States of Jersey

A Proposed New System for Jersey

Long-term Condition Management in the Community: Commencing with Chronic Obstructive Pulmonary Disease (COPD)

Scheme-level Outline Business Case (OBC)

Version 2.0

13 June 2012

This document

Purpose of the Outline Business Case

The Green Paper, *'Caring for each other, caring for ourselves'*, was produced in May 2011. Following public consultation, eight service areas were selected for early service development in 2012 – 2015. Sustaining Acute Services was identified as being 'Business As Usual', and was removed from the OBC list, therefore, seven OBCs have been produced.

Each proposed service change has been developed robustly, with full involvement from stakeholders. Working groups have used an Outline Business Case (OBC) template when discussing and developing the service changes, in order to ensure that all relevant aspects have been considered. The template incorporates guidelines from the UK Government's website on Business Cases as well as the template on the Treasury & Resources website.

Once approved, each OBC will be progressed to Full Business Case (FBC) – this is anticipated to be by Autumn 2012. The FBC will provide detail on the service change, including detailed timescales and action plans for implementation. Service implementation commences once the FBC has been approved and fund secured from the Medium Term Financial Plan, which is due to be agreed in late Autumn 2012.

Structure of this document

This Outline Business Case presents the elements of service change that must be considered in order for plans to be robust, stakeholders to be fully engaged, and risks to be managed effectively.

The case for change for integrated services for Long Term Conditions is presented, building from the case for change in the Green Paper. The linkage with the HSSD strategic principles and with the relevant services' strategies is clearly identified. The outcome of the Green Paper consultation, and in particular the views of stakeholders received during the consultation period have been presented where applicable, in recognition of the importance of these views.

The OBC then outlines the proposed service change, and the elements thereof, for example, the impact on workforce, on costs and on service delivery / quality.
Indicative costs and benefits are outlined. Some rounding adjustments have been made. All costs are presented at prices relevant to the each year, to ensure that the full cost of the proposals is understood. Costs and benefits which are quantitative and qualitative, short and long term and relevant to patients / service users / carers / families, clinicians and the public have been considered.
Implementation considerations are then presented, including stakeholder engagement and communication, key risks and issues for both the implementation period and for the full service delivery.

Revision history

Version	Date	Author	Description
0.01	30.11.11	Dr Linda Diggle	Working draft
0.02	30.11.11	Scott Maslin	Generic updates
0.03	12.01.12	Dr Linda Diggle	Document updated with revised costs provided by Treasury Projects Director
0.04	13.04.12	Amy Taylor	Updates to financial information
1.0	20.05.12	Rachel Williams	Final review and revision
1.1	13.06.12	Dr Linda Diggle	RW's comments addressed
2.0	13.06.12	Rachel Williams	Finalisation

Table of Contents

Abbreviations and Definitions

Abbreviation	Definition
AHP	Allied Health Professional
COPD	Chronic Obstructive Pulmonary Disease
EPP	Expert Patient Programme
FBC	Full Business Case
FEV_1	Forced Expiratory Volume
HSSD	Health And Social Services Department
ICP	Integrated Care Pathway
LTOT	Long term Oxygen Therapy
MTFP	Medium Term Financial Plan
NICE	National Institute for Health and Clinical Excellence
OBC	Outline Business Case
PCB	Primary Care Body
PCT	Primary Care Trust
QIF	Jersey Quality Improvement Framework
RNS	Respiratory Nurse Specialist
RST	Respiratory Specialist Team
SLA	Service Level Agreement

1 Executive Summary

1.1 Introduction and background

In common with jurisdictions and countries across the world, Jersey faces substantial current challenges in ensuring the availability of high quality health and social care for its citizens within a financially affordable sum. The KPMG technical document and the Green Paper, both published in May 2011, demonstrated that health and social care services in Jersey are at a crossroads. Existing capacity is due to be exceeded in some services in the near future, the elderly population is rising disproportionately and almost 60% of the medical workforce is due to retire in the next 10 years.

In early 2011 the vision for health and social care in Jersey was agreed. This clearly stated that services must be safe, sustainable and affordable.

The public consultation on the future of health and social services in Jersey concluded on 22 August 2011. Since that time, a Working Group has been considering the service changes that are required urgently; this Outline Business Case is a result of that process.

1.2 Strategic Context

The aim to manage long term conditions within the community and the services proposed for people with COPD within this outline business case complements work that is planned for the development of an Older Adults Strategy in Jersey and links to the States of Jersey Strategic Plan 2009-2014. The States of Jersey Strategic Plan for 2009-2014 includes a number of priority areas for Health and Social Services which include the:

- Development of a strategy that will draw together in a cohesive way all the action required to deal with the ageing population
- Enhancing and improving healthcare provision and promotion of a healthy lifestyle
- Supporting those in need and increasing social inclusion by helping people to help themselves.

1.3 The Case for Change

The prevalence of COPD in Jersey is currently estimated at 3.8%[1] of the population aged 16+, which equates to 3,000 individuals. It should be noted that this estimation includes all grades of the disease – mild, moderate and severe. According to the World Health Organisation, approximately 15% of smokers will develop COPD, and by 2020, COPD will be the third leading cause of death and the fifth leading cause of disability.

There are no disease registers in Jersey. Between 280 to 300 individuals are known to HSSD as these patients present to the hospital. These individuals usually have severe disease (the number varies year on year as some patients die from their disease whilst the progressive nature of COPD means that others have mild or moderate disease which becomes more severe over time).

[1] Jersey Public Health Intelligence, 2011

The prevalence and severity of COPD increases with age. Whilst younger adults may have COPD, they may not have any symptoms of the disease until the natural decline in lung function (which happens due to the ageing process) takes effect. The individual is then likely to develop symptomatic disease. Jersey's population is rapidly ageing, and the over 65 population is forecasted to increase by 95% between 2010 and 2040. Inpatient activity is predicted to increase by 33%, and current capacity is inadequate to meet this demand.

However, it is difficult to precisely predict the number of people we might expect to see with this chronic condition by 2040, because successful stopping smoking measures could eventually decrease the incidence of COPD (respected experts have predicted that less than 5% of people should be smoking in 30 years time[2]). The prevalence of smoking in Jersey used to be 40% of our population during the 'duty-free' years of the 1970's.This has decreased to the current smoking prevalence of 23% of people aged over 16. Yet because there can be a delay in the time between when a person smoked and the development of lung disease, we may have not yet reached the peak of COPD prevalence in the island[3].

The prevalence of people with COPD could reach as high as 10% of those aged over 70 and between 5% to 7% of the population aged between 35 and 70[4]. This could equate to 5,300 people with COPD in 2040. However, if our stop-smoking measures work, we may instead see a reduction in the incidence of COPD by 2040.

The existing service is medicalised and institutionalised. Best practice models of care, such as expanded roles (e.g. Community Matrons), telehealth and self care are extremely limited. Community services do not operate 24 hours, there is a waiting list for funded Nursing home places and, other than the Samares Rehabilitation Ward, there are no step-up/step-down facilities. This means that long term conditions are often not well managed, and demand for general medical beds is high.

Recruitment and retention remains a challenge; almost 50% of staff will be eligible for retirement in the next decade, and many of these retiring professionals are generalists who can treat a range of conditions. The high cost of living in Jersey, competitive pay packages in the UK and rules and regulations for entry and residency in Jersey present recruitment problems.

With no changes to the service model, the increasing demand will create unsustainable pressure on the hospital and on the whole health and social care system. There is an urgent need to both upgrade existing estate and redesign services for long term conditions, in order to provide proactive, integrated, personalised care, consistent pathways and improved value for money.

1.4 Service Objectives for COPD

To maximise independence and wellbeing for people with COPD through:

[2] Beaglehole R, Bonita R, Horton R et al, for *The Lancet* NCD Action Group and the NCD Alliance. Priority actions for the non-communicable disease crisis. *Lancet* 2011; **377:** 1438–47.
[3] personal communication: Dr Andrew Luksza, Consultant in Respiratory Medicine
[4] personal communication: Dr Andrew Luksza, Consultant in Respiratory Medicine

- Avoiding hospital admissions
- Supporting families and carers
- Providing a cost-effective, community model of care that increases access to effective pharmacological treatment, pulmonary rehabilitation, self management education and smoking cessation support
- Diagnosing COPD early and treating appropriately
- Integrating all relevant agencies
- Complying with National Institute for Health and Clinical Excellence (NICE) quality standards for COPD care.

1.5 COPD services by 2015

The COPD service will deliver person-centred care, predominantly in an individual's own home and in community and Primary Care settings. The key service elements are:

- **Screening** – Smokers or ex-smokers aged 35 years or over will be offered screening. This will be provided at accessible times and locations, for example, in public places on a Saturday. The aim is to identify a diagnosis or risk of developing COPD early. Screening also includes 'case finding' and 'risk stratification' - GPs would be encouraged to carry out targeted screening of symptomatic patients at high risk of lung disease, and a range of professionals, including the specialist respiratory team would identify individuals who may be at risk of repeat attendances at the Emergency Department, at risk of readmission to hospital or at risk of developing COPD).
- **Structured care in Primary Care.** Once identified through screening or through case finding, individuals would have a free consultation with their GP to confirm the diagnosis, to exclude other conditions and initiate treatment. Individuals with mild - moderate COPD will receive a free annual COPD consultation. The GP will also refer all individuals to free education and self management training co-ordinated by the Expert Patient Programme (EPP).
- **Awareness raising, healthy lifestyle promotion and self care**, including **Expert Patient Programme** – The citizen's portal will act as a 'one-stop' website, providing educational material and support. An awareness raising campaign will be targeted at smokers or ex-smokers, to increase screening. Individuals who are still smoking will be referred to smoking cessation support, and a range of other support mechanisms for healthy lifestyles and self care will be available, such as exercise referral, health walks and respiratory information mornings. The Expert Patient Programme will increase an individual's understanding of their disease and provide self help and mutual support.
- **Third Sector** organisations such as the Breathing Space Support Group will be supported and encouraged to work in partnership to provide services and information.
- **Pulmonary Rehabilitation**, which is run by physiotherapists, will help people achieve maximal lung function.
- **Community multidisciplinary team,** including 24 hour home care and night sitting
- **Multidisciplinary Specialist Respiratory team,** enabled by **telehealth** and supported by the **Ambulance Service** and **specialist oxygen service** will identify people with severe COPD at risk of exacerbation and will deliver specialist care in the community to help them remain in their own homes and as well as possible. Telehealth will be used to monitor patients' vital signs, so that variations from the

normal range for individual patients will be quickly identified and professionals will be able to adapt care and prioritise based on need. **Met Office Healthy Outlook**® Alerts will be provided to assist individuals in understanding and managing their condition.

- **Carer Respite**
- **Intermediate care team,** providing a virtual ward, hospital at home and Step-up or Step-down care, as required, for periods of up to 6-8 weeks
- **Hospital liaison,** with COPD Ward Champions and proactive discharge planning
- **Palliative support** in preferred place of care

Benefits include:

- Earlier diagnosis
- Improved condition management
- Reduced Emergency Department presentation
- Reduced non-elective admission
- Reduced length of stay
- Delayed requirement for admission to Nursing / Residential care
- Lengthening the time spent being active and economically productive
- Reduced Social Security costs from benefit payments
- Support to Primary Care
- Encouraging a continued vibrant Third Sector
- Increased confidence and control – for both patients / service users and carers

1.6 The Financial Case

The recurrent revenue cost for this OBC by 2015 (at 2015 prices) is £1.7m.

The total revenue cost for 2013-2015 is estimated to be £3.7 million. Over the same 3 year period, it is estimated that the new model will release capacity (cost containment) in the hospital which equates to £1.1 million.

Implementation costs total £85,000 in 2013, and £21,000 in capital costs in 2013.

The service will require an additional 8.67FTE.

The Long Term Conditions Management in the Community service will begin with COPD management, as outlined in this business case. This is due to it's high prevalence and potential to quickly derive significant benefits through service redesign.

Coronary Heart Disease (CHD) and Diabetes are also high priority. Services for individuals with these conditions will be developed during 2014 and 2015; the amount of funding required for these conditions has been identified and is presented in this OBC.

1.6.1 Implementation Actions and Timescales

Action	2012				2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Write the service specification																
Devise outcome measures and metrics																
Tender for services																
Agree funding amount and mechanisms with the Primary Care Body																
Full Business Case with stakeholders																
Business plan for the community team																
Workforce plan for new roles																
Funding agreement for new model																
Recruit new posts: Specialist Respiratory Team, Clinical Investigations Team, Pulmonary Rehabilitation, and Community Physio.																
Recruit Expert Patient Programme Manager																
Procurement of telehealth monitoring																
Expert Programme Manager to attend UK training																
Establish Specialist Respiratory Team																
Develop integrated care pathway and treatment / management protocols																
Train staff on telehealth																
Risk stratification and case finding – eligible and appropriate for telehealth																
Invite identified patients to participate in telehealth																
Invite identified patients to participate in telehealth																
Roll-out revised pathways with telehealth to 50% of eligible patients																

Set up Healthy Outlook® alerts																
Deliver training to Primary Care via joint GP / Consultant Physician clinics																
Joint working between all elements of the new service to roll out integrated care pathway, management protocols and treatment protocols																
Identify patients who may benefit from the Expert Patient Programme																
Commence Expert Patient Programme																
Continue roll-out of Expert Patient Programme																
On-going recruitment and training of patients able to facilitate the EPP																
Roll-out revised pathways with telehealth to remaining 50% of eligible patients																

1.7 Stakeholders, risks, issues, dependencies and enablers

1.7.1 Stakeholders

The OBC was produced by a Working Group comprising Third Sector partners, including Family Nursing & Home Care, patient representative, a General Practitioner, existing H&SS providers (from both C&SS and the hospital) and HSSD Human Resources and Finance.

Stakeholders to be engaged as the OBC develops into an FBC include the Asthma & Respiratory Society, patient representative, Breathing Space Support Group, Social Security Department and Education, Sport and Culture Department

1.7.2 Risks and Issues

Key risks and issues include:

- Lack of acceptance of new service model by patients, service users and carers – whether for screening or ongoing care
- Lack of acceptance of new service model by health and social care professionals, including GPs
- Recruitment and retention of appropriate staff
- Availability of funding for Primary Care
- Operating an integrated I.T system
- Lack of data and monitoring systems
- Lack of robust commissioning
- Underestimation of unmet need

1.7.3 Dependencies

The new COPD service is highly dependent on the development of Community multidisciplinary teams and Intermediate Care services. It is also dependent on the End of Life OBC and the new pathways and choices for palliative care contained therein.

1.7.4 Enablers

The ability to develop and deliver new services will depend on the continued commitment, support and enthusiasm of a range of partners, including the Third Sector (e.g. Jersey Asthma and Respiratory Society and Breathing Space) and Primary Care.

1.8 Next steps

To develop the plans for the COPD service further, the following steps are required:

- Consultation with Social Security Department as the new model would increase the number of patient visits to GPs (funded through the Health Insurance Fund)
- Understand the impact of the Long Term Care Benefit
- Work with a range of stakeholders to develop the detailed service specification, including outcome measures and metrics
- Develop the FBC
- Negotiate with the Primary Care Body to agree the terms of an SLA for initial screening and diagnosis and for annual visits
- Consult with the Asthma and Respiratory charities to ensure their continued support
- Consult with Education, Sport & Culture regarding capacity for referrals to exercise classes

2 Introduction and background

2.1 A Global challenge

Every health and social care system is experiencing similar challenges:

- Demographic change is dramatically increasing demand on all health and social care systems.
- Technological advances are allowing efficiency and quality improvements but also creating major new costs.
- Societal change is altering the relationship between services and service users, professionals and the public and between the state and individuals.
- Increasing regulation in health and social care is increasing quality but also reducing freedom to act atypically.
- Service ethos is shifting from treatment to prevention and promoting independence.

Health, social care and Third Sector partners and multi-agency teams need to work closely with one another and with patients, service users and carers to provide tools and evidence-based services aimed at managing demand, promoting health and wellbeing, ensuring equality of access and protecting / safeguarding vulnerable people. Our aspiration is to enable people to be cared for in the most appropriate place, living as productive and independent lives as possible.

2.2 The Challenge for Health and Social Care in Jersey

Jersey is experiencing many of the same challenges as all other health and social care systems internationally, but it also has some unique challenges.

A small island

In normal circumstances our population of just under 100,000 would be considered too small to support comprehensive acute hospital services and very specialist social care services – this would normally be provided for a population of over 250,000. However, geographical isolation and infrequent but material travel difficulties mean that providing a significant level of acute and emergency services locally is essential, and that it is desirable to provide local care packages for people with complex needs.

