South Staffordshire NHS
Primary Care Trust

REPORT TO PBC GOVERNANCE COMMITTEE 13TH MAY 2008

Enclosure:	Pulmonary Rehab Business Case and Highlight Report					
Subject:	Pulmonary Rehab					
Lead Director:	Sarah Laing and Anna Hammond					
Lead Officer:						
Recommendation:	**For Approval**	✓	**For Discussion**		**For Information**	

PURPOSE OF THE REPORT:

To Commission a Pulmonary Rehab Service across the East Locality

KEY POINTS:

There is currently one practice in SE Locality undertaking Pulmonary Rehab
Queens Hospital Burton Used to deliver Pulmonary rehab until 2005 when funding was discontinued and the East PBC currently has no Pulmonary Rehab service.
There are significant evidence based cost savings to be made and improved quality of life for COPD clients.

IMPLICATIONS:

Legal and/or Risk	Current risks include complete absence of Pulmonary Rehab Service spec to be adhered to and quality transparent outcomes/audit must be available via provider. Clinical competencies of service delivery must be compliant with service spec.
Standards for Better Health	Standards for Better Health: Complies with C5,D2,C10,C13,C14,D9,D10 and D11.
Financial	798 clients per annum at a cost of £155 equates to £123,69 per annum.
Training	To be incurred by provider
PBC	Business Case approved by East Staffs PBC Consortia
Other	

RECOMMENDATIONS / ACTION REQUIRED:

Service Provision Business Case Template

TITLE OF PROPOSAL	Pulmonary Rehab Service
ORGANISATION/ COMMISSIONING BODY	East Locality: SESC and East Staffs PBC Consortium
LEAD NAME FOR PROPOSAL	Anna Hammond/Sarah Laing
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Document Control

Document Version	Date of Revision	Summary of Revision
Version 1	**24/03/09**	
Version 2	**31/03/09**	**Following further Clinical Input from Consultant Respiratory nurse, Respiratory Consultant Dr Beckett Queens Hospital and Nurse specialist Chronic Conditions Management.**

Section 1: Compliance with the PCT Commissioning Framework

This business case complies with the following priority areas as outlined in the PCT Commissioning Framework:

PCT Commissioning Framework Priority Areas:	This business case relates to the following ***(Proposer to tick as appropriate):***
1. National priorities	
1.1 Improving health of the population	✓
1.2 Supporting people with long term conditions	✓
1.3 Access to services	✓
1.4 Patient/user experience	✓
1.5 Achieving financial balance	✓
1.6 Implementing reform	
1.7 6 key service priorities:	
- health inequalities	✓
- cancer 31 and 62 day waits	
- 18 week wait	
- MRSA	
- Patient Choose & Book	
- Sexual health & access to GU medicine	
1.8 Links with Integrated Service Improvement Plan	
(ISIP) & Benefits Realisation Plan (BRP)?	
2. Local priorities	
(for completion locally)	

