## FH in the North East The Story So Far

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18.10.18

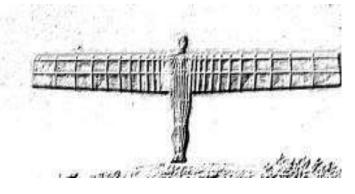
## Chapter One

Creating a Cascade Service

#### Northern Lipid Forum

in association with





# FH: can we deliver the new NICE Quality Standard?

Hilton Newcastle Gateshead Hotel Bottle Bank, Gateshead, Newcastle upon Tyne NE8 2AR

Tuesday 15th October 2013

## NICE Quality Standard (QS41 August 2013) Familial Hypercholesterolaemia

8 prioritised statements derived from CG71, designed to drive measurable quality improvements

- Statement 1. Diagnosis
- Statement 2. Specialist referral
- Statement 3. DNA testing
- Statement 4. Diagnosis in children under 10 years
- **Statement 5. Cascade testing**
- **Statement 6. Drug treatment in adults**
- Statement 7. Drug treatment in children
- Statement 8. Annual review

#### Key Findings from the RCP FH Audit

The clinical management in lipid clinics is of a good standard for individual patients who have been diagnosed with FH.

Current resources are inadequate to cope with the identification of the predicted additional FH cases UK wide.

There is a major lack of family "cascade" testing, whether carried out on the basis of lipid levels, or more effectively by a DNA diagnosis.

While there is good access to DNA diagnosis and funding for DNA testing in the Devolved Provinces, access and funding in England is poor.

There is a shortfall in child-focused services throughout the country, with only 26% of sites offering paediatric FH services.

## FH Services in the North East in 2013 Gap Analysis

- No centralised disease register for Adult FH probands and families in North East
- No Specialist nurses in Adult or Paediatric FH Clinics
- No regional infrastructure for FH Family cascade testing available to support Clinics
- No access to DNA mutation testing for new FH probands
- No clinical management database software (e.g. PASS) available to FH Clinics
- Adult specialist lipid clinics shortage, particularly in the south of the Region
- Paediatric Lipid clinics not available in south of the Region
- FATS/NECVN Primary Care FH Guidelines not fully implemented in south of Region
- No access to LDL Apheresis

#### Northern CCG Forum

- 13 CCGs
  - North East SHA area plus Cumbria CCG
- Long history of collaboration across the area
  - E.g. Clinical Innovation Teams
- Strong and independently minded forum
- Academic Health Sciences Network
  - Co terminus
  - Need for CCG engagement

## A Population Approach

- 3.1 million people
- 12,000 (5,000) people living with FH mutations
- Only 15% known
- Perhaps 100 preventable cardiac deaths per year
- CCGs agreed to risk share / population approach

## Selling Idea To The CCGs

- Prevention
- Innovation
- Implementing NICE guidance
- Best practice
- Population
- The human touch

#### The North East FHG Consortium

- North East Cardiovascular Network LSAG (10 clinics)
- Northern CCG Forum (13 CCGs)
- Northern Regional Genetics Service (genotyping)
- NewGene Ltd (genotyping)
- Academic Health Sciences Network (AHSN) (genetics)
- City Hospitals Sunderland (CHS FT, nurses host Trust)
- Newcastle NIHR Diagnostic Evidence Co-operative (DEC)
- AstraZeneca Ltd (PASS software licences)

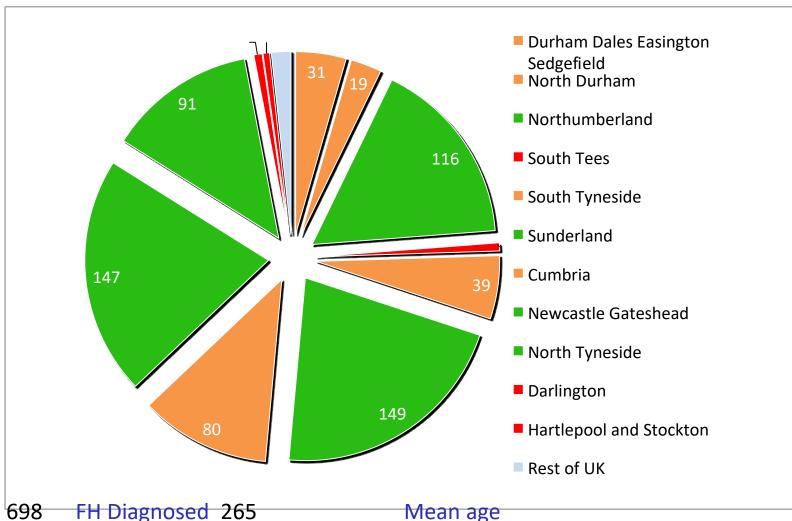
British Heart Foundation Support for FHG Nurses



