




Central Manchester University Hospitals

NHS Foundation Trust

Incorporating:

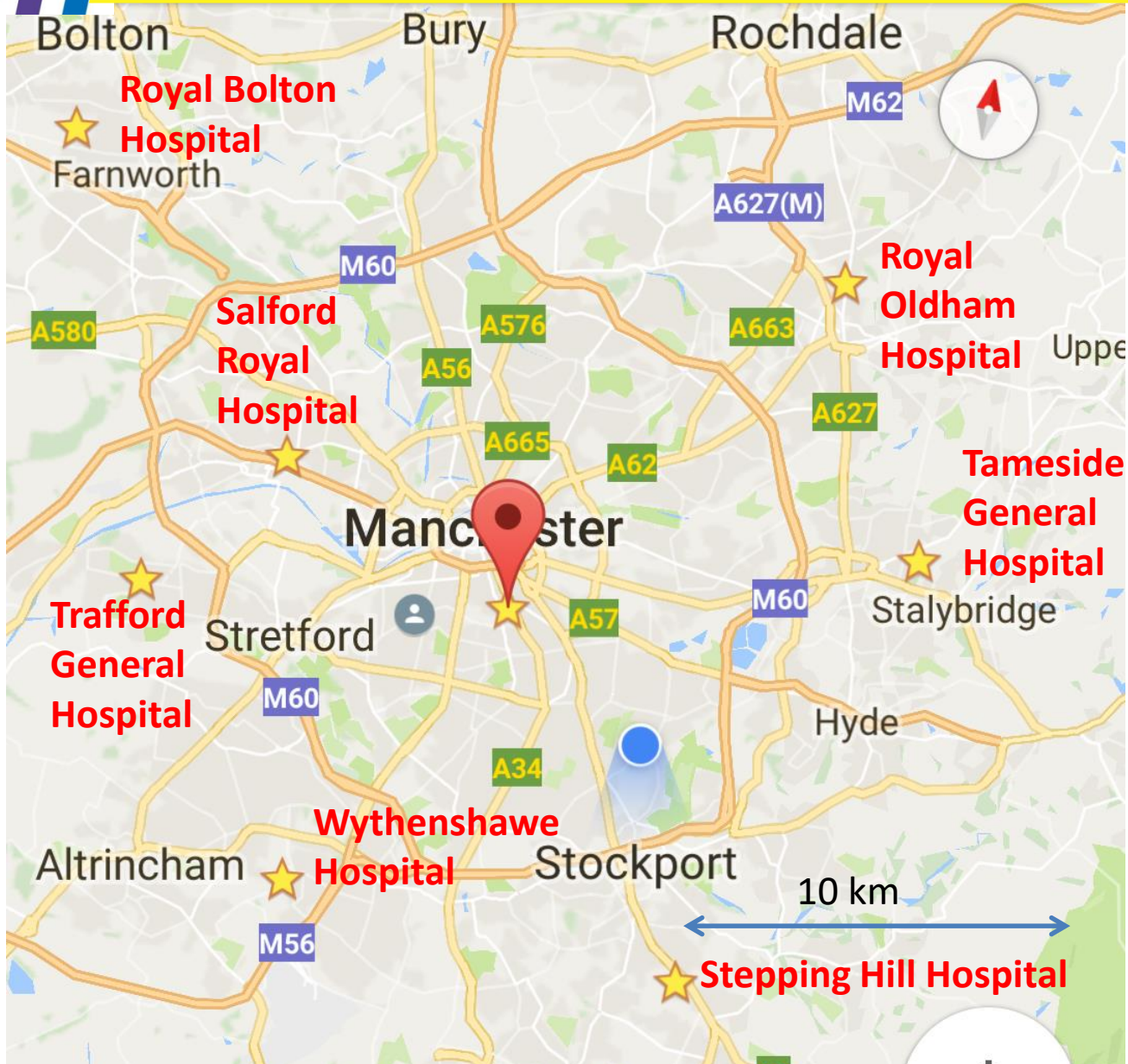
- Manchester Royal Eye Hospital
- Manchester Royal Infirmary
- Royal Manchester Children's Hospital
- Saint Mary's Hospital
- University Dental Hospital of Manchester
- Community Services
- Trafford Hospitals





Driving efficiencies in the performing laboratory process

John Hewitt





Development of Connectivity at Manchester Royal Infirmary

- Greater Manchester Pathology Network funded THIS solution NPEX
- ICE to GPs and order comms at Manchester Royal Infirmary.
- Roche middleware (Cobas IT middleware)

