

Development of the One Gloucestershire primary care based familial hypercholesterolaemia (FH) case-finding and referral pathway

Dr K.S. Gan, Dr M. Balasubramani

Department of Clinical Biochemistry, Gloucestershire Hospitals NHS Foundation Trust

Safety concerns

- Cardiovascular disease (CVD) accounts for 25% of UK deaths and is the main cause of death in deprived areas. Targeting cholesterol will have a major impact on CVD.
- Familial hypercholesterolaemia (FH) is an autosomal dominant disorder with prevalence of 1:250 for heterozygous and 1:300,000 for homozygous. If unrecognised, 50% have CVD by age 50 and only 50% live to retirement age.
- Life expectancy is normal with generic statins and healthy lifestyle. Early detection and genetic diagnosis to enable early intervention will reduce risk and enable better health outcomes
- Only 7% of FH were diagnosed in UK (2022). NHS Long Term Plan (LTP) aims to increase this to 25% by 2024/25.
- There is lack of clinical pathway for FH case finding in Gloucestershire.
- Existing waiting time from referral to seeing a consultant is > 12 months in GHT
- Gloucestershire FH Service aims to ensure this shortfall is addressed and our FH patients receive an equitable and robust genetic testing and cascade screening service, thus improving health outcomes.

Aims

- To support NHS LTP target, NHSE/I included an Investment and Impact Fund (IIF) indicator to increase detection and treatment of FH in the Primary Care Network Direct Enhanced Service in 2022/23 ⁽²⁾.
- IIF-CVD-04 recommends systematically searching primary care patient record to identify people aged ≤ 29 with cholesterol >7.5 or aged ≥ 30 with cholesterol of >9 ⁽¹⁾, excluding secondary causes, assessing further using FH scoring criteria, and then referring for specialist assessment and/or genetic testing in line with local pathways. Thresholds for IIF reward is 20-40%.
- Aim of One Gloucestershire Primary Care FH Referral Pathway (G-Care) is to support Primary Care to identify patients who meet the criteria of IIF-CVD-04 indicator and are therefore eligible for referral to Gloucestershire FH Service.
- Gloucestershire FH Service and 2 Cheltenham PCNs (10 surgeries) undertook a pilot project to identify patients who meet the criteria of IIF-CVD-04 indicator which led to development of a robust primary care referral pathway for genetic testing, cascade screening and specialist management of FH (Diagram 3).

Stakeholders

- GHT FH (Lipid) Service, One Gloucestershire ICB Circulatory CPG, GP lead (Dr R Hollands, Underwood Surgery, Cheltenham Central PCN), clinical pharmacist lead (Miss H Turner, St Paul's PCN, Cheltenham).

Diagram 1

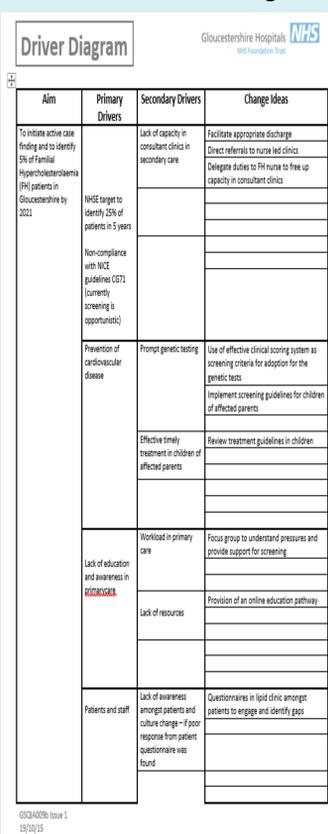


Diagram 2

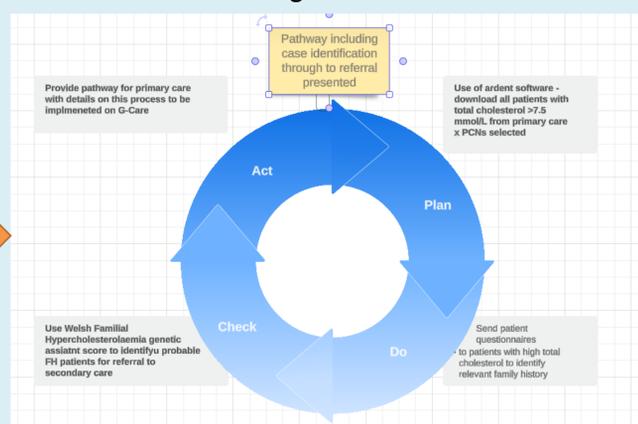


Diagram 3 (G-Care Pathway)