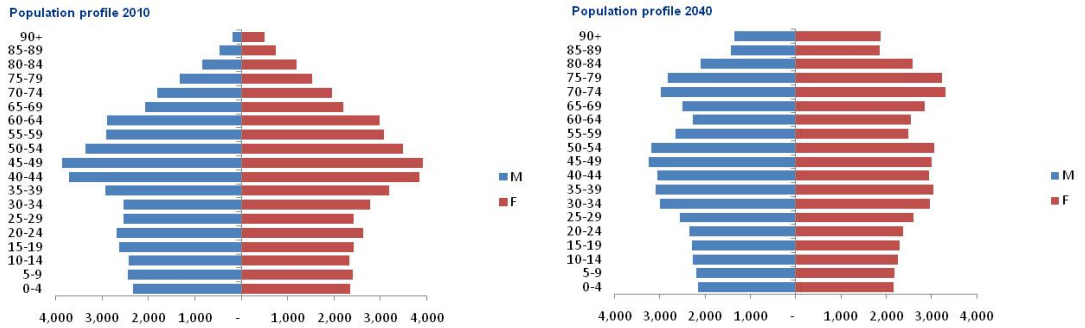
Accordingly, the unit cost of delivering hospital and social services in Jersey is higher compared with systems serving larger populations. This is because the fixed costs of key services such as Accident and Emergency, intensive care, and secure residential accommodation, which are still necessary to support relatively low levels of activity. This, along with the cost of living (including the cost of land and buildings) in Jersey leads to an additional funding “premium”, which increases unit costs. Secondly, it can produce vulnerable services due to workforce models, particularly in the medical workforce, which are relatively light, highly reliant on very small numbers of individuals and where the achievement and maintenance of specialist skills is difficult given relatively low patient numbers.

Demography

Given immigration controls the population of Jersey is rising only slowly. But it is ageing rapidly. Over the 30 years from 2010 to 2040 the numbers of residents over 65 is projected to rise by 95%; in the period to 2020 the increase is projected to be 35%. This

demographic change will create a huge surge in demand for health and social care services which will overwhelm the current capacity of the existing services.

Fig 1. Demographic change in Jersey



Within 5 years, the current numbers of hospital beds, operating theatres, residential and nursing care beds and other key community services will be inadequate to meet demand. These services therefore need to be expanded, supplemented and/or changed urgently to ensure that services can be safely and sustainably provided for the growing elderly population.

2.3 Strategic Principles

The vision of services which are safe, sustainable and affordable was distilled into a set of strategic design principles in late 2010. These were developed by stakeholders across health and social care, and ratified by Ministers:

- Create a sustainable service model – efficient, effective, engaging the public in self-management and with consistent access and thresholds
- Ensure clinical/service viability – overcome the challenges of low patient volumes, delivering high quality care and minimising risk
- Ensure financial viability – reduce the impact of diseconomies of scale, with value for money, an understanding of the costs of care in Jersey and robust procurement
- How should we fund health and social care? – establishing a charging model that incentivises care and cooperation
- Optimising estate utilisation – ensuring the estate is fit for purpose and utilised to maximum efficiency
- Workforce utilisation and development – supporting and utilising the workforce to the best of their abilities
- Clinical governance – sustaining a culture of safety, learning and transparency
- Use of business intelligence - with robust data to support decision making based on fact, and including patients and the public in service design and decision making

Service principles and assertions:

- Social care and health should be integrated as seamlessly as possible on a service user's/patient's life journey, with teams of social care, home care, medical, nursing, occupational therapy, psychology and other staff working together, working with the third sector and private sector providers
- Integration will be supported by an organisational and professional mindset that puts people first and at the centre of decision making about their care package, and

ensures that needs drive services and not the reverse, to improve emotional, social and health wellbeing.

- Single, integrated care pathways, single assessment and a move towards personalisation and needs driven care will provide choice and empowerment. At present, complex services are provided by a multiplicity of providers, teams and professionals with different referral and access points, assessment frameworks, eligibility criteria and pathways. Simplifying and standardising the current range of approaches would improve co-ordination, providing a holistic, streamlined service which provides support, enablement and choice of care setting for older people and support for their carers.
- Services should be planned and delivered within partnerships brining together all sectors of our Islands community and economy
- Where appropriate, service provision should move away from residential care and institutionalisation within social care towards an increase in community provision to allow service users to integrate and lead independent and productive lives as much as possible.

2.4 Stakeholders and public opinion

Between November 2010 and April 2011 a number of stakeholders were interviewed to ascertain their views on the future for health and social care. The key themes were:

- The development of an overall strategic plan as an overarching context for the development of the above is essential. This should address any changes required in the structure of services and relationships between them, as well as future funding mechanism to ensure the changes in service provision required will be delivered
- There is a groundswell of appetite for change
- Considerable scope exists for improvement in the coordination, collaboration and communication between different services and service providers
- Some gaps in service provision exist
- Elements of the operational infrastructure would benefit from strengthening. This includes improved mechanisms for data collection and distribution, recruitment and retention of key staff, and improvement and better use of estate

2.5 Results of the Green Paper consultation

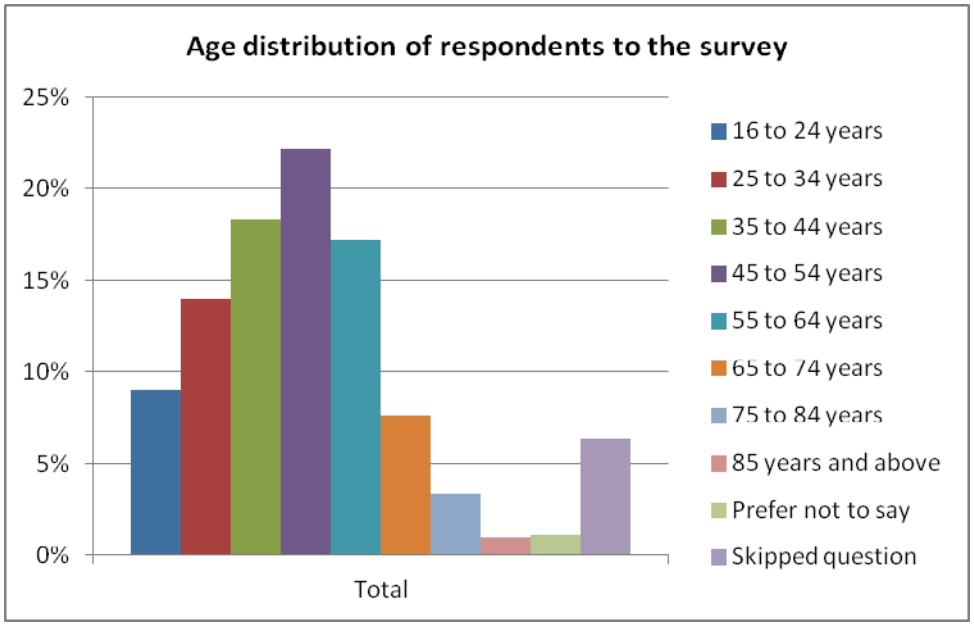
Between May and August 2010 HSSD consulted on the Green Paper ‘Caring for each other, Caring for ourselves’. More than 1,300 Islanders responded to the consultation. The response was overwhelmingly in favour of redesigning health and social services so that they continue to be safe and affordable for the future (86%), and many respondents included detailed comments and viewpoints.

The Green Paper sought views on three scenarios for the future of health and social care:

- Scenario One: “Business as usual” – services continue to be provided in the same way and through the same structures as in 2010; spending increases to meet growing demand.
- Scenario Two: “A small increase in funding” – the funding allocation does not increase. Services have to be prioritised within this budget and many services will be subject to ‘means testing’ or will be stopped.

- Scenario Three: “A new model for health and social care” – prioritised changes to service delivery, to ensure health and social services are safe, sustainable and affordable and are able to meet projected increases in demand.

Responses were received from across all age groups. 69% of responses were received from individuals; 17% from organisations, such as Family Nursing and Home Care, dDeaf Awareness Group and Mind Jersey. More women than men responded.



Responses

The overwhelming message from the consultation was the positive views of Islanders about their health and social services. The majority of the respondents believe it is very (81%) or fairly important (16%) to continue providing a wide range of health and social care services on island. The remaining questions elicited the following responses:

- The majority find it very important (82%) or fairly important (16%) that in future these services are free, or affordable, and available to all.
- The vast majority of people (90%) agreed that “The States should ensure that preventing ill health is as important as curing ill health”. Some people felt that a large benefit could be gained from this area in the long term, whilst others were not sure whether this would be possible.
- Mixed views were received regarding having “responsibility for your own health” – whether this was for longer waiting times or increased charges for people who choose not to look after their own health. In particular, there were concerns about “self-inflicted” injuries or illnesses. Some respondents argued that it was not always possible for everyone to look after themselves and that vulnerable, ill or disabled individuals should not be disadvantaged.
- Most respondents agreed that “People should be able to live in their own home for as long as possible, providing they have the right health and social care support from the States of Jersey, the Third Sector and parishes.
- The vast majority of people (90%) agreed that “Instead of going to a hospital doctor or GP, I would be happy to be seen by a nurse, a pharmacist or other care professional, for appropriate minor procedures such as measuring blood pressure or monitoring my diabetes.”

- Most respondents said they would welcome qualified nurses working with GPs to free up their time, but others were not in favour of nurses doing what they considered to be the work of a GP. Some respondents commented that the GP system in Jersey was already very efficient and they were concerned about damaging patient-GP relations, and others were concerned about the cost of Primary Care to individual patients.
- Respondents also indicated that off-island travel was acceptable for some treatments. Some respondents would rather not have off island treatment, whilst others felt that going away for care to be inevitable on a small island like Jersey. Respondents also expressed views on whether patients should travel off island to see a doctor, or whether doctors should visit Jersey to treat patients.
- Professionals working together to deliver better integrated care was important, but some respondents noted that Jersey's charities should receive more funding and support.
- The vast majority of respondents thought that health and social care should be accessible and affordable, if not free, to all. However, there was a range of views about who should fund this care, and how.
- The need for affordable care was often stressed, and many respondents felt payment and funding needed to be explored in more depth.
- Most respondents said that those who cannot pay should still enjoy high quality health and social care. Opinion was then split about whether the amount of free care available for each person should be capped, with respondents expressing concern about the costs of care for people with long term illnesses and whether they would be able to pay.
- Some respondents commented that if health and social care was capped, for some conditions or for all, this should be means tested. However, others disagreed with means testing and felt that if someone had worked all their lives, they should have as much right to free care as others.
- Some respondents felt it would be fair that those who had lived in Jersey all their lives received free access to treatment – but that people who have not paid into the system should not enjoy the same benefits.
- According to many respondents, significant numbers of people visit the Emergency Department rather than seeing a GP because there is a charge associated with the GP, while a visit to the Emergency Department is free. The majority agreed that if a charge applied to visit the Emergency Department for treatment of a minor condition, they would be more likely to go to see their GP. Many also suggested that GP consultation costs should be reviewed at the same time as Emergency Department costs.
- Many respondents felt that there are opportunities to improve current system. Suggested ways to improve efficiency included reducing bureaucracy in health and social services, improving communication between organisations and bringing in more third party and profit making organisations to provide care.

2.6 Development of the Outline Business Case

This Outline Business Case (OBC) presents the case for change for integrated community services for people living with Chronic Obstructive Pulmonary Disease (COPD) in Jersey. It explains, within the context of current and future safety,

sustainability and affordability and against the strategic principles agreed by Ministers in late 2010, the reasons why 'do nothing' is not an option.

The OBC was developed by a Working Group between August and November 2011. Between November 2011 and March 2012, significant work was undertaken with Treasury to ensure that financial projections are within an indicative cost envelope and sufficiently detailed and accurate for the Medium term Financial Plan submissions in Summer 2012.

The OBC then outlines the features and timescales of the proposed service changes and assesses the potential impact against a range of factors, including workforce, cost and quality.

This OBC has been prepared by Dr Linda Diggle, Head of Healthcare Programmes with Richard Jouault, Managing Director of Community and Social Services as Senior Responsible Officer, after consultation with service providers, Third Sector organisations, service users and carers.

3 The Preferred Option

3.1 The Service Case

International evidence

In recent years, the healthcare organisations of many countries have recognised that proactive management of adults with long term conditions and prevention of others from acquiring a long term condition is essential to keep people well for longer, to prevent people requiring admission into hospital and to prevent health care costs spiralling.

Many parts of Europe and countries such as the US and Canada have now developed community based programmes to improve the management of long term conditions such as COPD, Coronary Heart Disease and Diabetes. Much of the early work for developing frameworks for long term conditions took place in the US. Kaiser Permanente led the way by focusing on integrating services and using a proactive approach to managing care for people with long term conditions. Since then evidence has accumulated in support of this approach.

In the UK, the Long Term Conditions Model published in January 2005[5] provided a framework to help local health and social care communities improve the care of people who have chronic diseases. Within this framework the proactive management of people with long-term conditions, including the promotion of self-care by patients, has become a key priority for the NHS. General practice in the UK now takes a central role in delivering more integrated and personalised care, and in implementing policies that target 'at-risk' individuals with appropriate interventions.

The outline business case for COPD draws upon international and UK evidence and the UK Long Term Conditions model.

3.2 Current Services in Jersey

In 2010, 300 Jersey residents diagnosed with COPD were in regular contact with services provided by the Health and Social Services Department and Family Nursing & Home Care. In 2011, four of the largest GP practices in the island reported that, collectively, they have 1664 patients recorded as having COPD, however it is possible that some patients are registered with more than one practice and therefore there may be double counting of individuals with COPD across practices.

Unmet need is a common challenge in long term conditions such as COPD. In other jurisdictions, individuals with COPD often are cared for predominantly by their GP. In the UK, records are maintained through Disease Registers as part of the GP Quality Outcomes Framework (QOF) – and so the known numbers of individuals with COPD can be calculated. In Jersey, the situation is different. The Quality Improvement Framework (QIF) is still being developed, and Disease Registers in Primary Care are not yet fully populated. However, access patterns are also different from the UK. Due to the co-payment system for Primary Care, many individuals with long term conditions may access free hospital care in preference to paying for Primary Care, therefore records of diagnoses and attendances at hospital may form a more complete overview of the

[5] Supporting People with Long Term Conditions – An NHS and Social Care Model to support local innovation and integration, January 2005.

numbers of individuals with COPD in Jersey. It is believed that up to 50% of individuals with COPD may be undiagnosed.

In 2011, COPD prevalence was estimated to be 3.8%[6] of the population aged 16+. Rates vary with age, however, it is difficult to estimate current prevalence in Jersey amongst different age groups until disease registers in Primary Care are fully developed. UK Respiratory Clinicians estimate that prevalence amongst younger adults may reach between 5 to 7% whereas for older adults (aged over 70) prevalence may be around 10%[7]. It is known that prevalence figures for younger adults are likely to be underestimated, as identified by an international quantitative survey in six countries, which concluded that significantly more people between 40 and 65 are likely to have COPD than has been previously recognised[8].

Work undertaken by the Health Intelligence team has estimated there are currently 3,000 individuals in Jersey with COPD.
The prevalence and severity of COPD increases with age. This is because whilst younger adults who smoke or who used to smoke may have COPD, they may not have any symptoms of the disease. Once the natural decline in lung function occurs due to the ageing process, the individual may then develop symptomatic disease.

The prevalence rates of COPD in the future are predicted to increase as the full impact of our population's smoking habits over past decades takes effect. Nevertheless, it is difficult to precisely predict the number of people we might expect to see with this chronic condition by 2040. This is because successful stop smoking measures are likely to lead to an eventual decrease in the incidence of COPD and some experts have predicted that less than 5% of people should be smoking in 30 years time[9].

The prevalence of smoking in Jersey used to be 40% of our population during the 'duty-free' years of the 1970's. This has decreased to the current smoking prevalence of 23% of people aged over 16. Yet because there can be a delay in the time between when a person smoked and the development of lung disease, it is thought we have not yet reached the peak of COPD prevalence in the island[10]. If the prevalence of people with COPD in Jersey is 10% amongst those aged over 70 and between 5% to 7% amongst 35 to 70 year olds, this would equate to 5,300 people with COPD in 2040. However, if our stop-smoking measures work, and overall tobacco use continues to be reduced, we may instead see a reduction in the incidence of COPD by 2040.

It is expected that the service changes highlighted in this OBC will, for the first time in Jersey, provide robust data on the numbers of islanders with COPD including their ages, gender and severity of disease and this will help more accurate estimates of predicted prevalence to be calculated in the future.

