The power of partnerships – changing the NHS for the better

Mike Farrar, Chair - Life Sciences Innovation Delivery Board
What I want to cover...

• Good innovation starting point (strengths)

• Need to be better at spreading good ideas across the NHS (weaknesses)

• Significant challenges ahead (threats)

• New NHS landscape and liberation (opportunities)

• NHS encouragement of innovation (opportunities)
Good innovation starting point

• The NHS has a worldwide reputation for innovation and R&D

• There is no shortage of intelligent people with good ideas

• GP Commissioners collaborating with pharmaceutical companies to improve care for people with COPD
Need to be better at spreading good ideas across the NHS

• Innovation needs to be both invention and adoption of good practice

• Innovation requires collaboration

• Exemplar
Need to close the adoption gap

- Financial pressures in part from current adoption trajectory
- Reduced pressures if potential adoption trajectory achieved

£6 bn each year from closing the adoption gap

- Flat cash

2010 2015
Significant challenges ahead

- Ageing population
- Consumer sophistication and demand
- ‘Possibilities explosion’: Life sciences industry innovation
- Exhaustion of traditional cost containment methods
New NHS landscape and liberation

• In future, the uptake of innovation will be more about creating a culture of innovation and empowering people to innovate

• The conditions need to be propitious to allow research and innovation to take place

• Benchmarking uptake of NICE approved medicines
NHS encouragement of innovation

- Life Sciences Innovation Delivery Board – a globally unique partnership
- £20m available through regional innovation funds - 10x more applications than funding available
- Legal duty for innovation – will move with new landscape
- NHS Innovation Expo – the largest event of its type in Europe
- NHS Life Sciences on NHS Networks
The Power of Partnerships: Delivering QIPP Benefits by Collaborating with Industry

The NHS and the Pharmaceutical Industry Working Together for Patients
Mark Jones, President, AstraZeneca, UK Ltd
Healthcare Innovations EXPO, 10 March 2011
Our challenge

- Ageing demographic
- Increasing demand on healthcare resources
- Economic slowdown
- Increasing cost of new technologies
Our goal

Better health outcomes

Availability of innovative medicines that bring value

Efficient use of resources

Together we need to optimise healthcare resources to improve patient outcomes & deliver efficiency savings
A common agenda

- The industry is committed to working in partnership with the NHS to achieve more efficient services whilst protecting patient outcomes.

- Medicines can play a valuable role in improving health and delivering cost savings across the care pathway.

- ABPI members are already helping local NHS teams to redesign services to improve health outcomes, reduce costs and enhance the patient experience.
Appropriate use of medicines can improve patient outcomes

• The estimated number of lives saved through the use of statins has tripled & rates of premature death from CHD are now lower than ever before. ¹

  – Around 4 million people are now receiving statins, saving an estimated 10,000 lives every year. ²

1. 'Shaping the future', progress report healthcare-republic.com, 05 January 2007 (www.onmedica.com/newsArticle.aspx?id=c45a256d-6288-487c-a1ce-e2271e61e5e5)
Appropriate use of medicines can deliver cost savings to the NHS

• NICE estimates that £446,627 can be saved for every 100,000 patients that are treated in line with the hypertension guidance, resulting in an overall saving of over £200 million a year.¹

• Overall, additional spending on VTE prophylaxis of £30.1 million is anticipated to have saved £31 million in reduced events across all patients.²

• Figures showed that switching just 7% of women from the pill to long-acting reversible contraceptives (LARCs) could save the NHS £100 million by reducing 73,000 unwanted pregnancies each year.³

www.nice.org.uk/usingguidance/benefitsofimplementation/costsavingguidance.jsp
http://www.nice.org.uk/newsroom/features/HowNICECouldSaveTheNHSOver600million.jsp
“The NHS will need to achieve unprecedented efficiency gains, with savings reinvested in front line services, to meet the current financial challenge and the future costs of demographic and technological change:

