NHS South West NHS Genomic Medicine Centre

100 000 Genomes Project SWGMC Rare Disease Recruitment

November, 2015 Number 1

Contents

Introduction

Highlights

1. Introductory leaflets
2. Recruitment
3. Eligibility
4. Entry of phenotype data
5. Results
6. Website
7. Recruitment team

South West NHS GMC Team members

Prof Sian Ellard
Programme Lead
sian.ellard@nhs.net
01392 408259

Dr Steven Johnson
Project Manager
steven.johnson@nhs.net
01392 408177

Dr Charles Shaw-Smith
Rare Disease Lead
charles.shaw-smith@nhs.net
01392 405737

Website (in development)

www.swgmc.org

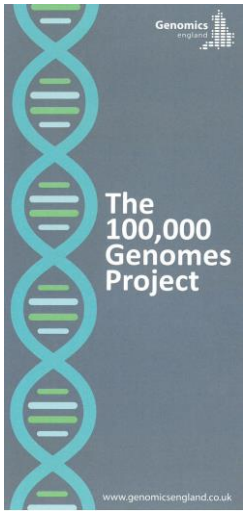
Introduction

Welcome to the first edition of the SWGMC 100,000 Genomes Project Newsletter. A large and growing network of people throughout the Peninsula are involved in one way or another in recruitment of patients to the Rare Disorders arm of the project. The aim of this newletter is to keep you informed about all aspects of this exciting project. We hope that it is useful- feedback always welcome!

Highlights

- New conditions are in the process of receiving approval for recruitment: CADASIL, undiagnosed neurocutaneous syndromes, atypical haemolytic uraemic syndrome, Hereditary Haemorrhagic Telangiectasia, and a range of dermatological disorders amongst others (see under Eligibility, below)
- Leaflets. Several of you have asked about these. Genomics England have prepared introductory leaflets suitable for distribution in clinic. These are close to readiness, just awaiting final REC approval.
- For recruitment team: new consent form/information sheet to be released soon- please continue to the existing versions until advised to change

1.Introductory leaflets



Several of you have asked about leaflets for potential recruits to take away from clinic. Genomics England have prepared introductory leaflets suitable for distribution in this way. These are close to readiness, just awaiting final REC approval. The front page is illustrated on the left.

The leaflets don't say anything about secondary findings or data sharing, so it will still be important for clinicians to highlight these aspects of the project when having preliminary discussions with potential recruits (see under Recruitment, below).

The leaflets should be ready for distribution next month. We'll let you know when available.

Timetable for 'onboarding' of Local Delivery Partners (LDPs)

The LDPs are the partner hospital Trusts in the Peninsula and Somerset:

Derriford Hospital, Plymouth

Royal Cornwall Hospital, Truro

North Devon District Hospital, Barnstaple

Torbay Hospital

Musgrove Park Hospital, Taunton

Yeovil District Hospital

LDPs are 'on board' when patients/families can be recruited, and the samples processed, locally in that hospital

Projected timetable for onboarding:

Derriford, RCH Truro, MPH Taunton by December 31st, 2015

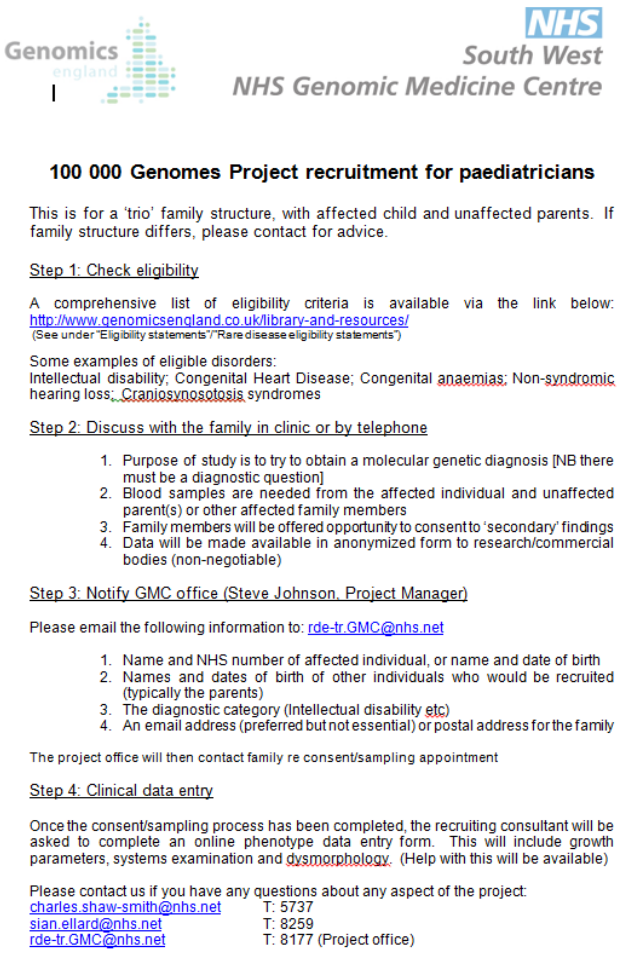
NDDH, Yeovil DH, Torbay Hospital by summer 2016