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[6] Jersey Public Health Intelligence, 2011
[7] Personal communication: Dr Andrew Luksza, Consultant in Respiratory Medicine
[8] Fletcher MJ et al. COPD Uncovered: An International survey on the impact of chronic obstructive pulmonary disease (COPD) on a working age population BMC Public Health 2011,11:612.
[9] Beaglehole R, Bonita R, Horton R et al, for *The Lancet* NCD Action Group and the NCD Alliance. Priority actions for the non-communicable disease crisis. *Lancet* 2011; **377:** 1438–47.
[10] Personal communication: Dr Andrew Luksza, Consultant in Respiratory Medicine

There will be a significant challenge in providing accessible, cost effective care for older adults with COPD. The wider economic impact from younger adults with COPD must also be considered; individuals aged between 40 and 65 are likely to be at the peak of their earning power, being the most active and productive contributors to society. They tend to have the most spending power, pay the highest taxes and contribute the most to the costs of healthcare, education and social services. Therefore, keeping people of working age with COPD well and economically productive will provide a significant wider economic benefit.

Currently, COPD services are provided by HSSD, by GPs and by one community based Respiratory Nurse Specialist. A number of challenges exist with the current service model:

Service design principle	Challenges of the current services
Create a sustainable service model	• Institutionalised care, provided predominantly from the hospital. As demand increases, hospital capacity will be exceeded and surgical waiting lists will increase • Inadequate provision of specialist COPD community services • Inadequate provision of generalist community support 24-hours • Limited rehabilitation provision • Limited intermediate care, particularly step-up and step-down • Limited usage of technologies which can support individuals in their own homes • Limited self care and expert patient programme • Although they constitute a relatively small proportion of Jersey's population, the known number of people with severe COPD present a significant burden to the hospital due to exacerbations of their condition, particularly during the winter months • Financial disincentive which prevents / discourages patients from attending their GP for regular care for their COPD. This hinders condition management and increases the risk of severe exacerbations, Emergency Department presentations and unplanned admissions.
Ensure Clinical/service viability	• Medicalised care, with limited enhanced role practitioners in acute settings and limited enhanced roles in community teams (e.g. Community Matrons and Nurse prescribing) • Recruitment remains a challenge • Upcoming retirements, particularly as almost 60% of consultant are due for retirement in 10 years • Retention is a challenge, as roles and career opportunities are limited • Care is not integrated, co-ordinated or personalised
Ensure financial viability	• Up to 50% of people with COPD are likely to be undiagnosed. Untreated COPD is likely to result in incapacity or disability and likely to incur direct hospital costs plus indirect costs in terms of lost productivity (often due to the early retirement of people due to COPD amongst the working age population) • Financial disincentive preventing / discouraging people from attending their GP • Unscheduled demand due to poor condition management, which hampers effective management of hospital resources • High use of hospital resources due to lack of provision in community and Primary Care settings • Average length of stay in hospital of 8 days

Service design principle	Challenges of the current services
Optimising estate utilisation	• Admissions for COPD exacerbations, particularly in the winter months, increase pressure on hospital capacity minimising the ability to respond to other pressures and increasing the risk of hospital acquired infections
Workforce utilisation and development	• Limited expanded roles for non-medical staff • Lack of nurse prescribing prevents specialist nurses from being fully effective • Lack of 24 hour home care and access to multi-disciplinary services in the community necessitates patient admission into hospital
Clinical governance	• Not meeting evidence based NICE quality statements regarding the standard of COPD services, due to current service configuration
Use of business intelligence	• Lack of data on activity • Lack of data on outcomes • Lack of integration which limits data on admissions, bed days, length of stay, Primary Care attendances, Emergency Department contacts and outpatient appointments • Lack of qualitative data, e.g. Patient Reported Outcome Measures • Limited Health Intelligence regarding prevalence and unmet need, which is required for effective commissioning and decommissioning • Lack of data with which to assess value for money

3.3 Description of Service

Shifting the Balance - a new model of care for COPD

The proposed new service for managing the long-term condition of COPD in Jersey would shift the balance of care from the hospital to the community.

Although this change would be a new model for Jersey, many jurisdictions in recent years have redesigned care in order to treat more people with COPD in the community, with greater integration and targeted community care providing systematic support to patients in their own homes and reducing hospital admissions.

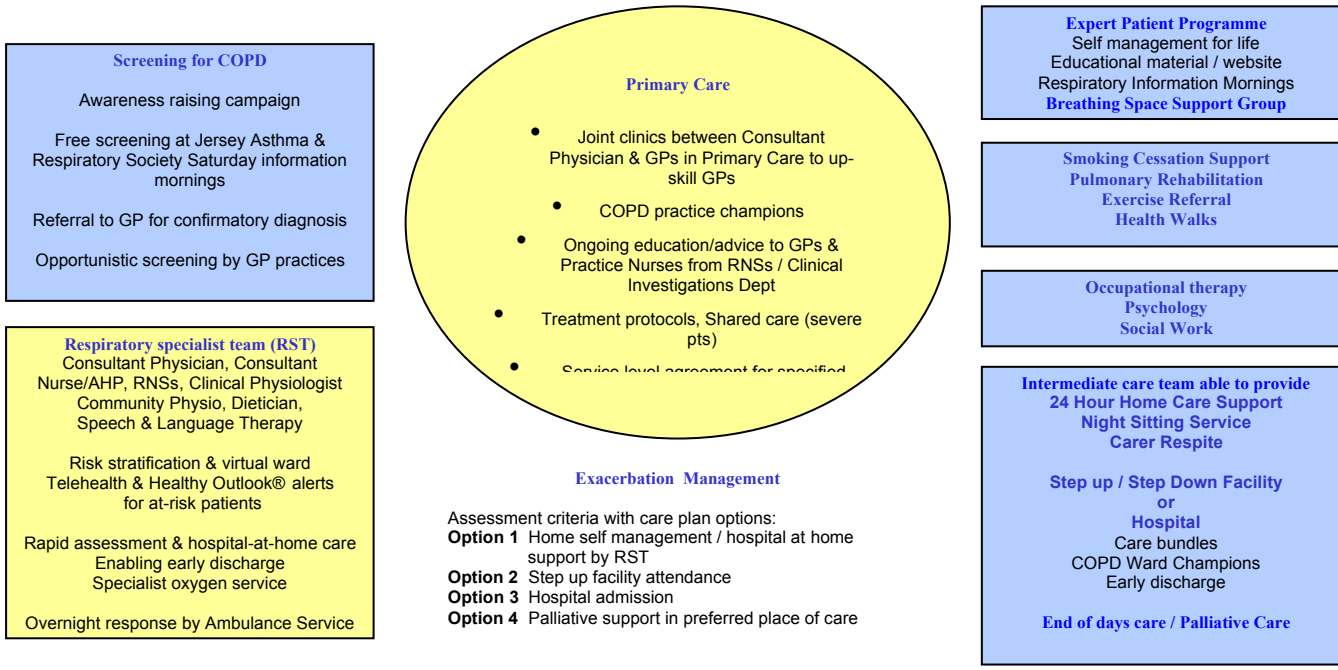
The development of the new model for COPD care in Jersey has drawn heavily upon successful experiences elsewhere, whilst at the same time taking into account the unique aspects of Jersey's healthcare system. The model is centred on the needs of the patient and follows guidance set out in the Outcomes Strategy for COPD (2011)[11].

The proposed model complies with all thirteen NICE quality standards for COPD[12]; adherence to these standards will ensure Jersey residents receive a quality, evidence based service.

[11] Department of Health. *An outcomes strategy for people with chronic obstructive pulmonary disease (COPD) and asthma in England*. London: DH, 2011. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127974

[12] NICE website. *NICE COPD quality standard*. www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp (accessed 07 November 2011).

Shifting the Balance of COPD Care to the Community



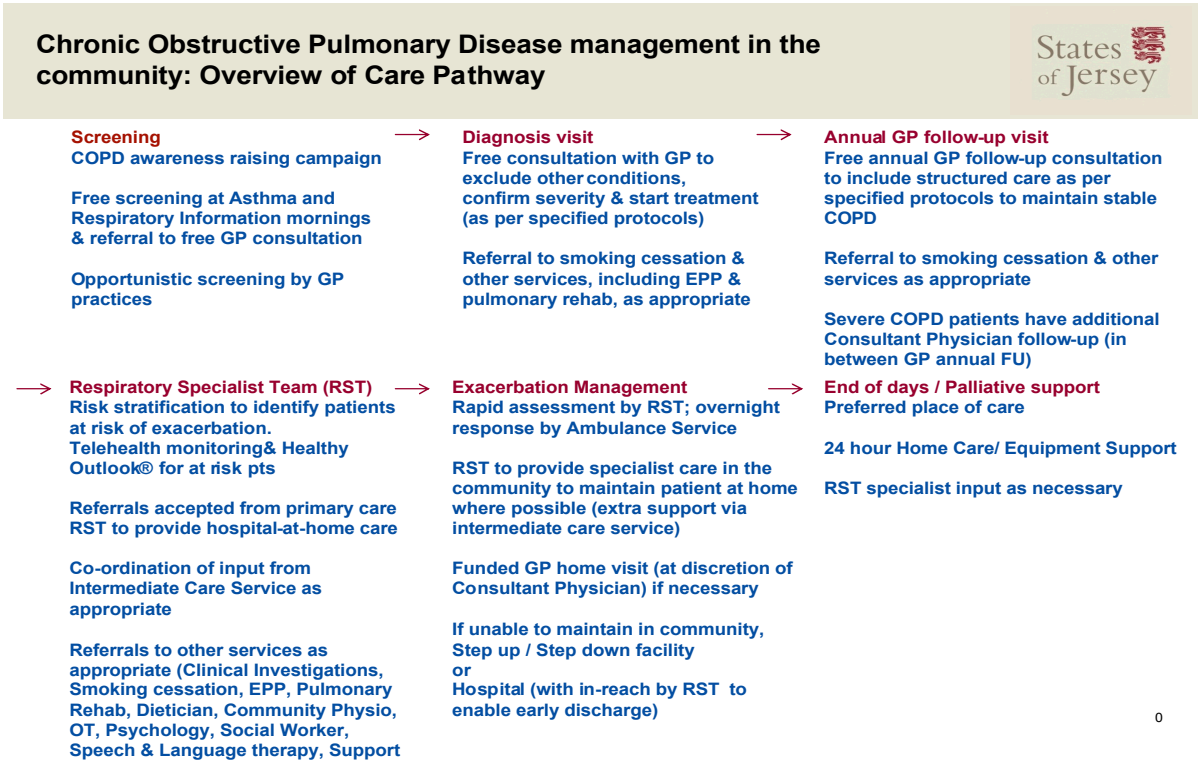
Clinical leadership will be essential to the development and delivery of the new COPD service. As such, a local Consultant Physician on a 12-month secondment will work with a Consultant Nurse or Allied Health Professional to focus on setting up and initiating the new model (with backfill provided by a temporary consultant appointment).

This will support the commissioning of the new COPD service, and the full integration of service delivery, which is anticipated to be provided by HSSD, Primary Care and the Third Sector working in partnership. It will also enable training and support to professionals, including GPs, and shared clinics.

Detailed operational planning will be prioritised, working with a range of stakeholders. This will include developing integrated care pathways, with clear access points, joint working and single assessment and care planning processes. It will be supported by the Single Point of Access, and will fully integrate with the service developments in other OBCs, notably with Intermediate Care, Dementia and End of Life.

The new COPD service will comprise:

- Screening, case finding and risk stratification
- Structured care in Primary Care
- Awareness raising, healthy lifestyle promotion and self care, including Expert Patient programme.
- Pulmonary Rehabilitation
- Community multidisciplinary team
- Specialist Respiratory team, enabled by telehealth
- Carer Respite
- Intermediate care team
- Hospital liaison
- Palliative support



3.3.1 Screening, case finding and risk stratification

In 2013, a COPD awareness raising campaign would be aimed at the general population. The campaign will encourage attendance amongst smokers and ex-smokers over the age of 35 for screening of their lung health.

Smokers or ex-smokers aged 35 years or over will be offered screening, with the aim being to identify a diagnosis or risk of developing COPD early.

Screening will be accessed in several ways. The awareness raising campaign will encourage people to attend at free screening sessions taking place at Saturday morning drop-in clinics. These clinics are currently held in the Clinical Investigations Department at the General Hospital and are funded by the Jersey Asthma and Respiratory Society. Six HSSD healthcare professionals are skilled in screening and all are involved in running the free Saturday morning sessions.

In future, screening could also be undertaken in a range of other venues, for example, in a small marquee in the town centre, to encourage uptake of screening by as many smokers and ex-smokers as possible.
Patients could also choose to attend at their GP practice for the initial screening spirometry if they wished (a fee is likely to be charged to the patient by the GP for this initial consultation).

For case finding, GPs would be encouraged to carry out targeted screening of symptomatic patients at high risk of lung disease, for example, GPs could opportunistically screen patients who attend their practice because of symptoms of a chest infection and who are either smokers or ex-smokers (there is evidence that

targeted case finding in this way can be a highly efficient way of identifying people with lung disease[13]).

Risk stratification would be undertaken by the specialist respiratory team to identify patients who are at most risk of admission and/or presentation in the Emergency Department. A variety of tools and techniques are available to support this, including analysis of Emergency Department presentations, admission and discharge data, contacts with Community services and Family Nursing and Home Care services, participation in support groups such as the Breathing Space Support Group, and discussions with health and social care professionals who have contact with patients and will know their condition, severity and needs.

3.3.2 Structured care in Primary Care

Primary Care will become the central focus for providing care to patients with stable COPD.

When a screening spirometry suggests an individual has COPD, he / she will be given a letter / voucher to attend for a free confirmatory 'diagnosis' consultation at their GP practice. The consultation will confirm the diagnosis, exclude other conditions and initiate treatment, such as starting the patient on inhaled therapies.

The GP would be advised by the screening clinic to expect the patient to visit. The GP would perform a diagnostic spirometry plus other care (as discussed in the structured care section below) and HSSD would reimburse the GP for the consultation fee on receipt of the diagnosis visit results.

GPs will be guided in the structured care to be delivered during the 'diagnosis' and subsequent visits by an integrated care pathway (ICP). They will arrange for the patient to be provided with education about their condition, and would also refer all individuals to a range of free services and activities:

- Smoking cessation support
- Education and self care
- Expert Patient Programme (EPP)
- Third Sector services such as the Asthma and Respiratory Society Saturday information mornings, or Breathing Space
- Pulmonary rehabilitation, which in turn would lead pulmonary rehabilitation physiotherapists to refer patients onto 'Exercise Referral' classes and 'Healthy Walks'.

Once the diagnosis is confirmed, the GP will inform the specialist respiratory team. This will include details of whether the patient has mild, moderate or severe disease and whether they believe the patient would benefit from telehealth monitoring. Individuals will then be cared for by the appropriate professionals, depending on the severity of their disease; for example, those with mild or moderate COPD will have their condition fully

[13] van Schayck CP, Loozen JM, Wagena E, *et al*. Detecting patients at a high risk of developing chronic obstructive pulmonary disease in general practice: cross sectional case finding study. *BMJ* 2002; **324**(7350):1370-4.

managed within Primary Care. This will include a free annual COPD consultation, which will be a 'structured care' consultation. The GP would deliver care as recommended by the National Institute for Clinical Excellence (care differs according to the severity of the patient's condition, as shown in Table 1),. On confirmation of diagnosis the GP will provide the patient with a Self-management Plan and Patient Record booklet.

In addition to an annual follow-up consultation with their GP, patients with severe COPD (an FEV1 <30%) will also have an annual outpatient consultation with the Consultant Physician (this will occur between their annual GP follow-up visits). This would ensure those with severe disease were seen twice yearly (as recommended by NICE) to further reduce their risk of exacerbation.

Referral to smoking cessation would be discussed at every consultation and the results submitted to HSSD.

A register of COPD patients and their disease severity would be maintained and payments to GP practices would be triggered through receipt of the core information requirements.