- The NHS will release up to £20bn of efficiency savings by 2014, which will be reinvested to support improvements in quality and outcomes”
QIPP and ABPI

• ABPI is engaging with the QIPP Medicines Use and Procurement workstream, through the DH QIPP Partners Group
  – Industry forum to engage on the QIPP agenda
  – Updates on QIPP progress
  – Positioning and communication of Medicines management documents from NPC eg Better Care, Better Value

• We are a member of the Joint Working subgroup and we are working with the NHS and DH to develop plans in a number of areas, for example:
  – Joint Working best practice criteria
  – Communications of how Joint Working can help to deliver QIPP
  – Reviewing the Toolkit to make more user friendly
Joint Working describes situations where, for the benefit of patients, NHS and industry organisations pool skills, experience and/or resources for the joint development and implementation of patient centred projects and share a commitment to successful delivery.

The Department of Health and ABPI have developed an interactive toolkit to support this way of working.

1. encourage NHS organisations and staff to consider joint working as a realistic option for the delivery of high-quality healthcare and a way to drive efficiency in the delivery of services in both primary and secondary care

2. provide the necessary information and have easy access to the tools which will help to enter into joint working
The burden of COPD is significant

• The death toll is high: one person dies in England and Wales from COPD every 20 minutes – a loss of about 25,000 lives every year.

• It’s expensive: Annual patient costs for COPD are around £810m-930m; and the disease leads to 24m working days lost each year (9% of certified sickness absence).

• It is a burden on the NHS: One in eight emergency admissions to hospital are for COPD (2nd biggest cause).

• The burden is partly avoidable: Following hospital admission for an exacerbation, 30% of people with COPD are likely to be readmitted within a three-month period.

Source: DH COPD Strategy Consultation Documents and Listening Slides (2010)
UK Diabetes Prevalence

- Diabetes is one of the most problematic long-term conditions facing health systems in UK
- **2.3 million** people are diagnosed with diabetes in the UK\(^1\)
- By 2025, it is estimated that there will be more than **4 million people** with diabetes in the UK\(^1,2\)
- Type 2 diabetes accounts for approximately **90% of all cases** and is recording the most growth\(^3\)
- More than **500,000 people** in the UK have type 2 diabetes, but are not aware of it\(^1\)

*Prevalence of type 2 diabetes is increasing and poorly managed type 2 diabetes can lead to microvascular and macrovascular complications*\(^1\)

3. International Diabetes Federation. Diabetes and Cardiovascular Disease
Burden of Diabetes in UK

- 1 in 10 people in a UK hospital bed has diabetes\(^1\)
- 10% of NHS spending goes on diabetes: £9 billion/year or £1 million/hour\(^1,2\)
- People with diabetes are twice as likely to be admitted to hospital\(^3\)
- In the UK, people with diabetes spend 1.1 million days in hospital every year\(^4\)
- Presence of diabetic complications increases NHS costs more than 5-fold\(^2\)

Joint Working: Benefits

- **Patient:**
  - Improved patient experience
  - Better information about their condition and treatment options
  - Care closer to home with the potential for fewer hospital admissions

- **NHS:**
  - Higher quality more consistent care
  - Better health outcomes
  - Better value of resource, greater value for money, lower costs

- **Member Company**
  - More appropriate use of medicines
  - Improved understanding of patient and NHS needs
  - Faster implementation of national policies which may support member businesses
Realising the value of medical technologies

Peter Ellingworth
Chief Executive, ABHI
Talking points

• The medical technology industry

• Who we are

• Partnering for efficient and effective healthcare
The medical technology industry

- £13bn sector
- 55,000+ employees
- 3,000+ organisations
- 99% with < 250 employees

Source: BIS
Who we are

• Industry association for companies operating in the UK medical technology sector.

