core Collection, and the Cochrane Library

17 randomized controlled trials

3,070 records screened

Critical appraisal

Risk of bias

Certainty of evidence

GRADE

Health Technology Assessment

Including health economics and ethics

Conclusions and implications

Structured research and implementation

New studies initiated

Ongoing implementation activities

PICO (summary)

Population: Adult patients who would usually be hospitalized according to the current standard of care in Sweden.

Intervention: **Hospital at Home** – a care model providing healthcare through visits in the patient's home for patients who would otherwise be hospitalized.

Comparator: In-hospital care according to the current standard of care in Sweden.

Outcomes: Mortality (primary), change in health status, Emergency Department visits, complications (including infections but excluding mortality), health-related quality of life, readmission, length of stay, and experience/satisfaction (including sense of security) among patients, staff, and close relatives. Survey data were included only if based on validated scales.

Study design: Randomized controlled trials

Five disease areas included:

- Chronic obstructive pulmonary disease exacerbation
- Heart failure
- Elderly patients with acute deterioration
- Respiratory tract infections
- Neutropenia

Results

Evidence gaps

(limits of the current evidence base)

- Evidence from RCTs is limited to selected patient populations.
- Important evidence gaps remain, particularly regarding:
  - Patient experiences
  - Complications and safety
  - Resource utilisation

HTA findings (17 RCTs)

Outcome	Finding (compared with in-hospital care)	Certainty of evidence (GRADE)
Mortality	↔ No clear difference	• **COPD: Low** • **Selected elderly patients with acute deterioration: Low** • **Heart failure, respiratory tract infections, neutropenia: Very low**
Health-related quality of life (COPD)	↔ No clear difference	**Low**
Readmission (COPD)	↔ No clear difference	**Low**
Length of stay (days)	↑ **May be longer in HaH**	• **Heart failure: Low** • **Selected elderly patients with acute deterioration: Moderate**
Costs	↓ **10–25% lower costs (wide uncertainty)**	

↑ Favors HaH ↔ No clear difference ↓ Favors usual hospital care

HaH = Hospital at Home | COPD = Chronic Obstructive Pulmonary Disease

Conclusions

Ongoing research and co-design projects at Sahlgrenska

Implementation and scale-up

- Implementation studied through interviews and observations
- Organisational integration across care settings
- First 500 care episodes evaluated
- Length of stay: 5.6 days for ***HaH*** vs 5.2 days for ***inpatient care***
- Readmission to inpatient care: 18%

Preliminary real-world data

BB at Home (postnatal care at home)

- Expanded postnatal care at home for new parents and newborns
- Provides professional support in the home after birth
- Examples of outcomes include high parental satisfaction and reduced need for in-hospital stays

Older patients' experiences

- Study exploring older patients' experiences of receiving acute hospital-level care at home
- Focus on perceived safety, care processes and care trajectories
- Mean age 87 years

Care model for advanced heart failure

- Co-design process to develop a care model for patients with advanced heart failure
- Suitable for delivery of care in the patient's home
- Involves patients, relatives and healthcare professionals

Acute hospital-level care at home for older adults

- Study of adults aged 75+ who receive acute hospital-level care at home
- Mobile team with physician and nurse assesses and treats at home
- Explores older persons' experiences compared with emergency department care

Conclusion

Current RCT evidence is limited by low certainty and important knowledge gaps.
At Sahlgrenska, the HTA has provided a foundation for coordinated, patient-centred research and evidence-based implementation of Hospital at Home.

Hospital at Home Care: From Health Technology Assessment to Structured Research and Implementation

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