Table 1: Structured care delivered by GPs at annual follow-up visits[14]

	Mild / moderate / severe airflow obstruction	Very severe airflow obstruction
Clinical assessment	• Smoking status and desire to quit (signposted to Smoking Cessation Service) • Adequacy of symptom control: – breathlessness – exercise tolerance – estimated exacerbation frequency • Presence of complications • Effects of each drug treatment • Inhaler technique • Need for referral to Specialist Respiratory Team or therapy services (physiotherapy, dietetic advice, occupational therapy, social services, palliative care team)	• Smoking status and desire to quit (signposted to Smoking Cessation Service) • Adequacy of symptom control: – breathlessness – exercise tolerance – estimated exacerbation frequency • Presence of cor pulmonale • Need for long-term oxygen therapy • Nutritional state • Presence of depression • Effects of each drug treatment • Inhaler technique • Need for referral to Specialist Respiratory Team or therapy services (physiotherapy, dietetic advice, occupational

[14] Chronic Obstructive Pulmonary Disease: Management of Chronic Obstructive Pulmonary Disease in adults in primary and secondary care. NICE clinical guideline 101, June 2010

	• Need for pulmonary rehabilitation • Ensure patient has supply of rescue medications	therapy, social services, palliative care team) • Need for pulmonary rehabilitation • Ensure patient has supply of rescue medications
Measurements to be taken	• FEV_1 and FVC* • BMI • MRC dyspnoea score	• FEV_1 and FVC* • BMI • MRC dyspnoea score • SaO_2*

* The exact measurements required will be confirmed during the FBC work-up and SLA discussion

Where a patient was experiencing an exacerbation, the GP would refer the patient to the Specialist Respiratory Team instead of admitting into hospital.

Where a medical assessment of an exacerbation was required as a matter of emergency, one GP home visit per year would be funded. If required, the GP would then quickly involve the specialist community team to provide the support required to their patients as an alternative to hospital admission.

A Service Level Agreement (SLA) with Primary Care would provide payment to GPs for the initial diagnosis and for specified care delivered during an agreed number of consultations, as detailed above. This care would be free to patients. A similar SLA arrangement is in place for childhood immunisation consultations and 6-week developmental check; this is working very well and has been hugely successful in encouraging parents to bring their children to Primary Care at specific time-points for specific interventions.

Payments would be made per consultation or as part of QIF. The SLA would include detail of the clinical care to be delivered and the quality performance criteria. The specified care to be delivered by GPs and Practice Nurses as part of the SLA would include the onward referral of the patient to a variety of services and activities. A COPD lead would be nominated by each practice, and Spirometry equipment would be calibrated annually by the Clinical Investigations Department.

The Jersey Quality Improvement Framework (QIF) could also provide payment to GPs for delivering the seasonal flu vaccination to those with long term conditions. A similar arrangement for incentivising flu vaccination in Primary Care is in place in the UK (under the Quality and Outcomes Framework). Increasing the take-up of flu vaccination should reduce the risk of exacerbations of COPD during the winter months.

If a practice preferred not to be involved in the care of COPD patients, the respiratory specialist team will arrange for the patient to receive their COPD care at an alternative GP practice.

Initially, up-skilling of Primary Care will take place via joint clinics between GPs and the Consultant Physician. The Consultant Physician will provide mentoring, education,

specialist advice and support to GPs, and the specialist Nurses and Clinical Investigations Department will support GPs and Practice Nurses with ongoing education and advice.

In other areas, similar approaches to support, training and shared care for patient with severe COPD have been highly successful – for example, joint working between Walthamstow West PBC group, a local Chest Consultant and GSK delivered an increase in recorded COPD prevalence of 12% (453 to 508 patients), a 16% reduction (from 80 to 67) in year-on-year COPD non elective admissions and an 18.6% reduction in the cost of non-elective admissions in the period of September 2009 to August 2010[15].

3.3.3 Awareness raising, healthy lifestyle promotion and self care

Self-care is a key aspect of effective COPD management. Providing service users and carers with the information, tools and skills to take control of their condition and make informed choices often has a significant impact on their confidence, mental health and wellbeing, and ultimately on the progression and level of disability caused by their condition.

Awareness raising amongst health and social care professionals, including Third Sector providers, is also very important. This will be provided by the Expert Patient Programme Manager and/or the Consultant Nurse/AHP. It will be available to a wide range of professionals, including HSSD staff, staff working in care homes, generalist home care workers, Family Nursing and Home Care and private sector care providers. This will include education on who to refer for screening, smoking cessation support available, telehealth and the availability of the specialist team.

'One-stop' information

From 2014, the citizen's portal will act as a 'one-stop' website, providing educational material and support.

In the meantime, the COPD awareness raising campaign will commence in 2013. The campaign will be planned with the HSSD Communications Officer, in order to ensure it is comprehensive and effective. This will involve media coverage, information leaflets, education to the general public and talks to Third Sector groups about the importance of good lung health. The campaign would also aim to educate smokers and ex-smokers over the age of 35 about the symptoms of lung disease and, if they have symptoms, to encourage them to have an assessment (by screening) of their lung function.

The HSSD Communications Team will also support the consultant Nurse/AHP in producing a COPD webpage on the gov.je website. This will include information about COPD for individuals, teams and organisations – whether they are providing care, receiving it, or supporting others. The website would provide links to other respiratory conditions and to relevant Third Sector organisations.

Self-management and Patient Record materials

[15] Available at http://www.gsk.com/uk/joint-working/case-studies-walthamstow.htm (Accessed 24 Oct 2011).

Patients with COPD will receive a Self-management Plan and Patient Record in a booklet format from their GP upon confirmation of the COPD diagnosis. The Self-management Plan explains to the patient what COPD is, how they can manage their symptoms, how to cope with their COPD and how to improve their health and wellbeing. The booklet will include information for recording their medications, oxygen status, lung function, in order to monitor symptoms and prevent exacerbations. It will also provide guidance on breathing techniques, healthy eating, awareness of what types of weather conditions may worsen their disease and details of useful contacts.

The patient record booklet will also include a peel off oxygen alert card to make sure all healthcare providers are made aware of the patient's condition (so that neither too much nor too little oxygen is administered).

The record booklet will be used by the Specialist Respiratory Team, GPs and other professionals as a patient-held record. In time this will be replaced by an integrated IT-based multidisciplinary care plan. This could be hosted on the GP central server (GPCS) if permissions were granted from GPs. For the majority of patients, it is envisaged that GPs will devise the care plan following confirmation of diagnosis. The Specialist Respiratory Team are likely to devise the care plan for patients with severe disease who do not already have a care plan.

Expert Patients Programme (EPP)

An Expert Patients Programme (EPP) and peer networks will be developed in Jersey to encourage self-help and mutual support amongst people with a long term condition. A typical programme consists of a six week self care skills training course aimed at helping the individual better manage their long term condition on a daily basis.

These programmes have been extremely effective in other jurisdictions including the UK, where the Department of Health has promoted the concept of user-led self management courses. Since the UK introduced the Expert Patients Programme, evidence shows that participants feel more confident in managing their condition, make more effective use of healthcare resources, have fewer attendances at Emergency Departments and fewer hospital admissions, and feel better prepared for consultations with healthcare professionals[16]. ,

Patients with COPD will be provided with support and guidance to enable them to self-manage their long term condition. EPP training will be based around the 'Self-management for Life' course. This supports patients and their carers to make informed choices about their lifestyles, thereby reducing demand on services in the longer term and slows the progression of their condition through improved management and monitoring.

Lay volunteers will be identified from amongst patients attending courses. These individuals would themselves become trainers, thereby supporting a cascade of support.

[16] Chief Medical Officer. *The expert patients programme.* Department of Health, 2007. www.dh.gov.uk/en/Aboutus/MinistersandDepartmentLeaders/ChiefMedicalOfficer/Archive/ProgressOnPolicy/ProgressBrowsableDocument/DH_4102757

They will also provide ongoing support, guidance and advice to other patients and their carers.

Training packages will be delivered to clinicians and professionals, including GPs, to increase their awareness and understanding and to encourage their support of patients in the new behaviours.

The Expert Patient Programme Manager will develop links with EPP co-ordinators in other jurisdictions, in order to inform the detailed design and development of the programme. (S)he become a 'super-trainer' (able to train patients to be trainers). An annual licence to run the EPP programme would be obtained.

Third Sector

The Third Sector will continue to be integral in supporting people with COPD.

Key organisations are the Breathing Space support group, the Jersey Asthma and Respiratory Society and Family Nursing and Home Care. These and other Third Sector organisations play a central role in providing peer support and direct services for patients with respiratory conditions. A patient representative has been included in this OBC work and wider involvement of the Third Sector will ensure that the FBC is co-produced and is cognisant of the needs and wishes of patients and carers.

3.3.4 Pulmonary Rehabilitation

Pulmonary rehabilitation is run by physiotherapists. It is an evidence-based intervention for patients with COPD which aims to prevent or reduce de-conditioning (loss of muscle tone and endurance due to chronic disease) and facilitate effective self-management. Pulmonary rehabilitation has been shown to reduce patient symptoms, disability and hospital admissions[17]. It combines strength and endurance training with functional exercise, to achieve maximal functional independence through improved self-management of the disease with education which addresses specific medication, nutrition, psychological, social and behavioural issues.

The provision of pulmonary rehabilitation will be increased to meet the recommendations stated within NICE guidance[18] This states that people with mild COPD are generally not sufficiently disabled by their condition to warrant participation in formal pulmonary rehabilitation programmes (MRC Dyspnoea grades 1 & 2). People diagnosed with MRC Dyspnoea grade 3 should be offered pulmonary rehabilitation as soon as possible after

[17] Pulmonary rehabilitation post-exacerbation has been shown to reduce re-admissions of patients by 26% with cost effectiveness demonstrated. Seymour JM, Moore L, Jolley CJ, Ward K, Creasey J, Steier JS et al. Outpatient pulmonary rehabilitation following acute exacerbations of COPD. Thorax 2010, 65(5); 423-428.

[18] NICE website. *NICE COPD quality standard*. www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp (accessed 07 November 2011).

this grade of dyspnoea is identified. In addition, all patients who are admitted to hospital for an acute exacerbation will have post exacerbation pulmonary rehabilitation provided within six weeks post discharge as this is known to achieve the most effective outcomes. The increase in pulmonary rehabilitation provision will also enable the service to be delivered in a community setting.

On completion of the pulmonary rehabilitation programme, patients will receive an exercise referral. Six blocks of five exercise referrals sessions will be provided free of charge. In addition, patients will be encouraged to make use of health walks, which are run by volunteers free of charge and include walks suitable for people with COPD (of short duration without inclines and with plenty of opportunity for regular stops).

3.3.5 Community multidisciplinary team

Community multidisciplinary teams are outlined in the Dementia OBC. They will comprise co-located teams, with a Single Point of Access and working within agreed protocols such as a holistic Common Assessment Framework and integrated care pathway. The community multidisciplinary teams will have an important role in providing ongoing home care support for patients with COPD who are not at immediate risk of exacerbation.

24 hour home care support will be available as necessary, to enable patients to be cared for in their own homes. This will include support with activities of daily living such as laundry, meals, shopping etc. The aim is to enable patients to be supported in their own home, reduce the burden on unpaid carers and reduce the need for admission to a care home and support independence for longer.

Equipment, aids and adaptations such as walking aids and stair lifts would help maintain independent living.

3.3.6 The Multidisciplinary Specialist Respiratory team supported by telehealth

The Specialist Respiratory Team will ideally be based in the same building/offices as the Community Multidisciplinary Team and will provide specialist input. The specialist team will comprise the Consultant Physician, Consultant Nurse / AHP and three specialist respiratory Nurses, community Physiotherapist and a Dietician. Further input will be provided by occupational therapy, psychology, social workers and the end of life team as required (resource for these roles are incorporated into the Intermediate and EOL OBCs). The Specialist Respiratory Team will also work closely with GPs and the ambulance service.

It is expected that many of the patients with mild COPD will be managed by their GP and will not require specialist or Community Multidisciplinary Team input. It is intended that GPs will call upon the Specialist Respiratory Team for support rather than referring a patient with COPD into hospital.

The Specialist Respiratory Team will deliver specialist care in the community for people with severe COPD at risk of exacerbation in order to help them remain in their own homes and as well as possible. The specialist team would perform the assessment and identify the co-ordinated care needed and where possible would then hand over to the Community Multidisciplinary Team.

Risk stratification would be undertaken by the Specialist Respiratory Team, working with GPs and the hospital, especially the Emergency Department, to identify patients who are at most risk of admission and/or presentation in the Emergency Department.

A virtual ward will be used, with telehealth providing remote monitoring of vital signs to support proactive management, fast response and prioritisation of workload. The virtual ward will facilitate personalised care in an individual's home, guided by the individual's choices.

Virtual wards have been successful in other jurisdictions, particularly for patients with the highest predicted risk of emergency readmission. A virtual ward does not use any actual hospital building or hospital beds; patients are cared for in their own homes but the systems, multidisciplinary staffing and ward round routine of a real hospital ward are applied to enable intensive, dynamic and personalised case management.

Within a virtual ward, patients with differing levels of need are allocated to different intensity virtual beds (i.e. patients are stratified according to their risk). Members of the Specialist Respiratory Team will hold an office-based virtual ward round at the beginning of each working day during which patients within the virtual ward will be discussed at different frequencies depending on their circumstances and stability. As an example, in a ward of 100 virtual 'beds', the five patients occupying the highest dependency 'beds' could be discussed daily, 35 patients could be discussed weekly, with the remaining 60 patients discussed monthly.

Telehealth monitoring will provide monitoring for vital signs. This will assist in determining which patients to prioritise for home visits or contact by telephone.

Upon receipt of a faxed/emailed referral, Specialist Respiratory Nurses will undertake holistic assessments in the patient's home using an agreed Common Assessment Framework. The Nurse ill suggest a package of care which closely matched the patient's needs and preferences, and will then co-ordinate and providing care to the patient and support to their carer(s). The Nurse will help to navigate the patient through the spectrum of physical and mental health care, including Third Sector provision, to secure the most appropriate on-going support.

The Specialist Respiratory Nurses will be able to prescribe certain medications, and will provide and co-ordinate care, bringing in other services as required, including 24 hour home care, night sitting service, carer respite, community physiotherapy, occupational therapy, social services support, psychology and dietetics. They will also access equipment, aids and adaptations to support independent living, plus the use of telecare alarm systems as necessary. The specialist oxygen service, provided by the Clinical Investigations Department, will ensure appropriate assessment of patients requiring short burst and long term oxygen therapy.

If hospitalisation was necessary, the specialist respiratory nurses will provide inreach into the hospital, working with ward staff and discharge co-ordinators to enable early discharge wherever possible.

Medical discussion between the Consultant Physician and GP will take place via telephone. The Consultant Physician will strive to ensure partnership working with GPs, enabling GPs to recognise the Specialist Respiratory Team as a critical support for patients experiencing exacerbations or at high risk of an exacerbation which could negate need for admission to hospital.

All members of the team will access one IT system e.g. PRISM. The team will have access to this system in the community using laptops and remote internet access. The possibility of linking with the GP central server (GPCS) at a future point, and the enhancement that could offer, will be explored as the GPCS project develops.

The Consultant Physician and Consultant Nurse will develop and maintain the COPD integrated care pathway and treatment protocols in line with NICE standards. The consultant Physician will be responsible for ensuring adherence across all part of the system.

As and when the patient's condition improves, specialist team input will be reduced as appropriate, and the patient will receive ongoing care from the Community Multidisciplinary Team and their GP, as necessary.

Telehealth

It is envisaged that telehealth monitoring will be used for 200 patients being managed within the virtual ward.

Telehealth will enable the Specialist Respiratory Team to robustly monitor and proactively manage patients. It provides daily monitoring of the patient's vital signs, e.g. blood pressure, pulse rate, blood oxygen levels and body temperature. If these recordings were outside of the patient's normal range, an alert would be received by the Specialist Respiratory Team.

Daily monitoring of vital signs can identify changes in condition, enabling the team to deliver appropriate specialist pharmacological and non-pharmacological interventions to a patient in their own home as necessary.

Telehealth, working within a redesigned pathway of care, can lead to:

- Reduction in risk for those living at home
- Rapid and appropriate response to emergencies
- Improved condition management
- Delayed admission to residential or nursing care
- Safer discharge from hospital or care
- Reduction in admissions to hospitals
- Reduction in falls
- Reduction in care packages
- Increase in choice, control and confidence
- Increase in self care
- Reduction in anxiety for carers

The Whole System Demonstrator programme was set up by the Department of Health in May 2008 to assess whether telehealth and telecare are value for money and effective, to provide a clear evidence base for investment decisions and to demonstrate how technology can supports people to live independently, take control and be responsible for their own health and care.

The programme is the largest randomised control trial of telehealth and telecare in the world, involving 6191 patients and 238 GP practices across three sites, Newham, Kent and Cornwall.

The initial findings published in December 2011 show that, if delivered within an effective system, telehealth and telecare can substantially reduce mortality, reduce the need for admissions to hospital, lower the number of bed days spent in hospital and reduce the time spent in A&E:

- a 15% reduction in A&E visits
- a 20% reduction in emergency admissions

- a 14% reduction in elective admissions
- a 14% reduction in bed days and
- an 8% reduction in tariff costs.