Section 2: Outline of the Proposed Service Provision

Introduction	N.B This document draws on information contained in the NICE clinical guidelines for COPD, a service specification for South Staffordshire PCT, the South Birmingham PCT, clinical expertise from Consultant Dr Paul Beckett, Consultant Respiratory nurse Joan Manzie and Jane Heath Clinical Nurse Specialist plus various evaluated pilots across the country. The East locality has shown a commitment to improve services for COPD patients. The services for this group of patients are complex including preventative services, acute hospital care and long term oxygen therapy. Community based services to support patients with COPD vary significantly across the patch, following differing levels of investment over the years. Admission rates to hospital also vary between practices across the locality. The number of admissions to hospital for COPD related illnesses totalled 430 for the last 12 months. This cost approximately £853,800 Significantly The East Locality saw 2836 admissions for respiratory conditions at a cost of £3.2 million According to current QoF registers the COPD register for the East Locality is 3988 clients, it is estimated that this should be 10,622, as such it is likely that many of those being admitted for "other" respiratory conditions may fall into the COPD category and could also benefit from pulmonary rehab services. Thus potential cost savings could be significantly higher than anticipated. NICE estimates that the direct cost of COPD to the NHS is estimated to be more than £491million per year, which equates to roughly £819 per person. More that half of the direct costs relate to care in hospital. http://www.healthcarecommission.org.uk/_db/_documents/COPD_factsheet.pdf - Accessed March 2009 The PCT are currently working on a comprehensive strategy for the management of COPD. The locality will contribute to this strategy and consider implementation of recommendations once complete. However, practice based commissioners have highlighted the need to address one major gap in local service provision, namely pulmonary rehabilitation. The NICE clinical guideline for chronic obstructive pulmonary disease was published in February 2004. This document clearly states the important role of pulmonary rehabilitation in the management of stable COPD, highlighting the need to implement this approach which can reduce mortality and morbidity. Pulmonary rehabilitation is a multidisciplinary programme for patients with chronic respiratory impairment that should be tailored to optimise each patients physical and social performance. In the South East locality a practice in Tamworth and a practice in Lichfield have piloted pulmonary rehabilitation programmes and whilst Burton has a specialist respiratory nurse for long term conditions management, there is no recognised Pulmonary Rehab in the East PBC consortia.

Outline of Proposal	The East Locality would like to commission a structured programme for the delivery of a community based pulmonary rehabilitation service. Each patient will attend a course which will follow NICE guidance. NICE guidance states clients must attend 2 sessions each week for a minimum of 6 weeks. Each session will contain an exercise component and an educational theme. The education elements should include: • Explanation of COPD • Importance of giving up smoking • Benefits of exercise (with introduction to local services) • Exercise sessions • Q&A with a Clinician • Energy Conservation and equipment • Stress and relaxation therapies • Long term oxygen therapy • Inhaler techniques and rescue medications • Nutrition • Work life balance and benefits • Other services available and referral (expert patient program, etc) A Detailed Service Framework is attached. This programme was piloted at the Langton practice in Lichfield and the evaluation showed reduced admissions to the GP and hospital following attendance at the programme. It is expected that as a minimum courses will be delivered in 4 locations across the locality – Burton, Uttoxeter, Lichfield and Tamworth.
Aims & Objectives	The main objective is to: • Provide a comprehensive community based multi disciplinary pulmonary rehabilitation service to COPD patients registered to GPs within the East locality There are a range of aims to this programme: • Improve exercise tolerance • Reduce the sensation of dyspnoea • Improve peripheral muscle strength and mass • Reduce the number of days spent in hospital • Improve the ability to perform routine activities of daily living • Reduce exacerbations and hospital admissions • Reduce visits to primary care practitioners • Reduce anxiety and depression • Improve quality of life
Management of the Service	Initially all practices will be offered the opportunity to deliver this service for their patients through a LES, against a service specification for the 6 week pathway advocated by NICE. The practices will be offered a payment of £300 per patient per course, attending a minimum of 2 sessions per week. NICE guidance advocates a minimum of 2 sessions per week to achieve effective clinical outcomes. Each practice will be asked to produce a detailed programme illustrating how

