Joint Working with the Pharmaceutical Industry

Guide and Case Studies
NHS England North Foreword

“Our ambition is to enable an open, transparent, participative and inclusive NHS that delivers high quality care to every patient, every time”

(Putting Patients First: The NHS Business Plan for 2013/14 – 20115/16)

Working in partnership represents a fundamental shift in the relationship between the pharmaceutical industry and the NHS, moving away from the traditional sponsorship model, and towards Joint Working in a way which is both fair and mutually beneficial, with the shared aim of achieving pre-determined improvements for patients.

The pharmaceutical industry, apart from supplying medicines that improve patients’ lives, can contribute expertise arising from its extensive knowledge of the therapy areas relevant to its medicines. It can also share its experience in business and financial management.

The Department of Health, the NHS and ABPI developed a support package for both the NHS and industry on successful Joint Working, which includes a number of recommendations looking at strengthening the relationship between the NHS, ABPI and the pharmaceutical industry.

This booklet aims to highlight that Joint Working can help the NHS to provide high quality care. It details a framework and shows examples that have achieved measurable improvement in outcomes for the health of the local population.

We hope that these will inspire you to identify areas where Joint Working could be beneficial within your locality.

Dr Mike Bewick
Deputy Medical Director (Primary Care)
NHS England
Medical Director NHS England North

Gill Harris
Chief Nurse, NHS England North

ABPI Foreword

The NHS and the pharmaceutical industry share a common goal in improving patient outcomes and this has been the foundation of several dozen successful Joint Working projects in recent years. The potential of such projects to deliver improvements that benefit patients has been proven time and again in a range of services and therapy areas – as this booklet shows. It is our shared ambition to see many more Joint Working projects that will support innovation and high quality patient care.

I hope that the case studies in this booklet will inspire you to look for opportunities to set up new Joint Working projects between the NHS and the pharmaceutical industry that will bring innovative ways of working, benefit patients and make services more efficient and effective.

Where there are challenges to setting up Joint Working projects, support is available. This booklet outlines the seven steps to setting up a joint working project and the ABPI’s Joint Working: A Quick Start Reference Guide for NHS and Pharmaceutical Industry Partners provides further guidance and resources. The ABPI is committed to supporting Joint Working and also has a regional team dedicated to helping industry and the NHS to work together.

As these case studies show, your idea for improving services can be made reality, by working together with common purpose and remembering always that our priority is to deliver better patient outcomes.

Stephen Whitehead
Chief Executive, ABPI
**Introduction**

Joint Working describes situations where the NHS and pharmaceutical companies pool skills, experience and/or resources for the benefit of patients and share a commitment to successful delivery. Many such projects have been successfully implemented, across a range of health economies and disease areas. However, feedback from some partners found that Joint Working can be difficult to initiate due to the number of parties involved and the lack of clear shared objectives. To facilitate this, the Department of Health and the ABPI worked together with key stakeholders to develop a guide. This was produced in 2009 and will be updated shortly to reflect the new NHS architecture.

In 2012, ABPI produced a Joint Working booklet called ‘A Quick Start Reference Guide for NHS and Pharmaceutical Industry Partners’. This details a coherent and user-friendly ‘7 Steps’ approach which should be considered when embarking on any Joint Working projects between the NHS and pharmaceutical companies.

These ‘7 Steps’ are detailed in the flowchart below which outlines the systematic approach, from the initial concept right through to the projects’ commencement. It also outlines a Joint Working criteria checklist of questions that should be used throughout the working process.

### 7 Steps to Joint Working

The flowchart describes the standard steps suggested to start a Joint Working project, and is applicable to both single and multi-company projects.

#### Any obligatory internal processes should be completed in tandem.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>STEP 1 – Joint Working Agreement (or equivalent) signed by NHS and Pharmaceutical Industry partners</td>
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<tr>
<td>2</td>
<td>STEP 2 – Joint Working Criteria Checklist</td>
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<tr>
<td>3</td>
<td>STEP 3 – Project Initiation Document (PID)</td>
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<tr>
<td>4</td>
<td>STEP 4 – Project Team formed</td>
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<tr>
<td>5</td>
<td>STEP 5 – Joint Working Agreement</td>
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<tr>
<td>6</td>
<td>STEP 6 – Project Implementation Plan (PIP)</td>
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<tr>
<td>7</td>
<td>STEP 7 – Project Close-out</td>
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</tbody>
</table>

#### Steps 1–3

**Joint Working Agreement**

- Discuss with ‘Joint Working’ (JW) partners
- Confirm project scope and aims
- Ensure that each party has the necessary commitment and support

**Joint Working Criteria Checklist**

- Review criteria met
- Update checklist as appropriate

**Project Initiation Document**

- Start to pull together the project team
- Agree a Terms of Reference
- Get approval from relevant partners

#### Steps 4–7

**Project Team**

- Commences project and informs all other relevant partners
- Internal processes initiated and timelines shared between partners
- Regular progress meetings arranged

**Project Implementation Plan**

- Partners develop draft JW Agreement
- Project team develops action plan
- Progress the PID, including project and analysis of data
- Include data collection, analysis, validation, and publication of outcomes

**Project Close-out**

- Commences implementation and successful delivery of a patient-centred project
- For ongoing management, effective governance and quality assurance
- Commences implementation and successful delivery of a patient-centred project
- For ongoing management, effective governance and quality assurance

### Step 2 - Joint Working Criteria

All potential parties should review this checklist and satisfy themselves that each criterion would be met under the project. The parties should also establish that their respective organisations have the required structures in place to enable successful delivery in line with Clause 18.5 of the ABPI Code of Practice for the Pharmaceutical Industry. If the answer to any of Red Questions is **No**, the project is not a true Joint Working (JW) arrangement and should not be viewed as such. Appropriate steps to address the outstanding areas should be taken before proceeding further under the heading of JW.

<table>
<thead>
<tr>
<th>Red Questions</th>
<th>Yes</th>
<th>No</th>
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A negative response to the Amber Questions signals potential issues that may arise. These should be addressed as soon as possible to ensure successful and timely project delivery.

