The Heart Failure Policy Network

Pressure point 2:

Discharge planning and early follow-up

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About the Heart Failure Policy Network

The Heart Failure Policy Network is an independent, multidisciplinary group of healthcare professionals, patient advocacy groups, policymakers and other stakeholders from across Europe whose goal is to raise awareness of the unmet needs surrounding heart failure (HF) and its care. All members donate their time for free. All Network content is non-promotional and non-commercial.

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1. Top five things you need to know

1. **Discharge from hospital after an acute heart failure (HF) episode marks the beginning of care, not the end.** HF is a lifelong condition; appropriate follow-up after discharge is critical to improve patient symptoms, quality of life and survival.[1]

2. **Many patients leave the hospital with high levels of need, even when judged fit to go home by physicians.**[2,3] Transition from hospital to community settings is thus a vulnerable period[4-6] where patients are at risk of administrative errors, data loss and generally 'falling though the gaps' as they withdraw from close medical supervision.

3. **People leaving hospital after an acute HF episode remain at high risk of hospital readmission and death.**[6] The three months following discharge from an acute HF episode are recognised as a peak period for rehospitalisations,[5,7,8] with a higher risk of mortality than during hospitalisation.[9]

4. **Every patient leaving hospital should have a personalised discharge plan and be followed-up by a specialist within two weeks.** This process should take a multidisciplinary approach to the person's clinical and other needs, and it must ensure plans are in place for appropriate follow-up, monitoring and care.

5. **Discharge planning must be individualised to each individual's clinical and personal circumstances – including their wishes and preferences.** Consideration of their social and family circumstances and psychological wellbeing are paramount to ensure they can adapt to the demands of treatment, modifying self-behaviours and monitoring.

See section 2: What is the issue?

See section 4: What is good practice?

See PP: Patient empowerment and self-care

2. What is the issue?

Preventing hospital readmission should be a key goal at discharge

When a person is discharged from hospital after an acute HF episode, a key goal should be to prevent a repeat admission. Recurrent hospitalisations are a serious event and contribute to decreased survival.[10] Rates of hospital readmission are about 25% within a month of discharge after a first episode of acute HF,[11] rising to 50% in the first six months.[7,12-14] The risk of death is also highest in the early period after discharge:[15] mortality in the first two to three months after hospital discharge is around 7–11%.[16]

Transitions of care from hospital to home are a vulnerable period for people with HF

During the transition from hospital to community setting, a multidisciplinary assessment of the individual's condition is critical. Patients may leave the hospital with high levels of need as serious symptoms may not be well controlled, even when they are judged fit to go home by hospital physicians.[2,3] For example, up to a quarter of patients still experience both pulmonary oedema (breathlessness) and peripheral oedema (swelling of the limbs) at discharge.[17]

Disruption and errors in care are common during transition from hospital

Transition from the hospital setting also carries numerous risks for the quality of care: information can be lost, contact between patients and healthcare professionals broken, and care and treatment unnecessarily delayed or discontinued.[6] The consequences for patients can be significant. For example, up to 70% of patients experience an unintentional change in their medication during major transitions,[18] and between 5% and 8% of unplanned hospital admissions can be directly attributed to medication issues.[19]

Stabilisation following discharge may take days, weeks or even months

There are major limitations to what can be achieved in the inpatient setting when treating an acute episode of HF.[16] Close care and supervision should extend into the days, weeks and potentially months after the patient leaves the hospital.[1,4] This highlights the need for seamless transitions of care from hospital discharge onwards.

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3. Evidence of effectiveness

There is clear evidence of the effectiveness and benefits of multidisciplinary and integrated models in discharge from hospital:

- Leading models of discharge with close patient involvement demonstrate reduced length of hospital stay (i.e. expedited discharge) without compromising patient safety.[20]
- By supporting integration of care, optimising use of resources and improving patient outcomes, effective discharge planning may lead to reduced costs.[11]
- Ensuring follow-on appointments in the first week or month after discharge reduces the risk of hospital readmission.[21] Patients with an outpatient follow-up appointment scheduled upon hospital discharge have lower readmission rates than those who do not have this follow-up.[22]
- HF specialist nurses are central to effective hospital discharge,[20] and pharmacist-led medicines reconciliation reduces emergency visits,[23] showing the importance of multidisciplinary working in successful hospital discharge.

