



ACNAP
Association of Cardiovascular
Nursing & Allied Professions

Role of nurse-led clinics in addressing patient adherence and implementation of guidelines

CRT Plenary meeting on Guidelines implementation, 29 May 2024 Frankfurt



ESC
European Society
of Cardiology

Focus Points for Today's Discussion

- ✓ To explore the significance of nurse-led clinics.
- ✓ To understand the importance of patient adherence.
- ✓ To examine the role of clinical guidelines in standardized care

Nurse-led clinics

- The concept of HF nurses working in an outpatient clinic was for first time described in 1983!
- This was followed by the first nurse-led HF clinic started in Sweden in 1990 after which they spread out to many Swedish hospitals.
- Nurse-led HF clinics reduce the need for hospital care since titration of drugs can be rapidly achieved.
- Furthermore, studies indicate that early follow-up after hospitalization may prevent readmissions



Case Report | [Free Access](#)

Nurse-led heart failure clinics in Sweden

Anna Strömberg Jan Mårtensson, Bengt Fridlund, Ulf Dahlström

First published: 03 September 2001 | [https://doi.org/10.1016/S1388-9842\(00\)00099-4](https://doi.org/10.1016/S1388-9842(00)00099-4) | Citations: 68

Nurse-led clinics

- In this nation-wide registry, 39% of identified HF cohort was planned to be referred to a nurse-led HF clinic.
- Patients who were planned for referral had more-severe HF, higher use of HF treatments, and less comorbidities at referral.
- Planned referral was independently associated with lower risk of death, but not of HF hospitalization.

Journal of the American Heart Association

Volume 8, Issue 10, 21 May 2019

<https://doi.org/10.1161/JAHA.118.011737>



ORIGINAL RESEARCH

Nurse-Led Heart Failure Clinics Are Associated With Reduced Mortality but Not Heart Failure Hospitalization

Gianluigi Savarese, MD, PhD; Lars H. Lund, MD, PhD; Ulf Dahlström, MD, PhD; Anna Strömberg, PhD

BACKGROUND: Follow-up in a nurse-led heart failure (HF) clinic is recommended in HF guidelines, but its association with outcomes remains controversial, with previous studies including few and highly selected patients. Thus, large analyses of “real-world” samples are needed. Aims were to assess: (1) independent predictors of and (2) prognosis associated with planned referral to nurse-led HF clinics.



Nurse-led clinics

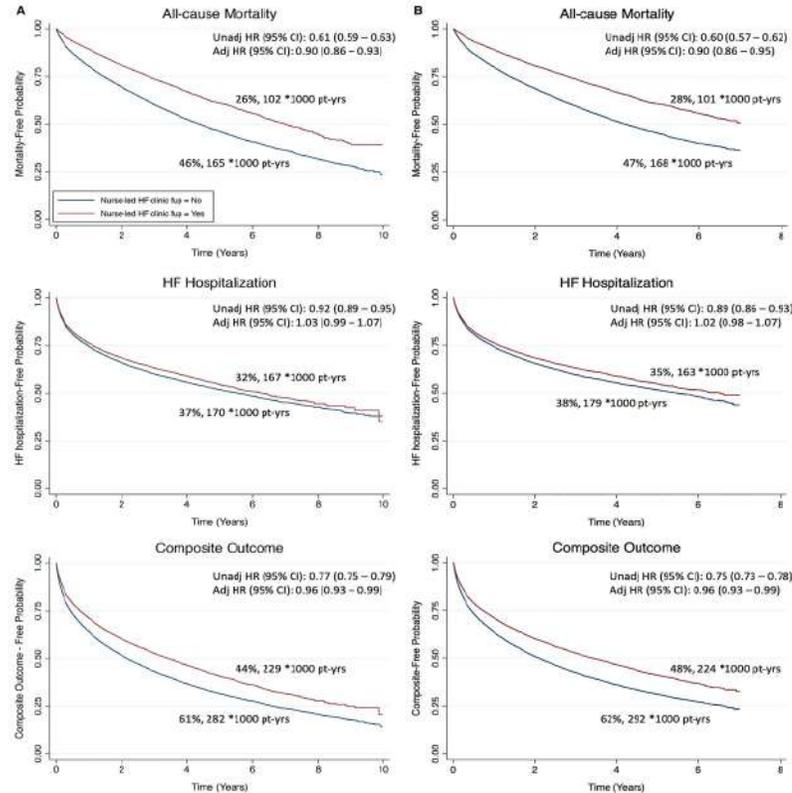


Fig. Outcome analysis (A) in the overall population and (B) in patients enrolled between 2006 and 2011 (sensitivity analysis). In each graph, the number of events, as % of the number of patients, and the event rates, as patient-years, are reported for each study arm. adj indicates adjusted; HF, heart failure; HR, hazard ratio; pt-yrs, patient-years; unadj, unadjusted.