<table>
<thead>
<tr>
<th>Amber Questions</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
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<td>15</td>
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If all the answers are ‘yes’ you should proceed with internal compliance discussions. Pharmaceutical partners must verify that the project complies with the ABPI Code of Practice.

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* refer to the JW checklist in this guide
** the template can be found in the JW Toolkit (refer to recommended reading)
*** a description of the IRC can be found in this guide at step 3
Acute Coronary Syndrome (ACS) comprises a set of life-threatening health conditions affecting the heart. In a 12-month period in 2009-10, there were 150,802 hospitalisations due to ACS in the UK (65% due to heart attacks and 35% to chest pain). Managing and treating ACS represent a significant direct cost to the UK healthcare system and, if not treated quickly and adequately, can lead to death. In fact, ACS is one of the top five causes of death in the UK, after different forms of cancer and stroke.1

Nearly fifteen per cent of patients (14.8%) still die within one year of their first ACS event and 39.2% within four years.2 Patient non-compliance to therapies and rehabilitation services is thought to play a significant role in these outcomes. Nearly half (40%) of patients prescribed oral antplatelet (OAP) therapy to help manage their condition stop using it within 12 months and they are more than likely to experience death or a non-fatal heart attack as a result.3 Additionally, although on the increase, still only 44% of eligible heart patients take up the opportunity to participate in cardiac rehabilitation.4

Through the development of an innovative personalised patient support programme – called OneHeart – that works to address individual patient beliefs causing non-adherence, the project is starting to see successes. The OneHeart pilot – which will be evaluated through a randomised clinical trial (RCT) conducted by King College London – aims to enrol and monitor outcomes in 500 Bristol Heart Institute patients. The trial will take 2-3 years to complete and is due to commence in the summer of 2013.

Objectives

Demonstrate improved OAP therapy adherence, increased uptake of cardiac rehabilitation and reduced re-admissions to hospital amongst 500 Bristol Heart Institute patients with ACS.

Strategies include:

• Identify the reasons for patients with ACS to not adhere to prescribed therapies and services
• Develop an innovative and individualised patient support programme for patients with ACS – who have been prescribed an OAP therapy – to address these negative reasons for non-adherence and reinforce positive behaviours (such as exercising, attending cardiac rehabilitation, stopping smoking, etc)
• Implement the patient support programme with 500 Bristol Heart Institute patients with ACS and measure its success over a 2-3 year period via an RCT

1 Charles River Associates, The burden of acute coronary syndromes in the United Kingdom, 03 March 2011

Joint Working Examples

The following pages give examples of Joint Working case studies. For further information, please refer to the contact details at the end of the booklet.

Acute Coronary Syndrome
• AstraZeneca: OneHeart – A Personalised ACS Patient Support Programme with Bristol Heart Institute

Asthma
• AstraZeneca: Improving Asthma Care in Partnership with NHS East Surrey CCG

Chronic Obstructive Pulmonary Disease (COPD)
• AstraZeneca: Improving COPD Disease Management in Partnership with Wirral CCG
• AstraZeneca: Improving COPD Services in East Surrey
• GlaxoSmithKline: LloydsPharmacy Ltd and Hull PCT – Improving COPD Care
• GlaxoSmithKline: Wearside PBC Group – Improving COPD Care
• GlaxoSmithKline: Walthamstow West PBC Group – Improving COPD Care

Epistaxis
• Baxter: Management of Epistaxis – A New Paradigm

HIV
• Bristol-Myers Squibb: Dean Street at Home – Postal HIV Testing in Collaboration with Chelsea and Westminster Hospital Foundation Trust

Parkinson’s
• Lundbeck: Integrating the Parkinson’s Care Pathway in Sunderland

Epistaxis
• Baxter: Management of Epistaxis – A New Paradigm
AstraZeneca: Improving Asthma Care in Partnership with NHS East Surrey CCG

The prevalence of asthma in England is amongst the highest in the world, estimated to affect 3 to 5.4 million people1. Between 1,000 – 1,200 people a year still die from asthma in England, and it is estimated that 90% of those deaths are attributed to preventable factors.2 Asthma is managed predominantly in primary care with patients taking responsibility for lots of the management of their condition themselves outside of the healthcare setting.

Despite emergency admission rates being low (84 in 2010/11) across the CCG’s patient population, it was recognised that the care patients received from the 18 practices was variable and that this variation could lead to suboptimal patient outcomes and ultimately unnecessary spending.

Following a highly successful Joint Working project focusing on COPD, NHS East Surrey CCG approached NHS Improvement to participate as an asthma test site for the Lung Improvement Programme. This gave the CCG an opportunity to improve asthma patient care, and reduce unnecessary spending by optimising and standardising the approach taken to the condition’s management across their 18 practices.

Through a second Joint Working project with AstraZeneca, and in collaboration with local stakeholders, the CCG was able to develop a fully integrated pathway that focused on every aspect from case finding and accurate diagnosis, chronic disease management, through to acute care.

Objectives

Reduce unwarranted variation and deliver consistent standards of care across the entire pathway for patients with asthma from the CCG’s 18 practices.

The strategy is to work together with NHS Improvement, practices, patients, PCT pharmacists, the Local Prescribing Committee (LPC) and secondary care specialists to create centralised guidance, education and resources that allow practices to autonomously manage their asthma patients in the most effective and efficient manner.

Benefits

| Patient | | NHS | | AstraZeneca |
|---|---|---|---|
| • Better patient understanding of their illness and proactivity in seeking further information | • Reduced re-admissions to hospital | | • NICE have recommended the use of AstraZeneca’s Oral Anti Platelet therapy (TA 236), and as a result of increased patient adherence within this programme, AstraZeneca, as well as other medicines and therefore pharmaceutical companies may benefit from an increase in the number of prescriptions per patient |
| • Improved patient compliance with their prescribed OAP therapy and recommended lifestyle changes | • Improved use of NHS resources through increased uptake of cardiac rehabilitation services | | • Improved corporate reputation amongst local and national stakeholders |

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2 South East Coast Quality Observatory. EysDv: hospital admissions with asthma as a primary diagnosis (16 – 19), 2012
AstraZeneca: Improving COPD Disease Management in Partnership with Wirral CCG

COPD is estimated to affect more than 3 million people in the UK and, as a result, poses a significant challenge to the NHS and its resources. Optimising chronic disease management is a core part of UK health strategy. Primary care is expected to provide most of the chronic disease management and much of the task is undertaken through nurse-based review. Unwarranted variation of health outcomes has been identified as a key issue by the Department of Health.

