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From crisis to prevention: transforming heart failure diagnosis through early detection

Heart failure is a complex clinical syndrome characterised by symptoms such as breathlessness, ankle swelling and fatigue, alongside clinical signs including elevated jugular venous pressure, pulmonary crackles and peripheral oedema (McDonagh et al., 2021). This condition arises when the heart cannot pump blood effectively enough to meet the body's metabolic demands. Heart failure results from structural abnormalities affecting the valves, chambers or vessels, or functional abnormalities of the heart (Lilly, 2021). The scale of this challenge in the United Kingdom (UK) is substantial: heart failure affects over one million people, with approximately 400,000 remaining undiagnosed (Beishon et al., 2024). Most concerning is that up to 80% of diagnoses occur in the hospital setting, despite 40% of patients presenting with symptoms that should have prompted earlier clinical assessment (British Heart Foundation, 2025). This pattern demonstrates a significant deficiency in primary health care identification before disease progression requires hospitalisation.

A strategic opportunity

British Heart Week 2025 (7-15 June) provides the perfect national platform to strengthen the British Society for Heart Failure's (BSH) "Detect the Undetected: Find Me" campaign. This initiative focuses on early detection by targeting the three key 'F' symptoms: 'Fighting for Breath', 'Fluid Retention' and 'Fatigue'. As part of BSH's ambitious 25in25 initiative to reduce heart failure deaths by 25% over the next 25 years, potentially saving 10,000 lives annually, the campaign creates a powerful opportunity to educate the public about early symptom recognition and encourage timely GP consultations (British Society for Heart Failure, 2024).

Challenges of recognition

Heart failure often mimics other conditions making it challenging to determine the true nature of the illness; it bears little resemblance to the dramatic chest-clutching scenes we see in movies. Unlike a myocardial infarction (MI), or heart attack, which often occurs suddenly with severe chest pain (Thygesen et al., 2019), heart failure usually develops gradually as the heart muscle becomes weaker and has trouble pumping blood to meet the body's requirements (Lilly, 2021). The insidious symptoms, for example, breathlessness when climbing stairs, persistent fatigue, and swollen ankles (McDonagh et al., 2021), are easily dismissed as normal signs of aging, being "out of shape," or carrying a few extra pounds. This dangerous misconception contributes to widespread under-diagnosis. It is crucial to understand that heart failure is fundamentally different from an MI. While an MI involves a sudden blockage, obstructing the blood supply to part of the myocardium, heart failure is a chronic condition where the heart cannot pump efficiently enough to meet the body's needs (Lilly, 2021). Despite its alarming name, heart failure simply means the heart is working less efficiently than it should, not that it has stopped beating. This misunderstanding of what heart failure actually is, combined with its subtle early warning signs, creates a perfect storm for late diagnosis when treatment options become more limited and outcomes less favourable.

Identifying heart failure in clinical practice

Healthcare professionals should maintain high clinical suspicion when patients present with seemingly unrelated symptoms that could collectively indicate heart failure. Listen carefully when patients describe exertional dyspnoea during activities of daily living (McDonagh et al., 2021). They may downplay breathlessness as "getting older" or being "unfit," however, new-onset shortness of breath when climbing familiar stairs or walking to local shops warrants investigation. Persistent fatigue that fails to respond to rest is often dismissed by both patients and clinicians as stress or aging, yet it is a cardinal symptom requiring cardiac assessment (Jennings et al., 2022). Bilateral lower limb oedema may be attributed to venous insufficiency or medication side effects, but when combined with other symptoms, it strongly suggests fluid retention from cardiac dysfunction. Pay particular attention to sleep-related symptoms: patients reporting the need for multiple pillows

(orthopnoea) or nocturnal awakening with breathlessness (paroxysmal nocturnal dyspnoea) are describing classic signs of pulmonary congestion (Jennings et al., 2022). A persistent nocturnal cough, especially when patients mention it is worse when lying flat, may be misattributed to respiratory conditions but could indicate cardiac-related pulmonary oedema (Lilly, 2021). Palpitations, tachycardia, or irregular heart rhythms reported by patients should prompt consideration of compensatory mechanisms or underlying arrhythmias contributing to heart failure. Additionally, decreased appetite or nausea may seem gastrointestinal in nature, but can result from reduced mesenteric perfusion in heart failure (Jennings et al., 2022). The key is recognising these symptoms' insidious onset and interconnected nature; patients rarely present with textbook presentations, making careful history-taking and clinical correlation essential for early detection and timely intervention (Diamond-Fox, 2021).