More strikingly they also demonstrate a 45% reduction in mortality rates. The UK Government has set out an ambition to extend the use new and emerging healthcare technologies to 3 million people over the next 5 years.

Met Office Healthy Outlook® Alerts

Healthy Outlook® is an automated forecast alert service provided by the UK Meteorological Office. It has been proven to help COPD patients stay healthier, has delivered substantial financial savings for the NHS and is a recommended case study in the Quality, Innovation, Productivity and Prevention (QIPP) programme.

There is a strong link between the weather and health, especially during cold winters when there are significant increases of mortality and morbidity. High levels of circulating infections amplify these effects and the impact is particularly marked among patients with COPD, who have a significantly increased risk of ill-health and hospitalisation during the winter months.

The Met Office uses 5 indicators of risks which are known to put the health of COPD patients at risk:

- level of circulating infections as determined by the UK Health Protection Agency
- a predictive algorithm regarding the weather
- threshold temperatures (hot or cold)
- air quality
- seasonal pattern

The Healthy Outlook forecast alert service provides patients with interactive telephone alerts advising them how to manage their symptoms better during high risk periods. Information about their responses to the interactive alerts would be provided to the Specialist Respiratory Team.

Healthy Outlook® has been evaluated by a number of PCTs in the UK. Bath and NE Somerset PCT implemented the service in 11 practices who recruited 41 per cent of their COPD patients. Their aim was to reduce hospital admissions for COPD patients in the winter. Practices using the service experienced a 51% decrease in COPD related emergency hospital admissions, while practices not taking part had a 1% increase in the same admissions over the same period. Bath and North Somerset PCT announced the reduction equated to 94 emergency spells and a potential saving of £235,000.

Healthy Outlook® will be used in Jersey for the 50 patients most at risk of exacerbations (the same group as those who will receive telehealth monitoring) plus a further 250 patients with severe COPD.

Specialist oxygen service and oxygen provision

Some people with COPD develop low blood oxygen levels and require treatment with short term bursts of oxygen (known as SBT). Some patients with low blood oxygen levels

need long-term oxygen at home for between 16 and 24 hours per day (known as Long Term Oxygen Therapy - LTOT).

Oxygen is not a prescribed drug on the GP formulary, but instead is treated as a product. Therefore patients in the community cannot access oxygen for the same cost as they will access prescribed medications, such as inhalers - patient on SBT pay 30% of the costs of their oxygen. GPs obtain oxygen for patients in the community on completion of a home oxygen order form (known as the HOOF), which ensures the patient is assessed by an expert Clinical Physiologist from HSSD to determine their exact oxygen requirements.

Anecdotally, those working with COPD patients report that some patients restrict their use of oxygen (for example, for periods during the day) in order to reduce cost. Restricting oxygen in this way can result in the patient's condition worsening, which in turn may lead to further medical intervention and hospitalisation.

As part of the COPD service, oxygen for SBT will be removed from the subsidised products list. This will cost approximately £10,000 per year.

Patients requiring LTOT are supplied with an oxygen concentrator (concentrators provide unlimited amounts of oxygen as they take oxygen from the air and provide it in a concentrated way through tubing which fits into the patient's nostrils). However, concentrators cost approximately 15 pence per hour in electricity to run. For patients who need to use a concentrator between 16-24 hours a day, their home electricity costs increase rapidly and this acts as a further financial disincentive to discourage use. To add to their costs, patients on LTOT also require cylinders of oxygen for portability and back-up.

In the UK, patients requiring oxygen are provided with LTOT. They also qualify for an electricity reimbursement. Although outside the scope of this OBC, discussion will take place with the Social Security Department to request that oxygen be added to the list of Prescription Only Medicines. In addition, discussions will be held with the Social Security Department to request an electricity subsidy to be paid from the Health Insurance Fund. In total, it is estimated such a subsidy would cost approximately £35,000. This would end the inequality in patient's use of oxygen to treat their condition and reduce their risk of deterioration as a result of limiting their home oxygen use.

Ambulance Service: Extended training and close liaison with specialist team

The Specialist Respiratory Team will not provide services out of hours. Out of hours response and at-home stabilisation will be provided by the Ambulance service, supported by training provided by the Consultant Physician. The Consultant Physician may also consider providing training to the rapid response team which will form a part of the community multidisciplinary team.

Currently, the ambulance service are providing response and at-home stabilisation for some regular COPD patients. The ambulance crew administer the patient's own medication and oxygen and offer reassurance and support. Sometimes, this reduces the

patient's anxiety in the middle of the night, calms their breathing difficulties and the patient opts to remain at home.

Information will be provided to the Ambulance service regarding which patients are appropriate for at-home stabilisation. Crews will then coordinate and communicate with the Respiratory Specialist Team the following morning.

Future development

Initially, the newly formed Specialist Respiratory Team will focus on the management of patients with COPD. In future years, this may be expanded to include patients with other respiratory conditions such as fibrosis, asthma, bronchiectasis etc.

In 2014 it is envisaged that extra specialist staffing resource will be added to the team to enable a similar service for the management of Coronary Heart Disease in the community. In this way, COPD would act as a template model for changing the management of other long term conditions to be community focused.

With each long term condition, the Consultant Nurse will drive the service redevelopment and a Consultant Physician will be seconded (or temporarily appointed) for a 12 month period to clinically lead the transformation of their specialist area.

3.3.7 Carer Respite

Unpaid family carers deliver a large proportion of day to day care, which can affect their own physical and mental health.

As outlined in the Dementia OBC, a Carers Support Budget will be made available. This will be up to £50 p.w and £2,500 per annum, ringfenced to meet carers' needs, once these needs are identified via a carer's assessment. Carers eligible to access the budget would be residing in the same property as the cared for person and providing a 'substantial' amount of care. In exceptional circumstances carers who are not residing with the cared for person would be able to access the Carers Support Budget.

An assessment of emotional, psychological and social needs would be undertaken by a Carers Support Worker. Interventions would then be identified in a care plan, e.g. promote the carer's social inclusion – particularly where there are one off needs or for respite.

Evidence*:* One study found that 65% of the intervention group were living at home after 30 months, compared to 26% in the control group[19], while another study showed that the median time of residing in the community following a period of comprehensive support was 647 days in the intervention group and 396 days in the control group[20].

The Carers Support Workers would also:

- Provide advice on available peer support

[19] Brodaty H, Gresham M and Luscombe G, The Prince Henry Hospital dementia caregiver's training programme. *International Journal of Geriatric Psychiatry*, 1997; 12(2): 183–92.

[20] Eloniemi-Sulkava U, Notkola IL, Hentinen M, et al., Effects of supporting community-living demented patients and their caregivers: a randomized trial. *Journal of the American Geriatrics Society*, 2001; 49(10): 1282–87

- Offer specialist advice and information on services
- Ensure that 24-hour information and support service is relevant to individuals and their carers
- Identify and develop a range of social activities to be jointly available to individuals and their carers
- Offer or signpost access to specific carer education programmes
- Promote the inclusion of carers in planning and decision-making and support individual carers to participate as required
- Offer advice and practical support to help carers maintain employment
- Promote access to carer support services for individuals who may be hard to reach or reluctant to seek or accept advice or support

3.3.8 Intermediate care team

The Intermediate Care service will provide care for all services users, including those with long term conditions for 6 – 8 weeks. The service will work closely with all other aspects of the system to ensure individuals are identified early, their care is co-ordinated, and the transition to longer terms services, where necessary, is timely and smooth.

The Intermediate Care service will comprise co-located physical, mental health, therapy and social care professionals, working within an Intermediate Care Resource Centre, providing:

- Access to 24/7 Nursing and home care, including night sitting
- A Rapid Response multi-disciplinary team, providing care for up to72 hours as an alternative to an admission
- Community reablement, providing care in the service users' home or residential home to increase skills for independent living
- Short term community beds providing admission avoidance (Step-up Unit) and rehabilitation and recovery (Step-down Unit) from inpatient settings
- Day treatment unit
- Telehealth and telecare

The Intermediate Care service will be delivered in partnership between HSS, independent providers, the Third Sector, Parishes and Primary Care.

It will link with the Single Point of Access (SPA), which co-ordinates all referrals, provides appropriate responses to service user need, coordinates care and monitors the service user's progress through the care pathway.

Risk stratification will be undertaken to identify those patients who are at risk of presentation at the Emergency Department, either through an exacerbation of a chronic disease or with a high risk of developing the first signs of one.

Care co-ordinators will support the individual, ensuring needs assessments are completed and individual care plans are produced.

Whilst UK community models for COPD suggest that most patients can be cared for within their own homes, evidence from a national audit for COPD care suggests that

30% of COPD admissions could benefit from a Step-down facility[21]. The Step-down Unit could therefore support approximately 66 COPD patients in Jersey in 2013 (based on 2010 COPD admissions data). These are likely to be patients who are considered medically fit for discharge, but who require a few extra days support to be able to return to their own home or residential care. The Lead for the Intermediate Care OBC has confirmed the projected capacity within the Step-down Unit would be sufficient.

For patients with COPD who are not coping at home with an exacerbation the use of Step-up instead of hospital is less clear. If patients with COPD cannot be managed at home, then it is likely they would require further investigations, such as arterial blood gases and a chest x-ray. They are also likely to require oxygen therapy. Consequently, admission to hospital, rather than to a Step-up unit, would probably be the most appropriate.

3.3.9 Hospital liaison

The Specialist Respiratory Team will include an acute Respiratory Nurse Specialist. When a patient cannot be managed at home and is admitted to hospital, the Specialist Respiratory Team will be notified. The Team will liaise with ward staff and discharge co-ordinators to agree care bundles. They will co-ordinate and deliver the care bundles as necessary to enable the patient to return home as soon as possible, and will liaise with discharge planning coordinators and the Step-down Unit to plan discharge. The care bundles will ensure the patient is stabilised as soon as possible through rapid effective treatment.

As junior doctors rotate on a 6 monthly basis, a Ward Champion will be nominated by the Chief Nurse. The Ward Champion will be trained to ensure continuity in using the COPD care pathway. Education will also be provided by the Specialist Respiratory Team for junior doctors early on in their rotation to make them aware of the care pathways and protocols.

The Specialist Respiratory Team will liaise with the audit team and COPD Ward Champions to ensure COPD care bundles are utilised appropriately. They will provide regular feedback to ward staff.

3.3.10 Palliative support

The End of Life Care OBC identifies the new model for palliative care. The End of Life service aims to:

- Provide patient choice and equity
- Deliver quality services that are outcome focussed and measurable
- Improve the patient and family experience in relation to End of Life care
- Ensure long term sustainability within a model of community based care provision
- Reduce the number of episodes associated with End of Life within the hospital
- Reduce hospital length of stay associated with End of Life care

[21] Survey of early discharge schemes from the 2003 UK National COPD Audit.
Simon J. Quantrill, Derek Lowe, Harold S.R. Hosker, et al. *Respiratory Medicine*, *Volume 101, Issue 5*, *May 2007*, *Pages 1026-1031*.

The new service model will provide appropriate choice for people in Jersey in relation to End of Life care. It will be based on principles of privacy, dignity and choice. It comprises:

- The Gold Standards Framework (GSF)
- The Liverpool Care Pathway (LCP)
- End of Life Register
- Specialist Palliative Care Team, providing training and support
- Multidisciplinary Team working
- Rapid Response, 24/7 Home Care team and Night Sitting
- Bereavement Support

A standardised and consistent approach will be implemented, following the Gold Standards Framework (GSF) and the Liverpool Care Pathway (LCP). This will be supported by island-wide policies, guidelines and standards, to support strong governance. It will also enable Jersey to measure outcomes and compare with other centres. The LCP is used in more than 1,800 centres across the UK, and the Gold Standard framework is also in use across many PCTs across the UK.

An island-wide register will be developed, with the knowledge and consent of the patient. This will record the patient's preferred priorities of care and will provide information to any professional. The register will also provide linkage to appropriate support for patients and their families and will be support regular multidisciplinary team meetings.

The patient will remain under the care of their GP, with support from the Specialist Palliative Care Team. Generalist support when required will be provided by the Multidisciplinary Community teams.

The LCP will be adapted for Jersey. Care will be provided in a wider range of settings, including in the individual's home. This will be supported by a range of health and social care professionals, including a Rapid Response, 24/7 Home Care team and Night Sitting service, which are outlined in the Intermediate Care OBC.

The Specialist Palliative Care Team will provide training and ongoing support to enhance the knowledge and skills base across professionals and training will be. The development of skills across a broad range of different professionals will lead to a change in behaviour and practice in relation to the "difficult conversation" and advanced treatment planning, using the Gold Standards Framework clinical prognostic indicator as a guide.

Bereavement support is an essential aspect of End of Life Care. Although not all people will want or need the support, clear signposting and equitable access to bereavement services will be required.

The new model of care is in the process of being developed, led by a Palliative Care Nurse Specialist and a Liverpool Care Pathway Nurse. These are both acute-based posts funded through a charity.

3.3.11 Activity Impacts

The demand for COPD Services is projected to increase, due to the ageing population, the effects of our smoking habits and the efforts to identify undiagnosed patients and unmet need.

There are an estimated 3,000 individuals with COPD in Jersey in 2010. 280 to 300 individuals are known to HSSD.

The number of individuals with COPD is projected to increase to 4,500 by 2020 and could increase to 5,300 by 2040 (however, if stop-smoking strategies work, there could be a reduction in the incidence of COPD by 2040). Of these, it is anticipated that the majority will have mild to moderate COPD. At present, it is difficult to state an exact breakdown of the percentages of patients who currently have mild, moderate or severe COPD as there are no disease registers. As disease registers are introduced (from late 2012), prediction will be come easier and service models will adjust accordingly.

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The Specialist Respiratory Team will provide care and support in community settings for those with severe COPD, and structured care for individuals with mild – moderate COPD will be provided by Primary Care, working with the Community Multidisciplinary Teams.

Recent evidence from the DH Whole Systems Demonstrator evaluation indicates that redesigned services (including Expert Patient Programmes and risk stratification), supported by telehealth, can reduce Emergency Department contacts and non-elective admissions by up to 20%. This has a consequential impact on Ambulance journeys and acute bed days. Expert patient programmes should also contribute to reducing COPD patient A & E attendances and ambulance journeys, whilst also reducing outpatient appointments.

Service	Activity Impact

Screening	• In addition to GP screening, screening sessions would be held in the Clinical Investigations Department. These sessions are currently funded by the Jersey Asthma and Respiratory Society therefore the number of sessions to be held per year would require consultation and agreement with the Asthma and Respiratory Society
	• The number of individuals to be screened per year would be confirmed following consultation with the Society
	• Number of new patients who will be identified by screening:
	  • 2013 - 59
	  • 2014 - 88
	  • 2015 - 118

Structured care in Primary Care	By 2015: • 50 -100 people will be referred from screening to Primary Care per year for a confirmatory diagnosis • 70% of patients with COPD will be known to GPs • 936 patients will have a confirmatory diagnosis • Approximately 1000 follow-up appointments providing structured care (as per NICE guidance) per year

Service	Activity Impact
Awareness raising, healthy lifestyle promotion and self care and Expert Patient Programme	• In 2013, 100 patients will receive self management for life training • From 2014 onwards, 200 patients p.a. will receive self management for life training • From 2013, 250 people will be referred to exercise referral each year of which the majority are expected to take up the service • From 2013, 800-900 referrals to smoking cessation per year. Some patients will need more than one quit attempt. If the smoking cessation service is moved to a community provider, double the potential numbers of people can be seen • In 2013, 150 health and social care professionals will receive training to support patients in self management for life.
Pulmonary Rehabilitation	• An additional 200 patients per year will receive pulmonary rehab (only 50 patients per year can currently access pulmonary rehab)
Community multidisciplinary team	• The number of COPD patients who would require ongoing 24 hour home care support from the Community Multidisciplinary Team is currently unknown however it is likely to be in the region of 200 patients.
Specialist Respiratory Team	• Community care (including a Community Physician review annually) for approximately 200-300 COPD patients per year from 2013 • Increased activity for dietetics - 195 predicted new referrals for 2013, 230 in 2014 and 271 in 2015; 6 x 1hr education sessions in hospital and 6 x 1hr education sessions in community • Increased activity for speech & language therapy and community physiotherapy • Increased activity for the Clinical Investigations Department (oxygen service)
Carer Respite	• Demand for carer respite due to COPD is currently unknown however it is likely to be in the region of 100 patients.
Intermediate care team	• Intermediate Care Team activity projections are contained within the Intermediate Care OBC

Hospital liaison	• Reduced admissions - currently an estimated 260 admissions per year for COPD, with an average length of stay of 8 days.
	  ○ 2013 – reduction of 39 admissions (312 bed days)
	  ○ 2014 - reduction of 77 admissions (616 bed days)
	  ○ 2015 - reduction of 106 admissions (848 bed days)

Service	Activity Impact

	• Reduced length of stay (from 8 days to 3) for 30% of patients requiring hospital care:
	  ○ 2013 - 66 patients (330 total bed days reduced)
	  ○ 2014 - 55 patients (275 total bed days reduced)
	  ○ 2015 - 46 patients (230 total bed days reduced)
	• Reduced Emergency Department attendances by 90 per year from 2013
	• Reduced Outpatient appointments by 10% in 2013, and by 20% in 2014 and in 2015

Palliative support	• End of Life activity projections are contained within the Intermediate Care OBC

3.3.12 Workforce Impacts

The COPD service will deliver a change in traditional roles, moving to a more community based model. Health and social care, Primary Care and Third Sector staff will all need the skills and competencies to work within the agreed integrated care pathways, with improved communication and sharing of roles in order to avoid duplication and gaps in the service.

