Health Science and the NHS
The role of commissioners

Pioneering new developments in community based pathology and diagnostics

Gilbert Wieringa, 9th July 2014
## Life Sciences
- Analytical Toxicology
- Anatomical pathology
- Blood transfusion science/transplantation
- Clinical biochemistry
- Clinical genetics
- Clinical embryology & Reproductive Science
- Clinical immunology
- Cytopathology
- Electron microscopy
- External quality assurance
- Haematology
- Haemostasis and thrombosis
- Clinical Immunology
- Histocompatibility & immunogenetics
- Histopathology
- Microbiology
- Molecular pathology of acquired disease
- Phlebotomy
- Tissue banking

## Physiological Sciences
- Audiology
- Autonomic neurovascular function
- Cardiac physiology
- Clinical perfusion science
- Critical care science
- Gastrointestinal physiology
- Neurophysiology
- Ophthalmic and vision science
- Respiratory physiology
- Urodynamic science
- Vascular science

## Bioinformatics Science
- Clinical Bioinformatics / Genomics
- Clinical Bioinformatics / Infection
- Computing science
- Health Informatics

## Physical Sciences and Biomedical Engineering
- Biomechanical engineering
- Clinical measurement & Development
- Clinical Pharmaceutical Science
- Diagnostic radiology & MR physics
- Equipment management & clinical engineering
- Medical electronics & instrumentation
- Medical engineering design
- Clinical photography
- Nuclear medicine
- Radiation protection & monitoring
- Radiotherapy physics
- Reconstructive Science
- Rehabilitation engineering
- Renal dialysis technology
- Ultrasound & non-ionising radiation

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5% NHS workforce; 50,000 staff; >50 disciplines
Diagnostics technology
Access increasingly around the patient – diagnostics key
Growth in high street diagnostics
Demands for health and healthcare

4 million diabetics by 2015

Diabetes prevalence (thousands)

NHS health checks programme

www.nhs.uk/Planners/NHSHealthcheck/Pages/NHSHealthCheck.aspx
FREE CHOLESTEROL TESTING

Flora pro activ teamed up with Sainsbury’s Pharmacies to offer free instore cholesterol tests to Sainsbury’s shoppers from 15 June to 5 July*

240 stores across the country are offering you the chance to check your cholesterol for free – and a list of participating stores can be found here.
Examples of IS providers
Dear Doctor,

Re: Patient No: 5552

I have a patient who has recently had his cholesterol done with the lab which showed a total cholesterol of 7. The reason for this letter is that he has just had it done at Boots and was told that it was 4.5. This fills me with concern exactly what is going on in the community. I have had another patient who was told that she didn’t need to go on a Statin, but in fact, her raised cholesterol was all HDL and her overall ratio was low. I am wondering whom I should be writing to.

I shall be grateful for your help.

Thank you.

Yours sincerely
Issues in commissioning diagnostic testing services

• Integrating approaches across the NHS and independent sector

• Delivering evidence-based protocol-driven pathways
HbA1C tests ordered by GPs per practice population
Rate of audiology assessments by PCT
BNP tests ordered by GPs per practice population
Issues in commissioning diagnostic testing services

• Integrating approaches across the NHS and independent sector

• Delivering evidence-based protocol-driven pathways

• Ensuring reliable results delivered by proven technology from qualified providers
Bolton Quality Assurance Scheme for Point of Care Testing
Monitoring analytical performance

- a. Accurate and precise
  (no bias; small random errors)

- b. Inaccurate but precise
  (strong bias; small random errors)

- c. Accurate but imprecise
  (no bias; large random errors)

- d. Inaccurate and imprecise
  (strong bias; large random errors)
The BQAS model

**Month 1**
- Unknown sample
- Retrospective comparison of results against peers
- Mimicking a patient scenario

**Month 2**
- Known sample
- Real time comparison of results against target value
- Provision of troubleshooting guidance
- Encouraging ownership in technology
Issues in commissioning diagnostic testing services

• Integrating approaches across the NHS and independent sector

• Delivering evidence-based protocol-driven pathways

• Ensuring reliable results delivered by proven technology from qualified providers

• Managing performance across silos
How can healthcare scientists add value for commissioners?

- Providing front line clinical services
- Pathway development across stakeholders
- Technology innovation & governance
- Teaching/training
- Performance management