• Purpose:
  – To promote the benefits, value and adoption of innovative, safe and effective medical technologies to ensure optimum and high quality patient outcomes in the UK and key international markets.
Focus

• Partnering to deliver value for QIPP

• Variation in technology adoption & outcomes

• Commercial policy
  – Simple and consistent procurement practices
  – Reducing cost to serve/doing business
  – Fit for purpose
The value of innovation

• **Innovation delivers efficient & effective healthcare**
  – Interventional radiology
  – Surgical techniques, e.g. laparoscopic
  – Diagnostics (in vivo/in vitro) → specific treatment decisions

• **Innovation evidence: NICE, NTAC, NTAC**

• **Now?**
  – Focus on productivity, quality & outcomes
Partnering for efficient & effective health care

• Innovative Technology Adoption Procurement Programme (iTAPP)
  – Medical technologies to improve quality and efficiency of care
  – 100+ technologies
  – Top 22 = £5.5bn of savings
  – Targeting £1bn+ savings by Mar 2014

• Relationships at strategic level
Partnering for efficient & effective healthcare

• **Challenges:**
  – Implementation, adoption and diffusion
  – Appropriate evidence
  – Silo budgeting
  – Formal processes to decommission/re-design services
  – Disinvest to reinvest

• **Leadership**
Thank you!
The NIHR Exemplar and working with industry

Dr Jonathan Sheffield
Chief Executive
How we’re organised

Comprehensive Cancer

Stroke

Primary Care

Clinical Research Network HQ

Medicines for Children

Mental Health

Diabetes

Dementia & neuro.

NHS National Institute for Health Research
Clinical Research Network
How are we performing?

• We’ve recruited more than half a million patients into high quality clinical studies last year
  – Increased treatment options for those patients
  – Helped patients to participate in improving care for others in the future
How are we performing?

• We’re increasing the involvement of the life-sciences industry in NHS research, which helps to bring new and better treatments to our patients earlier

  – 639 “industry” studies getting our help

  – North West Exemplar programme
## Exemplar Background

<table>
<thead>
<tr>
<th>Why?</th>
<th>What?</th>
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</table>
| • Commercial research is crucial for UK economy and healthcare  
• UK is losing relative market share | • Initiated in summer 2009  
• NIHR CRN, NHS and Industry working together to demonstrate that improved performance can be achieved |

<table>
<thead>
<tr>
<th>Who?</th>
<th>How?</th>
</tr>
</thead>
</table>
| • NIHR CRN Coordinating Centre  
• North West NIHR Local Research Networks  
• NHS North West SHA  
• All North West Trusts and PCTs  
• 15 Pharma companies/CROs | • Best use of available infrastructure  
• Clear and effective communication  
• Monitoring and performance management  
• Forward planning |
Pilot scheme in the North West

Participating Organisations:

- NIHR CRN Coordinating Centre
- 3 North West Comprehensive Local Research Networks (CLRNs)
- Primary Care Research Network North West
- 9 North West Topic Local Research Networks
- NHS North West Strategic Health Authority
- 64 North West NHS Trusts and PCTs
- 13 Biopharmaceutical companies and 2 Contract Research Organisations
Exemplar studies

- Twenty commercially-sponsored studies on the NIHR Clinical Research Network Portfolio
- Had to use NIHR approvals and costing templates and the unmodified model Clinical Trial Agreement
- Studies cover a wide range of disease areas, populations and networks
- Also monitoring all commercial portfolio studies across the North West, to ensure consistently high performance
- First patient worldwide
## Results

<table>
<thead>
<tr>
<th>Metric</th>
<th>Median Calendar Days (interquartile range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Form to NHS Permission (first site)</td>
<td>54 (42-77)</td>
</tr>
<tr>
<td>SSI Form to NHS Permission (all NW sites)</td>
<td>26 (16-45)</td>
</tr>
<tr>
<td>R&amp;D Form to FPFV (first site)</td>
<td>72 (45-99)</td>
</tr>
<tr>
<td>NHS Permission to FPFV (all NW sites)</td>
<td>17 (12-37)</td>
</tr>
<tr>
<td>Time to agree costings</td>
<td>5 (1-24)</td>
</tr>
<tr>
<td>Time to sign final contract</td>
<td>2 (1.5-2.5)</td>
</tr>
<tr>
<td>Time to issue NHS Permission letter</td>
<td>1 (all studies in 1 day)</td>
</tr>
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</table>
# CSP metrics for Non-Exemplar studies