Service	Staff	Number	Comment (e.g. timing)
Screening	Included in Primary Care		
Structured care in Primary Care	Primary Care advise there is adequate workforce capacity within practices to provide screening and structured care		
Awareness raising, healthy lifestyle promotion and self care and Expert Patient Programme	Smoking cessation Expert Patient Programme Manger	TBC – service being tendered 1 FTE	Sufficient community pharmacist resource
Pulmonary Rehabilitation	Junior Physiotherapist Rehabilitation Assistant Input from currently employed allied health professionals to deliver training: • Respiratory nurse • Smoking cessation Co-ordinator • Occupational Therapist • Pharmacist • Dietician • Psychologist	0.2 FTE 0.2 FTE 30 hours/year 20 hours/year 20 hours/year 30 hours/year 20 hours/year 20 hours/year	
Community multidisciplinary team	Included in Intermediate Care OBC		
Specialist Respiratory Team	• Consultant Physician for 12 months • Consultant Nurse or Allied Health Professional • Respiratory Nurse specialists • Community Senior Physiotherapist	1 FTE 1 FTE 2.5 FTE 1 FTE	To provide 0.56 FTE of Community physio and 0.44

	• Dietician • Speech & Language therapists • Administrative assistant • Clinical Physiologist • Administrative assistant • Manual worker / engineer	0.5 FTE 0.2 FTE 1 FTE 0.5 FTE 1 FTE 0.5 FTE	FTE of Pulmonary Rehabilitation Occupational Therapy, Psychology and Social Worker input is costed in Intermediate Care and IAPT OBCs
Carer Respite	Included in Dementia OBC		
Intermediate care team	Included in Intermediate Care OBC		
Hospital liaison	No extra staffing is required in the hospital. Each ward will nominate a COPD Ward Champion		
Palliative support	Included in End of Life Care OBC		

Staffing levels will be constantly monitored and reviewed through 2013 - 2015 to ensure the workforce is appropriate for caseload volumes and intensity.

It is expected that the intensity of work will be high in 2013, as unmet need is identified, more COPD patients are diagnosed and the new service model is developed and embedded.

The difficulties in recruiting and sustaining COPD expertise will be monitored, as it is a key risk.

3.3.13 Infrastructure impacts

Estates. The new community Specialist Respiratory Team will require office space. Co-location with the Community Multidisciplinary Team and/or Intermediate Care Team would be preferable, in order to support coordination, communication and integration, and to maintain a focus on the patient / service user and carer.

Information Technology.

'One stop' website

Initially, a webpage for patients with COPD will be developed on gov.je with support from the HSSD Communications Team. This will provide patients with information about service availability, access to the Expert Patient Programme, pulmonary rehabilitation,

exercise referral, healthy walks etc along with contact telephone numbers e.g. for the Specialist Respiratory Team.

From 2014, health and social care professionals, children, parents and families will access information via a citizen's portal. The citizens' portal will enable care to be designed by the individual and care professional, based on the individual's needs and, where appropriate, they choices. It will also enable care packages to be delivered and monitored in a coherent and co-ordinated manner.

The citizen's portal will provide real time information regarding service availability, self care, family support groups etc, to assist the child and family with feeling more in control of their situation. The citizen's portal is included within the IT cross cutting workstream.

Patient record system

As noted in the Intermediate Care OBC, in order to streamline processes and support a single care pathway for service users/patients, a new IT system will be required with integration of current IT system.

The Specialist Respiratory Team will use one IT system within which care and results of investigations for COPD patients will be recorded; this should be the same IT system as used by the Intermediate Care team and should link with the GP Central Server (the options for which system will provide IT support will be explored by the HSSD IT team). Access will be through laptops and remote internet access, to support community working. For costings purposes, interaction with the GPCS is considered outside the scope of this business case. The system currently used by the Clinical Investigations Department is the PRISM system.

If a citizen's portal was developed in the future as a system for storing patient notes electronically, this would enable the team to share electronic patient records with the patient, with GPs and with other healthcare providers (assuming the patient gave permission). This will greatly enhance the interaction between all health and social care professionals.

Risk stratification tools

The possibility of using UK Department of Health risk stratification tools such as PARR ++ and the Combined Model will be explored. These are used by PCTs to identify patients most at risk of admission.

However, this OBC assumes that the Specialist Respiratory Team would not be able to make use of these tools initially, due to a lack of training and risk stratification will be undertaken through reviewing hospital admissions in the previous two years.

In the past two years GPs have received an additional £4 per patient, in order to support and fund IT within Primary Care. As QIF develops, GPs will need to maintain Disease Registers, including for COPD, in order to ensure needs are identified, care provided and payments under QIF accurately claimed. This, along with the focus on screening, and the GPCS project, should significantly increase the information available regarding COPD prevalence within Primary Care.

To accurately determine the impact of the COPD Service, business information and intelligence will be required. Robust systems will be required to enable data gathering such as:

- Numbers attending screening at the Saturday morning information sessions or at GP practices
- Number diagnosed with COPD and at what severity (mild, moderate, severe)
- Number of patients on the COPD Register
- Number of patients who received structured care
- Changes in GP or hospital prescribing patterns
- Number of Specialist Respiratory Team visits (by staff type)
- Caseloads
- Amount using telehealth
- Patient and carer-reported outcomes
- Numbers on SBT and LTOT
- Numbers completing the Expert Patient Programme
- Number of lay volunteers
- Referrals to exercise walks
- Smoking cessation referrals and success rates
- Third Sector activity
- Use by COPD patients of Step-up or Step-down facilities
- Use of other Intermediate Care services e.g. night sitting
- Emergency Department presentations were for COPD
- Repeat attendances (in a rolling 12 month period)
- Ambulance journeys for COPD patients with an exacerbation
- Hospital admissions with a primary diagnosis of COPD
- Average length of hospital stay for COPD exacerbations
- Number of individuals transferred to long term care homes due to a primary diagnosis of COPD

3.3.14 Service Delivery: Benefits

Anticipated benefits include

- Choice, control and confidence to make informed lifestyle choices and therefore improve quality of life
- Easy access to information
- Improved self-management and monitoring of conditions
- Reduced time spent travelling (either for patients or professionals)
- Increased confidence in service users, leading to reduced exacerbations
- Increased confidence in carers
- Time saved by referrers by having a Single Point of Access
- Personalisation of care
- Improved service user experience through receiving care across a seamless pathway
- Increased independent living by supporting people in their own homes where possible
- Reduced Emergency Department presentations and unnecessary admissions
- Reduction in delayed transfers of care
- Reduced hospital length of stay
- Reduction in the rate of admissions to residential and nursing homes
- Faster and easier transition between acute and community services

- Increase in the number of people maintained in the community
- Proactive management of COPD
- Optimum use of resources, with Primary Care and the Specialist Respiratory Team working together to adopt a prioritised and coordinated island-wide approach
- Improved integrated working, coordination and communication between constituent organisations
- Care professionals able to prioritise their workload, with reduced unnecessary visits to patients
- Increased support for Third Sector organisations
- Integrated care pathway with explicit trigger points and clear access channels to ensure that individuals, families and carers seek professional help in a timely and appropriate manner
- Earlier identification of patients at risk of presentation at the Emergency Department
- Adoption of a wellness model through health campaigns that promote smoking cessation and early identification / treatment and interventions for COPD

3.3.15 Anticipated risks

- Lack of willingness to engage in the new model of care
- Disagreement regarding service provision
- Inadequate resources and lack of investment / funding
- Lack of capacity to plan and implement the new COPD service
- Sectors of the population may reject or be slow to engage with self-care
- A lack of acceptance that services of the need for change
- Continued recruitment and retention challenges
- Lack of capital investment in IT systems
- Changes in funding streams and charging policy, including a lack of clarity on the likely impact of the LTCB
- Lack of available information and data, both for commissioning / decommissioning and for assessing benefits, outcomes and value for money
- Challenges with information flow and accessibility
- Unrealistic expectations from service users and professionals
- Accommodation availability
- Lack of an integrated and/or shared IT system

3.3.16 Dependencies and enablers

The new COPD model is dependent upon

- The development of Intermediate Care, particularly the Step-up / Step-down Units, as outlined in the Intermediate Care OBC
- New community MDTs, as outlined in Dementia (physical and mental health community MDTs for older adults, co-located at Overdale)
- The development of End of Life pathways, as outlined in the End of Life Care OBC
- The development of Improving Access to Psychological Therapies, supporting GPs in identifying and treating anxiety and depression in people with a long term condition, as outlined in the IAPT OBC
- Commissioning GPs to provide structured care
- Co-operation from acute services and hospital discharge co-ordinators regarding case finding
- Co-operation between acute services and the Step-up/Step-down Units to facilitate seamless transfers between the hospital and community
- Continued Third Sector commitment, particularly regarding funding of screening

- Existing services sharing the vision for COPD care and participating in new ways of integrated working
- GP use of anxiety and depressing score as tool for early identification of LTC patients anxiety / depression
- Agreement of GPs to participate in care provision
- Reliance upon a new model for the smoking cessation service which will enable COPD patients to access smoking cessation support free of charge
- Access to GP central server and sharing of information
- Ability of nurses to prescribe
- Agreement of MDT model moving away from traditional 'medical' model
- Patient concordance with new approach to COPD care

3.4 Enablers

In addition this proposal resonates with the development of the Long Term Care Benefit.

Interactions will also be required with:

- The entire range of services provided for individuals and their carers (including Primary Care)
- Other States Departments
- Older Adults Policy group

And with:

- HSSD Business Plan 2012
- States Strategic Plan
- Medium Term Financial Plan
- Health and Social Services White Paper

Workforce:

The development of COPD will require workforce development, as new ways of working will be required, both in terms of skills, locations and care delivery.

Mechanisms will also be required to address the existing recruitment and retention challenges, both in terms of additional staff and changing skills and ways of working.

More specialist staff will be required, working in community settings. These individuals will need to be fully trained and supported.

Roles for professionals will evolve, for example, through enhanced roles in Nursing such as Community Matrons.

Estates:

As noted above, a suitable location will be required for the COPD Service, preferably co-located with the Intermediate Care Resource Centre or Community Multidisciplinary Teams for Older Adults.

Commissioning:

New COPD services will be robustly commissioned. Services will be provided transparently, with visibility on activity, outcomes and value for money. The provider

market will be supported, in order to sustain Jersey's vibrant Third Sector and other providers.

Metrics and outcome measures, including Patient Reported Outcomes, will be collected in order to assess the benefits provided, to contribute to future commissioning and to demonstrate value for money.

Primary Care:

Primary Care services are integral to the delivery of the COPD Service. This includes case finding, screening, providing structured care and supporting individuals long term.

IT:

IT and informatics will be critical to the service's success, as these will support multidisciplinary community working, support individuals in their own homes and provide visibility of outcomes, activity and benefits.

Awareness and information will require a range of media, including the citizen's portal.

In addition, IT will be required to support joint working between Primary Care and the Specialist Respiratory Team.

Telehealth is essential in supporting individuals in their own homes for as long as possible, and providing control, confidence, self care and active condition management.

Informatics:

Data and information will need to be improved in order to maintain the COPD Register, to monitor activity and to assess the benefits (both qualitative and quantitative, and in terms of outcomes).

Finance:

There is currently a lack of clarity regarding the impact of the Long Term Care Benefit on the COPD Service.

Legislation:

No legislative changes are required to enable the introduction of the new community based model of COPD. There are, however, some significant changes, which would impact upon and improve the community management of patients with COPD and help reduce the risk of exacerbations and hospital admission.

- Non-medical prescribing will enhance ways of working for the Specialist Respiratory Team, thereby enabling the Nurses and AHPs to be more effective in their management of the patient's condition
- Inclusion of a target within the Jersey Quality Improvement Framework to incentivise GPs to administer the seasonal flu vaccination to patients with COPD would improve uptake of the vaccine. Payment to GPs for the flu vaccine consultation could be met by the Health Insurance Fund.

3.5 The Financial Case

3.5.1 Revenue costs

The total additional recurrent revenue cost for the COPD Service (at 2015 prices) for the period 2013 – 15 is £1.7m.

The revenue cost is estimated to be:
2013 - £701,000
2014 - £1.3m
2015 - £1.7m

Non-recurring implementation costs are estimated at £85k between 2013 -2015.

The table below includes the costs for Long Term Conditions in community settings for heart disease and diabetes:

	2013 £'000	2014 £'000	2015 £'000	Total £'000
Implementation Costs	85	90	124	**299**
Recurrent revenue costs	701	1,344	1,652	**3,697**
Capital costs	21	-	-	**16**
TOTAL	**807**	**1,434**	**1,776**	**4,017**

The service will require an additional 8.67 FTEs to enable clinical care to take place within the community, to roll out and sustain an Expert Patient Programme and to reimburse GPs for providing structured care to patients with COPD.

3.5.2 Revenue savings

Cost containment of £1.1m is anticipated in the period 2013 – 2015.

A number of benefits are anticipated by the second quarter of 2015, including:

- Estimated total reduction in bed days at the general hospital of 2,611, which supports the hospital in managing the predicted future pressures (total cost containment between 2013-2015 of £1,044,400)
- Estimated total reduction in emergency department attendances of 180 (60 p.a.) (£5,100 cost containment p.a).
- Estimated total reduction in out-patient department attendances of 285 (total cost avoided between 2013-2015 of £28,500)

3.5.3 Capital costs

£21,000 of capital expenditure is required in 2013, with no additional capital costs thereafter.

3.5.4 Funding

In order to support COPD services being provided predominantly by Primary Care, new funding mechanisms need to be developed. Options include:

- An agreed sum to GP practices for each consultation provided to patients with COPD.
- An agreed sum per patient per year, based on the requirements of structured care. Payments would be made to GP practices on a quarterly basis following receipt of structured care consultation results

- A 'global sum annual payment' (as occurs in the UK) whereby each practice is paid an amount towards their costs for delivering essential and additional services, including staff costs (weighted according to certain criteria including their patient list size). In return for this global sum, practices would deliver specific services, such as those for people with long term conditions including COPD, CHD, diabetes etc as detailed within integrated care pathways and treatment protocols specific for each condition
- QIF payments for delivering specified care to individuals on the COPD Register
- QIF payments for achieving specified outcomes delivering specified care to patients with

The detail of Primary Care funding needs to be considered as part of the Primary Care cross-cutting workstream. It needs to consider, for example, payments for providing care to patients with co-morbidities.

Patients with COPD will not pay for community services.

The new service also proposes that the oxygen service is free to patients.

3.5.5 Managing risk

Due to the nature of this scheme there is an inherent risk of increasing capacity and costs within the community services while not achieving the level of intended cost deferments in the acute hospital sector. To minimise the financial risk we intend to:

- Identify robust metrics for monitoring quantitative benefits
- Monitor the COPD Service to ensure that maximum efficiency is achieved delivering a value for money service
- Monitor the acute metrics to ascertain impacts in the Emergency Department, non-elective admissions and length of stay
- Make staged investments to ensure the expected benefits are being realised.

3.5.6 Sensitivity analysis - scenarios

Given the size of Jersey and the number of .GPs per population, it is reasonable to assume that GPs in Jersey have a closer knowledge of their patients. Therefore, the assumption has been made that recorded prevalence of COPD will increase to 70% by 2015. A sensitivity analysis has been included within the costings to allow for the recorded prevalence to increase to 50% in 2013, 60% in 2014 and 70% in 2015.

3.5.7 Assessment of affordability and value for money

Based on the total anticipated activity, revenue spending for the new model for the 3 year period 2013-2015 is estimated to be in the region of £4 million.

