



# FANTASTIC FOUR – A PATIENT CENTRIC APPROACH TO HEART FAILURE



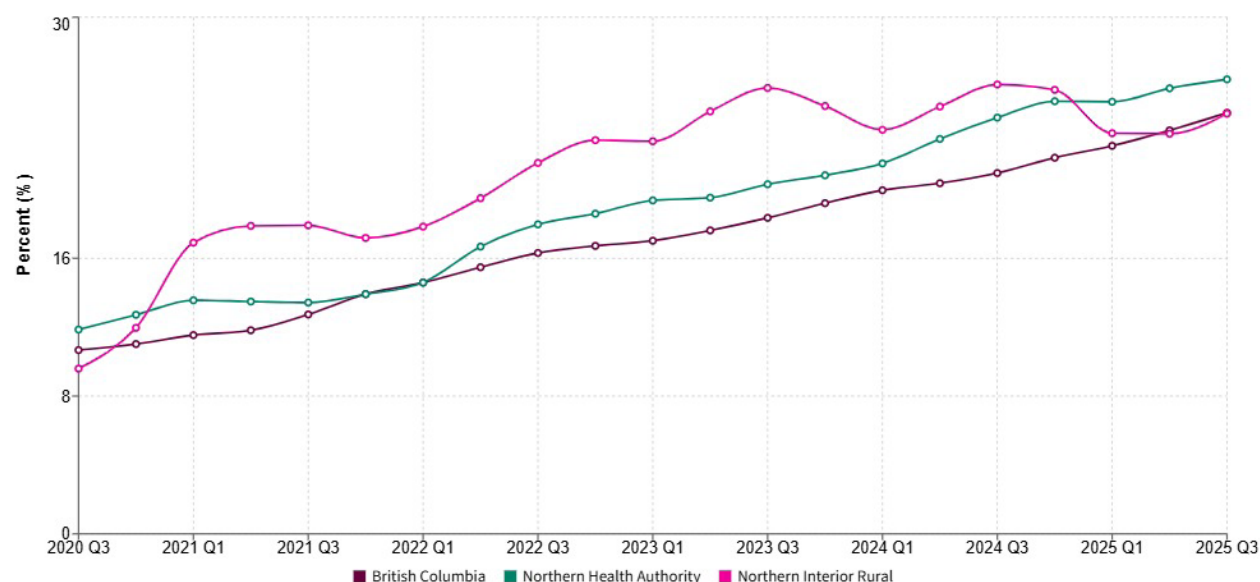
Heart failure is one of the leading causes of death in Canada and is a growing concern as it is also the leading cause of hospital admissions and readmissions across the country. With an aging population, the percentage of people suffering with chronic diseases, including heart failure, is expected to rise. Current guidelines promote the use of guideline directed medical therapy (GDMT) to treat people with heart failure with reduced ejection fraction (HFrEF, defined by the [American Heart Association as ejection fraction less than or equal to 40%](#)), drawn from four classes of medications that have been shown to improve quality of life and life span for these patients.

The [Health Data Coalition](#) (HDC), working with Cardiologist Dr. Daisy Dulay on a project sponsored by the [Northern Interior Rural Division of Family Practice](#) (NIRD) utilizing their Primary Care Network (PCN) Pharmacist, Michael Matula, developed a set of measures to support primary care providers in managing the treatment of patients with heart failure. The project uses the skills of a trained pharmacist, in consultation with a cardiologist, to assist primary care providers in optimizing GDMT for patients living with heart failure.

The gap is particularly evident in remote and rural areas where access to heart function clinics and specialists is not always an easy option. Of the clinics enrolled in HDC Discover across the province we see a rising curve, where increasingly patients with heart failure are being prescribed at least 3 of the 4 foundational medications available, topping at a rate of 22% for HDC's provincial sample, representing approximately a

## Heart failure and prescribed three or more of the four foundational medication classes in the past year

The percentage of active patients with heart failure (HF) (based on the problem list) who have had coded prescriptions for three or more of the four foundational medication classes for heart failure recorded in the EMR in the past year. The four foundational medication classes include Renin-angiotensin-aldosterone system (RAAS) inhibitors, Selective beta blockers, Sodium-glucose co-transporter 2 (SGLT2) inhibitors, and Mineralocorticoid Receptor Antagonist (MRA).



quarter of primary care clinics. The project team is interested in tapping some collective energy to keep this trend going and improve both the quantity and quality of life for patients with heart failure.

A recognized barrier to optimizing heart failure treatment is clinical inertia. Clinical inertia is defined as [“the lack of treatment intensification in a patient not at evidence based goals for care”](#) and three principal factors have been identified as contributing: system-related factors, provider-related factors and patient-related factors.

### **System Related Factors**

Many radiological and procedural reports that arrive in the inbox of the primary care providers do not get parsed into structured fields within the Electronic Medical Record (EMR). As such, details contained within these cannot be searched easily. This system-related factor contributing to GDMT clinical inertia puts the manual data entry of ejection fraction burden on the already over-whelmed primary care office.

**“Pharmacists, like physicians and nurse practitioners, prefer to use a shared decision-making approach to therapies. We know which agents and doses are best suited for optimal HFrEF management, based on evidence and the clinical presentation, and we engage the patient in a way that empowers them to choose which options are best for them. This often leads to greater satisfaction of care and improved adherence to prescribed therapies.”**

**– Michael Matula, PCN Pharmacist**

### **Provider Related Factors**

The overwhelming medical information available today presents challenges of keeping up with all the latest guidelines also contributes to the physician-related factors of clinical inertia. For example, physicians may not be aware that SGLT2i medications can also be prescribed to patients with heart failure WITHOUT diabetes. Dapagliflozin, a SGLT2i, can be prescribed without special authority, unlike Empagliflozin.

Once this cohort of patients with HFrEF are identified, the provider is invited to a triad meeting with the PCN Pharmacist and the Cardiologist to discuss treatment options and to gain consent for the patients to be seen by the PCN pharmacist. The PCN pharmacist books an appointment with the consenting patient to review current treatments with an aim to optimizing GDMT and answer any questions or concerns. In collaboration with the Rural Coordination Centre of BC (RccBC), the cardiologist can virtually meet with rural patients from the Northern Health region while they are in the primary care office ([RccBC's C2C program](#)). If there are opportunities to improve patient care, a referral is made to the PCN pharmacist.

### **Patient Related Factors**

These hybrid meetings address the provider-related contributing factor to clinical inertia by upskilling the providers on GDMT for patients with heart failure and subsequent meetings between the pharmacist and the patients address the third factor by providing support and education for the patient directly. These pharmacist-led patient meetings are not as time-bound as primary care provider visits and allow for more information exchange with the patients, perhaps leading to a better understanding of the benefits of GDMT and ultimately better patient adherence to the treatment plans.

### **WHERE ARE YOU IN THIS STORY?**

If you need support for identifying your patients with heart failure suitable for GDMT, we suggest starting a quality improvement project.

#### **Contact Us**

**Learn more about how your data  
can empower your practice:**

[hdcbc.ca](https://hdcbc.ca) | [info@hdcbc.ca](mailto:info@hdcbc.ca)