	the multidisciplinary service will be delivered. This will be assessed to ensure it meets the minimum criteria defined in the NICE guidance and the service specification before agreement is given to commence. Practices in South East Staffs have already been consulted to assess whether they are interested in delivering this service and two practices have expressed an interest. The commissioning team will then tender for the delivery of the services for the remainder of practices. A detailed tender document will be produced and those tendering will be required to detail full management of the service. The tender will utilise the service specification produced by headquarters clinical strategy team.
Scope of the Proposed Service *(i.e. which patients will be using the service, Target Localities/patient profile)*	Initially patients on the COPD register will be targeted. However, it is recognised that the number of patients on the registers is far lower than national prevalence rates would suggest (as previously identified). Different options to improve the diagnosis of COPD are currently being explored. The number on the register in South East Staffordshire is 2195. The number of the East registers is 1,793 The prevalence rate is 1.4% However expected prevalence would be 10,622 with a prevalence rate of 3.74% (SSPCT Primary Care data system March 2009) The pulmonary rehabilitation programme will be available for patients 'functionally disabled by COPD (usually MRC grade 3 and above)' . The service will not be suitable for those patients who cannot walk, have unstable angina or who have had a recent myocardial infarction (NICE 2004) More specifically the referral criteria is: ▪ Proven diagnosis of COPD (FEV1 <80%, FEV1/FVC < 70%, on COPD register) ▪ Prior agreement to undertake the course from the patient and consent ▪ Optimal medication prescribed ▪ No significant orthopedic or neurological problem which is likely to significantly limit mobility ▪ Untreated or severe Mental Health problems may limit success
Clinical Effectiveness	This is a recommendation of NICE and as such has the appropriate clinical evidence.

What will be the benefits to Patients?	The specific benefits to patients are highlighted under 'aims'.
What will be the benefits for Clinicians/Staff	This service will provide an opportunity for staff to utilise and further develop their skills in this area of disease management. The service will be welcomed by staff caring for those who currently have

?	few referral options to help patients to proactively manage their condition
What will be the anticipated benefit area for the PCT *(i.e Number of Reduced Admissions / Avoided Out Patient attendances)*	The number of COPD admissions across East Locality in the past 12 months is 430 Significantly looking at multiple admissions data, East Staffs Consortia has 189 clients with "respiratory disease" who accrued over 1000 admissions in the last 12 months at a cost of almost £900K The locality saw 2,836 admissions for respiratory related conditions during the past 12 months Evidence from studies of moderate methodological quality suggests that pulmonary rehabilitation is a highly effective and safe intervention to reduce hospital admissions and mortality and to improve health-related quality of life in COPD patients. http://www.cochrane.org/reviews/en/ab005305.html A study by Liverpool Health Observatory estimated that number of emergency admissions of people with respiratory problems could potentially be reduced by 25 per cent and the overall number of bed days by 45 per cent. http://www.healthcarecommission.org.uk/_db/_documents/COPD_factsheet.pdf - Accesed March 2009 It is suggested that pulmonary rehabilitation programmes can reduce overall costs per client by up to 50% As such there are potential savings of well over £1M

Milestones & Timescales	**Milestone**	**Timescale**
	Offer LES to practices	May 2009
	Begin tender process	May 2009
	Service commence	October 2009

	The Programme is oversubscribed	A robust referral system and appropriate service must be available across the locality
	The Programme is not run at times appropriate for Pulmonary Rehab, ie it is well documented that many COPD clients find they are not compliant early or late in the day.	It must be specified in the commissioning document that the service must run at times where compliancy is at its strongest.

	The COPD register has not captured the extent of COPD within our locality and clients arte missing out on vital treatment and rehabilitation	Ensure that registers are up to date and that a gold standard spirometery system is in place for correct diagnosis.

Section 3: Financial Implications

Annual Expenses (Cost of New Service)	Year 1 £300 per client	Notes
Capital Costs	**TBC**	
Staffing Costs, including backfill for clinicians running new service provision	**TBC**	
Training and Supervision Costs		
Equipment & Materials		
Other Expenses	**Cost**	Cost per patient £300 per course. All capital, staffing, training costs etc.. will be expected to be subsumed within this cost.
Total Cost of New Service	£ 300 per client @ 400 clients equates to £120,000	A target population of 15% of those currently on the COPD register are eligible, NICE guidance states 67% of these will undertake a PR . This equates to 400 clients per annum. Thus we would need 3.5 programmes for 16 people per session running each week across the East locality for 42 weeks of the year.
Anticipated Revenue ***please explain source of revenue***	£ Currently in East Staffs 189 clients cost almost £900K	£
Profit Element for Service Provider	£	£

