National Quality Assurance Advisory Panel - Genetics

Annual Report 2011-12

Meetings
The Panel met twice during this period (18th October 2011 and 26th March 2012) with this frequency of meetings to continue for 2012-13. In addition much panel business is conducted by email between meetings.

Panel Membership
During this period Paul Roberts replaced Tony Parkin as one of the representatives of the ACC; and Fiona Macdonald replaced Ann Curtis as one of the representatives of the CMGS; and Jordan Clark replaced Jane Holden as specialist advisor for the molecular haematology/oncology scheme. In addition Jerry Hancock joined the panel as a Specialist Advisor, providing a link to the UKMRD Network and the EuroMRD Network QC scheme. Current membership of the panel at the end of this period is as follows:

Prof Mike Griffiths (Chair) RCPath Representative
Dr Fiona Macdonald CMGS Representative Replaced Ann Curtis
Dr Dave Robinson CMGS Representative
Ms Kim Smith ACC Representative
Mr Paul Roberts ACC Representative Replacing Dr Tony Parkin
Prof Nick Cross BSH Representative
Ms Roberta Goodall ACB Representative.
Ms Fiona Coyne (secretary) Genetic Technologists Rep
Dr Jane Moorhead IBMS Representative
In addition specialist advice continues to be provided by the scheme organisers and similar representatives:
Ros Hastings  NEQAS in Clinical Cytogenetics Scheme Organiser
Sandi Deans  NEQAS in Clinical Molecular Genetics Scheme Organiser
Simon Patton  EMQN Scheme
Jordan Clark  NEQAS for LI (Molecular Haemato-oncology)  
(replacing Jane Holden).
Jerry Hancock  UKMRD Network and EuroMRD Network

UK NEQAS for Clinical Cytogenetics:
Updated performance criteria were ratified by NQAAP for three schemes: Constitutional, Acquired and Microarray.

One outstanding red laboratory referral from the previous period was resolved, with the closure of the laboratory and transfer of service to an alternative provider.

One new red laboratory referral within the tumour FISH scheme was received due to repeated non-submission. This referral was ongoing at the end of the period covered by the report (but has subsequently been resolved).

There were only 4 poor performance incidents in UK laboratories in 2011 (one genotyping and one non-submission for the Tumour round; one genotyping and one interpretation in the LPD round).

UK NEQAS for Molecular Genetics
There were no new referrals for persistent poor performance in 2011-12. Only 2 poor performance incidents in UK laboratories was reported (both genotyping in the May 2011 CF Blood Spot round).

UK NEQAS for Molecular Genetics has now developed genotyping/interpretation and interpretation only schemes to run alongside genotyping only schemes.

**EMQN**
Only performance in the genotyping aspects of the EQA schemes by UK labs is currently reported to the NQAAP panel. EMQN reported no cases of PP, or persistent PP in 2011 schemes

**UK NEQAS for Leucocyte Immunophenotyping (Molecular Haemato-oncology)**
The Molecular Haemato-oncology aspects of the EQA schemes organised by UK NEQAS for Leucocyte Immunophenotyping also report to NQAAP for Genetics. Performance criteria for some of the schemes were approved by NQAAP at the March 2011 meeting, and are now identifying poor performance.

One red laboratory has been referred to NQAAP after amber performances in two rounds of the Chimerism scheme where results have fallen outside the defined acceptable range. The laboratory has engaged with NQAAP and although still outstanding the red status is expected to resolve shortly after a change in practice by the laboratory.

*Other developments*
The three molecular providers continue to develop their services with pilot schemes for Pre-implantation Genetic Diagnosis, Gastrointestinal Stromal Tumours, KRAS, EGFR, BRAF, FLT3 and NPM1 all in operation or planned.

The Molecular Pathology pilot EQA schemes are being developed in collaboration with UK NEQAS for ICC and ISH (i.e. KRAS, EGFR, BRAF). A specialist advisory group has been set up for the molecular pathology joint schemes which will report to UK NEQAS for Molecular Genetics.

**Reporting arrangements for other Molecular Genetic based EQA schemes.**

The panel has previously been concerned with the lack of defined reporting arrangements for the growing number of molecular genetic based EQA schemes mainly offered by other EQA providers.

Through the Joint Working Group on Quality Assurance, the panel agreed that all new molecular genetic based EQA schemes should establish governance arrangements during their initial pilot phases and this should include the reporting arrangements for poor performance. Schemes should be assessed on a case by case basis but the panel strongly believe that such schemes should report to the Genetics panel as they are generally technical only schemes at present. In view of this Dr Jerry Hancock has joined the panel as a specialist advisor, providing a link to the UKMRD Network and the EuroMRD Network QC scheme in which the UK laboratories participate. At present the scheme is observational and educational and does not identify poor performance.

**Other EQA programmes**
There remain concerns about other EQA schemes in the UK or where UK laboratories are choosing to use non-UK schemes. The potential for NQAAP for Genetics to have an oversight role has been identified, and is being investigated, for:

- Biochemical Genetics EQA schemes
- Laboratories using the ASHI (American Society of Histopathology and Immunogenetics) chimerism EQA program.

**Complaints**

No complaints were received by the panel in 2011-12.

Mike Griffiths,
Chair of NQAAP for Genetics,
November 2012