Research has confirmed that numerous National Institute for Health and Clinical Excellence (NICE) guideline interventions that can improve patient quality life – such as a smoking cessation, pulmonary rehabilitation and inhaled medications – are not reaching patients.

In 2009/10, there were approximately 103 COPD admissions to hospital from patients from the 7 Wirral Alliance CCG practices. This admission rate was above that of the PCT and the national average. The CCG recognised this as an area for improvement and, as it was outlined as a key priority in their 2011/12 Commissioning Plan, sought methods to improve personalised care planning for COPD patients in order to reduce the rates of exacerbations and lead to improved patient quality of life.

Objectives

- To use new computer-guided consultation software - LUNGEHEALTH© - in COPD patient assessments across Wirral Alliance CCG’s seven practices to assess whether it could improve COPD management in line with NICE guidance, and consequently improve patient outcomes.

Work with nurses from the seven practices to:
- Use the software as part of optimisation assessments with COPD patients
- Review assessment outcomes
- Understand the benefits and challenges of using the software

Benefits

<table>
<thead>
<tr>
<th>Patient</th>
<th>NHS</th>
<th>AstraZeneca</th>
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</thead>
<tbody>
<tr>
<td>• Formally identified 154 additional asthma patients</td>
<td>• Reduce emergency asthma hospital admissions by 21%</td>
<td>• Medicines during this project were optimised, meaning that patients were stepped up and down in line with BTS recommendations, and AstraZeneca as well as other pharmaceutical companies benefitted from the appropriate use of inhalers</td>
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<tr>
<td>• Increase patient recognition of having a formal self-management plan up to 73%7</td>
<td>• Willing and engaged practices across the CCG, allowing the new tools and guidelines to become the natural way of consulting, and standardised optimal care becoming the norm</td>
<td>• The number of patients with a self-management plan increased, as well as number of patients having inhaler technique checked, meaning that there was support for optimal adherence through structured education and decision making, ensuring patients received the optimal benefit from AstraZeneca’s medicines and those of other pharmaceutical companies</td>
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The success of the project was recognised across the NHS when it was nominated as a finalist at the 2012 National Association of Primary care (NAPC) Vision Awards

Step 1: Consistent patient cohorting
- AstraZeneca provided a data interrogation tool which defined specific cohorts to help practices group and manage their patients
  - Four cohorts were identified and profiled – with the largest being patients who were receiving asthma medications but had not received a formal diagnosis – which went on to inform the types of other resources required
- Risk stratification was a key outcome, and through three “Plan Do Study Act” cycles, four key cohorts were identified through risk stratification for intervention

Step 2: Creating central resources
- From cohort profiling, the team developed standardised read codes and two types of formal self-management plans – one pictorial and one text-based – for use by practices with patients
- Local asthma diagnostic guidelines and a treatment pathway were developed in line with the BTS/SIGN Guideline, in a collaboration between the medicines management team, PCT pharmacists, LPC representatives and patients from each practice

Step 3: Engaging and upskilling practices
- An asthma education day was held with guest speaker, Professor Martyn Partridge, which was attended by 60 GPs and nurses
- Practice specific cohort breakdowns were presented individually to practices alongside the management resources to enable and empower them to put in place appropriate plans of action
- AstraZeneca nurses helped mentor practice nurses on optimal management for different cohorts
- PCT pharmacists visited practices to carry out medication reviews and went into care homes to do patient medication reviews
- A monthly newsletter was developed by the project team to keep all practices up to date on project progress

Step 4: Working with secondary care
- Data sharing between the hospital trust and practices was established to allow proactive case management by practices following A&E attendance
- Standardisation of hospital paperwork was agreed and that a discharge summary would be sent by the hospital to a patient’s practice to allow primary care follow up within 7 days

AstraZeneca provided a data interrogation tool which defined specific cohorts to help practices group and manage their patients.
## Project Administration

A review of the COPD registers of the practices were conducted and a third (29.8%) of those registered (256 patients) were invited for review.12

### Computer-guided consultation software

AstraZeneca funded the licencing of a new computer-guided consultation software package, LUNGHEALTH©, and provided a full training software training programme run by AstraZeneca clinical services and AshfieldIn2Focus as to how to use the package to deliver COPD assessments.

### Nurse-led assessment

Following training, practice nurses conducted 45 minute consultations with the identified patients, using LUNGHEALTH© to ensure consultations were conducted thoroughly in line with NICE’s COPD guidance.

### Shared patient assessment

A two page consultation summary was printed at the end of each patient review and, as well as being provided to the patient, was also sent to other relevant healthcare professionals across the pathway – such as the pulmonary rehabilitation community team lead – as part of referral management.

## Benefits

### Patient

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Details</th>
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<tbody>
<tr>
<td>Of the 227 patients with a confirmed diagnosis of COPD:</td>
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<tr>
<td>• 80.2% of patients received a written management plan – supporting delivery against NICE COPD QS 2 and QOF 2 &amp; 4</td>
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<tr>
<td>• 100% of patients were offered oral or inhaled therapies – supporting delivery against NICE COPD QS 3 and QOF 1 &amp; 2</td>
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<td>• 96% of patients were provided with an education plan – supporting delivery against NICE COPD QS 7 and QOF 1, 2, 3 &amp; 4</td>
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<tr>
<td>• 80.2% of patients were provided with a crisis plan – supporting delivery against NICE COPD QS 7 and QOF 1, 2, 3 &amp; 4</td>
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### NHS