2. Recruitment

a. Recruitment so far

We are on target so far. Our target for the first year of the study is 304 samples. Our recruitment target in terms of numbers of samples to the end of October, 2015, was 109, and we have collected 111 samples to that date- good news, and thanks to all for their efforts!

b. How to recruit a patient



Genomics england

NHS South West NHS Genomic Medicine Centre

100 000 Genomes Project recruitment for paediatricians

This is for a 'trio' family structure, with affected child and unaffected parents. If family structure differs, please contact for advice.

Step 1: Check eligibility

A comprehensive list of eligibility criteria is available via the link below:
http://www.genomicsengland.co.uk/library-and-resources/
(See under "Eligibility statements"/"Rare disease eligibility statements")

Some examples of eligible disorders:
Intellectual disability; Congenital Heart Disease; Congenital anaemias; Non-syndromic hearing loss; Craniosynostosis syndromes

Step 2: Discuss with the family in clinic or by telephone

1. Purpose of study is to try to obtain a molecular genetic diagnosis [NB there must be a diagnostic question]
2. Blood samples are needed from the affected individual and unaffected parent(s) or other affected family members
3. Family members will be offered opportunity to consent to 'secondary' findings
4. Data will be made available in anonymized form to research/commercial bodies (non-negotiable)

Step 3: Notify GMC office (Steve Johnson, Project Manager)

Please email the following information to: rde-tr.GMC@nhs.net

1. Name and NHS number of affected individual, or name and date of birth
2. Names and dates of birth of other individuals who would be recruited (typically the parents)
3. The diagnostic category (Intellectual disability etc)
4. An email address (preferred but not essential) or postal address for the family

The project office will then contact family re consent/sampling appointment

Step 4: Clinical data entry

Once the consent/sampling process has been completed, the recruiting consultant will be asked to complete an online phenotype data entry form. This will include growth parameters, systems examination and dysmorphology. (Help with this will be available)

Please contact us if you have any questions about any aspect of the project:
charles.shaw-smith@nhs.net T: 5737
sian.ellard@nhs.net T: 8259
rde-tr.GMC@nhs.net T: 8177 (Project office)

We have tried to make this as simple as possible. An example, the version for paediatricians, is shown in the panel opposite.

We feel that the process is about as straightforward as it could possibly be, and indeed clinicians from different specialties throughout the peninsula have risen to the occasion and recruited dozens of families so far- see the recruitment figures above.

The easiest way to recruit a patient/family is from clinic, but phoning on receipt of a negative molecular test is also an effective option.

Ask for help if needed!

c. Recruitment outside Exeter

See side panel for definitions of LDPs, onboarding, and projected onboarding timetable. Currently, patients known to the Clinical Genetics service are being recruited in Exeter, Plymouth and Truro. It is a complex procedure because samples have to be brought back to Exeter for processing within the timeframe specified in the protocol (6 hours). For this reason, specialties outside Clinical Genetics are currently recruiting only from Exeter. We will keep you updated on progress on this topic.