The model of care proposed in this OBC would provide value for money as its principles have been tried and implemented in other jurisdictions with demonstrated benefits. In other areas, evidence has confirmed that where annual structured care to all patients with COPD is provided, where patients can readily access pulmonary rehabilitation and other evidence based COPD services, where teaching is provided to enable self-management, where specialist nursing input is promptly targeted to those most at risk of exacerbations and where telehealth supports the new models of community care, the need for expensive hospital care can be significantly reduced.

A model which proactively identifies and managed long term conditions in community settings offers the best value for money both now and into the future. Patients will be taught and supported in staying well and the right health care professionals will provide the right level of care to patients in the right setting with the right outcome.

Currently, co-payments in Primary Care prevents / discourages patients from attending their GP for regular care for their COPD. This prevents effective control of their disease and increases the risk of exacerbations requiring hospitalisation and perversely, once they have deteriorated and are in hospital, care is free. The new model provides patients with annual free GP consultations and access to services that will help maintain their lung condition, plus free care in the community to keep patients from requiring admission into hospital.

Over the 3 year period 2013-2015, cost avoidance from reduced admissions, bed days, Emergency Department attendances and Outpatient appointments is estimated to be in the region of £1.1 million.

The prevalence of COPD will increase for the next 20 years or more as the population ages and the full effects of our smoking habits over past decades take effect. However, it is a misconception to consider COPD as an 'old person's disease'; people who are currently economically active will also be affected, and an international quantitative survey in six countries showed significantly more people between 40 and 65 are likely to have COPD than has been previously recognised[22]. Improved screening and diagnosis for adults over the age of 35, with proactive care in community settings can help to ensure working age adults remain active and productive contributors to society. Keeping people of working age with COPD well and economically productive would therefore benefit hospital services, social services and the wider economy.

3.5.8 Verification procedures and assumptions

The Health Intelligence Unit estimated Jersey COPD prevalence as 3.8%; this equates to an estimated 3000 people in Jersey with COPD in 2011/2012. This was estimated based on the Dorset prevalence for COPD (which could act as a reasonable comparator) whilst also taking into account Jersey's higher rates of lung and head & neck cancers (primarily caused by smoking).

To determine how many patients with COPD would be seen by GPs, an assumption has been made that a higher recorded prevalence will be captured by GPs in Jersey (70% by 2015) compared to an analysis of UK modelled versus recorded prevalence of COPD by PCTs (30%). In addition, a sensitivity analysis has been included within the costings to allow for a 50% recorded prevalence of COPD in 2013, 60% in 2014 and reaching a maximum of 70% in 2015.

For the purposes of the OBC costs, a payment per GP consultation has been assumed, based on an adjusted payment per consultation from other HSSD/ Primary Care Body

[22] Fletcher MJ et al. COPD Uncovered: An International survey on the impact of chronic obstructive pulmonary disease (COPD) on a working age population BMC Public Health 2011,11:612.

Service Level Agreements. The exact funding amount and mechanism for GPs will be agreed through negotiation between HSSD and the PCB.

3.6 Implementation Actions and Timescales

Action	2012				2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Write the service specification																
Devise outcome measures and metrics																
Tender for services																
Agree funding amount and mechanisms with the Primary Care Body																
Full Business Case with stakeholders																
Business plan for the community team																
Workforce plan for new roles																
Funding agreement for new model																
Recruit new posts: Specialist Respiratory Team, Clinical Investigations Team, Pulmonary Rehabilitation, and Community Physio.																
Recruit Expert Patient Programme Manager																
Procurement of telehealth monitoring																
Expert Programme Manager to attend UK training																
Establish Specialist Respiratory Team																
Develop integrated care pathway and treatment / management protocols																
Train staff on telehealth																
Risk stratification and case finding – eligible and appropriate for telehealth																
Invite identified patients to participate in telehealth																
Invite identified patients to participate in telehealth																
Roll-out revised pathways with telehealth to 50% of																

eligible patients																
Set up Healthy Outlook® alerts																
Deliver training to Primary Care via joint GP / Consultant Physician clinics																
Joint working between all elements of the new service to roll out integrated care pathway, management protocols and treatment protocols																
Identify patients who may benefit from the Expert Patient Programme																
Commence Expert Patient Programme																
Continue roll-out of Expert Patient Programme																
On-going recruitment and training of patients able to facilitate the EPP																
Roll-out revised pathways with telehealth to remaining 50% of eligible patients																

4 Stakeholders

4.1 Stakeholder involvement in service model development

The Working Group involved / consulted in the development of this OBC and service model were:

Richard Jouault	HSSD Deputy Chief Executive
Dr Andrew Luksza	HSSD Consultant in Respiratory Medicine
Dr Linda Diggle	HSSD Head of Healthcare Programmes, Public Health
Dr John Coates	GP and COPD lead, Island Medical Practice
Hugh Neylan	KPMG
Dr Petra Schinle	HSSD Staff Grade – Respiratory Medicine
Patrick Le Coz	HSSD Senior Management Accountant
Christopher Leck	Project Director, Treasury
Suzanne Stephan	Patient representative
Mirium Prior	HSSD Clinical Effectiveness Manager, Public Health
Jacqui Bond	HSSD Respiratory Nurse Specialist
Alison Norman	Respiratory Sister, Family Nursing and Home Care
Andrew Norman	HSSD Chief Clinical Physiologist
Louise Woodland	HSSD Physiotherapist
Melissa Messervy	HSSD Physiotherapist
Celine Brown	Indigo House, Practice Nurse
Jacqui Coates	Island Medical Centre, Practice Nurse
Lisa Perkins	HSSD Head of Speech & Language Therapy
Elspeth Snowie	Family Nursing and Home Care, Clinical Effectiveness Facilitator
Esta Williams	HSSD Ambulance Control Centre Manager
Gill Rattle	HSSD Head of Occupational Therapy Services
Kerry Bartlett	HSSD Senior Occupational Therapist
Natalie Mallet	HSSD Human Resources Officer
Tracey Winkley	HSSD Human Resources Officer
Mary Campfield	HSSD Adult Social Services, Team Manager

The working group identified that going forward, the key stakeholders for development of the FBC and implementation of the service change include:

Stakeholders	Responsible	Accountable	Consulted	Informed
HSSD Community & Social Services and Health Promotion	✓	✓		
Patients and carers			✓	
Primary Care			✓	✓
Asthma and Respiratory Society			✓	✓
Ambulance – main service, community			✓	✓

alarm and combined control, patient transport services				
Social Security (provide Health Insurance rebate and benefits)			✓	✓
Specialist nurses Family Nursing & Home Care			✓	✓
Secondary care physicians, Clinical Investigations Department, Pulmonary Rehabilitation			✓	✓
HSS social work team			✓	
End of life care providers			✓	
Psychology			✓	
Other health professionals – Physio, Dieticians, OT, Speech & Language Therapy	✓	✓	✓	✓
Community Pharmacists			✓	
Politicians, including the Minister for Health and Social Services			✓	

4.2 Communications to Internal Stakeholders

The OBC Lead will update attendees of the OBC workshops via email as progress and developments occur.

4.3 Communications to External Stakeholders

Some external stakeholders will require communications at a particular point or stage in the programme; others will want or benefit from communications throughout.

The OBC Lead will update external attendees of the OBC workshops via email of progress as developments occur.

5 Conclusion and Next Steps

5.1 Conclusion

There are believed to be up to 3,000 individuals with COPD in Jersey at present. By 2040 it is projected this may increase to 5,300.

Current services are predominantly hospital-based. There is limited specialist care provided in community settings, and services are not provided 24-hours. Co-payments for GP consultations, and for oxygen can reduce access to these two important areas of care for COPD. This can lead to long term conditions being poorly managed, with resulting Emergency Department attendances and non-0elective admissions.

The proposed new service for managing COPD will shift the balance of care from the hospital to the community. It will focus on identifying patients over the age of 35 through increased awareness, targeted case finding and screening.

Monitoring and care for individuals with mild – moderate COPD will be predominantly based in Primary Care, where GPs will provide structured care and a free consultation to the patient each year.

Care for individuals with severe COPD will be provided by the Specialist Respiratory Team, led by a Consultant Physician and Nurse / AHP. This team will work closely with enhanced Pulmonary Rehabilitation, supported by telehealth and the Met Office Alert. They will work closely with the patient and carer to understand their needs and preferences, and will deliver care in community settings (predominately in the patient's own home). Care will be proactive, and the patient's condition monitored, in order to prioritise and adapt care and avoid exacerbation and hospitalisation. This team will also work closely with the Community Multidisciplinary Team.

This will be supported by the citizen's portal, and in the meantime by a 'one stop' website.

Although this change will be a new model for Jersey, these models are well developed and demonstrated by many jurisdictions, and the potential benefits can include a 45% reduction in mortality, almost 20% reduction in non-elective admissions and an increase in confidence, choice and control.

5.2 Capacity and project management requirements

This project cannot be delivered within current capability and capacity.

Clinical leadership is required. This will be provided by the Consultant Physician and the Consultant Nurse / AHP.

In order to finalise the FBC, the clinical aspects of the Primary Care element of the COPD service, and then the payment mechanisms, will need to be agreed.

The development of the Full Business Case will require additional resourcing. In addition, project management resource is required from 2012 in order to manage the developmental and delivery stage of this project.

Support and resources are also required from:

- Information Services, to set up remote access and use of a suitable IT system on community staff laptops; support the COPD webpage development on gov.je and subsequent incorporation into citizen's portal; and to identify software to aid processing of GP payments.
- HSSD's Communications Team, to advise and organise awareness raising campaign.

5.3 Timetable

This Full Business Case needs to be produced, working closely with a range of stakeholders including Primary Care and the Third Sector. The FBC will need to be approved and provide sufficient assurance to senior management that the service development can proceed and resources can be committed.

The FBC is used as a reference point in the event of any business changes during the project lifecycle and in the event of a post project review or equivalent major review following implementation of the project. The FBC will aim to:

- Verify the continuing need for investment in the project
- Demonstrate that the preferred solution represents value for money
- Establish that the HSSD is capable of delivering the project
- Confirm that the planned investment is affordable
- Demonstrate that HSSD is capable of managing a successful implementation and subsequently sustaining success
- Provide an essential audit trail for decisions taken
- Identify how benefits will be realised and monitored
- Confirm the investment decision

In order to develop the FBC, the following actions are required:

- Secondment of Consultant Physician
- Appoint Consultant Nurse / AHP
- Develop detailed service specification, outcome measures and metrics
- Agree the clinical aspects of the Service Level Agreement for COPD with Primary Care Body
- Consult with Social Security Department as the new model will increase the number of patient visits to GPs and therefore would impact upon the Health Insurance Fund
- Consult with Education, Sport & Culture Department to ensure the exercise referral classes would have adequate capacity to receive increased numbers of patients with COPD

Sign off by Minister

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6 Appendices

Appendix 1 – Benefits Log

What is the benefit	Type	Short term or long term?	How will the benefit be measured	What is the baseline	Target
Improved condition management, enhancement of care in community, enabling patients to remain independent in own homes	Patient	Ongoing	Reduction in Ambulance journeys, Emergency Department attendances and non-elective admissions	No baseline	Target not set
Increased patient and carer confidence to manage their health and wellbeing	Patient Carer Family	Ongoing	Patient Reported Outcome Measures (PROMS)_	No baseline	Target not set
Increased patient choice, with individualised care packages designed to meet holistic care needs	Patient Carer	Ongoing	Patient Reported Outcome Measures	No baseline	Target not set
Improved patient experience / patient journey across services	Patient Carer	Ongoing	Patient Reported Outcome Measures	No baseline	Target not set
Improvement in patient health, independence and quality of life	Patient Carer	Ongoing	Patient Reported Outcome Measures	No baseline	Target not set
Increased patient control and condition management, through improved self – monitoring; patient is provided with a better understanding of their condition	Patient Carer	Ongoing	Reduction in hospital admissions/readmissions	260 unscheduled admissions for COPD exacerbations in 2011	222 in 2013 183 in 2014 154 in 2015
Increased alternatives to hospital e.g. Step-up/step-down care	Patient Carer	Ongoing	Reduction in hospital admission	260 unscheduled admissions for COPD exacerbations in 2011	Admissions ending in step-down care: 33 in 2013 55 in 2014 46 in 2015

What is the benefit	Type	Short term or long term?	How will the benefit be measured	What is the baseline	Target
Long term health promotion	Patient Carer	Ongoing	Reduction in demand for unscheduled and reactive acute admissions	260 unscheduled admissions for COPD exacerbations in 2011	222 in 2013 183 in 2014 154 in 2015
Standardised acute care through adoption of care bundles	Patient	Ongoing	Reduction in length of stay	Average length of stay 8 days	Reduce average length of stay to 3 days
Patients are seen by the most appropriate staff	Patient Staff	Ongoing	Improved utilisation of staff	No baseline	Target not set
Increased co-ordination of care	Patient Carer	Ongoing	Reduction in clinical risk	No baseline	Target not set
Community multidisciplinary team working engenders mutual professional support and improved job satisfaction	Staff	Ongoing	Reduction in sickness rates Improved retention	New team therefore no baseline	Target not set
Increased staff satisfaction as roles are enhanced to maximise professionals' skills and expertise	Staff	Ongoing	Reduction in sickness rates Improved retention	Baseline would need to be explored	Target not set
Improved careers, leading to improvements in recruitment and retention	Staff	Ongoing	Recruitment and retention statistics	Baseline would need to be explored	Target not set
Reduced travel time (for staff and/or patients)	Staff	Ongoing	Reduction in travel time	No baseline	Target not set
Care professionals able to prioritise their workload, with reduced unnecessary visits to patients	Staff	Ongoing	Number of visits to patients	No baseline for new team	Target not set

What is the benefit	Type	Short term or long term?	How will the benefit be measured	What is the baseline	Target
Increased support for Third Sector organisations	Charities	Ongoing	Survey of Third Sector organisations could be initiated	No baseline	Target not set
Increased resources to meet short term demand	Staff	Ongoing	Reduction in pressure on staff, leading to reduction in sickness rates and improved retention	Baseline would need to be explored	Target not set
Increased availability of home adaptations and equipment	Patient Carer	Ongoing	More individuals able to live productive and independent lives Reduction in burden on carers	No baseline	Target not set
Reduced unmet need, through improved risk stratification and case finding	Patient	Ongoing	Reduction in inequalities Improvement in services for hard to reach and vulnerable groups Improved service planning	No baseline	Target not set
Early diagnosis of COPD allows prompt treatment to slow rate of health decline	Patient	Ongoing	Working COPD patients are retained in the workforce for longer and contribute to economy	Baseline would need to be explored with Social Security Dept	Target not set
Increased public awareness, through improved access to information	Patient General public	Ongoing	Improved culture of self care and lifestyle choices Individuals and patients adopt a more proactive approach to managing their health and wellbeing, leading to reduction in demand for health and social care in the future	No baseline	Target not set
Reduced time to referral, through Single Point of Access	Patient	Ongoing	Audit referral request to be 'seen' (period in days)	Baseline would need to be explored	Target not set

What is the benefit	Type	Short term or long term?	How will the benefit be measured	What is the baseline	Target
Optimum use of resources, with Primary Care and the Specialist Respiratory Team working together to adopt a prioritised and coordinated island-wide approach	Patients Carers Staff	Ongoing	Feedback from Jersey PCB, GP practices, Specialist Respiratory Team meetings	No baseline	Target not set
Reduced Ambulance journeys	Patients	Ongoing	Ambulance service statistics (to be explored – dependent on coding)	No baseline	Target not set
Reduced Emergency Department presentations and unnecessary admissions	Patients	Ongoing	Reduction in Emergency Department presentations. Reduction in admissions.	150 attendances for COPD p.a.	90 attendances for COPD p.a
Reduction in delayed transfers of care	Patients	Ongoing	To be explored	No baseline	Target not set
Reduced hospital length of stay	Patients	Ongoing	Average length of stay	Average 8 day stay	Reduce average LOS to 3 days
Reduced rate of admissions to residential and nursing homes	Patients	Ongoing	To be explored	Baseline to be explored	No baseline	Target not set

Appendix 2 Stakeholder Log

Stakeholders	Responsible	Accountable	Consulted	Informed
HSSD Community & Social Services and Health Promotion	✓	✓		
Patients and carers			✓	
Primary Care			✓	✓
Asthma and Respiratory Society			✓	✓
Ambulance – main service, community alarm and combined control, patient transport services			✓	✓
Social Security (provide Health Insurance rebate and benefits)			✓	✓
Specialist nurses Family Nursing & Home Care			✓	✓
Secondary care physicians, Clinical Investigations Department, Pulmonary Rehabilitation			✓	✓
HSS social work team			✓	
End of life care providers			✓	
Psychology			✓	
Other health professionals – Physio, Dieticians, OT, Speech & Language Therapy	✓	✓	✓	✓
Community Pharmacists			✓	
Politicians, including the Minister for H&SS			✓	