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<tr>
<td>• Full assessment using the computer-guided consultation method was completed in 256 patients (24.4% of the expected national patient population) – supporting delivery against the NICE COPD Quality Standard 4 (QSFQ) and Quality and Outcomes framework domain 1 (QOF 1)</td>
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<td>• COPD diagnosis was revised for over 10% of patients assessed (29 of 256) – removing them from the COPD register and onto a correct diagnostic pathway – supporting delivery against NICE COPD QS 1</td>
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<tr>
<td>• Of the 227 patients with a confirmed diagnosis of COPD:</td>
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<tr>
<td>- 55.6% of eligible patients were identified for smoking cessation services – supporting delivery against NICE COPD QS 5 and and QOF 1</td>
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<td>- 56.8% of patients met NICE eligibility criteria for pulmonary rehabilitation services – supporting delivery against NICE COPD QS 6 and QOF 2</td>
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<td>- 3.1% of patients were identified through initial assessment for long term oxygen therapy – supporting delivery against NICE COPD QS 8 and QOF 1</td>
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### AstraZeneca

<table>
<thead>
<tr>
<th>Benefit</th>
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<tbody>
<tr>
<td>Increased use of AstraZeneca’s medicines as well as those of other pharmaceutical companies in line with NICE guidelines</td>
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<tr>
<td>Improved corporate reputation amongst local and national stakeholders</td>
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## AstraZeneca: Improving COPD Services in East Surrey

Every 20 minutes in England and Wales, someone dies from chronic obstructive pulmonary disease.14 Over 12,300 people in Surrey suffer from COPD which accounts for 1.1% of the population 15. In 2007/8, there were 178 hospital admissions for COPD in the ESyDoc area16. The cost of these hospital admissions can be estimated at £311,000.8 In 2007/8, the NHS Surrey COPD budget expenditure was around £8.3 million 17

### Objectives

Several issues affected the treatment of COPD in the area:

- Limited clinical leadership existed for COPD in the community
- Frontline nursing staff required support to further develop clinical expertise in COPD
- Lack of uniform understanding and implementation of existing guidelines and pathways
- Communication between primary and secondary care was suboptimal and no agreed referral or discharge pathways existed
- Disjointed working between primary care, secondary care and outreach teams hampered the provision of care

The ESyDoc project set out to improve the quality of patient care, reduce hospital admissions, re-admissions, and length of stay by:

- Developing a patient focussed COPD pathway in line with NICE COPD guidelines
- Working in collaboration with secondary care, GP practices, NHS Surrey Medicines Management team, community pharmacy, community respiratory outreach team and South East Coast Ambulance Trust
- Upskilling and supporting healthcare professionals

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1 Consultation on a Strategy for Services for Chronic Obstructive Pulmonary Disease (COPD) in England
2 QOF: NHS Information Centre. 2007/08
3 Hospital admissions data 2007/08 provided by The Information Centre for Health and Social Care
4 NHS Programme budgeting data as of 2007/08
5 Based on applying the 2007/8 National Tariff for COPD without complications/co-morbidities

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6 Wirral Alliance CCG COPD raw data, 2012
7 LUNGHEALTH and NICE indicators data, 2012
8 Wirral Alliance CCG COPD raw data, 2012
9 LUNGHEALTH and NICE indicators data, 2012
## Project Administration

Roles and responsibilities were agreed between the cross-functional project team composed of 20 practices from ESyDoc, Surrey and Sussex Healthcare NHS Trust (SASH), Surrey Community Health, Surrey Medicines Management team, South East Coast Ambulance Trust, Breathe Easy and AstraZeneca. The approach centred on devising and implementing a long-term condition model, improving communication and stakeholder engagement. The following changes were implemented:

### Stakeholder engagement
- All GP practices signed up to the project
- The local Breathe Easy Group was re-launched

### Systematic register validation and review
- An audit was carried out including COPD register validation, patient identification and risk stratification

### Upskilling/COPD education service
- A training needs analysis was conducted and a nurse mentorship and respiratory education programme was put in place
- 80% of practices were visited by a consultant respiratory physician who discussed COPD management and referrals with GPs and nurses

### Patient reviews
- COPD qualified specialist nurses supplied via AstraZeneca provided a patient review service whilst upskilling frontline nursing staff based on findings from their training needs analysis in a clinical setting

### Service re-design
- Referral pathways were re-designed with multi-stakeholder input
- A patient-centred care pathway was developed with Surrey and Sussex Healthcare NHS Trust (SASH), the medicines management team, Surrey Community Health, South East Coast Ambulance Trust and Breathe Easy in line with NICE COPD guidelines and disseminated
- Referral templates were developed and embedded for the outreach team and pulmonary rehabilitation

### Communications
- Communication processes expanded to effectively cover South East Coast Ambulance, pharmacy, Air Alert, the medicines management team and patients (including out of hours)

### Practice nurse and outreach nurse education meetings were held monthly and fortnightly

## Benefits
- A fall in average length of stay from 6.8 days to 5.0 days
- Patient reported outcomes increased dramatically with 95% patients saying they were “very satisfied” with the care they had received and 88.9% saying they were “totally aware” of the next steps in their self management of the condition
- A 21% reduction in COPD hospital bed days
- While 90 day admission rates increased in the SE Coast SHA, ESyDoc and SASH saw a 12% reduction (from 43% to 31%) from the end of 2009 through to Q1 2010
- Based on the success of the long-term condition model in COPD, a similar process is now being applied to the treatment of asthma
- Improved corporate reputation amongst local and national stakeholders
- Built trust with East Surrey CCG leading to a further joint working project on asthma in partnership with NHS improvement
- An increase use of AstraZeneca’s medicines as well as those of other pharmaceutical companies in line with NICE guidelines

