House of Care

Equity and Reach Report

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Heather Jarvie[1], Gwen Allardice[2]
on behalf of NHSGGC House of Care Programme

[1] Programme Manager, Health Services Section, NHSGGC
[2] Medical Statistician, Health Services Section, NHSGGC

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1 Introduction

This report sets out findings of House of Care programme equity audit undertaken by NHS Greater Glasgow & Clyde (NHSGGC) Public Health Directorate on behalf NHSGGC House of Care Evaluation sub-group.

2 Background

2.1 Overview of House of Care

The House of Care (HofC) model, was developed by the Year of Care Partnership, to show what needed to be in place to enable local teams to introduce care and support planning as an approach to supporting self-management of people living with long term conditions (LTCs). The model comprises four interdependent components, with collaborative care and support planning conversation at the centre of the house (Figure 1).

Figure 1: The Care Planning House

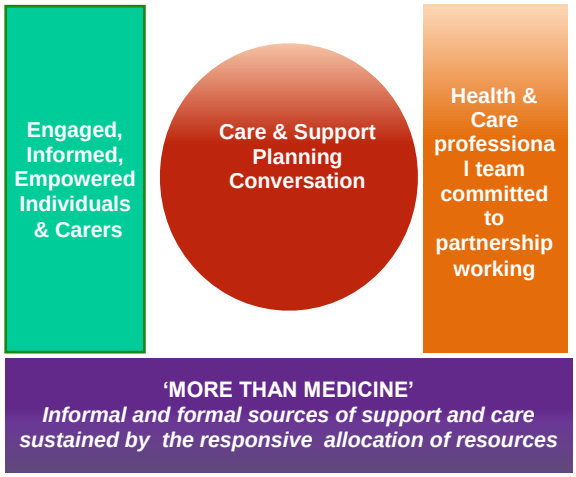


Figure 2: Care Planning Approach

Figure 2 summarises the components of the HofC care planning approach. At the first information gathering (IG) appointment, the patient attends an appointment at their practice to have their appropriate 'annual review' tests. Tests results and agenda setting prompts are sent to the patient in a 'results letter' at least one week before the patient attends the care planning (CP) appointment. At the CP appointment, the patient and the Health Care Professional will jointly discuss: what is important to the patient; the patient's results; any questions or support needs the patient may have; and an agreed care plan is developed.

The HofC approach has been endorsed by the Scottish Government to address the needs of people living with multiple LTCs and is aligned with Scottish Government's route map of deliverables to achieving its 2020 vision through developing New Models of Primary Care.

NHSGGC along with NHS Lothian and NHS Tayside are participating in a 2 year early adopter programme initiative in partnership with the Scottish Government, Health and Social Care Alliance and British Heart Foundation (BHF) to apply the HofC model in Scotland during 2015-17[1]

2.2 NHSGGC House of Care Early Adopter Programme

NHSGGC commenced the early adopter programme during 2015/16 contract year, with a further expansion during the 2016/17 contract year. The programme aims are outlined in box 1:

Box 1: NHSGGC House of Care Programme Aims

To develop, optimise and test a workable model of person-centred Chronic Disease Management (CDM) for patients with multi-morbidity, operating within a local 'total place' approach to prevention and care. This will include patients diagnosed with Type 2 Diabetes (T2D) and/or Coronary Heart Disease (CHD) as an exemplar

An initial cohort of 9 practices commenced implementation in 2015/16. Appendix 1 provides a summary of practice populations and start dates. Box 2 outlines the evaluation questions prioritised for NHSGGC HofC programme evaluation.

Box 2: NHSGGC House of Care Evaluation Priorities

i. What are the outcomes of the consultation for the patient in terms of self-management and relationship with practitioner?

ii. To what extent do patients find the intervention acceptable and have patients identified a change in the quality of the consultation?

iii. Does the House of Care approach improve the reach and participation of those from socio-economically deprived communities?

iv. To what extent do GP practices find the intervention acceptable?

v. What has been the impact of training on Health Care Professional practice in delivering CDM?