Appendix 3 Risk Log

Risk	**Likelihood** *(High / Medium / Low)*	**Impact** *(High / Medium / Low)*	**Overall Risk Rating** *(Likelihood x Impact)*	**Controls/Actions**
Inadequate resources and lack of investment / funding	H	H	H	• Robust Business case • Clear value for money case
Lack of capacity to plan and implement the new COPD service	H	H	H	• Resource backfill for Consultant Lead to allow release from clinical duties • Appoint Consultant Nurse/AHP to drive planning & implementation
Reluctance to attend screening, especially for individuals with mild symptoms	H	H	H	• Invest in public awareness campaign • Work collectively with HSSD Communications Department to ensure effectiveness of campaign • Ensure convenient and free access to screening / diagnosis / follow-up
Disagreement regarding service provision, especially as increased workload for Primary Care teams	H	H	H	• Reimburse Primary Care appropriately for work delivered • Appoint and resource Specialist Respiratory Team with island-wide remit to lead and coordinate long term conditions starting with COPD
If prescription charges are re-introduced, risk of patients seeking medication in secondary care	H	H	H	• Free GP consultation will reduce overall impact of costs to patient • Prescription charge exemption for people with long term conditions

Risk	Likelihood *(High / Medium / Low)*	Impact *(High / Medium / Low)*	Overall Risk Rating *(Likelihood x Impact)*	Controls/Actions
Not all stakeholders agree with new model of care	M	H	H	• Widen consultation during FBC development, and cp-produce FBCs with a range of stakeholders • Engage regularly with all stakeholders, including Primary Care and Third Sector during implementation • Ensure financial incentives in place and that prompt payment (quarterly) is made to providers • Ensure efficient information flows are set up to make it easy for GPs to submit structured care information
Lack of specialist knowledge to provide structured care	M	H	H	• Consultant Physician to provide support / education to GPs • Regular training updates to Primary Care and other providers by Specialist Respiratory Team • Increase access to specialist advice
Recruitment of health professionals, especially Specialist Nurses	M	H	H	• Training to develop on-Island expertise • Attractive recruitment package
Jersey Asthma & Respiratory Society reduce support	M	H	H	• Engage with Jersey Asthma & Respiratory Society before FBC development • Consider need for HSSD funding for this part of the service in FBC development • Use the Specialist Respiratory Team to provide screening / education
Increased costs for home adaptations and equipment	H	M	H	• Ensure items purchased or leased are clinically and cost effective

Risk	Likelihood *(High / Medium / Low)*	Impact *(High / Medium / Low)*	Overall Risk Rating *(Likelihood x Impact)*	Controls/Actions
Lack of interest from Third Sector and private sector to provide services – or lack of a fair playing field	H	M	H/M	• Fair States of Jersey procurement process
Lack of additional investment to develop new roles, recruit new staff (or retain existing staff)	H	M	H	• Use existing local expertise where available for roles and training others • Identify additional future value in new staff e.g. Consultant Nurse who is a nurse prescriber
Uncertainty about planning assumptions; underestimation of demand Lack of available information and data, both for commissioning / decommissioning and for assessing benefits, outcomes and value for money	M	M	H	• Ensure good modelling • Collect all available COPD data • Inform practices in advance to encourage them to collect data • Look at providing templates to GPs – engage early
Resistance to change working patterns to 24 hours	M	M	M	• Early and open communication with union representatives • Staff input into planning with phased implementation of 24 hour service • New post contracts clearly state unsocial hours expected
Increased social care costs as people live longer	M	M	M	• Early diagnosis of COPD allows prompt treatment to slow rate of health decline and remain in the workplace • Culture of self-care supports active independent living

Risk	**Likelihood** *(High / Medium / Low)*	**Impact** *(High / Medium / Low)*	**Overall Risk Rating** *(Likelihood x Impact)*	**Controls/Actions**
Slow cultural shift; Islanders unwilling to engage in self-care	M	M	M	• Invest in public awareness campaign • Work collectively with other campaigns e.g. Self Care week • Expert patient programme – media to celebrate examples of local successes
Lack of capital investment in IT systems	M	M	M	• Robust business case for IT cross cutting workstream
Challenges with information flow and accessibility	M	M	M	• Plan for integrated and/or shared IT system
Unrealistic expectations from service users and professionals	M	M	M	• Work with Communications unit to plan awareness raising campaign • Ensure communications with staff are optimum
Accommodation availability	H	H	H	• Work with Estates workstream to identify accommodation
Lack of an integrated and/or shared IT system	H	H	H	• Liaise with GPCS project manager • Liaise with IT

Appendix 4 - Issue log

Description	**Impact** *(High/Medium/Low)*	**Lead**	**Comments** *(What can we do to work around the issue?)*
Lack of Primary Care data to provide robust intelligence for risk stratification and case finding	H	H	• Consider as part of Primary Care workstream • Payment to GP practice for COPD consultations will encourage sharing of patient information

Appendix 5 - Dependency and enabler log

Description of Dependency	Dependency Lead	Dependency 'Strength'	Comments
Intermediate Care OBC: • Use of Step up / Step down facility • 24hr Home care Support • Night Sitting service • Carer respite support	John Cox	H	A Step-down facility would reduce hospital stays for people with COPD 24hr Home care support would prevent some patients requiring admission to hospital
End of Life Care OBC - support with end of life care	Honor Blain	H	Support with end of life care would enable patients with COPD to die in own homes
The development of Improving Access to Psychological Therapies, supporting GPs in identifying and treating anxiety and depression in people with a long term condition, as outlined in the IAPT OBC	Tracy Wade	H	Identifying anxiety and depression amongst people with COPD would enable targeted support to be given and improve patients ability to cope with their long term condition
Commissioning GPs to provide structured care	Director of Commissioning	H	Reduce health inequalities and standardise best practice in primary care
Co-operation from acute services and hospital discharge co-ordinators regarding case finding	Dr Andrew Luksza	xx	Patient needs identified and appropriately prioritised and planned for
Co-operation between acute services and the Step-up/Step-down Units to facilitate seamless transfers between the hospital and community	John Cox	xx	Reduction of bed days due to delayed discharge
Continued Third Sector commitment, particularly regarding funding of screening	Linda Diggle	H	Shift culture from acute care crisis management to 'living with a diagnosis'
Existing services sharing the vision for COPD care and participating in new ways of integrated working	MDT	xx	Improved communication, disbanding of silo working

Intermediate Care OBC: • Use of Step up / Step down facility • 24hr Home care Support • Night Sitting service • Carer respite support	John Cox	H	A Step-down facility would reduce hospital stays for people with COPD 24hr Home care support would prevent some patients requiring admission to hospital
End of Life Care OBC - support with end of life care	Honor Blain	H	Support with end of life care would enable patients with COPD to die in own homes
The development of Improving Access to Psychological Therapies, supporting GPs in identifying and treating anxiety and depression in people with a long term condition, as outlined in the IAPT OBC	Tracy Wade	H	Identifying anxiety and depression amongst people with COPD would enable targeted support to be given and improve patients ability to cope with their long term condition
Commissioning GPs to provide structured care	Director of Commissioning	H	Reduce health inequalities and standardise best practice in primary care
Co-operation from acute services and hospital discharge co-ordinators regarding case finding	Dr Andrew Luksza	xx	Patient needs identified and appropriately prioritised and planned for
Co-operation between acute services and the Step-up/Step-down Units to facilitate seamless transfers between the hospital and community	John Cox	xx	Reduction of bed days due to delayed discharge
Continued Third Sector commitment, particularly regarding funding of screening	Linda Diggle	H	Shift culture from acute care crisis management to 'living with a diagnosis'

Appendix 5 Financial Analysis

Note: the costs shown in the table below, and throughout the document, have been inflated to reflect the relevant prices for each year.

Initiative Title	Initiative Description	Assumptions & Evidence	Implementation Date	Additional FTE	2013 Revenue £'000s	2014 Revenue £'000s	2015 Revenue £'000s	2013-15 Capital £'000s	2013-15 Rev-Implementation £'000s
				No.					
Diagnosis of COPD (estimated 3000 patients)	Publicity, Awareness Raising, Publications (including Website Development)	Website Development costs covered by IT workstream		-	-	-	-	-	2
COPD Specialist Team (Consultant Physician Lead)	Consultant Physician lead		Jan-13	-	-	-	-	-	27
COPD Specialist Team (Consultant Physician Lead)	Consultant Nurse/AHP		Jan-13	1.00	79	81	83	-	-
COPD Specialist Team (Consultant Physician Lead)	Specialist Nurses (including 23% ED)	This assumes current 0.5 FTE Respiratory Nurse will transfer to this team. Total costs allocated equivalent to 3.0FTE but additional staff at 2.5FTE.	1 FTE in Jan 2013 & 1.5 in Jul 2013	2.50	131	158	162	-	-
COPD Specialist Team (Consultant Physician Lead)	Admin Assistant	Admin Assistant required for Patient Registration & Processing of GP Payments.	Apr-13	1.00	25	34	35	-	-
COPD Specialist Team (Consultant Physician Lead)	Dietician input		Apr-13	0.50	22	30	31	-	-
COPD Specialist Team (Consultant Physician Lead)	Psychology input	Covered by IAPT OBC		-	-	-	-	-	-
COPD Specialist Team (Consultant Physician Lead)	Physiotherapy input		Apr-13	0.56	27	37	38	-	-
COPD Specialist Team (Consultant Physician Lead)	Speech & Language Therapy		Apr-13	0.20	10	13	14	-	-
COPD Specialist Team (Consultant Physician Lead)	Laptops for access to PRISM System	4 Laptops - £5k [assumed to be replaced every 3 years][includes £10k one-off Software Upgrade]		-	-	-	-	5	10
COPD Specialist Team (Consultant Physician Lead)	Transport Costs	Mileage Allowance based on 3 Staff doing 7000 miles per annum and adjusted based on FTE start dates		-	12	17	17	-	-
COPD Specialist Team (Consultant Physician Lead)	Telehealth for High Risk Patients	Leasing costs at approximately £40k per annum.	Jan-13	-	42	43	44	-	-
COPD Specialist Team (Consultant Physician Lead)	Healthy Outlook (Forecast Alert Service from Met Office)	Based on Maximum 300 COPD Patients @ £29		-	7	9	10	-	-
COPD Specialist Team (Consultant Physician Lead)	Breathe Easy Care Plans & Exercise materials	Based on 6000 Leaflets over 3 years		-	18	13	-	-	-

Initiative Title	Initiative Description	Assumptions & Evidence	Implementation Date	Additional FTE	2013 Revenue £'000s	2014 Revenue £'000s	2015 Revenue £'000s	2013-15 Capital £'000s	2013-15 Rev-Implementation £'000s
Oxygen Provision	Clinical Physiologist	Spirometry & Concentrator Management	Jul-13	0.50	12	24	24	-	-
Oxygen Provision	Engineer	Servicing & Delivery of Oxygen Concentrators	Jul-13	0.50	8	16	17	-	-
Oxygen Provision		Lease Car & Petrol		-	2	5	5	-	-
Oxygen Provision	Oxygen	Cost of removing Oxygen from Subsidised Products list		-	5	10	11	-	-
Oxygen Provision	Concentrators	10 per annum to include replacement/repair costs		-	4	9	9	-	-
Oxygen Provision	Additional Cylinders	Backup & Portability		-	3	5	5	-	-
Oxygen Provision	Patient Equipment	Spirometry Equipment (15 x £1k) [assumed to be replaced every 3 years]		-	-	-	-	16	-
Primary Care Structure Care	1st GP Consultation	Payment & Terms to be negotiated between HSS & PCB		-	35	3	5	-	-
Primary Care Structure Care	Annual follow up Visit	Payment & Terms to be negotiated between HSS & PCB		-	-	48	52	-	-
Primary Care Structure Care	Contingency GP Payments for Exacerbation Home Visits	Assumes 200 Episodes per annum		-	16	22	23	-	-

Health and Social Services

Initiative Title	Initiative Description	Assumptions & Evidence	Implementation Date	Additional FTE	2013 Revenue £'000s	2014 Revenue £'000s	2015 Revenue £'000s	2013-15 Capital £'000s	2013-15 Rev-Implementation £'000s
Primary Care Structure Care	GP Consultations - Increased Prevalence Ratio	Assumes 70% by 2015		-	27	52	65	-	-
Primary Care Costs	GP Share	Based on Social Security Rebate		-	10	16	17	-	-
Expert Patient Programme	COPD Educational Package	Licence & Training Costs including UK Course attendance	Jan-13	-	32	32	33	-	-
Expert Patient Programme	Programme Manager	Start January 2013	Jan-13	1.00	71	73	75	-	-
Pulmonary Rehabilitation	Senior Physiotherapist		Jan-13	0.44	29	29	30	-	-
Pulmonary Rehabilitation	Junior Physiotherapist		Jan-13	0.20	11	11	11	-	-
Pulmonary Rehabilitation	Rehabilitation Assistant		Jan-13	0.27	10	10	10	-	-
Pulmonary Rehabilitation	Venue Session Hire		Jan-13	-	13	13	14	-	-
Exercise Referral/Health Walks	Free to Patients	Exercise Referral costs to HSS based on Initial Assessment @ £19.50 + 6 Blocks of 5 Sessions @ £120		-	27	37	38	-	-
Smoking Cessation	Help2Quit	£60k NRT, £22k Incentive Payments to Community Pharmacists	Jan-14	-	-	95	97	-	-
Administration Costs of New Posts	Recurrent Costs	MDU, CPD, Clothing, Stationery & Consumables	Apr-13	-	13	18	19	-	-
Administration Costs of New Posts	Non-Recurrent Costs	Job Advertising, Interviewing and Desktop Set Up		-	-	-	-	-	46
Total - COPD				**8.67**	**701**	**963**	**994**	**21**	**85**
CHD			Jan- 2013 -		**-**	**381**	**352**	**-**	**91**
Diabetes			Jan- 2013 -		**-**	**-**	**306**	**-**	**123**
Total Long Term Conditions				**8.67**	**701**	**1,344**	**1,652**	**21**	**299**

Appendix 7 - NICE Quality Standards for COPD

NICE quality standard for COPD[1]	
Number	**Quality statements**
1	People with COPD have one or more indicative symptoms recorded, and have the diagnosis confirmed by post-bronchodilator spirometry carried out on calibrated equipment by healthcare professionals competent in its performance and interpretation
2	People with COPD have a current individualised comprehensive management plan, which includes high-quality information and educational material about the condition and its management, relevant to the stage of disease
3	People with COPD are offered inhaled and oral therapies, in accordance with NICE guidance, as part of an individualised comprehensive management plan
4	People with COPD have a comprehensive clinical and psychosocial assessment, at least once a year or more frequently if indicated, which includes degree of breathlessness, frequency of exacerbations, validated measures of health status and prognosis, presence of hypoxaemia, and co-morbidities
5	People with COPD who smoke are regularly encouraged to stop and are offered the full range of evidence-based smoking cessation support
6	People with COPD meeting appropriate criteria are offered an effective, timely, and accessible multidisciplinary pulmonary rehabilitation programme
7	People who have had an exacerbation of COPD are provided with individualised written advice on early recognition of future exacerbations, management strategies (including appropriate provision of antibiotics and corticosteroids for self-treatment at home), and a named contact
8	People with COPD potentially requiring long-term oxygen therapy are assessed in accordance with NICE guidance by a specialist oxygen service
9	People with COPD receiving long-term oxygen therapy are reviewed in accordance with NICE guidance, at least annually, by a specialist oxygen service as part of the integrated clinical management of their COPD
10	People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team, and have access to a specialist early supported-discharge scheme with appropriate community support
11	People admitted to hospital with an exacerbation of COPD and with persistent acidotic ventilatory failure are promptly assessed for, and receive, non-invasive ventilation delivered by appropriately trained staff in a dedicated setting
12	People admitted to hospital with an exacerbation of COPD are reviewed within 2 weeks of discharge
13	People with advanced COPD, and their carers, are identified and offered palliative care that addresses physical, social, and emotional needs
National Institute for Health and Clinical Excellence (NICE) (2010) CG101. *Chronic obstructive pulmonary disease: management of chronic obstructive pulmonary disease in adults in primary and secondary care*. London: NICE. Available from www.nice.org.uk/guidance/CG101	