## Objectives

<table>
<thead>
<tr>
<th>Patient</th>
<th>Hull PCT</th>
<th>LloydsPharmacy (GSK)</th>
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<tbody>
<tr>
<td>• Reduce exacerbations of COPD and possibly improve patient outcomes</td>
<td>• Practices to be able to enhance patient care by working with member pharmacies</td>
<td>• Increased acknowledgement of the role of GSK in supporting pharmacy to generate evidence that supports the value to patients of the interventions they undertake</td>
</tr>
<tr>
<td>• Receive more accessible care through pharmacy</td>
<td>• Identification of patients at risk of exacerbations and proactive provision of rescue medication</td>
<td>• Generating evidence that Joint Working between LloydsPharmacy, GSK and Hull PCT has improved COPD patient management and impacted positively on patient outcomes</td>
</tr>
<tr>
<td>• Create a more joined-up care pathway involving GP, Long Term Conditions (LTC) team and pharmacy</td>
<td>• More efficient use of existing services</td>
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<tr>
<td>• Drive better understanding of their condition</td>
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<tr>
<td>• Improve their ability to self-manage</td>
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## GlaxoSmithKline: LloydsPharmacy Ltd and Hull PCT – Improving COPD Care

It is recognised that COPD is a significant burden on the NHS. An economic analysis in the UK estimates that the direct costs of COPD are more than £491m per year which equates to roughly £819 per person with the disease. The British Lung Foundation suggests that there are an estimated 3.7 million people with COPD in the UK, yet only 900,000 have been diagnosed with the disease.

The Hull PCT area faced the second greatest challenge from COPD in England and the highest in Yorkshire and Humerside. People in Hull are 55% more likely to be admitted to hospital with COPD than the UK average.

### Objectives

- Reduce exacerbations of COPD and possibly improve patient outcomes
- Receive more accessible care through pharmacy
- Create a more joined-up care pathway involving GP, Long Term Conditions (LTC) team and pharmacy
- Drive better understanding of their condition
- Improve their ability to self-manage
- More efficient use of existing services
- Practices to be able to enhance patient care by working with member pharmacies
- Identification of patients at risk of exacerbations and proactive provision of rescue medication
- Increased acknowledgement of the role of GSK in supporting pharmacy to generate evidence that supports the value to patients of the interventions they undertake
- Generating evidence that Joint Working between LloydsPharmacy, GSK and Hull PCT has improved COPD patient management and impacted positively on patient outcomes

### Data

- Economic costs of COPD to the NHS. Thorax 2004; 59
**Project Administration**

**Patient Pathway and Protocols**
Through Joint Working, LloydsPharmacy pharmacists played a role in patient care through COPD Medicines Use Review (MUR), monthly progress checks and dispensing rescue medication packs with the support of GP practices within the PCT. A protocol setting out the increased role of pharmacy, the exact nature of the interventions and specifically the process for requesting and dispensing rescue medication was developed in conjunction with and endorsed by all involved parties.

**Education and training**
In order to support pharmacists to deliver COPD Medicines Use Reviews (MURs) to a high standard, LloydsPharmacy pharmacists completed an independently validated training module on COPD. Additionally all participating pharmacists and their staff attended a training event in order to equip them with the knowledge and skills necessary to deliver the project.

**Pharmacy-based interventions**
Pharmacists conformed to an agreed flow-chart of interventions including validated tools such as COPD Assessment Tool21 and MRC Dyspnoea Scale22. Under this protocol, Pharmacists identified diagnosed COPD patients based on dispensed medication or through GP/nurse referral and recruited these patients into the 6 month pilot. There were a number of assessments and checks completed as part of the pilot.

**Data collection**
In order to demonstrate the impact of this project on both patient outcomes and on measures such as A&E admissions, data was collected. LloydsPharmacy were responsible for collection, collation and management of patient data. Subject to patient consent the data identifying patients through their NHS number was sent to Hull PCT to enable the exact patient admissions history and outcome to be tracked.

In accordance with the Data Protection Act, GSK only had access to fully anonymous patient data.

**Benefits**

<table>
<thead>
<tr>
<th>Patient</th>
<th>The feedback of the experience was positive, particularly the inclusion of the inhaler technique training. For patients where enrolment and follow-up CAT scores were captured, a decrease of 6.6 points indicates that the project had the potential to benefit the impact of COPD on patients lives (experts involved in developing the CAT suggest that a change of 2 or more units may indicate a clinically significant change in health status). 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull PCT</td>
<td>• Number of CAT tests carried out = 23</td>
</tr>
<tr>
<td></td>
<td>• Number of dyspnoea scores taken = 20</td>
</tr>
<tr>
<td></td>
<td>• Average dyspnoea score = 3.1</td>
</tr>
<tr>
<td>LloydsPharmacy</td>
<td>An average CAT score of 23.4 indicates that COPD had a high impact on the lives of the patients involved in the project. 23</td>
</tr>
<tr>
<td></td>
<td>• 31 COPD patients were signed up to the pilot through 15 LloydsPharmacy outlets</td>
</tr>
<tr>
<td></td>
<td>• Inhaler technique training delivered to 71% of pilot participants (22 patients)</td>
</tr>
<tr>
<td>GSK</td>
<td>23.5% of current smokers attempted to quit during pilot (4 patients).</td>
</tr>
</tbody>
</table>

**Challenges**

There was a general perception that COPD patients were disenfranchised from the healthcare system and there was limited belief that their condition could be improved. Overall, this project provided limited evidence that pharmacy can be implemented into a local care pathway for COPD. However, there were significant challenges in relation to enrolment of patients and their on-going engagement with the programme. Thirty one patients were enrolled over 6 months, compared to an initial aim of enrolling 150 patients. The main challenges were a lack of interest from patients to be recruited into the pilot and pressure on pharmacist's time to deliver the service. Patients also had a high dropout rate during the project, with only 16% of patients who completed the initial CAT assessment completing the follow-up CAT assessment after the 6 month period. The main feedback was that the assessment process was time consuming and represented a significant investment of time and effort from both the pharmacists and patient.
A 2007 report by the British Lung Foundation found that Sunderland Primary Care Trust (PCT) faced the sixth highest challenge nationally from COPD and the greatest in the North East region. A third of the city’s population were smokers, and it had the eighth highest proportion of people at increased risk of a COPD-related hospital admission (51% more likely than the average) in the UK. Wearside, a former coal-producing area, had a COPD prevalence rate of 2.8%; 3,070 people in a population of 107,935 (38%) of the PCT’s population. Wearside’s COPD hospital admissions spend in 2008–9 was £1.1m.

Objectives

- **Patient**
  - To provide a service to support patients in managing their condition through earlier intervention and education, thereby improving patients’ quality of life.

