



## The RCGP quality improvement initiative using CPRD data: Lessons learned

Booth HP<sup>1</sup>, Yelland E,<sup>1</sup> Mullett D<sup>2</sup>, Gallagher AM<sup>1</sup>, Padmanabhan S<sup>1</sup>, Welburn S<sup>1</sup>, Valentine J<sup>1</sup>, Myles P<sup>1</sup>

1. Clinical Practice Research Datalink
2. Royal College of General Practitioners

### PROBLEM

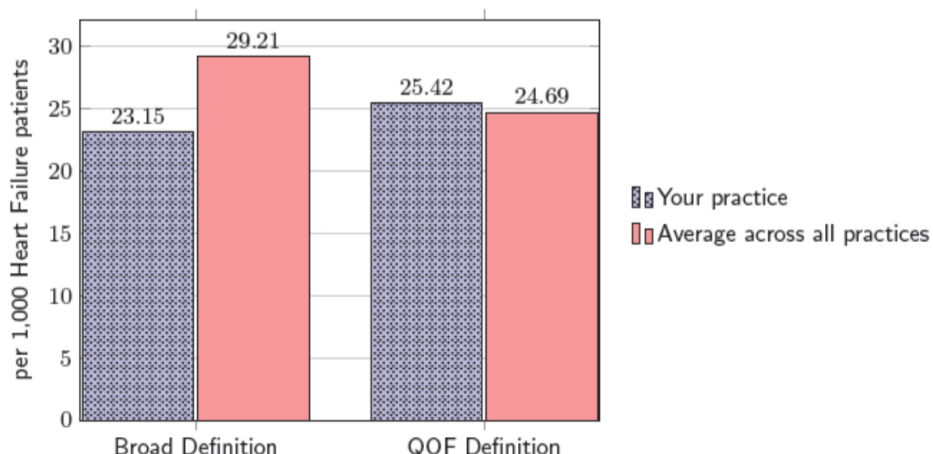
Quality improvement (QI) is a priority for general practice across the UK, and GPs are expected to participate and provide evidence of QI activity. Pressures on the primary care workforce mean that approaches to QI must be efficient, straightforward and effective. This project aimed to scale up production and distribution of bespoke quality improvement reports for GP practices contributing data to CPRD.

### APPROACH

- Clinical Practice Research Datalink (CPRD) is a UK government research service facilitating public health research using anonymised primary care data
- The pilot study was set in UK practices who contribute anonymised patient data to CPRD
- Stakeholder consultations identified primary care QI needs and potential indicators
- Two prescribing in heart failure indicators were selected from the RCGP Patient Safety Toolkit for inclusion in pilot reports
- Iterations of the report containing dummy data were sent to 116 clinicians with a survey
- Pilot reports containing real data were sent to 12 practices, and GPs were interviewed to understand the utility of the reports
- QI reports were scaled up and sent to practices using Vision® and EMIS® software

### FINDINGS

Figure 1: Prescribing of NSAIDs per thousand heart failure patients



Most data available for QI in primary care is practice- or CCG-level, not user-friendly and locally-based with regional variation in availability.

Key elements in the reports were benchmarking of practice rates against other practices (Figure 1) and individual case-finding.

Pilot reports were used to (1) review individual patients' care, (2) implement broader QI actions in the practice such as adding flags to patient records and discussion at practice meetings and (3) provide evidence for their annual appraisal and revalidation in one instance.

The reports were scaled up to 291 CPRD Vision® practices in July 2017. The indicators were extended to work with data from CPRD EMIS® practices and sent to 271 Vision® and 186 EMIS® practices in December 2017.

#### Case-finding

Based on the last collection from your practice on 21<sup>st</sup> January 2017, we identified 15,609 currently registered patients<sup>6</sup>, and we found:

- 200 patients with heart failure based on the broad definition
  - 12 of these patients with a record of at least one dispensing of an NSAID during 2016, these patients are:

Patient Identifier (As seen in Vision)	Vision alpha phonetic	Age	NSAID type(s)
0qd@	zero quebec delta @	<65	Naproxen
1wfN	one whiskey foxtrot NOVEMBER	65+	Ibuprofen
2egM	two echo golf MIKE	65+	Naproxen Piroxicam
3rh0	three romeo hotel zero	<65	Ibuprofen
4tj1	four tango juliet one	65+	Naproxen
5yk2	five yankee kilo two	65+	Etoricoxib
6ul3	six uniform lima three	<65	Naproxen
7iZ4	seven india ZULU four	<65	Meloxicam
8oX5	eight oscar X-RAY five	<65	Ibuprofen
9pC6	nine papa CHARLIE six	65+	Naproxen
0aV7	zero alpha VICTOR seven	<65	Naproxen
1sB8	one sierra BRAVO eight	65+	Diclofenac Naproxen

### CONSEQUENCES

- RCGP/CPRD QI reports are the first example of a nationwide QI tool offering benchmarking and casefinding to UK general practices
- Using EHR data to produce these reports means they are scalable to a large number of practices and can be repeated over time to monitor changes in prescribing practice
- Clinical input into the indicators is vital to ensure code lists are appropriate and the information clinically relevant and actionable
- CPRD aims to send out two reports per year