4. What is good practice?

Patients hospitalised for HF should have a personalised discharge plan

According to the UK National Institute for Health and Care Excellence guidelines,[24] the following key factors should be ensured in a quality discharge plan:

- Patients should only be discharged from hospital when they are stable and their management plan is optimised.
- Timing of discharge should consider the wishes of both patient and carer, and the level of care and support available in the community.
- Patients should be given clear information as to how they can access advice and follow-up care.
- Every effort should be made to inform the primary care team, patient and carer.

Discharge planning should be initiated as soon as possible

Preparing for discharge is a recognised phase of inpatient care.[11] Ideally, discharge planning should be initiated as soon as the patient's condition is stable.[1 4] It should ensure a seamless transition from inpatient to outpatient or primary care. This includes sharing appropriate information between professionals in different care settings, and putting steps in place to enable continuous monitoring and adjustments of treatment, so patients are supported in adhering to their medication and initiating lifestyle adjustments.[25]

Patients should be actively involved in setting discharge and care goals

The transition from hospital care can be challenging for people with HF. Patients and clinicians should work together in setting goals, taking full account of the patient's preferences, existing healthcare resources and the risk of adverse outcomes.[9 26] Structured discussions may also help determine each patient's knowledge, health literacy and available support networks.[11 20] It is vital to engage patients, their carers and families to ensure a sound understanding of the patient's needs and discharge plan after they have left the close supervision of the hospital.

Preparing patients to manage and adapt to life with HF is essential

A key goal of discharge planning should be to help prepare patients and their families for the journey ahead by enhancing their knowledge, skills and confidence to manage care, navigate the healthcare system, and know when and how to seek help.[27] Therapeutic education should be offered to all patients, initiated in hospital and structured around a well-organised follow-up model.[1 6]

Patients should always have a clear follow-up schedule when they leave hospital

Patients need clear points of contact when leaving the hospital to ensure they do not feel 'lost' or unsupported after discharge.[11]

What should follow-up include?

According to guidelines,[1 4 24 28] at point of discharge, in-hospital healthcare professionals should:

- plan follow-up with a review from the GP or primary care team, ideally within seven to ten days of discharge, or three days in cases of severe HF
- schedule a visit to the hospital HF team within two weeks of discharge
- refer patients to, or enrol them in, disease management programmes

Efficient communication across settings is vital

Communication, referral and data-sharing protocols between different care settings are important to support discharge planning and transitional care.[6] Primary and secondary care teams need to share results from investigations and ensure information – for example, on patients' progress or change in situation – is communicated across the entire care team. This can be done via shared databases, standardised electronic records or patient-held alert cards.[29]

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5. Involving a multidisciplinary team

A wide range of healthcare professionals should be involved in effective discharge planning.

Role	Patient	Specialist physician (usually cardiologist or internal medicine specialist)	In-hospital HF specialist nurse	Primary care physician	Primary care nurse	Pharmacist	Carers and family
Responsibilities	Patients need to be involved in decisions about their discharge and follow-up.[1] They will have a crucial role in the management of their condition,[11] so they need to understand their condition and necessary behaviour changes from early on.	Specialists (ideally an HF specialist cardiologist) should see the patient within two weeks of discharge, or liaise with the member of the cardiology team who sees the patient.[1]	In-hospital cardiology nurses have a vital role in acute HF care – for example, monitoring changes in signs and symptoms,[30] and in the transition to outpatient care. In leading models of discharge planning, in-hospital nurses are able to refer patients to HF management programmes and take a leading role in ensuring high-quality communication with the patient, their family and/or their carer(s).	Primary care physicians are often responsible for managing the patient in the vulnerable period immediately after hospital discharge. According to European guidelines, they should see the patient within one week of discharge.[1,4,30]	Primary care nurses should support the primary care physician to monitor and manage the HF patient. They should ensure long-term collaboration with HF specialists.	Pharmacists have an important role in consolidating the pharmacological plan before hospital discharge. They can ensure the best regimen for each patient, maximising effectiveness and minimising adverse reactions.[6]	The patient's carers and family members have an important supportive role in the vulnerable weeks after hospital discharge. They can help with daily activities and offer psychological support. After hospital discharge, carers and family members can provide the emotional support needed for the patient to engage with significant life changes.