- **NHS**
  - To establish a framework of consistency across Wearside Consortium practices, reducing inappropriate hospital referrals through the development of more appropriate patient pathways and treatment protocols.

- **GSK**
  - If successful, patients will be treated in line with NICE COPD Guideline, leading to more rational and appropriate use of relevant medicines, including GSK’s medicines.

**Project Administration**

- Development of treatment protocol by Wearside Consortium, in line with NICE COPD guidelines and agreed with secondary care and Sunderland PCT.
- Installation of the POINTS® patient audit tool in all practices, to enable effective prioritisation of COPD patients for review, and the measurement of change from QoF to NICE standard of care.
- A practice-by-practice analysis of training needs, supported by the GSK Respiratory Care Associate (RCA) in line with NICE COPD guidelines.
- A bespoke, consortium-wide training programme to up-skill healthcare professionals to deliver NICE COPD standards of care. This training programme was developed by GSK and Wearside Consortium together with local respiratory specialists.
- A Wearside Consortium incentive scheme of £2 per patient per practice in each financial year, encouraging achievement of pre-specified objectives.
- A patient experience survey to measure the quality of patients’ annual COPD review, to review areas of strength as well as those in which improvements could be made.

**Benefits**

The total number of patients diagnosed with COPD in the Wearside CCG (from QoF 2008/09) was 3,070, a prevalence of 2.8% (in QoF 2010/11 it was 3,441 and 2.9%). The reviewed subgroup was 1,541 COPD patients, 50% of the total diagnosed PBC population based on QoF 2008/09.

<table>
<thead>
<tr>
<th>Patient</th>
<th>NHS</th>
<th>GSK</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percentage of patients with exacerbation frequency recorded in the patient notes during the previous 12 months increased from 58% to 93% (n=1541)</td>
<td>The variability in the quality of reviews across 16 of the practices, measured by the coefficient of variation of the mean practice NICE score, decreased by 70% from the baseline audit to the two-year audit (n=1541)</td>
<td>There was an increase in the appropriate use of medicines, including GSK’s medicines within this locality over the period of the joint working project.</td>
</tr>
<tr>
<td>Patients with a Medical Research Council (MRC) score for breathlessness increased from 77% to 94% (n=1541)</td>
<td>Of 15 respondents (11 from practice nurses) to the HCP experience questionnaire distributed, the percentage of respondents recording a high knowledge score (8 to 10) was higher after the educational sessions across several aspects of the management and understanding of COPD.</td>
<td>Of all 241 patients, 78% were very satisfied with their review and a further 8% that it had decreased.</td>
</tr>
<tr>
<td>Patients with a measurement of FEV1 increased from 74% to 84% (n=1541)</td>
<td>All 15 respondents to the HCP experience questionnaire stated that the educational sessions had been successful or very successful in building their confidence, improving their skills and knowledge and increasing their enthusiasm for managing their COPD patients.</td>
<td>The rate of COPD admissions in Wearside PBC was 13.6% lower in the first year of the project (Sep 09-Aug10) and 3% lower in the second year (Sep 10-Aug 11) than in the base year (Sep 08-Aug 09). By comparison, the admission rates for the rest of Sunderland PCT decreased by 2.5% and 1% in the first and second years respectively, and admissions for the whole North East SHA decreased by 3.2% in the first year but rose by 7% in the second year compared with the base year. The higher admissions observed for all localities in the second year were most likely related to the more severe winter.</td>
</tr>
<tr>
<td>The percentage of patients who obtained the maximum NICE standard review score of 4 points (i.e. had a COPD review within the previous 12 months and where the FEV1, MRC score and exacerbation frequency were recorded in their notes) increased from 72% at baseline to 93% at the two-year audit (n=1541)</td>
<td>Of the 241 patients who responded to the patient experience questionnaire, 90% said they were very satisfied with their review and a further 8% that they were fairly satisfied.</td>
<td>Of all 241 patients, 78% said they were shown how to use their inhaler and 47% that they were given a self-management plan sheet, while a further 22% already had one.</td>
</tr>
<tr>
<td>Of the 241 patients who stated they had a high understanding of their condition increased from 68% before their review to 85% (n=1541)</td>
<td>Regarding their knowledge of what to do if their symptoms became worse, 30% of the 241 respondents stated it had increased a lot, 24% that it had increased a little, 43% that it had stayed the same and 3% that it had decreased.</td>
<td>The percentage of the 241 patients who stated they had a high understanding of their condition increased from 68% before their review to 85% (n=1541).</td>
</tr>
<tr>
<td>The rate of COPD admissions in Wearside PBC was 13.6% lower in the first year of the project (Sep 09-Aug10) and 3% lower in the second year (Sep 10-Aug 11) than in the base year (Sep 08-Aug 09). By comparison, the admission rates for the rest of Sunderland PCT decreased by 2.5% and 1% in the first and second years respectively, and admissions for the whole North East SHA decreased by 3.2% in the first year but rose by 7% in the second year compared with the base year. The higher admissions observed for all localities in the second year were most likely related to the more severe winter.</td>
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26 Data on trial site size, COPD site size and prevalence have been taken from the England Quality and Outcomes Framework (QOF) 2010/11 database https://catalogue.ic.nhs.uk/publications/primary-care/qof/qof-site-size-from-08-09-pct/qof-08-09-pct-qof-sites-prev-chw Accessed 16th March 2013
31 HCP Joint Working Experience Questionnaire, data from 15 HCPs collected and analysed by Ipsos MORI, March 2010
30 COPD patient experience survey. Data collected from 261 patients and analysed by Ipsos MORI, September 2010
32 HCP if successful, patients will be treated in line with NICE COPD Guideline leading to earlier intervention and education, thereby improving patients’ quality of life. 
33 This information was generated by the Regional Healthcare Analysis tool, which is a proprietary software of Dr Foster Limited and IMS Health Limited. All rights reserved. No further copying or reproduction of this information is permitted without consent from Dr Foster Limited and IMS Health Limited.
GlaxoSmithKline: Walthamstow West PBC Group – Improving COPD Care

COPD was a significant burden on the NHS; the disease was the UK’s fifth biggest cause of mortality and second most common cause of emergency admissions. At the time of project set-up, NHS Waltham Forest and Walthamstow West PBC Group reported a lower than average prevalence for diagnosed COPD (0.9% v 1.4% national average), with the actual prevalence rate thought to be closer to 4.1%. NHS Waltham Forest ranked 148 out of 152 Primary Care Trusts Nationwide for COPD. This was based on length of stay, number of emergency admissions and number of emergency bed days for patients with COPD.