Gianluigi Savarese. Journal of the American Heart Association. Nurse-Led Heart Failure Clinics Are Associated With Reduced Mortality but Not Heart Failure Hospitalization, Volume: 8, Issue: 10, DOI: (10.1161/JAHA.118.011737)

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Importance of medication adherence

- ✓ Adherence to treatment is crucial for achieving optimal health outcomes, managing chronic conditions, preventing disease progression, and reducing complications.
- ✓ When patients consistently follow their prescribed treatment plans, they are more likely to experience improved health outcomes, be hospitalized less often, and enhanced quality of life.
- ✓ Additionally, improving medication adherence plays a significant role in controlling healthcare costs by minimizing the need for emergency interventions, hospital readmissions, and additional medical services.



Patient Adherence

- Let's take a closer look at the factors associated with low adherence rates:

Prevalence of non-adherence

- Studies have shown consistently that non-adherence to medication regimens is a prevalent issue across various therapeutic areas. It's estimated that approximately 50% of patients with chronic conditions do not take medications as prescribed.

Consequences of non-adherence

- Poor medication adherence can worsen health outcomes, increase hospitalizations, and raise health care costs. Additionally, non-adherence is associated with reduced effectiveness of a treatment regimen, increased disease progression, and elevated risk of complications.

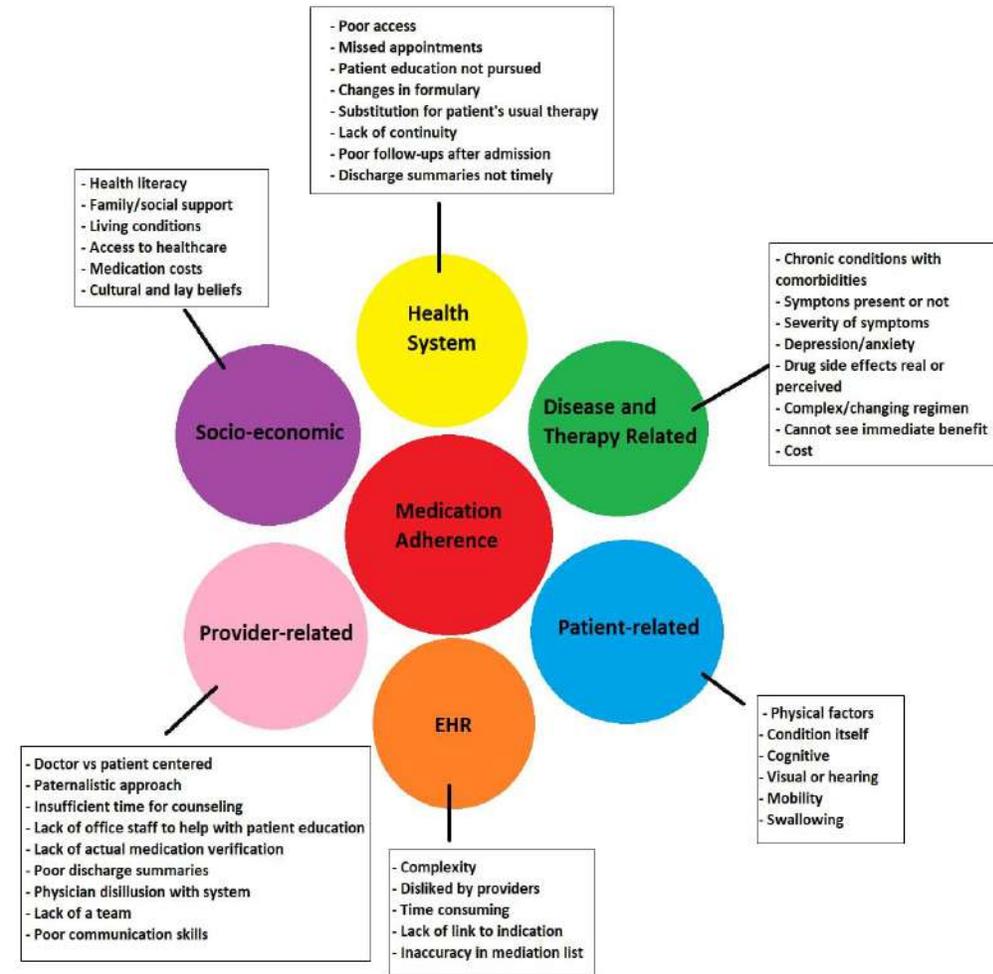


Figure based on: Ileana L. Piña, Katherine E. Di Palo, Marie T. Brown, Niteesh K. Choudhry, Jamie Cvengros, Deborah Whalen, Laurie P. Whitsel, Janay Johnson,
Medication adherence: Importance, issues and policy: A policy statement from the American Heart Association, Progress in Cardiovascular Diseases, Volume 64,2021,Pages 111-120,

Patient adherence

- **Factors influencing non-adherence**
- ✓ One challenge is that many medications require multiple daily doses at specific times, which can be difficult to remember and integrate into busy lives. On top of that, unpleasant side effects can deter patients from taking their medication, especially if not managed effectively.
- ✓ On top of that, there's a lack of patient education. They might not fully grasp the purpose or long-term benefits of their treatment plans, leading to a decreased sense of urgency about taking their medications consistently. We can pair this with psychosocial factors, like stress, depression, lack of motivation, and social support, especially for chronic diseases.
- ✓ Additionally, there are cost barriers. Affordability can be a significant hurdle, forcing patients to skip directly or ration medication, hoping for cost savings.



Patient adherence