6. What is really happening, and why?

Discharge planning is often poor and may contribute to the high cost of HF

Despite evidence that high-quality planning of transitional care is effective, poor discharge planning is often the norm. Data are relatively scarce, but research from the US demonstrates that discharge is still poorly executed even in the highest-performing hospitals,[31] supporting wide-ranging concerns from experts in Europe. Evidence-based models of high-quality discharge are still not widely used, which contributes to hospital readmission of people with HF.[9] For example, despite the existence of models for pharmacist-led reconciliation of medicines for HF patients, this aspect of discharge and care transitions is generally underdeveloped.[6] This poor transitional care contributes to the high burden of HF in terms of costs and mortality.[5 11 16]

HF patients often feel unsupported at discharge

See PP: Patient empowerment and self-care

Transitions from hospital to out-of-hospital care are often unclear or not aligned with patients' wishes,[32] which may impact their engagement with self-care. For example, patients and families are frequently confused and anxious about whom to contact after leaving the hospital.[6] Cardiology patients in Scotland have stated that poorly managed hospital discharge, poor information and lack of follow-up in the community were the main challenges to their care.[33]

Patients are not getting the follow-up appointments they need

Even in countries with clear guidelines for HF discharge and follow-up, few patients are seen by the right professionals. In England and Wales, some 20% of HF patients are not seen by HF specialists during their hospitalisation.[34] Patients who receive close input from a cardiologist or HF specialist in their hospital care are more likely to have an echocardiogram than those who do not. In addition, an audit in 2015–16 found that only 47% of HF patients with care led by specialists were discharged with all core medications; this fell to 22% if patients were not seen by a specialist.[34] In France, only 30% of HF patients are reported to see a cardiologist within one month of discharge,[35] and most are followed-up only when they have a GP appointment, resulting in irregular and ad hoc follow-up.[36]

Communication at hospital discharge is often poor

Poor coordination and communication between hospital doctors and GPs at discharge has been noted in HF and other chronic diseases.[33 37-39] For example, it is common for GPs to not receive discharge summaries or, if they do, for the quality of information to be poor, such as lacking medication indications or follow-up instructions.[40-42] In France, an HF study among private nurses found that the majority thought links between healthcare professionals were insufficient, resulting in poor patient care.[36]

Fragmented inpatient care negatively impacts discharge and follow-up

See section 5: Involving a multidisciplinary team

Expert commentators report that HF inpatient care is of lower quality than that of other cardiovascular patients, such as those suffering heart attacks. Care is fragmented, with little coordination for a true whole-patient approach.[43] Roles and responsibilities of healthcare professionals treating HF in the inpatient setting are poorly defined, which may complicate discharge.

Measures to assess discharge are lacking

See section 7: Case studies and reproducible tools

Healthcare professionals and patients lack clear standards and measures to assess discharge planning. For example, the National Heart Failure Audit in England and Wales measures specialist follow-up for HF patients within two weeks of discharge,[34] but it is not currently possible to compare quality of discharge planning. The same is true of discharge summaries, as availability and use of metrics to assess them is limited.[44]

7. Case studies and reproducible tools

This section presents case studies of innovative and best practice in discharge planning following an acute episode of HF, alongside tools available to assess discharge.

Case studies

Assessing performance of HF care, Kent Surrey and Sussex Academic Health Science Network, UK

A local collaboration between healthcare, academia and life sciences has focused on addressing variation in care and improving outcomes for people living with HF in the Kent, Surrey and Sussex region of the UK.[45] The resulting project, initially called Quality and Patient Safety Collaborative Heart Failure Project, uses a data-driven, quality-improvement approach, drawing on national quality standards on HF and patient experience. The project assesses hospital performance based on data collected by participating hospitals, and provides them with an assessment dashboard showing where improvements are needed. The project considers two different pathways of care: hospital (acute) and community. Hospital discharge is one of the measures of the hospital pathway assessment, which considers, for example, medication on discharge. The project aims to provide a platform for discussion and support the development of key recommendations to providers and commissioners.[45]

Discharge referral to cardiac rehabilitation, NHS Ayrshire and Arran, UK

In Scotland, within NHS Ayrshire and Arran, all individuals diagnosed with HF or experiencing exacerbation of the disease are seen by the cardiac rehabilitation team in hospital to initiate education sessions as soon as possible.[46] Upon discharge, patients are referred to community-based nursing care, and once they are ready to start cardiac rehabilitation the in-hospital team is contacted and an assessment arranged. Transitional care follows an integrated and multidisciplinary pathway.