The ***NHSGGC House of Care Early Adopter Programme Evaluation Framework*** document provides further information on each element of the programme evaluation. This report focuses on question iii: *Does the House of Care approach improve the reach and participation of those from socio-economically deprived communities?*

[1] British Heart Foundation programme funding extended for 1 further year to 31st March 2018.

3 Methods

3.1 Data Definitions

In order to facilitate HofC programme reporting and evaluation requirements, participating practices were required to adopt NHSGGC HofC programme Read Code[2] guidance and allow electronic extraction of defined data items (appendix 2).

All patients on the CHD and/or T2D Local Enhances Service (LES) disease register, registered within the 9 participating practices during the time period 1st April 2015 to 31st March 2016 were eligible for the HofC programme, and were included in the data extract[3] and subsequent analysis.

Two unique Read Codes were implemented to differentiate those patients invited to & attended a HofC type annual review from patients who attended a routine care CDM annual review.

3.2 Analysis

Anonymised patient demographic information (age, gender and SIMD quintile[4]) and defined Read Codes (as per Appendix 2) were provided by NHSGGC Information Services to Public Health for analysis.

3.3 Limitations of Approach

It was originally envisaged to undertake a direct comparison of the 9 participating practice activity during 2015/16 contract year with the previous contract year activity in relation to reach & engagement of eligible patients. However, 6 of the 9 participating practices were are 17c, were not required to undertake (and record) activity as defined within QOF and LES specifications and therefore due to data quality issues it would not have been possible to undertake before and after comparisons for these practices.

4 Overall Programme Activity

4.1 Eligible Population

Tale 1 shows that a total of 4,110 patient were on the CHD and/or T2D LES disease register, and registered within the 9 participating practices during the 2015/16 contract year

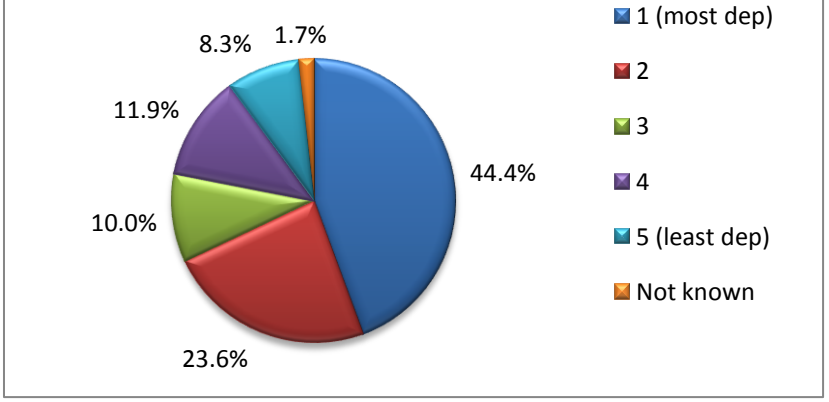
***Table 1**: Number (%) of eligible patients by disease register(s)*

TOTAL	Type 2 Diabetes	CHD	CHD & Type 2 Diabetes
4110	1907 (46.4%)	1610 (39.2%)	593 (14.4%)

[2] The Read Clinical Classification, commonly known as Read Codes, is the standard Clinical Terminology system used in General Practice
[3] LES data extract 28/12/2016
[4] Scottish Index of Multiple Deprivation (2012)

Figure 1 shows that 44.4% (n= 1825) of the total eligible population resided within the most deprived neighbourhoods, only 8.3% (n=341) of eligible patients resided within the least deprived neighbourhoods. The SIMD ranking was unknown for 2% (n=70) due to incomplete / unmatched postcodes.

***Figure 1**: Eligible patients by SIMD quintile (n=4110)*



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4.2 Programme Reach & Engagement

Table 2 and figure 2 summarise programme activity in the 2015/16 contract year within the 9 participating practices.