## **Chapter Two**

A Partial Success

#### **NECVN FH Genetic Testing Activity 2014-16**



Total FH Tests 698 FH Diagnosed 265

Proband Mut+ 129 (31.2%) Proband Tests 414 52 yrs Cascade Tests 284 Cascade Mut+ 136 (47.9%) 35 yrs

## **Chapter Three**

Going South
With
General Practice

## The Challenge

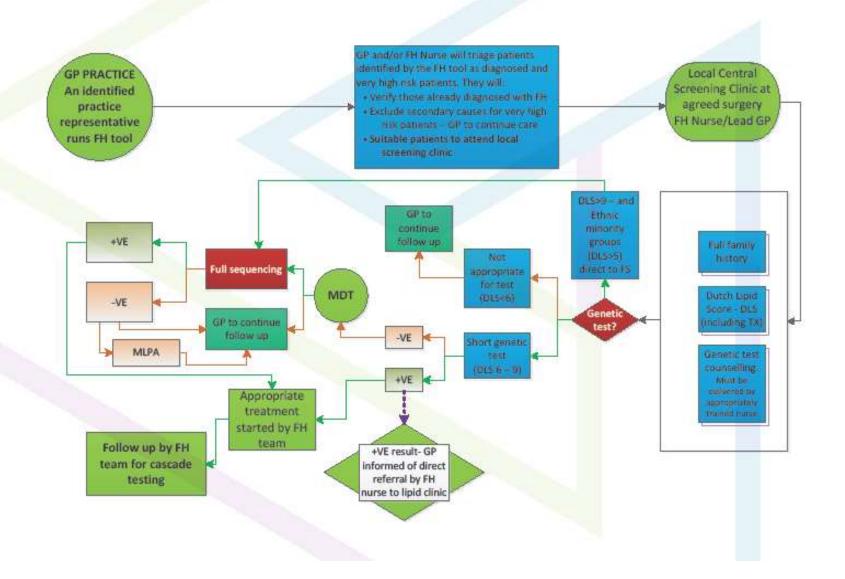
- Growing activity in the south of the patch
- Starting with GP registers and the data we hold on individuals
- Engaging with GP practices and CCGs
- Facilitating case finding

## **Key Steps**

- AHSN
  - Created and hosts the broader collaboration
  - Amgen and Sanofi have joined the group
- FH Tool
  - Dr Nadeem Qureshi, Nottingham University
  - FAMCAT
  - PRIMIS
- Developing the pathway



#### FH Pathway (September 2018)



#### **FAMCAT**

- Extract from GP system
- PRIMIS (Grasp-AF, Grasp-HF)
- Ranks register by risk
- Example (Cruddas Park Surgery)
  - 66 High risk
  - Rule of thirds
    - Secondary (alcohol, diabetes)
    - Known to lipid service
    - Worth reviewing

### **Durham story**

- Dr Mike Hackett pioneered use of FAMCAT locally, including group consultations
- Started work to apply FAMCAT across DDES
- Nursing team presentation later
- We aim to triage from our registers a target population to test.
- What rate of positives will we find?
  - Earlier experience (Chapter 1) was 35%
  - Can we achieve the same?
  - Even 25% would be very good

## **Chapter Four**

- Lots still to do to increase rates of case finding and subsequent cascade testing
- But....
- Child-Parent FH screening in Primary Care David Wald et al, NEJM 2016
- For every 1000 children screened 8 positive (4 + 4 parents)