Ten-point discharge checklist, University College London Partners, UK

In 2015, the University College London Partners, working with St Bartholomew's Hospital, set up the Heart Failure Improvement Collaborative. The Collaborative developed a checklist of elements of high-quality discharge summaries.[44] Though not exhaustive, the list was considered to meet the needs of clinicians, patients and carers. It can support the audit of discharge summaries and ultimately improve performance. The Collaborative has demonstrated improvements in services following use of the checklist.[44]

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Person-centred discharge planning, Gothenburg University, Sweden

The Gothenburg University Centre for Person-Centred Care (GPCC) has pioneered a successful model for hospital discharge and early follow-up in HF, emphasising joint care planning.[20] The model is typically led by nurses (ideally HF specialists), who provide therapeutic education and develop care plans with patients along structured consultation models, considering patients' values, needs, and physical, personal and social preferences. The model has shortened hospital stay without increasing the risk of readmission, while also maintaining patient physical performance and health-related quality of life.[20]

HeartNetCare-HF, German healthcare system, Germany

HeartNetCare-HF is a disease management programme for patients with systolic HF, which was validated in a large randomised trial within the German health system.[47] It is based on previously successful modules and considers patients' preferences. The programme features several elements, including telephone-based monitoring and nurse-coordinated care. It provides patients, their carers and families with teaching materials to educate them on self-monitoring protocols and involve them in care.

Tools for assessing hospital discharge

Checklist for HF management, Optimize Heart Failure Care, international

The Optimize Heart Failure Care programme has developed a checklist to record key aspects of HF immediately before discharge and at two early post-discharge visits.[48] The checklist allows monitoring of disease progression and treatment optimisation.

Heart Failure Clinical Tools Library: Discharge Orders/Discharge Instructions, American Heart Association, US

The American Heart Association (AHA) has made a range of clinical tools from different hospitals available on its website, including summaries and checklists for discharge.[49] These tools aim to capture patient data, clinical decisions and directions for next steps; some are intended to be shared with patients and therefore include information on drug dosage and food interactions. The AHA highlights that hospitals should develop their own instructions based on internal procedures.

