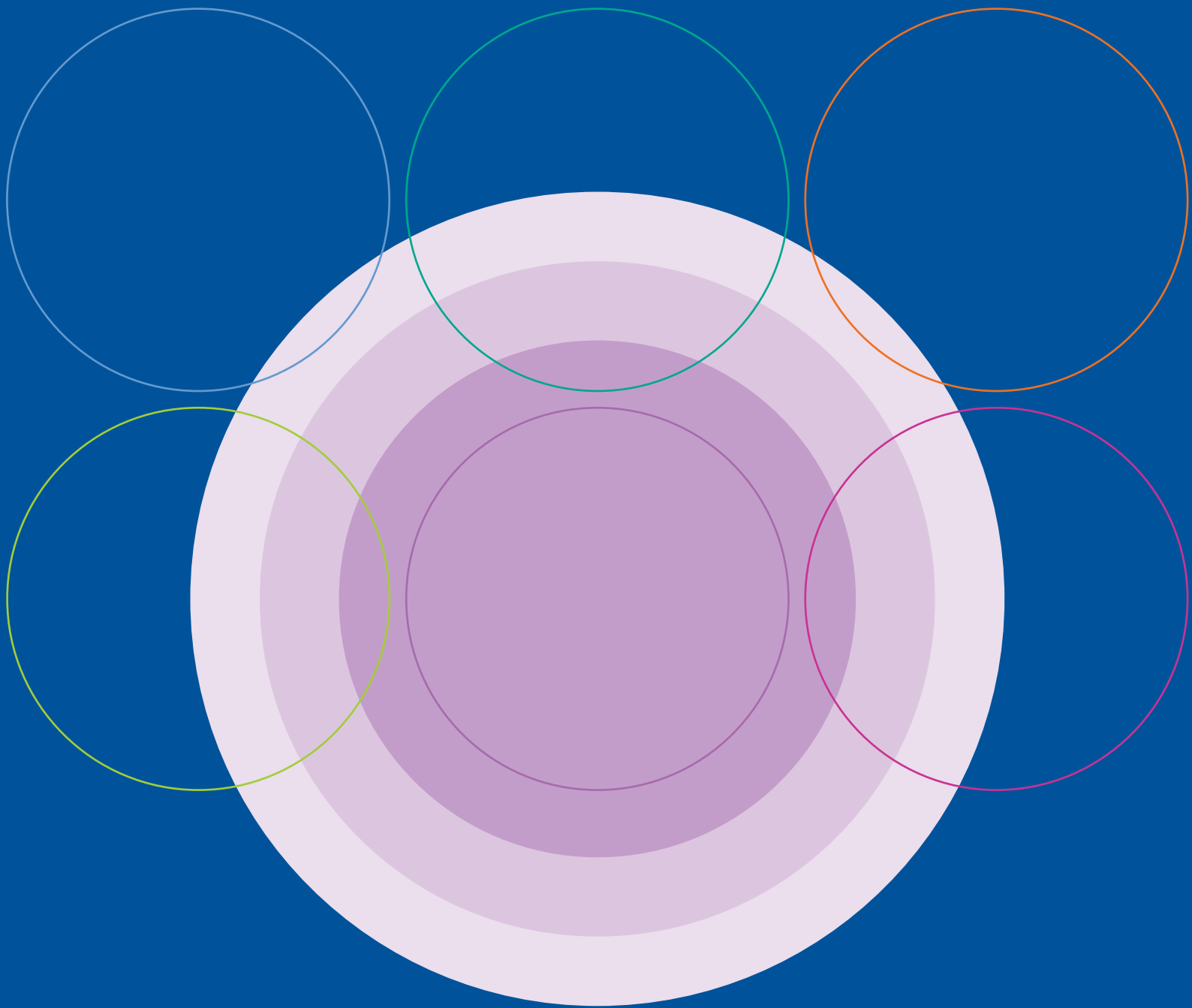


THE BUSINESS CASE FOR PEOPLE POWERED HEALTH

April 2013



ABOUT NESTA

Nesta is the UK's innovation foundation. An independent charity, we help people and organisations bring great ideas to life. We do this by providing investments and grants and mobilising research, networks and skills.

Nesta Operating Company is a registered charity in England and Wales with company number 7706036 and charity number 1144091. Registered as a charity in Scotland number SCO42833. Registered office: 1 Plough Place, London, EC4A 1DE.

www.nesta.org.uk

ABOUT INNOVATION UNIT

We are the innovation unit for public services. As a not-for-profit social enterprise we're committed to using the power of innovation to solve social challenges. We support leaders and organisations to achieve radically different solutions that offer better outcomes for lower costs.

Registered office: CAN Mezzanine, 49-51 East Road, London, N1 6AH

www.innovationunit.org

ABOUT PPL

PPL is an independent management consultancy founded in 2007, which partners on practical projects and programmes across the UK. We work with the private, public and third sectors; providing professional support in a way which is cost-effective and focussed on delivering sustainable social, economic and health outcomes.

Registered office: 145-157 St John St, London, EC1V 4PY

www.privatepublic.co.uk

© Nesta 2013.