Anticipated Financial Benefit to PBC Budgets	**Year 1**	**Year 2**	**Year 3**
Anticipated freed up resources achieved through avoided secondary care activity. *Please specify:*	£212,500	£212,500	
Less Cost of new Service Provision to users of the service	£120,000	£120,000	
Surplus to PBC Budgets	£92,500 Against CIP	£92,500	

How much funding is being requested	£120,000 service provision

& identification of purpose	

Section 4: Corporate Governance

Please note that some contracting methods will entail certain liabilities, for example a Limited Company option under APMS. It is therefore essential specialist advice is taken to understand clinical/personal liability, medical indemnity etc.

On which contracting basis do you intend this service provision to be based? e.g. LES, PMS, SPMS, APMS, PCT GPSI Commissioned Service, please explain.	LES for the service provided by practices OR Contract for the larger community based service.
Which National, NSF and PCT Targets will this service provision deliver against?	The profile of COPD as a debilitating condition is increasing in the light of the publication of the recent NICE guidelines and the forthcoming National Service Framework (NSF). http://www.library.nhs.uk/RESPIRATORY/ViewResource.aspx?resID=281438 – accesed March 2009-03-25
Demonstrate links to Standards for better Health	Standards for Better Health: Complies with C5,D2,C10,C13,C14,D9,D10 and D11.
Patient, Public & Front-line Staff Involvement.	A variety of front line staff including Clinicians have highlighted the need for this development. This ranges from practice staff to specialist nurses and hospital consultants. This development has also been driven by practice based commissioners forming part of the business plans for both consortia. This business case has been agreed in principle by the East staffs PBC , SESC executive team and the PCT clinical strategy team.

Section 5: Quality & Corporate Assurance

Please note there is value in discussing your proposals early on with your PCT Clinical Governance Lead

Clinical Governance Assurances	
Please provide details of how the intended provider location meets Health & Safety and other Clinical Governance Assurance standards	Health and safety requirements will be met in line with practice protocols. Health and safety, clinical governance etc… issues will be detailed in the tender document
Please Specify Audit arrangements ie, patient satisfaction surveys, reduction of hospital referrals & admissions	• Total number of patients who have been seen in the service • Total number of DNAs for the service • Number of non elective admissions for each locality • Total number of adverse events associated with treatment • Total number of weeks waiting for first appointment • Number of visits to GP pre and post rehabilitation • Total number of weeks waiting for commencement onto a programme • Patient outcomes: improving health related quality of life, patients' functional and maximum exercise capacity, and reducing dyspnoea • Number of reviews completed with an analysis of results • Total number of Patient Satisfaction Surveys completed
What Quality Checks will be in place?	The service provider will under take a telephone follow up with each patient who successfully completes a pulmonary rehabilitation program. The follow up should be carried out: ▪ At 3 months post completion ▪ At 9 months post completion ▪ At 12 month s post completion Each follow up should include: • A Health and Quality of life assessment as agreed with the PCT. • A record of the number of emergency admissions the patient has had in the preceding 3 month period. In addition: • To meet the Healthcare Commission Standards for Better Health. Where standards are not met or there is a significant lapse in year, the PCT expects the service provider to notify commissioners of the breach of the standards and actions being taken to address performance issues.

	• The PCT will agree with the service provider key performance indicators to be monitored in year. These will be used to evaluate the quality of service provision. • The PCT and service provider will work jointly to review and maintain quality through engagement in performance review meetings to be held on a quarterly basis and regular contract monitoring meetings
What information will you supply to the PCT and with what regularity?	As above
Outline Contractual Arrangements (To be detailed in the Service Level Agreement)	
Proposed period of Contract	3 years
Proposed Notice Period	6 months
What Contract Review arrangements do you envisage?	6 monthly
How will Complaints be managed?	Practice based service will be managed through practice and PCT policy. Details of complaints system will be given in the service specification.