Risk factors and demographics

Heart failure predominantly affects those over 65 (National Institute for Health and Care Excellence, 2018), with risk increasing substantially with age, however, younger patients in their 40s and 50s are presenting with this condition (National Institute for Health and Care Excellence, 2025). Lifestyle factors play a crucial role, including smoking, excessive alcohol consumption, poor diet high in sodium and saturated fats, and sedentary behaviour. Pre-existing medical conditions significantly elevate risk, for example diabetes, hypertension, and previous MI (Lilly, 2021). Further, family history and genetic predisposition cannot be overlooked, particularly in younger patients where inherited cardiomyopathies may be the underlying cause (McDonagh et al., 2021). Perhaps most importantly, social determinants of health create profound disparities: individuals from deprived communities face higher rates of heart failure due to limited access to preventive healthcare, higher prevalence of risk factors like smoking and poor diet, increased exposure to environmental stressors, and delayed diagnosis due to healthcare access barriers (White-Williams et al., 2020). This intersection of biological, lifestyle, and socioeconomic factors means that heart failure risk assessment must consider the whole person within their social context, not just their clinical parameters.

The power of early detection

Early detection of heart failure represents one of the most powerful interventions in modern cardiology, fundamentally transforming patient outcomes and healthcare economics (Elendu et al., 2024). Early, precise diagnosis of heart failure unlocks a range of effective treatments capable of transforming patients' quality of life and prognosis. When caught early, the range of evidence-based treatments is remarkably effective: for heart failure with reduced ejection fraction, treatments such as angiotensin converting enzyme (ACE) inhibitors, beta-blockers, and mineralocorticoid receptor antagonists can improve quality of life, reduce hospital admissions, and increase survival, while newer therapies like sodium-glucose co-transporter 2 (SGLT2) inhibitors show promise across all heart failure types (National Institute for Health and Care Excellence, 2018, McDonagh et al., 2021). Quality of life improvements are profound; patients diagnosed early can maintain independence, continue working, and engage in family activities rather than facing the progressive disability that accompanies late-stage disease (Taylor, 2023). The economic case is equally compelling: heart failure costs the National Health Service (NHS) more than £2 billion per year, with 60-70% related to hospitalisation costs, while early detection strategies can redirect patients from expensive emergency care to cost-effective outpatient management (Taylor, 2023).

A call to action

The silent progression of heart failure from undetected symptoms to life-threatening crisis represents both a preventable tragedy and a great opportunity. The combination of the BSH's 'Detect the Undetected: Find Me' campaign and British Heart Week 2025 offers an unprecedented moment to transform this landscape through education, early recognition, and proactive intervention. By empowering both healthcare professionals and the public to recognise the subtle but telling signs,

we can shift the paradigm from crisis-driven to prevention-focused care. The evidence is unequivocal: early detection saves lives, preserves quality of life, and redirects significant NHS resources from expensive emergency interventions to cost-effective community management. The tools, knowledge, and treatments exist—what we need now is the collective will to act on them and save the 10,000 lives that early intervention could preserve each year.

References

Beishon, L., Jayasinghe, R., Roshan-Zamir, S. & Barton, C. 2024. Reducing heart failure deaths by 25% in 25 years: the '25in25' heart failure summit. *The British journal of cardiology*, 31.

British Heart Foundation. 2025. *UK Factsheet 2025* [Online]. Available: <https://www.bhf.org.uk/-/media/files/for-professionals/research/heart-statistics/bhf-cvd-statistics-uk-factsheet.pdf?rev=81a8015761aa4ced8bc39d7045202be5&hash=9D78ACBF5EB80FA8A9BE28C90BFBE171> [Accessed 1st June 2025].