***Table 2**: Programme reach & uptake* (source CHD & Type 2 Diabetes LES extract)

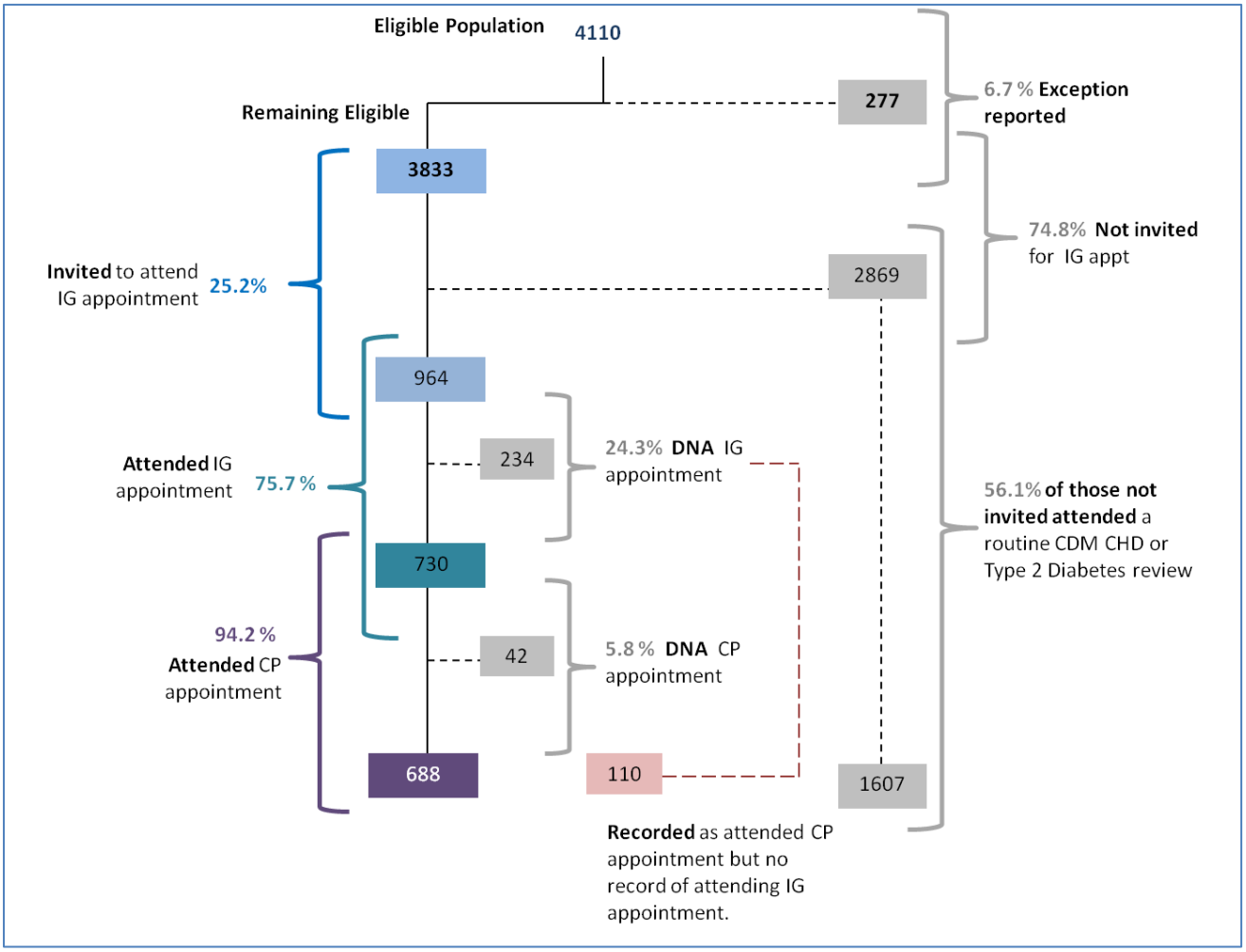
Eligible population (n)	4,110
Eligible patients exception reported (n)	277
Remaining eligible population	**3,833**
Invited Patients (n)	964
% remaining (n=3833) eligible who were invited	25.2%
Attended IG appointment (n)	730
% invited patients (n=964) who attended IG appt	75.7%
Attended both IG and CP appointments (n)	688
% invited (n=964) who attended both IG appt and CP appointment	71.4%
% of remaining eligible population (n=3833) who attended both IG and CP appointments	17.9%