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References

1. Ponikowski P, Voors A, Anker S, *et al*. 2016. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). *Eur Heart J* 37(27): 2129-200
2. Frankenstein L, Fröhlich H, Cleland J. 2015. Multidisciplinary approach for patients hospitalized with heart failure. *Rev Esp Cardiol (Engl ed)* 68(10): 885-91
3. Metra M, Teerlink JR, Felker GM, *et al.* 2010. Dyspnoea and worsening heart failure in patients with acute heart failure: results from the Pre-RELAX-AHF study. *Eur J Heart Fail* 12(10): 1130-9
4. National Institute for Health and Care Excellence. 2014. *Acute heart failure: diagnosis and management.* London: NICE
5. Moertl D, Altenberger J, Bauer N, *et al.* 2017. Disease management programs in chronic heart failure: Position statement of the Heart Failure Working Group and the Working Group of the Cardiological Assistance and Care Personnel of the Austrian Society of Cardiology. *Wien Klin Wochenschr* 129(23): 869-78
6. Riley JP, Masters J. 2016. Practical multidisciplinary approaches to heart failure management for improved patient outcome. *Eur Heart J Suppl* 18(suppl_G): G43-G52
7. Joynt KE, Jha AK. 2011. Who has higher readmission rates for heart failure, and why? Implications for efforts to improve care using financial incentives. *Circ Cardiovasc Qual Outcomes* 4(1): 53-9
8. Desai AS. Stevenson LW. 2012. Rehospitalization for heart failure: predict or prevent? *Circulation* 126(4): 501-6
9. Arrigo M, Nijst P, Rudiger A. 2018. Optimising Heart Failure Therapies in the Acute Setting. *Card Fail Rev* 4(1): 38-42
10. Farmakos D, Parissis J, Papingiotis G, *et al.* 2018. Acute heart failure: Epidemiology, classification, and pathophysiology. In: Tubaro M, Vranckx P, Price S, *et al.*, eds. *The ESC Textbook of Intensive and Acute Cardiovascular Care*. 2nd edn. Oxford: Oxford University Press
11. Cowie M, Anker S, Cleland J, *et al*. 2014. Improving care for patients with acute heart failure: before, during and after hospitalization. *ESC Heart Fail* 1(2): 110-45
12. Krumholz HM, Merrill AR, Schone EM, *et al.* 2009. Patterns of hospital performance in acute myocardial infarction and heart failure 30-day mortality and readmission. *Circ Cardiovasc Qual Outcomes* 2(5): 407-13
13. Gheorghiade M, Vaduganathan M, Fonarow GC, *et al.* 2013. Rehospitalization for heart failure: problems and perspectives. *J Am Coll Cardiol* 61(4): 391-403
14. Chun S, Tu JV, Wijeysundera HC, *et al.* 2012. Lifetime analysis of hospitalizations and survival of patients newly admitted with heart failure. *Circ Heart Fail* 5(4): 414-21
15. Solomon SD, Dobson J, Pocock S, *et al*. 2007. Influence of Nonfatal Hospitalization for Heart Failure on Subsequent Mortality in Patients With Chronic Heart Failure. *Circulation* 116(13): 1482
16. Bakosis G, Christofilis I, Karavidas A. 2017. Treatment goals and discharge criteria for hospitalized patients with acute heart failure. *Continuing Cardiology Education* 3(3): 100-06
17. Maggioni AP, Dahlstrom U, Filippatos G, *et al.* 2010. EURObservational Research Programme: the Heart Failure Pilot Survey (ESC-HF Pilot). *Eur J Heart Fail* 12(10): 1076-84
18. Cornish PL, Knowles SR, Marchesano R, *et al.* 2005. Unintended medication discrepancies at the time of hospital admission. *Arch Intern Med* 165(4): 424-9
19. Eapen ZJ, Reed SD, Li Y, *et al.* 2013. Do countries or hospitals with longer hospital stays for acute heart failure have lower readmission rates?: Findings from ASCEND-HF. *Circ Heart Fail* 6(4): 727-32
20. 20. Ekman I, Wolf A, Olsson LE, *et al.* 2012. Effects of person-centred care in patients with chronic heart failure: the PCC-HF study. *Eur Heart J* 33(9): 1112-9
21. Lee CS, Tkacs NC, Riegel B. 2009. The influence of heart failure self-care on health outcomes: hypothetical cardioprotective mechanisms. *J Cardiovasc Nurs* 24(3): 179-87; quiz 88-9
22. Bradley EH, Sipsma H, Horwitz LI, *et al.* 2015. Hospital strategy uptake and reductions in unplanned readmission rates for patients with heart failure: a prospective study. *J Gen Intern Med* 30(5): 605-11
23. Mekonnen AB, McLachlan AJ, Brien J-aE. 2016. Effectiveness of pharmacist-led medication reconciliation programmes on clinical outcomes at hospital transitions: a systematic review and meta-analysis. *BMJ Open* 6(2):
24. National Institute for Health and Care Excellence. 2010. *Chronic heart failure in adults: management*. London: NICE