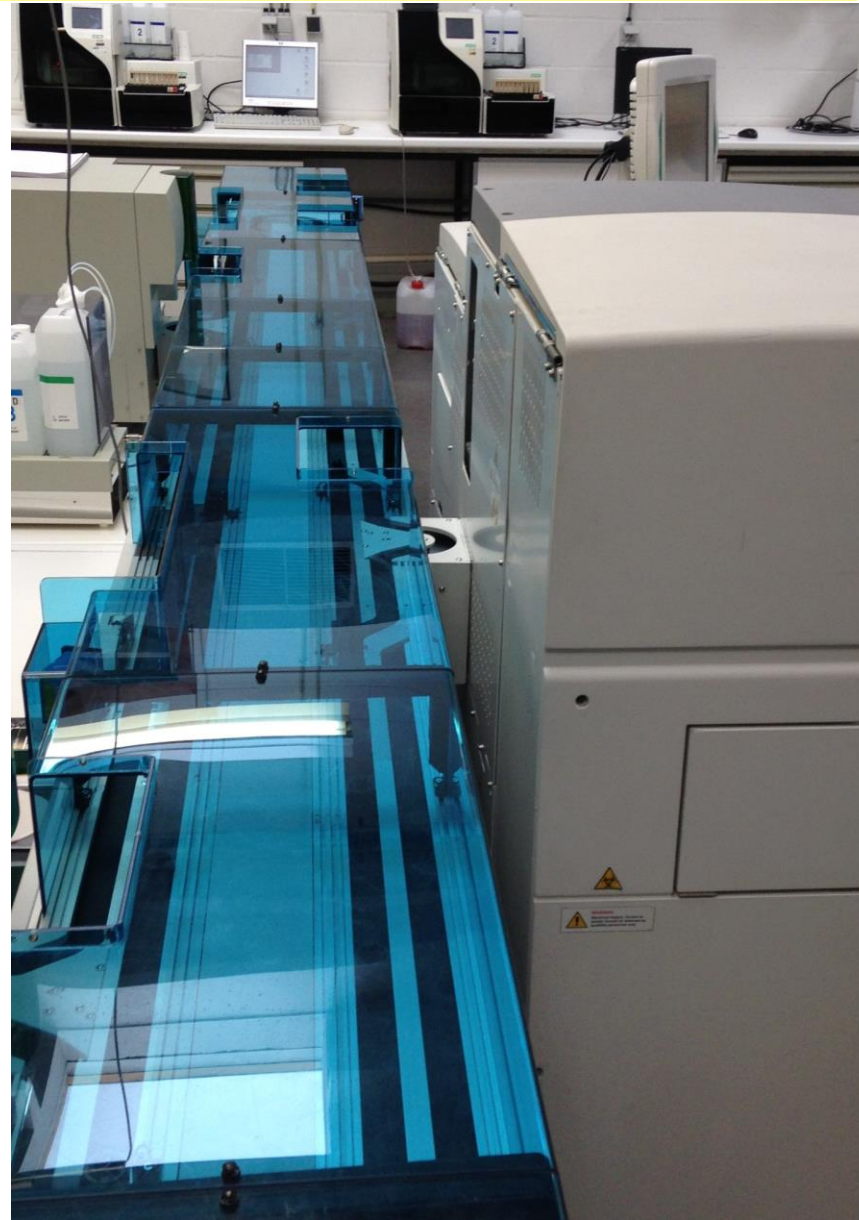


Preanalytics

- Analyser registration planned
- Serum volume detection
- Tube type identification

Tracking

- Black box analysers


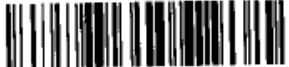












ICE sample security-closed loop

- ICE prints the barcode on the sample label
- Analyser registration planned
- Preanalytics checks sample type and volume
- Bio-Plex 2200 confirms that serum has been sampled and releases results only if IQC has passed

NPEx Manifest

#	Sending Labs Barcode	Patient	Test/Specimen	Receiving Lab Barcode
1	 I,16.0049327.D	Patient 1	Tissue transglutaminase IgA measurement On: Blood (S)	 I1714387S CMFT TRUST
2	 I,16.0049328.S	Patient 2	Rheumatoid factor measurement On: Blood (S)	 I1714388G CMFT TRUST
3	 I,16.0049329.Z	Patient 3	Tissue transglutaminase IgA measurement On: Blood (S)	 I1714389Z CMFT TRUST
4	 I,16.0049330.R	Patient 4	Antinuclear antibody (ANA) measurement On: Blood (S)	 I1714390T CMFT TRUST
5	 I,16.0049331.D		Antinuclear antibody (ANA) measurement On: Blood (S)	 I1714391K




Sample security and NPEX

- External barcodes
- Incompatible barcodes
- Human error



Can we deliver analyser registration via NPEX

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Test	Total weekly volume
Antibody to tissue transglutaminase for coeliac disease	654
Antinuclear antibody	588
Vitamin D measurement	268
Total IgE	226
PCR for Chlamydia trachomatis	221
Anti DNA antibodies	167
Autoantibody screen	150
Cytoplasmic ANCA screen	125
ACCP	121
Extractable nuclear antigens	115
Drugs of abuse urine screening	99
Aspergillus IgE specific allergen	92
ANCA pattern	80
Aspergillus IgG specific allergen	80
CD4 cell numbers	78
Anti cardiolipin antibodies	66
Thyroid peroxidase antibodies	61
House dust mite IgE specific allergen	61
Serum free light chain measurement	58
Rheumatoid factor	50



Remote supervision of Biomedical Support Staff (UK recommendation)

- It would not be expected for a support worker to clinically validate or authorise a result that could be used to treat a patient.
- It would not be expected for a support worker to telephone validated but clinically unauthorised results as they would not have the knowledge to know if the result was correct.
- It would not be expected for an unsupervised support worker running an analyser in a remote location that is not electronically linked to the main laboratory to be able to release results that could be automatically authorised.