During the 2015/16 contract year, 277 (6.7%) of the 4,110 eligible patients were exception reported[5], leaving a remaining 3,883 eligible patients (revised denominator). However there was substantial variation in the percentage of eligible patient exception reported across the 9 participating practices (range 0.2% to 19%). Reasons for patient exception reporting were not available for analysis. Consequently, it was not possible to distinguish the number of

[5] Exceptions are patients who are on the disease register, and who would ordinarily be included in the indicator denominator (after exclusions for defined reasons as per QOF guidance).

patients who were exception reported for clinical reasons versus reasons of informed dissent (refusal to participate or no response to minimum of 3 invites)

***Figure 2**: Summary of programme reach & engagement*



4.2.1 Reach

Of the 3,833 remaining eligible patients, 964 patients (25.2%) were invited to attend a HofC information gathering (IG) appointment. However of the 2,869 (74.8%) patients who were not invited, 1,607 were coded as attending a routine CDM annual review. This was principally due to delays in implementation of the HofC approach.

4.2.2 Engagement

Of the 964 patients who were invited to attend a HofC review, 730 patients (75.7%) attended an IG appointment. Of the 730 attending an IG appointment, 688 (94.2%) patients attended a subsequent CP appointment. This translates to 17.9% of remaining eligible patients attending both IG & CP appointments during the 2015/16 contract year.

Of the 234 patients who were invited to but did not attend an IG appointment, 110 had a record of attending a CP appointment. This is likely explained by either; a) practices coding issues – e.g. failing to consistently adopt the agreed coding guidance, or; b) model fidelity issues – patients not been seen at an IG appointment prior to attending a CP appointment.

Following discussion with practices and programme team it was deemed more likely to be down to practice coding issues, however the 110 patient were excluded from the equity analysis.

5 Equity Analyses

From an equity perspective there are several areas to focus on

- Is there equity amongst those considered eligible for HofC?
- Is there equity amongst those eligible who are invited for HofC?
- Is there equity amongst those invited who attend appointments?

In this instance equity is considered from the perspective of socio-economically deprivation as measured by the SIMD (2012).

5.1 Is there equity amongst eligible patients who are exception reported?

Table 3 summarises the number and percentage of eligible patients (n=4,110) who were exception reported (n=277) by SIMD quintile.

Table 3: Number and % of eligible patients exception reported by SIMD quintile

SIMD Quintile	Number of eligible patients	Number exception reported	% Exception reported
1 (most deprived)	1,825	158	8.7%
2	972	62	6.4%
3	412	22	5.3%
4	490	19	3.9%
5 (least deprived)	341	12	3.5%
Not known	70	4	5.7%
All	4,110	277	6.7%

The percentage of eligible patient's exception reported rises with increasing levels of deprivation, with 8.7% of the most deprived group being exception reported compared with only 3.5% of the least deprived group. These results are statistically significant (non parametric test for trend: $p<.001$.

5.2 Is there equity amongst remaining eligible who are invited for HofC?

Table 4 summarises the number and percentage of remaining eligible patients (n=3,883) patients who were invited (n= 964) by SIMD quintile.

Table 4: *Number and % of remaining eligible patients invited by SIMD quintile*

SIMD Quintile	Number of remaining eligible patients	Number invited	% Invited
1 (most deprived)	1,667	438	26.3%
2	910	220	24.2%
3	390	91	23.3%
4	471	115	24.4%
5 (least deprived)	329	84	25.5%
Not known	66	16	24.2%
All	3,833	964	25.2%

Once the exception reported patients have been removed (n=277) the analysis showed the there is little difference across the deprivation groups in the percentage of remaining eligible patients invited. These results are not statistically significant (non parametric test for trend: p= 0.416).

5.3 Is there equity amongst those invited who attend a HofC information gathering & care planning appointment?

Table 5 summarises the number and percentage of invited patients (n= 964) who attended both the HofC IG and CP appointments (n= 688) by SIMD quintile.

Table 5: *Number and % of invited patients who attended an IG ad CP appointment by SIMD quintile*

SIMD Quintile	Number of invited patients	Number attending IG & CP appointments	% attended IG & CP appointments
1 (most deprived)	438	313	71.5%
2	220	156	70.9%
3	91	66	72.5%
4	115	83	72.2%
5 (least deprived)	84	59	70.2%
Not known	16	11	68.8%
All	964	688	71.4%

There is little difference is little difference across the deprivation groups in the percentage of invited patients who attend both the HofC IG & CP appointments. These results are not statistically significant (non parametric test for trend: p=0.927).