<table>
<thead>
<tr>
<th>Metric</th>
<th>Median Calendar Days ( Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Form to NHS Permission</td>
<td>103 ( 44-216 )</td>
</tr>
<tr>
<td>SSI Form to NHS Permission</td>
<td>36 ( 9-132 )</td>
</tr>
<tr>
<td>Time to sign final contract</td>
<td>25.5</td>
</tr>
</tbody>
</table>
Key Success Factors

- Senior Support
  - Streamline and simplify
- Lead Network
  - Shared risk
- Infrastructure
- Escalation

Effective study set-up
Recruitment

• Recruitment plans are in place for all sites – with site specific milestones and contingency plans.
• Recruitment is performance managed.
• Network resources shifted to address the needs of individual studies
• Currently 6 studies have completed recruitment, with 2 ahead of target, 2 on target and 2 below target.
• Remaining 14 studies on or ahead of target.
Longer term goals

• Spread across NHS using Lean principles
  - process
  - people
  - communication

• To implement robust best practice guidance on delivering commercial clinical research across the NHS in England

• To improve delivery of commercial studies

• An increase in the amount of commercial clinical research placed in the UK.
Challenges - Stakeholders

- Industry
- NHS Senior Staff
- Networks
- NHS Front-Line Staff
- NIHR Clinical Research Network and Site staff
Plans for Future

• Working with Executive Teams to provide them with performance and benchmarking data for their organisation

• Working with Industry to support use of Networks and partnerships with all NHS organisations, demonstrating improved start up times and delivery

• Working with Networks by providing study and process data to help with local performance

• Working with Networks and Industry to help implement Exemplar recommendations into routine business
Questions
Joint Working With The Pharmaceutical Industry

Andrea Gupta
Business Manager, StHealth Consortium
ABPI Joint Working Award
COPD exerts a significant burden in the St Helens locality

- Admission rate 45% higher than national
- 4000 potential undiagnosed patients
- Under-management & variance of care to NICE standards
COPD Facts

• 25,000 deaths per year in England & Wales

• Cost £810-£930m and growing

• 2 million more have undiagnosed COPD. When diagnosed most are Moderate – Severe.

• Poor prognosis:
  - 15% of those admitted to hospital die within 3 months
  - 25% die within a year

• COPD is expected to be the 3rd leading cause of death worldwide by 2030.

• Annual lost productivity costs of COPD estimated at £3.8 billion which causes at least £20.4m loss of working days every year.
The Spectrum of COPD Prevention and Awareness

- **Raising awareness of early signs and symptoms**
- **Promote sustained stop smoking services**
- **Early identification**

The earliest point at which airflow obstruction may be detected by spirometry.

**Upper limits of normal**

**Lower limits of normal**

Unaware of lung health  |  Aware of lung health  |  No symptoms  |  Symptoms but no diagnosis  |  MILD stage  |  MODERATE stage  |  SEVERE stage  |  VERY SEVERE stage

- **Well**
- **At-risk**
- **With COPD diagnosis**

- **Make links with other disease areas, e.g. lung cancer, CHD**
- **Roles and responsibilities of employers**
- **Environmental factors**
VISION

- Improve care and outcomes for Patient’s with COPD
- Early detection – undiagnosed
- Up skilling
- Reduce costs – Primary Care, Secondary Care, Prescribing and Social Economic Burden
- Stakeholder engagement
- Patient empowerment
- Smoking cessation
Implementation started with business case

1. JW business case committing £290k
2. Patient pathway and treatment protocol developed
3. Developed and implemented a training and mentoring programme
4. Implemented POINTS audit software
5. Investing in Vitalograph COPD6 FEV1 monitors
6. Measure patient experience of service
Costs