To be Completed by PCT:

Comments received:	**Date**
Practice Based Commissioning practice/consortia Approved by East Staffs PBC	March 2009
Clinical Governance Lead	
Executive Directors	
Professional Executive Committee	

Outcome of Application	**Name**	**Date**
Approved – on the basis of:		
Rejected - Reasons for Rejection:		
Passed for Payment:		

Pulmonary Rehabilitation - Service Specification

Clinical Leads: Dr Paul Beckett , Joan Manzie and Jane Heath.
Commissioning Lead: Sarah Laing

	Essential	Desirable
Inclusion Criteria	– Diagnosis of COPD confirmed by spirometry – Functionally impaired by breathlessness – MRC dyspnoea 3-5	– A firm clinical diagnosis of any chronic respiratory disease.
Investigation	– Recent spirometry – Blood pressure – BMI	– Chest Xray in last 2 years – Full blood count – Electrocardiogram only when clinically indicated
Pre-Assessment	– Appropriately trained clinician must do assessment of all patients prior to PR. – An experienced, competent and appropriately trained clinician should be present during the initial PR assessment.	
Treatment	– On optimal medical therapy (NICE guidance). – Cigarette smokers should be encouraged to attend smoking cessation services or Lifestyle Team	

Oxygen	– If pulse oximetry shows exercise desaturation by at least 4% and below or equal to 92% on room air. Supplementary oxygen should be considered during exercise. This may require a formal ambulatory assessment. Patients on ambulatory oxygen should provide their own oxygen.	
Exclusion criteria	– Cardiovascular conditions liable to be aggravated by exercise: • Unstable angina • MI within the last 4 weeks • Significant aortic stenosis • Significant aortic aneurysm • Uncontrolled hypertension – Locomotor impairment liable to prevent exercise training – Cognitive impairment or other serious comorbidity liable to impair participation in the programme.	
Outcome measures	– Quality of Life – Exercise capacity, eg shuttle walk test/6 min walk test – Anxiety and depression – Breathlessness assessed using appropriate visual analogue scale – Patient satisfaction should be assessed after the programme Outcome measures should be assessed before and after the programme using validated tools, eg: – Chronic Respiratory Disease Questionnaire – St Georges Respiratory Questionnaire – Clinical COPD Questionnaire – The London Chest Activity Daily Living Questionnaire – Pulmonary Functional Status & Dyspnoea Questionnaire – Hospital anxiety Depression scale – Becks Depression Inventory – Lung Information Needs Questionnaire. Validated walking tests: – Incremental shuttle walking test – Six minute walking test – endurance shuttle walking test.	

	Exercise	
Aerobic exercise	– Walking is the most accessible form of exercise (other forms of aerobic exercise should be considered). – Other forms of aerobic exercise e.g treadmill, cycle ergometer.	
Strength training	– Upper and lower strength training. – Functional strength training e.g. using the individuals' own body weight as resistance. – Upper limb training – through upper limb ergometer, weights, therabands or home made weights.	
Intensity	– Minium of twice weekly supervised exercise sessions. – The intensity of exercise should be a minimum of 60% and up to 85% of an individuals maximum exercise capacity. – Group sessions are essential for a minimum of 6 weeks.	

Education		
Educators	– Educators need to be competent(good knowledge base of subject) and multi-disciplinary. – Education should be delivered by multidisciplinary staff. Suggested members: – physiotherapist – nurse – occupational therapist – pharmacist – social worker	– doctor – dietician – clinical psychologist – benefits advisor / citizens advice bureau – expert patients – patient support group Educators share knowledge so can cover for leave.
Education sessions	– Written information should be up to date and available for each education session.	– Offer patients attendance at missed education sessions
Education topics	– Importance of Exercise – Medication: • Bronchodilators (short/ long-acting and oral) • Steroids (inhaled and oral) • Antibiotics • Mucolytics – Exacerbation self-management including winter / summer preparation. – Breathing control and position techniques – Pathophysiology – Smoking – brief intervention and signposting – Sputum clearance – Energy conservation for activities of daily living – Nutrition – Self help groups – Going on holiday / travelling – End of life planning	– Relaxation and anxiety management – Smoking effects – Relationships and sex – Benefits, housing and social services – Using the NHS – Oxygen
Facilities and Staffing		
Safety	– The size of the room for the exercise session should be	