Objectives

There was a documented need to reduce health inequalities across NHS Waltham Forest. Before project initiation, there was no intermediary COPD service within NHS Waltham Forest.

Project Administration

Patient
- Improve the quality of the annual COPD review by implementing NICE COPD Guideline 2010.
- Increase patients' understanding of their condition and treatment options.

NHS
- To ensure adherence to the evidence based care pathway and treatment protocols. Patients to be treated in line with NICE COPD Guideline 2010 and local NHS Waltham Forest guidance.
- To increase the number of newly diagnosed COPD patients.
- More appropriate use of resources e.g. increased appropriateness of referrals to secondary care, reduction in unplanned admissions to secondary care, resulting in ‘care closer to home’.

GSK
- Increased use of appropriate respiratory medicines, including GSK medicines, in line with NICE COPD Guideline 2010.
- Demonstration of how Joint Working between GSK and Walthamstow West PBC Group has improved COPD patient management and experience.
- Increased acknowledgement of the role of GSK in supporting the locality group and NHS Waltham Forest.

Benefits

Patient
- The percentage of patients receiving an annual COPD review has increased from 20% to 73% (from 90 patients to 370).
- Recording of breathlessness has increased from 18% to 75% in line with NICE standards.
- 96% of patients (total patients n=56) were satisfied with the level of service given to them during their check up and felt that the review was thorough.
- An increase from 43% to 70% in patients having a high understanding of their condition.
- Patient understanding for the reason of why they have been given a type of medicine has increased by 50%.
- Whilst the following were not primary objectives of this project, it is of interest that:
  - Patients who were told how to access flu vaccines during their review increased from 26% to 85% (total patients n=56).
  - Patients offered pulmonary rehabilitation has increased from 26% to 65%.
  - There was an increase from 20% to 75% of current smokers being told how to access help to stop smoking.

NHS
- Overall improvement in the quality of patient review to NICE standards from 22% to 56% (total patients n=508).
- The prevalence of diagnosed COPD patients increased from 453 to 508, an increase of 12.1%.
- A 16% reduction (from 80 to 67) in year-on-year COPD non elective admissions in the period September 2009 to August 2010.
- The cost of non elective COPD admissions has been reduced by 18.6% in the period of September 2009 to August 2010 estimated to be equivalent to £35,000.

GSK
- There has been an increase in the proportion of COPD patients with moderate or severe classification receiving ICS/LABA combinations from 65.6% to 75.3% – an increase of 9.7%. This increase in ICS/LABA combinations is for all ICS/LABA combinations, including GSK ICS/LABA combination licensed for COPD.

References

39 NHS Waltham Forest commissioning case for COPD Pilot
41 POINTS data reports for 10 practices, 508 COPD patients. Collected and supplied by Quintiles, data analysis by GSK 22nd June 2010
42 COPD patient experience survey. Data collected and analysed from 56 patients by Ipsos MORI, October 2010
43 Data from NHS Waltham Forest (provided by Frank Hamilton, GP Commissioning Business Manager) November 2010
Epistaxis is the most common ENT emergency and in England, over 27,000 patients presented to secondary care in 2008-9\textsuperscript{44}. The mean length of stay (LoS) for epistaxis in the UK is over two days; the aim was to reduce length of stay without compromising quality of care. In 2009-10, Aintree University Hospital NHS Foundation Trust had 250 admissions for epistaxis. Patients stayed a mean of two days at a minimum cost of £400 per day. Reducing this by just one day could yield savings of around £100,000 for the Trust.

**Objectives**

Baxter and Aintree jointly agreed that to truly address the challenges within the current treatment regimen the service needed to be redesigned. This was primarily intended to address the training requirements within both A&E and with the junior doctors who often found it easier to use nasal packing and habitually admit patients rather than to identify the bleeding point and decide on a further course of treatment.

Floseal\textsuperscript{®} haemostatic matrix is a paste-like haemostatic matrix designed to stop bleeding quickly. The median time to haemostasis is 120 seconds. The product consists of expansile bovine gelatin granules coated in human thrombin. The use of Floseal\textsuperscript{®} in persistent epistaxis has already been trialled\textsuperscript{2} and showed statistically significant improvements in both patient and physician experience compared to nasal packing.

**Project Administration**

A new treatment pathway was designed and implemented in December 2010 (see below).

**Benefits**

<table>
<thead>
<tr>
<th>Patient</th>
<th>This innovative approach to treatment is aligned to the QIPP programme and enables patients to have a significantly improved experience, including:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• A shorter length of hospital stay</td>
</tr>
<tr>
<td></td>
<td>• A reduction in pain and discomfort compared to nasal packing</td>
</tr>
<tr>
<td></td>
<td>• As a result of proactively implementing the new pathway, some patients require no additional treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NHS</th>
<th>When compared to the preceding three years, the Baxter/Aintree audit showed that in 2010-11:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The total number of bed days due to epistaxis was reduced by 30%</td>
</tr>
<tr>
<td></td>
<td>• Mean length of stay was reduced by 21%</td>
</tr>
<tr>
<td></td>
<td>• Floseal\textsuperscript{®} was successfully used to treat epistaxis in 20 patients, including some who were on warfarin or aspirin. The overall success rate was 75% in selected patients</td>
</tr>
<tr>
<td></td>
<td>• The treatment was unsuccessful in 7 patients, all of whom had complications: two patients had septal perforations; two had posterior bleeding points and three had anterior bleeding points</td>
</tr>
<tr>
<td></td>
<td>The reduction in hospital stay improves productivity and reduces costs to the NHS. The saving that could be realised by introducing this programme is a conservative estimate of £100,000 per Trust, including the cost of treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baxter</th>
<th>• The team at Aintree plan to continue to work with Baxter to assess the safety of discharging patients a few hours after they have undergone Floseal\textsuperscript{®} treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Baxter plans to promote the pathway to other Trusts and extend it for use in the community</td>
</tr>
</tbody>
</table>

