

Primary Care (General Practice) Coding of Heart Failure: Brief Guide

The clinical impact of primary care heart failure services is inhibited by inaccurate general practice heart failure registers (see page two for example from NHS Greater Glasgow & Clyde).

General practices need to enter two separate read-codes to correctly distinguish between heart failure due to left ventricular systolic dysfunction (commonly now called heart failure with reduced ejection fraction: HF-REF) and heart failure from other causes (commonly now called heart failure with preserved ejection fraction: HF-PEF) :

- 'Heart Failure' G58 should be used to identify that a patient has clinical symptomatic heart failure (e.g. shortness of breath, fluid overload etc)
- 'Echo shows Left Ventricular Systolic Dysfunction' 585f should be jointly entered in those patients with heart failure due to reduced ejection fraction.

Only patients with both a heart failure code and a left ventricular systolic dysfunction code go into QoF denominators for ACE inhibitors and beta-blockers.

Patients with asymptomatic left ventricular systolic dysfunction should not be coded as 'Heart Failure', as this condition does not represent true clinical heart failure. Patients with isolated left ventricular systolic dysfunction read-codes do not appear on heart failure registers.

Background: General practices need to enter two separate read-codes to correctly distinguish between heart failure with reduced ejection fraction (HF-REF) and heart failure with preserved ejection fraction (HF-PEF) on Quality and outcomes Framework (QoF) heart failure (HF) disease registers; a clinical HF code and a left ventricular function code. Patients with isolated Left Ventricular Systolic Dysfunction (LVSD) read-codes do not appear on registers, as isolated asymptomatic LVSD does not represent true clinical HF.

Rationale: The management of HF in primary care is inhibited by inaccurate QoF HF disease registers. Patients without HF are often on registers while patients with HF often are not. HF also seems to be significantly under-represented on these registers compared to widely accepted evidence and the distinction of HF-REF vs. HF-PEF is poor.

Aim: To improve the clinical impact of primary care HF services by ensuring that all patients with HF are appropriately coded onto QoF disease registers, including the distinction between HF-REF and HF-PEF.

Methods: Incentivise practices (£6.50 per patient) through a 'one-off' locally enhanced service (LES) from 01/10/2014 to 31/03/2015 to improve the accuracy of their Heart Failure and/or LVSD patient coding. This involved:

- **Group A-** Reviewing the coding validity/accuracy of all patients on current QoF HF Registers.
- **Group B-** Reviewing the coding validity/accuracy of all patients with isolated LVSD codes, to see whether they also have clinical HF.
- **Group C-** Case-finding patients with confirmed HF missing from QoF HF registers, through reviewing lists of patients taking medications for the symptoms of HF (e.g. loop diuretics and/or mineralocorticoid receptor antagonists).

Results: 144 / 241 NHSGGC practices (60%) took part in the LES (total list size 764,491 people- ~14% Scotland)

Individual practice data was available for 143 out of the 144 practices that took part (total list size 763,112 people- ~14% Scotland)

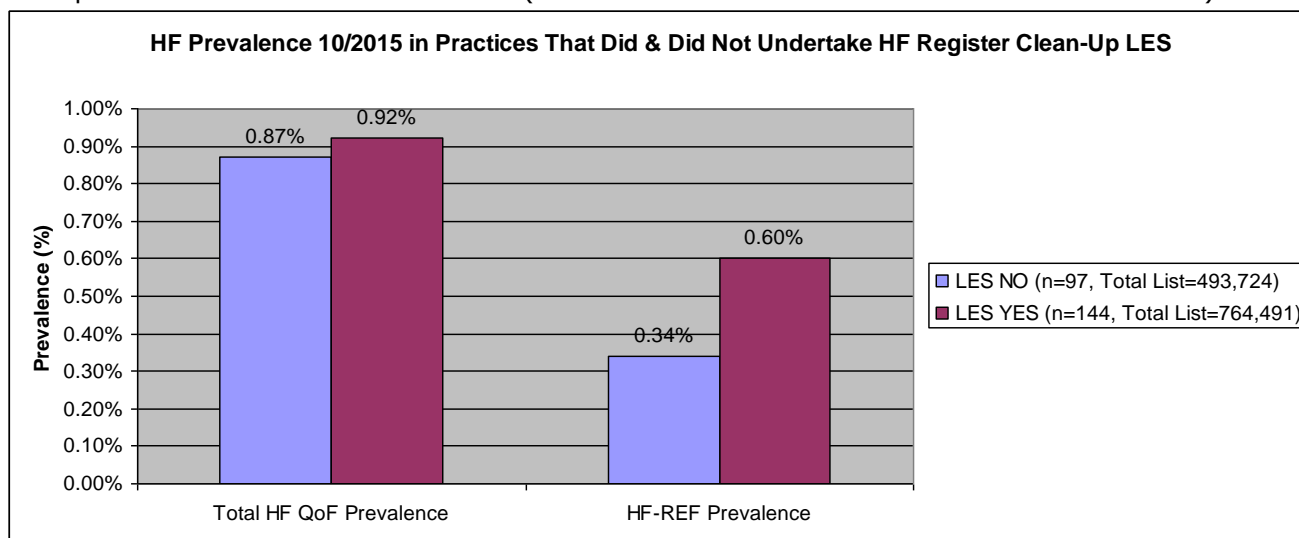
Group A- 5843 patients were on QoF HF Register before the LES. The following issues were identified by the LES.

- 2066 / 5843 (35.4%) patients were inappropriately missing an LVSD code (i.e. the LES review confirmed that these patients were HF-REF but they had not been correctly identified as such by the practice at baseline).
- 516 / 5843 (8.8%) patients were deemed to have an incorrect diagnosis after the LES review (i.e. false positives)
- 561 / 5843 (9.6%) patients were deemed to have a historic diagnosis that was no longer clinically relevant.
- 214 / 5843 (3.7%) patients with clinical HF were found to be incorrectly coded as reduced ejection fraction.

Groups B and C- 1659 additional HF patients (mean 11.6 per practice) were identified by the LES case finding (i.e. false negatives- these patients were not on pre-LES QoF registers but had a confirmed diagnosis of HF, as judged by the practice after review).

- 1105 patients with sole LVSD codes at baseline but no HF code (**Group B**).
- 554 patients identified from case finding with a confirmed HF diagnosis but no code at all (**Group C**).

Table: Comparison of HF and HF-REF Prevalence (in Practices that Took Part in LES vs. Those That Did Not)



General practices highlighted a further 232 patients to secondary care for further information/advice, where the diagnosis of HF was unclear. The NHSGGC Heart Managed Clinical Network is currently working through each patient on this list before replying to General Practice.

Conclusions: There were problems identified with the read-coding of 57.5% of patients on existing QoF HF disease registers by the LES review. Case finding also identified that a mean 11.6 patients per practice were inappropriately missing from existing QoF HF disease registers. Post LES, a clear gulf now exists in the HF-REF prevalence between those practices that undertook the LES and those that did not.

The results of this work will be shared nationally across NHS Scotland, through the HF Hub. Work is also on-going to improve the communication of new diagnosis information across the primary care and secondary care interface, in a language and format that is understandable to both.

APPENDIX 1: Heart Failure Register 'Clean-up' LES Process