- 9.2% decrease in hospital admissions in first 12 months (£100,000 tariff savings)
- Static or reduced prescribing budgets
- Best Practice: Respiratory prescribing
  - 18% more ITEMS than PCT average
  - 7% lower COST overall
  - (Lower cost per item)
POINTS Data

- Increases in patients receiving NICE-standard reviews (from 32% to 85%)
- 73% decrease in variability across practices
- Increases in patients being offered self-management plans and information on smoking cessation / pulmonary rehabilitation
- More appropriate prescribing
IPSOS Key Findings Patient Satisfaction

Quality
Adoption of best practice: Almost all patients completed a spirometry test and the healthcare professional explained COPD and its symptoms

Innovation
Improving processes: Three quarters of newly diagnosed patients were issued with self management plans and two thirds were offered pulmonary rehabilitation

Prevention
Improved patient knowledge: Overall patients understanding of what to do if their symptoms get worse and how to take care of their COPD has increased significantly

Productivity
Appropriate resource utilisation: Almost all patients were satisfied with the length of their COPD review, with the average length being around 30 minutes

Almost all patients (90%) felt that they were treated with respect and were able to ask all their questions which are key drivers of patient satisfaction
Patient Satisfaction

- Significant increases in patient understanding
- Average review length of 28 minutes
- Also increases in nurse confidence diagnosing / managing COPD, performing spirometry and when to refer
Early Detection

- 3010 screens carried out so far
- 570 new cases of COPD
- 70% mild/moderate (GOLD II)

<table>
<thead>
<tr>
<th>Disease Severity* (NICE 2004)</th>
<th>FEV1 percent predicted</th>
<th>Average cost of annual treatment per patient$</th>
<th>Average cost per exacerbation$</th>
<th>Percent of total COPD cost to NHS per patient$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>50 - 79%</td>
<td>£149.68</td>
<td>£14.81</td>
<td>8.5%</td>
</tr>
<tr>
<td>Moderate</td>
<td>30 - 49%</td>
<td>£307.74</td>
<td>£95.20</td>
<td>17.4%</td>
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<tr>
<td>Severe</td>
<td>&lt; 30%</td>
<td>£1,307.10</td>
<td>£1,658.59</td>
<td>74.1%</td>
</tr>
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*Also stipulates a post-bronchodilator FEV1/FVC ratio <0.7 for all severities of COPD
Sandfield Medical Centre

- National COPD prevalence in April 2010 was 1.58%
- COPD Prevalence 2009 was 2.69%
- COPD Prevalence now 4.71%
Respiratory Prescribing: Sandfield Medical Centre

<table>
<thead>
<tr>
<th>No. Items Prescribed</th>
<th>Comparison with PCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>537</td>
<td>+18%</td>
</tr>
<tr>
<td>456</td>
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</table>

<table>
<thead>
<tr>
<th>Cost per Item</th>
<th>Comparison with PCT</th>
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<tbody>
<tr>
<td>£13.76</td>
<td>-21%</td>
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<tr>
<td>£17.51</td>
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</table>

<table>
<thead>
<tr>
<th>Overall Cost</th>
<th>Comparison with PCT</th>
</tr>
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<tbody>
<tr>
<td>£7, 389</td>
<td>-7%</td>
</tr>
<tr>
<td>£7, 986</td>
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Respiratory prescribing for Sandfield Medical Centre, St. Helens, December 2010. As defined by BNF therapeutic group.
Tips

• Both sides need to chose partner(s) carefully
• Completer Finishers
• Have an open mind
• Share resources
• Open and Honest
• Transparency
• Stakeholder Engagement
Question time

Mike Farrar, Chair - Life Sciences Innovation Delivery Board
Mark Jones, President - AstraZeneca UK Ltd
Peter Ellingworth, Chief Executive – ABHI
Dr Jonathan Sheffield, Chief Executive – NIHR Clinical Research Centre
Andrea Gupta, Business Manager – StHealth Consortium