\textsuperscript{2} Hospital Episode Statistics for England per Epistaxis: Why change the treatment pathway. Baxter Healthcare. May 2011

\textsuperscript{44} Côté et al. Otolaryngol Head Neck Surg. 2010 Jun; 39(3):304-8
Bristol-Myers Squibb: Dean Street at Home – Postal HIV Testing in Collaboration with Chelsea and Westminster Hospital Foundation Trust

HIV is now a treatable medical condition and the majority of those living with the virus remain fit and well on treatment. The project involves a novel approach to reaching undiagnosed sexually active ‘men who have sex with men’ (MSM) outside the traditional routes for testing in more typical GU medicine settings.

56 Dean Street, Chelsea and Westminster NHS Foundation Trust’s HIV and sexual health centre in Soho, is the first NHS clinic to offer HIV home testing. “Dean Street at Home” is a collaboration with the social networking website Gaydar and the online medical service DrThom, and is funded by Chelsea and Westminster Health Charity and a joint working agreement with Bristol-Myers Squibb.

**Objectives**

The aim is to ensure better access to services by the hard to reach MSM community thereby ensuring early treatment of infected individuals which can reduce morbidity and may be life saving. The project is designed to complement existing HIV screening services by leveraging innovative channels such as social networks.

**Project Administration**

The project focuses on sexually active MSM in London through a revised website ‘Dean Street at home’, and invite them to take a postal HIV test via a third party provider which has existing governance links to Chelsea and Westminster sexual health services. Innovative technology is used to target and interact with MSMs.

**The objectives are:**
- Identify patients with previously undiagnosed HIV through targeted testing of the local population
- Ensure patients testing positive for HIV are transitioned into specialist services as smoothly and quickly as possible
- Reduce onward transmission of HIV in the MSM community
- Reduction in late diagnosis which is a major cause of HIV mortality

The project is designed to complement existing HIV screening services by leveraging innovative channels such as social networks.

**Benefits**

<table>
<thead>
<tr>
<th>Patient</th>
<th>To make HIV testing more accessible to people at high risk of infection, who may not be currently accessing services and to reduce morbidity and mortality through earlier diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS</td>
<td>To reduce undiagnosed HIV to reduce morbidity, mortality and onward transmission as early diagnosis and treatment has been shown to be more cost effective  The initiative is in line with the QIPP agenda to reduce late diagnosis and onward transmission of infection</td>
</tr>
<tr>
<td>Bristol-Myers Squibb</td>
<td>An increase in the number of patients identified with HIV is expected to lead to higher number of patients going on ARV medicines, including BMS’s medicine, in line with HIV London Consortium Tender guidelines and BHIVA guidelines  Improvement in the relationship and trust between BMS and the NHS</td>
</tr>
</tbody>
</table>

Lundbeck: Integrating the Parkinson’s Care Pathway in Sunderland

Lundbeck’s Parkinson’s disease specialist worked with partners across the Sunderland health economy, including City Hospital Sunderland and Sunderland PCT, to develop an integrated care pathway for local people with the condition.

Lundbeck was able to provide local performance data via its Parkinson's data manager tool, and after discussions with key commissioners and providers it was agreed that the initial main work should be to map local services through a facilitated local workshop.

**Objectives**

The project began in February 2012 and the half-day workshop was run in May, with Lundbeck providing project management and facilitation support. The workshop had five objectives:
- To identify the key building blocks of a local integrated care pathway for Parkinson’s disease patients and their carers across Sunderland, in line with the recently developed rehabilitation strategy.
- To improve liaison between Parkinson’s disease service commissioners, health and community care providers and local patients in order to enhance a local integrated care pathway.
- To improve awareness of each service and its roles and responsibilities, and develop processes to support seamless integrated patient care for those with Parkinson’s.
- To identify any gaps in the present service and identify solutions.
- To establish a baseline of key performance indicators to inform performance frameworks and assist evaluation of changes.

**Project Administration**

Many of those present at the workshop were specialists in neurology or Parkinson’s disease in Sunderland. However, the representation of community services was sufficiently wide to promote new introductions, new ways of working and mutual support.

The workshop looked at the four phases of the care pathway– diagnosis, maintenance, late-stage intervention and palliative care - and addressed these through small-group discussions involving professionals with various clinical and organisational backgrounds.

Key recommendations from the workshop were identified to develop an action plan, intended to be taken forward by a local steering group. This work is currently on going.
## Benefits

<table>
<thead>
<tr>
<th>Patient</th>
<th>NHS</th>
<th>Lundbeck</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the new Primary Care Centre outpatient and diagnostic services at Houghton-le-Spring</td>
<td>Facilitation of clinicians in the acute sector keen to work with community colleagues from healthcare and local government</td>
<td>Enhanced engagement with customers (working beyond the traditional NHS role)</td>
</tr>
<tr>
<td>Access to the new Integrated Care and Rehabilitation (ICAR) service with GP/nurse-led intermediate care and rehabilitation beds (step-up facility to prevent hospital admissions)</td>
<td>A cohort of GPs working with ICAR and willing to work with Parkinson's disease clinicians</td>
<td>Development of process map that can be replicated across other disease areas</td>
</tr>
<tr>
<td>Identification of ICAR charge nurse with a special interest in Parkinson's disease</td>
<td>Development of a local neurological forum to link to CCGs across the south of Tyne and Wear (sharing learning for other neurological conditions), with potential to become a clinical engagement forum</td>
<td></td>
</tr>
<tr>
<td>Patient-centred outcomes and integration within a rehabilitation strategy</td>
<td>Potential efficiencies through enhanced and improved working in partnership</td>
<td></td>
</tr>
</tbody>
</table>

### Contact Details

For further information, please contact the relevant company representatives as shown below.

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