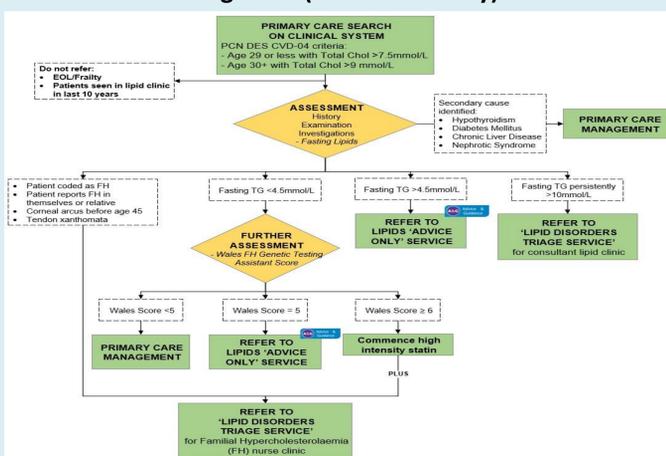
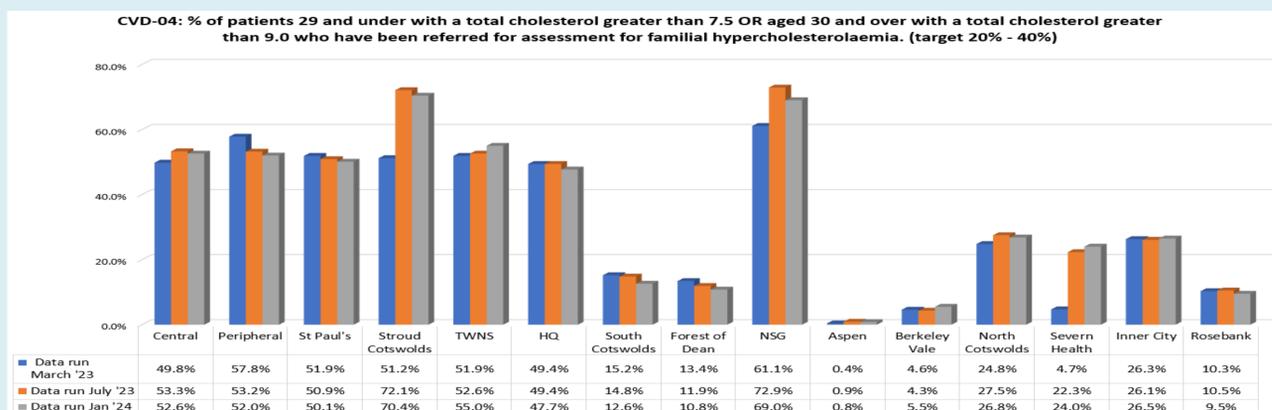


Diagram 4



Measures

- Outcome – number of patients identified and referred for assessment for FH through the pilot project
- Process – Using Ardens Healthcare Informatics, we developed a bespoke tool to identify patients who meet the IIF-CVD-04 cholesterol criteria, exclude secondary causes and assess the Wales FH genetic testing assistant score (web calculator). Questionnaire was sent to all patients who met the cholesterol criteria to determine family history.
- Balancing - number of patients meeting Wales FH score eligibility criteria to improve quality of referrals and hence waiting time for assessment.

Results from the pilot project

- Full assessments were completed in 7 surgeries between October - December 2022.
- Total population of the two PCNs is 104,000.
- 549 patients met the CVD-04 cholesterol criteria (0.53%).
- 141 had full assessments, and 7 (5%) met the Wales FH eligibility score and were referred for genetic testing.

Next steps

- To audit our diagnosis rate by identifying the number of genetically positive FH individuals in all the patients referred to Gloucestershire FH Service for assessment.
- To assess our case finding rate against NHS LTP target (25% by 2024/25).
- Education across all primary care networks.

References

- Familial hypercholesterolaemia: identification and management. NICE clinical guideline CG71 (August 2008).
- Network contract directed enhanced service. Investment and impact fund 202/23: updated guidance (March 2022).