Communication gaps

- ✓ Inadequate communication between health professionals and patients can lead to misunderstandings about medication instructions, potential side effects, and the importance of adherence.
- ✓ Limited patient engagement in shared decision-making processes can decrease commitment to treatment plans.

Healthcare system challenges

- ✓ A fragmented health system and a lack of coordination among healthcare practitioners can contribute to gaps in care and make medication management difficult.
- ✓ Access to follow-up care, monitoring, and support services may be limited, particularly for patients in underserved or rural areas.



Patient adherence

Strategies to Improve Adherence:

- ✓ **Patient Education:** Providing comprehensive information about the importance of adherence and the consequences of non-adherence.
- ✓ **Simplified Regimens:** Reducing the complexity of medication schedules (e.g., once-daily dosing).
- ✓ **Support Systems:** Utilizing reminder systems, support groups, and regular follow-ups to encourage adherence.
- ✓ **Motivational Interviewing:** Engaging patients in discussions to identify barriers to adherence and collaboratively finding solutions.



Implementation of Clinical Guidelines

- **What are Clinical Guidelines?**
 - ✓ Systematically developed statements to guide practitioner and patient decisions.
 - ✓ Based on evidence, clinical expertise, and patient preferences.
- ✓ **Development and Challenges:**
 - ✓ Developed by professional organizations (e.g., ESC, AHA, ADA).
 - ✓ **Challenges include:**
 - ✓ Lack of awareness or understanding.
 - ✓ Complexity and volume of guidelines.
 - ✓ Variability in practice settings and resources.



Barriers to the Effective Implementation of Guidelines

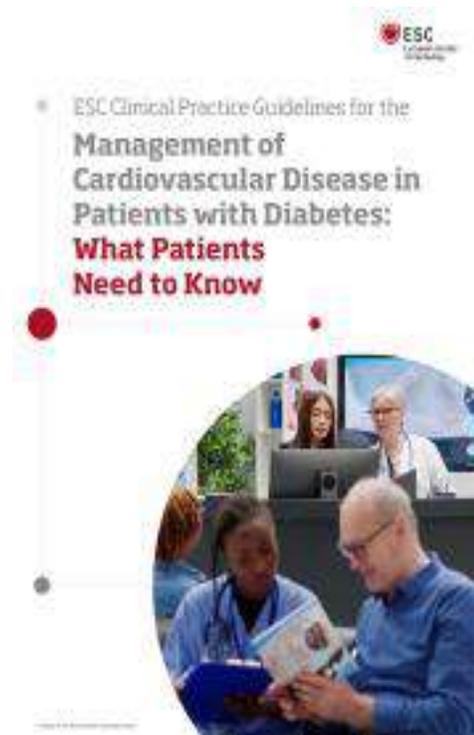
Category	Barriers
Guideline-related	<ul style="list-style-type: none">poor quality of evidenceinadequate practical relevance and applicability for different target audiences (i.e. physicians, nurses, patients)lack of guideline clarity (complicated, confusing, too much information)poor accessibility and dissemination of guidelines
Patient-related	<ul style="list-style-type: none">poor understanding, knowledge, and skillsdifficulties with adherence and compliance, especially self-care behaviors
Healthcare personnel	<ul style="list-style-type: none">insufficient training, poor skillslack familiarity and knowledgepoor attitudes awareness, motivation, and self-efficacylack of belief in effectiveness of guideline recommendation/desired outcome
Organizational	<ul style="list-style-type: none">inadequate time and excessive work pressureshortage of personnel and other resourcesinadequate budget and remunerationinadequate leadership and support from co-workers
External barriers	<ul style="list-style-type: none">unhelpful government health policies