6 Conclusions and Recommendations

Overall, HofC programme model reach was relatively low at 25.2%. This can largely be explained by practice start dates (Appendix 1). Although practice staff attended HofC training in April 2015, only 1 practice commenced inviting patients in quarter 1[6], the majority of practices (n= 5) did not commence invites until quarter 2, with the remaining 3 practices commencing invites in quarter 4. In addition, feedback from the project team noted that some practices adopted a phased approach to implementing HofC model by inviting a sub-set of their eligible patients to a HofC review versus the remaining to a routine CDM annual review. This may introduce a degree of selection bias between those patients who were invited to HofC reviews versus those who were seen for routine care during the 2015/16 contract year, therefore caution needs to be taken in interpreting these results.

The equity analysis showed that once exception reported patients were removed from the denominator, there was no significant difference in the percentage of patient being invited to or engaging with the HofC programme across deprivation groups. However, it is not possible from this analysis (due to limitations outlined in section 3.3) to assess whether the HofC model improves or worsens engagement within the most deprived groups.

It is recommended that NHSGGC HofC programme team continue to monitor programme reach and engagement by SIMD at both a programme and practice level, particularly focusing on gaining a greater understanding any persisting variation in patients who are exception reported. In addition, consideration should be given to incorporating equity monitoring of patient outcomes for example, biometric targets and quality of life measures.

[6] Quarters: 1 (April – June); 2 (July – September); 3 (October – December); 4 (January – March)

Appendix 1 NHSGGC House of Care Practices Populations & Start Dates

Practice CHD & Type 2 Diabetes LES disease register (2015/16 contract year) and HofC programme start date

Practice ID	Type 2 Diabetes only	CHD only	CHD & Type 2 Diabetes	Total	Start Date[7]
1.1	218	231	66	**515**	01 Sept 2015
1.2	112	140	54	**306**	04 Aug 2015
1.3	148	134	44	**326**	13 Aug 2015
1.4	395	353	119	**867**	04 Nov 2015
1.5	197	181	50	**428**	01 Sept 2015
1.6	88	85	40	**213**	24 Dec 2015
1.7	383	226	97	**706**	15 Apr 2015
1.8	198	143	67	**408**	21 Dec 2015
1.9	168	117	56	**341**	28 Sept 2015
All	**1907**	**1610**	**593**	**4110**	-

[7] Date of first recorded patient invite to attend HofC information gathering appointment

Appendix 2 Practice Read Coding and Data Extraction Guidance

Pathway	Local Definition	Read Code/Definition
Eligibility	All LES patients with CHD and/or Diabetes (Type 2) are eligible for HofC programme	**Existing LES Codes for** CHD & Diabetes (Type 2) disease registers
Invited Patients	All patients' invited to attend' HofC information gathering appointment	**NEW CODE:** **9OE5 -** Chronic Long Terms Conditions Management Required
Information Gathering Appointment	Patient 'attended' HofC information gathering appointment	**NEW CODE:** **9r -** Information gathering
Long Term Condition Care Planning	Patient 'attended' HofC Care Planning consultation	**Required LES codes** **9OEA.** Chronic Disease annual review completed **and either** **6A4..** Coronary heart disease review
Agreed Care Plan	HofC 'Care Plan developed' in collaboration with patient	**Required LES codes** **(both required)** **9m4..** Healthy Lifestyle Programme Status **67L..** Goal Identification

Glossary

BHF	British Heart Foundation
CDM	Chronic Disease Management
CHD	Coronary Heart Disease
CP	Care Planning
HofC	House of Care
IG	Information Gathering
LES	Local Enhanced Service
LTC	Long Term Condition
NHSGGC	NHS Greater Glasgow & Clyde
QOF	Quality & Outcomes Framework
SIMD	Scottish Index of Multiple Deprivation
T2D	Type 2 Diabetes
YofC	Year of Care Partnership