NEJM Catalyst

Swansea University Prifysgol Abertawe
School of Management Yr Ysgol Reolaeth

Academiau Dysgu Dwys Cymru
Intensive Learning Academies Wales

ICHOM 2024
21 - 22 October | Beurs van Berlage, Amsterdam

Using PROMs to optimise ambulatory management and improve outcomes for patients with Heart Failure

Emily Bacon[1], Hamish Laing[1], Linda Edmunds[2]
[1]Value-based Health & Care Academy, School of Management, Swansea University, Wales, UK
[2]Aneurin Bevan University Health Board, Wales, UK

Introduction

Aneurin Bevan University Health Board (ABUHB) delivers health and care services to South-East Wales.

The nurse-led heart failure team at ABUHB focuses on patients with reduced ejection fraction (HFrEF).

The heart failure service aims to:

- ♥ reduce the impact of heart failure on patients' quality of life by optimising medication
- ♥ provide a holistic approach to enable patients and carers to manage their heart failure

Patients with HFrEF account for **60%** of ABUHB's heart failure admissions.

Challenges

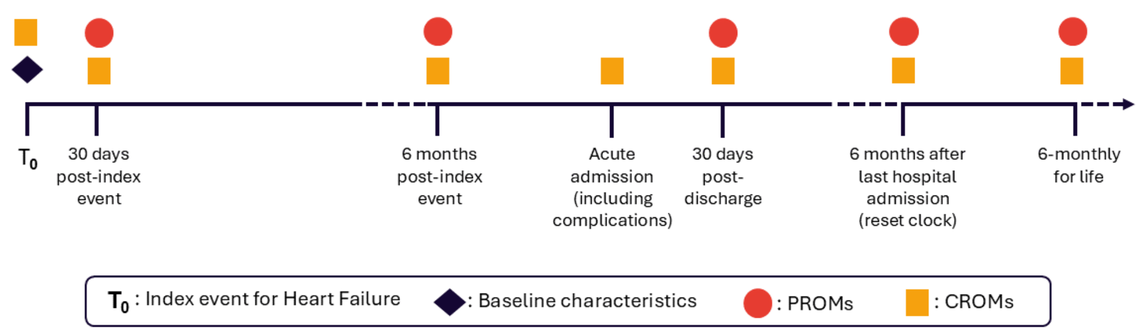
1. Patient referrals were increasing and were coupled with low discharge rates.
2. NICE guidelines in the UK advise that, to improve patient outcomes, specialist follow-ups should take place within two weeks of diagnosis, and medication be optimised within six months. Due to increasing patient numbers and issues with the referral system, these targets were not being met.
3. Outdated referral system - patients were referred by paper, telephone, and email; nurses had to sort through paper copies of patient referrals manually.
4. Long waiting times between appointments (62 days from initial diagnosis to first outpatient appointment) led to delays in optimisation (two years instead of six months).

Solutions

145 patients were trialled on a new pathway. PROMs were used to:

- Obtain a more accurate depiction of patient health and wellbeing
- Streamline patients to different clinics according to PROM scores
- Facilitate optimisation of patients' medication
- Inform discussions within patient appointments

CROMs were also introduced in alignment with the ICHOM timeline[1]:



The outdated referral system was replaced by e-referrals, with PROMs used to allocate patients to 3 different clinics:

1. An **'optimisation' clinic** with shorter, 20-minute appointments, to provide insight into the impact of heart failure on the patient's day-to-day life, with PROMs used to guide optimisation.
2. A **virtual clinic** which could be bypassed if PROM scores indicated that a patient needed to be seen face-to-face.
3. A **'complex' clinic,** with longer appointments, focusing on patients near end-of-life.

Results

- ✓ All patients received their first appointment within two weeks, compared to eight weeks in the previous delivery model.
- ✓ Through the introduction of e-referrals, inappropriate referrals were reduced from 282 to 140 patients.
- ✓ Patients were optimised within 4-5 months and discharged within 8 –9 months. 30-day readmission was reduced by 97%.
- ✓ 45% of the 145 patients showed improvement over time in their New York Heart Association (NYHA) classification of heart failure, indicating a reduction in the severity of functional limitations.

[1]Adapted from ICHOM (2024) Heart Failure Reference Guide.
https://ichom.org/files/medical-conditions/heart-failure/heart-failure-reference-guide.pdf

e.c.bacon@swansea.ac.uk