Strategies to address barriers

Strategy Category	Implementation Strategies
Guideline-related	<ul style="list-style-type: none">create short, user-friendly guidelines with reduced complexityimprove dissemination and accessibility using checklists, tablets, smartphones, and decision-making toolsinclude recommendations on comorbiditiesset clear intervention goals
Patient-related	<ul style="list-style-type: none">empower patients through education and support to improve knowledge, understanding, skills, and adherence
Healthcare Personnel	<ul style="list-style-type: none">improve knowledge, familiarity, agreement, and awareness by:<ul style="list-style-type: none">- active learning with expert opinion leaders- engagement between local opinion leaders and staff to develop local implementation strategies- educational meetings, outreach visits, audit and feedback, workshops, small group interactive post-graduate training sessions, continuing education- provision of educational materials including written materials, didactic presentations, and interactive conferences
Organizational	<ul style="list-style-type: none">application of manual or automated decision support systems to prompt following of recommendationsdevelopment and use of standard processes, procedures, and protocolsestablishing clear roles in terms of standing ordersoffering financial incentivesdeveloping further multi-professional collaboration

Guidelines for Patients

- What patients need to know
- Based on ESC Clinical Practice Guidelines, these documents describe diagnosis and treatment recommendations based on medical and scientific evidence from healthcare professionals. They are intended to contribute to patients' understanding of their condition, to give them the knowledge and confidence to be involved in shared decision-making with their healthcare providers. It also provides suggestions on ways to take care of themselves, which is essential in the effective management of their disease.

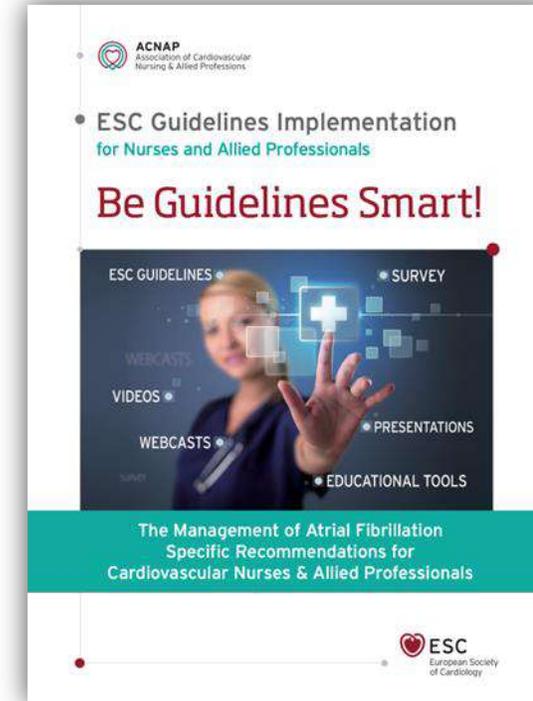


Guidelines implementation

A 'Be Guidelines Smart Toolkit' is available, aiming to ensure that nurses and allied professionals throughout Europe are aware of the variety of ESC guidelines and provide access to the latest evidence based resources in the management of cardiac conditions. More information available from:

www.escardio.org/be-guidelines-smart

ESC. Be Guidelines Smart. <https://www.escardio.org/Sub-specialty-communities/Association-of-Cardiovascular-Nursing-&-Allied-Professions/Education/be-guidelines-smart> (15 November 2021).



- ✓ A nurse's primary responsibility is to deliver the best quality of care to all patients efficiently and safely.
- ✓ To deliver top-quality care, nurses follow evidence-based guidelines for practice and take an individualized, patient-centered approach instead of a more generalized approach.



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