British Society for Heart Failure. 2024. *Bridging Strategy 2024-2025* [Online]. London: British Society for Heart Failure. Available: <https://www.bsh.org.uk/our-strategy> [Accessed 26th May 2025].

Diamond-Fox, S. 2021. Undertaking consultations and clinical assessments at advanced level. *British journal of nursing (Mark Allen Publishing)*, 30, 238-243.

Elendu, C., Amaechi, D. C., Elendu, T. C., Fiemotonghan, B.-E., Okoye, O. K., Agu-Ben, C. M., Onyekweli, S. O., Amapu, D. A., Ikpegbu, R., Asekhauno, M., Pius, E., Bayo-Shodipo, A. T., Okezie-Okoye, C. A., Bello, N., Oguine, C., Edochie, P., Dike, N., Amos, I., Asekhauno, J., Wusu-Ejalonibu, T. M., Ozigi, E. E., Otobo, G. O., Olokodana, A. R., Ayabazu, C. P., Nwafor, R. T., Gonji, N. J., Akpovona, O., Awotoye, T. I., Ozigis, M. O., Afolabi, O., Alabi, O. S. & Adebayo, M. 2024. A comprehensive review of heart failure: Unraveling the etiology, decoding pathophysiological mechanisms, navigating diagnostic modalities, exploring pharmacological interventions, advocating lifestyle modifications, and charting the horizon of emerging therapies in the complex landscape of chronic cardiac dysfunction. *Medicine*, 103.

Jennings, C. S., Astin, F., Fitzsimons, D., Lambrinou, E., Neubeck, L. & Thompson, D. R. 2022. *The ESC textbook of cardiovascular nursing*, Oxford, United Kingdom, Oxford University Press.

Lilly, L. S. 2021. *Pathophysiology of heart disease: an introduction to cardiovascular medicine*, Philadelphia, Wolters Kluwer.

Mcdonagh, T. A., Metra, M., Adamo, M., Gardner, R. S., Baumbach, A., Böhm, M., Burri, H., Butler, J., Čelutkienė, J., Chioncel, O., Cleland, J. G. F., Coats, A. J. S., Crespo-Leiro, M. G., Farmakis, D., Gilard, M., Heymans, S., Hoes, A. W., Jaarsma, T., Jankowska, E. A., Lainscak, M., Lam, C. S. P., Lyon, A. R., McMurray, J. J. V., Mebazaa, A., Mindham, R., Muneretto, C., Francesco Piepoli, M., Price, S., Rosano, G. M. C., Ruschitzka, F., Kathrine Skibellund, A. & Group, E. S. C. S. D. 2021. 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. *European Heart Journal*, 42, 3599-3726.

National Institute for Health and Care Excellence. 2018. *Chronic heart failure in adults: diagnosis and management* [Online]. Available: <https://www.nice.org.uk/guidance/ng106/resources/chronic-heart-failure-in-adults-diagnosis-and-management-pdf-66141541311685> [Accessed 1st June 2025].

National Institute for Health and Care Excellence. 2025. *Chronic heart failure: how common is it?* [Online]. Available: <https://cks.nice.org.uk/topics/heart-failure-chronic/background-information/prevalence/> [Accessed 1st June 2025].

Taylor, C. J. 2023. Earlier heart failure diagnosis in primary care. *British Journal of General Practice*, 73, 4-5.

Thygesen, K., Alpert, J. S., Jaffe, A. S., Chaitman, B. R., Bax, J. J., Morrow, D. A., White, H. D. & Group, E. S. C. S. D. 2019. Fourth universal definition of myocardial infarction (2018). *European Heart Journal*, 40, 237-269.

White-Williams, C., Rossi, L. P., Bittner, V. A., Driscoll, A., Durant, R. W., Granger, B. B., Graven, L. J., Kitko, L., Newlin, K., Shirey, M., On Behalf of the American Heart Association Council On, C., Stroke, N., Council on Clinical, C., Council On, E. & Prevention 2020. Addressing Social Determinants of Health in the Care of Patients With Heart Failure: A Scientific Statement From the American Heart Association. *Circulation*, 141, e841-e863.