New disorders shortly to be open for recruitment

-already approved

Haematology/immunology
Aplastic anaemia +/- PNH
Inherited Complement Deficiency

Renal
Atypical haemolytic uraemic syndrome

Dermatology
Autosomal recessive congenital ichthyosis
Ectodermal dysplasia without a known gene mutation
Epidermolysis bullosa
Meige's disease (lymphoedema)
Palmoplantar keratoderma and erythrokeratodermas
Undiagnosed familial neurocutaneous syndromes
Generalised pustular psoriasis

Respiratory
Familial and multiple pulmonary AVMs
Familial pulmonary fibrosis
Hereditary haemorrhagic telangiectasia (HHT)

Paediataric neurology
Infantile nystagmus

Metabolic
Familial hypercholesterolaemia

-likely to be approved

Neurology
CADASIL

Dermatology
Alopecia- familial cicatricial with scarring

3.Eligibility

The current list of eligible disorders is found on the Genomics England website, here:
http://www.genomicsengland.co.uk/library-and-resources/
(Please click on: *Eligibility statements, Data Models and Guidelines for Family Pedigree Selection*, and then choose *Rare Disease Eligibility Statements*)

Some new conditions were approved for recruitment in a meeting of the GEL Scientific Advisory Committee in a meeting on September 15th. These are listed in the side panel opposite.

4.Entry of phenotype data

The online tool which GEL envisaged for this process is called OpenClinica. The West Midlands GMC has developed its own version for the process, named **Genie**.

SWGMC is in the process of implementing Genie. Once this implementation is live, it will be possible to take forward data entry. Detailed information on how to do this will be circulated.

5.Results

When the project started, we were asked to advise recruits that it would not be possible to give a precise timeframe for feedback of results especially in the initial phase, but to say that a minimum of six months should be allowed before any prospect of feedback.

It is now clear that the figure of six months is optimistic, and that we should be saying "at least a year, if not 18 months from time of recruitment to feedback of any positive result."

6.Website

A local (SWGMC) website is in development. It can be viewed at www.swgmc.org

Recruitment team

Paediatric Research Nurses, Exeter
Su Wilkins
Caroline Harrill
Sue Ward

Genetic Counsellors, Exeter
Anne Searle

Genetic Counsellors, Plymouth
Matilda Bradford
Nicol Lambord

Specialist Registrars
Lettie Rawlins (Clinical Genetics, Exeter)
Rhian Clissold (Renal Medicine, Exeter)
Harriet Aughey (Paediatrics, Truro)

Thanks to the following for commitment to the project:

All members of Peninsula Regional Clinical Genetics Service

Richard Tomlinson, Eleanor Thomas, and all members of the Community Paediatrics team, RDE, Exeter

Coralie Bingham, Rhian Clissold, Renal Medicine, RDE, Exeter

Claire Bethune, Lucy Leeman, Andrew Whyte, Immunology and Allergy, Derriford Hospital, Plymouth

Nick Gutowski, Neurology, RDE, Exeter

Elizabeth Househam, Neurology, Derriford Hospital, Plymouth

Kayal Vijayakumar, Consultant Paediatric Neurology, Bristol Children's Hospital

Carolyn Charman, Naomi Goldstraw, Dermatology, RDE, Exeter

7. Recruitment team

Joining the recruitment team

The team is open to new members, especially in Torquay and Barnstaple. Team members should be up to date on the following:

1. Good Clinical Practice training- usually offered as part of Trust mandatory training
2. Completion of online consent training provided by Health Education England- the module can be completed in around an hour
3. Face-to-face consent training specifically for 100 000 Genomes Project, provided to date by Charles Shaw-Smith, Rare Disease Lead.

Changes to consent form/information sheet: GEL have listened to feedback that the consent form was too long and didn't link helpfully with the information sheet. The consent form document has been shortened by about 30% and links have been introduced. The new forms will be with us shortly, please continue to use the current version until advised to change.

We are currently listening to feedback from the recruitment team that recruitment appointments involving children with learning disability can be difficult, especially regarding blood/saliva sampling.

Please refer to comments in section on Reporting of Results above. We should take note that the timeframe for this has changed and inform recruits accordingly.

8. Thank you!

The management team would like to thank firstly all members of the recruitment team for their fantastic efforts in setting up and completing recruitment appointments. There has perhaps unsurprisingly been odd teething problems, some of which are currently being addressed, but on the whole the system is working extremely well, and the high attendance rates for appointments with very low 'drop out' were noted very positively in the quarterly review meeting chaired by Sue Hill in Exeter last week.
Secondly, a number of clinicians from around the peninsula have shown a high degree of commitment to the project. This has made our task easier and we are extremely grateful –thank you!