

## How can we improve the follow-up of patients with heart failure?

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EDITORIAL

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### Older, frail patients with heart failure must receive comprehensive follow-up. Their health literacy and capacity for self-care must be enhanced.

Heart failure is a frequent and common cause of hospital admissions (1).

Munkhaugen et al. have now published a study in the Journal of the Norwegian Medical Association in which they map drug treatment, self-care and health literacy in patients with heart failure admitted to Drammen Hospital and Vestfold Hospital Trust over a six-month period (2). The vast majority of patients in the study were over 70 years of age, and many scored high on frailty despite the fact that those who were most ill were not included. However, there was less patient population bias than in the Norwegian Heart Failure Registry (3), and the study therefore provides valuable information on how we treat and follow up patients who are not well-represented in the registry.

Follow-up of patients with heart failure can be divided into three main phases. The first phase consists of diagnosis and optimisation of drug therapy. This phase often begins during a hospital admission and continues at the outpatient clinics for heart failure, where the treatment of patients with heart failure with reduced ejection fraction is gradually escalated with the help of betablockers, mineralocorticoid receptor antagonists, renin-angiotensin-aldosterone system

inhibitors (RAAS inhibitors) and sodium-glucose cotransporter-2 inhibitors (SGLT2 inhibitors). Only 17 % of the heart failure patients surveyed in the study were referred to the outpatient clinic for heart failure, and their median age was eight years younger than those who were not referred (2). The higher proportion of referrals compared to what the respective hospitals have reported to the Heart Failure Registry (Drammen 8 %, Tønsberg 16 %) (3) can be attributed to variations in the use of assessment criteria and diagnostic codes to identify the patients. Nevertheless, the figures suggest that not all patients receive the follow-up service at the outpatient clinic, especially older patients.

In the second phase of the follow-up, the focus is on stabilisation, with as few hospital admissions as possible. In this phase, good follow-up can reveal early warnings of exacerbation. In such cases, self-treatment plans and enhanced health literacy can prevent admission to hospital, for example by adjusting diuretic therapy when there are signs of increased oedema, such as weight gain. Since almost 80 % of the patients in the study had a known heart failure diagnosis prior to inclusion, we can assume that a majority of the patients were in this phase. It is therefore particularly concerning that the authors report a low degree of health literacy among the patients and little use of self-treatment plans.

***«The findings indicate that many patients with heart failure are undertreated»***

The final phase of the follow-up encompasses advanced heart failure or a significant disease burden from comorbidities. This entails a change from prognostic to symptomatic treatment objectives. Effective heart failure treatment translates to effective symptom alleviation, and the drugs have additive effects on both symptoms and survival (4). As a general rule, patients with reduced ejection fraction should therefore be treated with all four classes of drugs throughout the clinical course. In this study, fewer than half of the patients received SGLT2 inhibitors and mineralocorticoid receptor antagonists, whereas betablockers and RAAS inhibitors were used more frequently. The low use of these two classes of drugs is consistent with other studies, indicating unnecessary restraint in the use of SGLT2 inhibitors among older patients (5). Low use may be due to fear of adverse effects, uncertainty regarding their transferability from clinical trials, and limited clinical experience with new drugs. However, there are well-documented treatment benefits from all these drugs, including in older patients (6). The findings therefore indicate that many patients with heart failure are undertreated.

The study by Munkhaugen et al. highlights the areas for improvement in the follow-up and treatment of patients with heart failure. The authors point to unmet needs for better follow-up, more use of self-treatment plans, enhancement of patients' self-care and health literacy, opportunities for remote follow-up at home, as well as use of structured advance care planning for patients in the end-of-life stage. These are important measures that can be helpful in the face of the challenges highlighted. In a wider context, the results point to a need for more comprehensive care pathways, as recommended by the Norwegian Directorate of Health for older patients with multiple diagnoses (7).

Such pathways should include clear information exchange interfaces between diagnosis-specific treatment lines in the specialist health service and more comprehensive pathways in the primary healthcare service. The Norwegian Society of Cardiology's guidelines for general practitioners who treat heart failure patients can contribute to a more seamless transition of the follow-up from the hospital to the primary healthcare service (8). Together with the measures proposed by Munkhaugen et al., we can move closer to a better and more comprehensive follow-up of heart failure.

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## REFERENCES

1. Savarese G, Becher PM, Lund LH et al. Global burden of heart failure: a comprehensive and updated review of epidemiology. *Cardiovasc Res* 2023; 118: 3272–87. [PubMed][CrossRef]
2. Munkhaugen J, Sverre E, Dammen T et al. Skrøpelighet, helsekompetanse og egenomsorg hos pasienter som innlegges med akutt hjertesvikt. *Tidsskr Nor Legeforen* 2023; 143. doi: 10.4045/tidsskr.23.0297. [CrossRef]
3. Norsk hjertesviktregister. Årsrapport 2022. [https://www.kvalitetsregister.no/sites/default/files/2023-08/%C3%85rsrapport%202022%20Norsk%20hjertesviktregister\\_o.pdf](https://www.kvalitetsregister.no/sites/default/files/2023-08/%C3%85rsrapport%202022%20Norsk%20hjertesviktregister_o.pdf) Accessed 31.10.2023.
4. McDonagh TA, Metra M, Adamo M et al. 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: Developed by the Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). With the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur J Heart Fail* 2022; 24: 4–131. [PubMed][CrossRef]
5. Bellary S, Barnett AH. SGLT2 inhibitors in older adults: overcoming the age barrier. *Lancet Healthy Longev* 2023; 4: e127–8. [PubMed][CrossRef]
6. Vaduganathan M, Claggett BL, Jhund PS et al. Estimating lifetime benefits of comprehensive disease-modifying pharmacological therapies in patients with heart failure with reduced ejection fraction: a comparative analysis of three randomised controlled trials. *Lancet* 2020; 396: 121–8. [PubMed] [CrossRef]
7. Helsedirektoratet. Oppfølging av personer med store og sammensatte behov. <https://www.helsedirektoratet.no/veiledere/oppfolging-av-personer-med-store-og-sammensatte-behov> Accessed 31.10.2023.
8. Norsk cardiologisk selskap. Utredning, behandling og oppfølging av kronisk hjertesvikt i allmennpraksis. Arbeidsgruppa for hjertesvikt. <https://www.legeforeningen.no/contentassets/ee690b8c98084969ba2057ba4b4fe336/utredning-og-behandling-hjertesvikt-allmennpraksis-15.03.23-endelig.pdf> Accessed 31.10.2023.