25. Pumping Marvellous. 2017. Navigating Heart Failure in the NHS [online]. Available from: http://pumpingmarvellous.org/wp-content/uploads/2017/06/Final-Published-Map-uploaded.pdf [Accessed 13/07/2018]
26. Vedel I, Khanassov V. 2015. Transitional Care for Patients With Congestive Heart Failure: A Systematic Review and Meta-Analysis. *Ann Fam Med* 13(6): 562-71
27. Hibbard JH, Stockard J, Mahoney ER, *et al.* 2004. Development of the Patient Activation Measure (PAM): Conceptualizing and Measuring Activation in Patients and Consumers. *Health Serv Res* 39(4 Pt 1): 1005-26
28. Bundesärztekammer. 2017. *Chronische Herzinsuffizienz*. Deutschland: Bundesaerztekammer
29. McBride A, Burey L, Megahed M, *et al.* 2014. The role of patient-held alert cards in promoting continuity of care for heart failure patients. *Eur J Cardiovasc Nurs* 13(1): 71-7
30. Mebazaa A, Yilmaz MB, Levy P, *et al.* 2015. Recommendations on pre-hospital & early hospital management of acute heart failure: a consensus paper from the Heart Failure Association of the European Society of Cardiology, the European Society of Emergency Medicine and the Society of Academic Emergency Medicine. *Eur J Heart Fail* 17(6): 544-58
31. Al-Damluji MS, Dzara K, Hodshon B, *et al.* 2015. Hospital variation in quality of discharge summaries for patients hospitalized with heart failure exacerbation. *Circ Cardiovasc Qual Outcomes* 8(1): 77-86
32. Ong MK, Romano PS, Edgington S, *et al.* 2016. Effectiveness of Remote Patient Monitoring After Discharge of Hospitalized Patients With Heart Failure: The Better Effectiveness After Transition–Heart Failure (BEAT-HF) Randomized Clinical Trial. *JAMA Intern Med* 176(3): 310-18
33. NHS Scotland. 2011. *Heart Disease Improvement Programme: National Overview –Take Heart.* Edinburgh: Healthcare Improvement Scotland
34. Donkor A, McDonagh T, Hardman S. 2017. *National Heart Failure Audit.* London: Healthcare Quality Improvement Partnership
35. Tuppin P, Cuerq A, de Peretti C, *et al*. 2013. First hospitalization for heart failure in France in 2009: Patient characteristics and 30-day follow-up. *Arch Cardiovasc Dis* 106(11): 570-85
36. Poyet L. 2013. *Infirmière libérale: consultation d'éducation thérapeutique pour l'insuffisant cardiaque.* Clermont-Ferrand: Ifsi Clermont-Ferrand
37. Cowie M, Bell D, Butler J, *et al.* 2013. Acute heart failure - a call to action. *Br J Cardiol* 20: S1-S11
38. Spencer RA, Spencer SEF, Rodgers S, *et al.* 2018. Processing of discharge summaries in general practice: a retrospective record review. *Br J Gen Pract* 68(673): e576-e85
39. Hammad EA, Wright DJ, Walton C, *et al.* 2014. Adherence to UK national guidance for discharge information: an audit in primary care. *Br J Clin Pharmacol* 78(6): 1453-64
40. Pirmohamed M, James S, Meakin S, *et al*. 2004. Adverse drug reactions as cause of admission to hospital: prospective analysis of 18 820 patients. *BMJ* 329(7456): 15-9
41. Gheorghiade M, Vaduganathan M, Fonarow GC, *et al.* 2013. Rehospitalization for Heart Failure: Problems and Perspectives. *J Am Coll Cardiol* 61(4): 391-403
42. Hancock HC, Close H, Fuat A, *et al.* 2014. Barriers to accurate diagnosis and effective management of heart failure have not changed in the past 10 years: a qualitative study and national survey. *BMJ Open* 4(3): e003866
43. Mueller C, Christ M, Cowie M, *et al.* 2017. European Society of Cardiology-Acute Cardiovascular Care Association Position paper on acute heart failure: A call for interdisciplinary care. *Eur Heart J Acute Cardiovasc Care* 6(1): 81-86
44. Bodagh N, Farooqi F. 2017. Improving the quality of heart failure discharge summaries. *Br J Cardiol* 24: 75-78
45. Bayly J. 2018. Interview with Sara C Marques and Ed Harding at The Health Policy Partnership [telephone]. 08/06/18
46. Cowie A. 2018. Interview with Sara C Marques and Katharina Beyer at The Health Policy Partnership [telephone]. 11/04/18
47. Stork S, Faller H, Angermann C. 2016. HeartNetCare-HF™. Available from: http://www.chfc.ukw.de/fileadmin/uk/chfc/Dokumente/Forschung/HNC_Buch_2012__20160418.pdf
48. Servier. Toolbox. Available from: https://www.optimize-hf.com/en/toolbox-2/ [Accessed 06/07/18]
49. American Heart Association. 2017. Get With The Guidelines®-HF Clinical Tools Library. Available from: https://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-heart-failure/get-with-the-guidelines-hf-clinical-tools-library#.W1crUtJKg2y [Accessed 24/08/18]

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