The Routine Reporting of Genomic Results Electronically


The Problem: Paper Reports

In 2015/2016 Sheffield Diagnostic Genetics Service delivered ~22,000 reports to clinicians, including over 4000 to the hospital in which the department resides. The majority of these reports were sent on paper:

- Reports are often lost in transit between the department and the referring clinicians - this causes delays in patient treatment
- The process of preparing reports and mailing them is time consuming and costly
- Paper Reports are not integrated into the patients record reliably

The Solution: Electronic Reports

Hospitals widely utilise electronic systems for the routine reporting of analytical results, from complex data such as images to simple text reports.

In South Yorkshire many hospitals utilise Integrated Clinical Environment (ICE) to deliver their reports to the relevant medical professionals.

Medical professionals are comfortable with receiving reports electronically, however we must consult with them extensively.

Reports can be viewed in the context of other medical data. For example biochemical results can be viewed alongside genetic data.

ICE: Integrated Clinical Environment

Six NHS Trusts in the South Yorkshire area are part of an ICE cluster. Results uploaded to ICE are available in each of these hospitals through a system called “OpenNet.” No additional linking is required. A further five trusts in the region use ICE and could be linked to the South Yorkshire cluster.

Validation: Data Flow

Genetics labs are unique in that they deal with patients who are not necessarily patients of the trust in which the department is hosted, and so they are not part of their Patient Administration Systems (PAS) therefore a unique route to validate patient data is required. Initial checks on data contained in our LIMS indicates that 85,475 patients validated with the NHS DBS checking service. 13% of samples failed.

A patient information validation pipeline is currently being produced using the NHS digital SPINE API.

This work is supported by:

#datasaveslives