	assessed by the programme staff and will depend on group numbers. – Risk assessment performed.	
Access	– Bus stop/parking nearby within 100m. – Wheelchair access. – Telephone/mobile available in emergencies. – Fire exit accessible.	– Transport
Facilities	– Toilets within 30 metres. – Cultural sensitivities taken into consideration. – Chairs – Tea/coffee/water facilities. – CD player for shuttle walk +/- music – Exercise equipment – Clipboards/pens/photocopying facilities – Diary sheets – Secure storage	– Exercise steps
Staffing	Minimum staff/patient ratio 1:8 – 1 PR qualified Health Care Professional (HCP) e.g. Nurse, physiotherapist or doctor. – 1 qualified HCA competently trained in PR – Physiotherapist and and appropriately trained Fitness instructors. – If one member of staff only they should be a qualified HCP trained in PR. – At all exercise sessions a member of staff with expertise in exercise is COPD should be present. – Physiotherapist involved in PR	– No of supervisors in attendance e.g. 1 or 2. – The risks must be assessed in all groups when deciding staffing levels with consideration of: • The setting and available help in an emergency • The training of the staff • Availability of emergency equipment • The health of the patients • Administrator

	team for assessments and some monitoring of progress.	
Knowledge of staff	– Experience and Knowledge of managing COPD disease. – Knowledge and experience of exercising patients with respiratory disease, particularly COPD. – Basic Life support.	– Immediate Life support. – First Aid.
Management of Emergencies/Equipment		
Pulse Oximeter	– Available for all assessments.	– Available for routine exercise sessions.
Oxygen	– Available for all walking test assessments. – A PGD is required for all non-medical health professionals for administering oxygen.	– Available for routine exercise sessions
Bronchodilators	– Patients should bring appropriate medication eg relief/bronchodilators for all assessments.	– Nebuliser and medication available for all assessments.
Follow Up and Maintenance		
Maintenance of exercise	– Promotion of the continuing exercise in some form, eg exercise diary.	– Access to some form of exercise.
Maintenance of education	– Ongoing access to education, e.g. groups leaflets, Breath Easy, websites	
Audit	– Audit of minimum key performance data/outcome measures – Exercise component – Quality of Life – Dyspnoea scores	

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HIGHLIGHT REPORT

Pulmonary Rehab –Service provision Business Case –

Sarah laing and Anna Hammond march 2009

Activities This Period

1. Audit of current provision of service and researching the evidence for service need.
2. Business Case developed in conjunction with Malcolm Thompson and Joan Manzie.
3. Given clinical sign off by Nurse Specialist Joan Manzie and Dr Beckett from Queens Hospital Burton.
3. Business Case presented to PBC Exec – Agreed to take it forward.
4. Sent to PEC and Service Improvement Board today March 27th 2009

Actual or Potential Problems

Potential

Financial implications – this service will need financial backing for pump priming of this service, although there are significant cost savings to be made these will not be realised in the initial phase of implementation.
Several practices may wish to deliver the service and robust audit trails will need to be implemented.

Actual

The numbers of clients accessing this service are large and it appears that COPD has been under diagnosed as such the service will need to be able to accommodate potential clients as well as those already registered as COPD.
There are financial constraints and LES/Willing Provider contracts need to be developed.

Activities for Next Period

For approval by the PEC , Service Delivery Board and PBC Governance.

Future Activities

Development of contracts
Tender process
Audit Outcomes