CONTENTS

FOREWORD	4
ABOUT THE SERIES	5
1 EXECUTIVE SUMMARY	7
2 INTRODUCTION	9
2.1 WHY NOW?	9
2.2 THE EVIDENCE BASE	12
3 COSTS AND BENEFITS OF PEOPLE POWERED HEALTH	13
3.1 COSTS OF PEOPLE POWERED HEALTH	13
3.2 BENEFITS OF PEOPLE POWERED HEALTH	14
3.3 EVALUATING THE EVIDENCE	17
3.4 FINANCIAL BENEFITS OF PEOPLE POWERED HEALTH	19
3.5 HEALTH OUTCOMES AND OTHER NON-FINANCIAL BENEFITS	21
3.6 REALISING THE BENEFITS OF PEOPLE POWERED HEALTH	24
4 CONCLUSION: THE BUSINESS CASE FOR PEOPLE POWERED HEALTH	26
5 ANNEX: ASSUMPTIONS	27
5.1 CLINICAL COMMISSIONING GROUP SIZE AND BUDGETS	27
5.2 MODEL OF FINANCIAL BENEFIT	27
6 APPENDIX 1	
STRATEGIC DRIVERS FOR PEOPLE POWERED HEALTH	28
6.3 QUALITY, INNOVATION, PERFORMANCE AND PRODUCTIVITY (QIPP)	28
6.4 THE MANDATE	28
6.5 INTEGRATION	29
6.6 MENTAL HEALTH	29
6.7 PERSONALISATION	29
6.8 THE CONTRIBUTION OF PEOPLE POWERED HEALTH TO STRATEGIC PRIORITIES	30
7 APPENDIX 2	
THE EVIDENCE BASE FOR ACTIVITIES ASSOCIATED WITH PEOPLE POWERED HEALTH	31
7.1 BENEFITS STUDIED AND QUANTIFIED	31
7.2 EVIDENCE BASE FOR PEOPLE POWERED HEALTH ACTIVITIES	32
7.3 STANDARDS OF EVIDENCE	33
7.4 SAMPLE SIZE	35
7.5 FURTHER RESEARCH INTO PEOPLE POWERED HEALTH	36
8 APPENDIX 3	
DEVELOPMENT OF SAVINGS ESTIMATES FOR PEOPLE POWERED HEALTH	37
9 APPENDIX 4	
DETAILED FINDINGS OF LITERATURE REVIEW	39
10 APPENDIX 5	
SELECTING TARGET POPULATIONS FOR PEOPLE POWERED HEALTH	41
11 APPENDIX 6	
TIMESCALES FOR PEOPLE POWERED HEALTH	43
ENDNOTES	44

FOREWORD

The fact that the NHS is now facing a decade-long financial mismatch between resources and demand is increasingly being accepted. Whilst there are some who believe against all the evidence that much more money will turn up from somewhere, the majority of leaders within the NHS accept that over the next 15 years we will have to significantly improve health outcomes for the same resource.

That is why we at the NHS Confederation are looking all the time at expanding how we can both extract more value out of our existing resources, and also to look for ways to find new forms of value that can create new healthcare outcomes.

Other services and industries do this all the time. Nearly 20 million people now bank on the internet looking after their own money in ways that had previously been done by others. These customers don't do this on their own. They are surrounded by a very complex web of organisation which encourages them to use their time and expertise to multiply the value that is being invested from the industry.

In the next decade healthcare is going to have to develop a similar approach to improving the capacity of patients to self-manage their conditions. To achieve this we will have to, just as other services have done, invest in services that increase the capacity of very different sorts of patients to better manage their healthcare.

This direction of travel has been recognised in our work with the World Economic Forum which is highlighting the need for countries to reorient their healthcare delivery to wellness support models based on supported health maintenance and enhanced self-care. But changing the DNA of the NHS to genuinely see people as 'assets' rather than 'needs' is challenging.

This report from Nesta's People Powered Health programme goes beyond making the moral case for better self-management and details how to make general and local business cases. It is based upon the experience of the People Powered Health programme with six different NHS localities, each of which over the year of the project had to learn to make that business case.

And this is not something that the NHS can treat as an interesting hobby. The NHS is expected from April 2013 to become dramatically better at empowering patients to manage their own treatment. This will be based upon many hundreds of business cases being made to clinical commissioning groups to invest money in these services.

The report helps us make the case to do so.

Mike Farrar is Chief Executive of the NHS Confederation

ABOUT THE SERIES

The Business Case for People Powered Health is intended for leaders, managers and practitioners across the health and social care system. It outlines the business case for a People Powered Health approach – examining global evidence of benefits and costs and how this links to the NHS.

The paper draws on the experience of the six local teams who took part in People Powered Health, which was led by Nesta and the Innovation Unit from summer 2011 to winter 2012. Following this report we will be publishing a series of learning products explaining why the People Powered Health approach works, what it looks like and the key features needed to replicate success elsewhere. The series includes:

- **People Powered Health:** health for people, by people and with people: making the case for system-wide change, foreword by the King's Fund.
- **More than Medicine:** new services for People Powered Health, foreword by Macmillan.
- **People Helping People:** peer support that changes lives, foreword by MIND.
- **Redefining Consultations:** changing relationships at the heart of health, foreword by the Royal College of GPs.
- **By us, For us:** the power of co-design and co-delivery, foreword by National Voices.
- **Networks that Work:** partnerships for integrated care services, foreword by ACEVO.
- **People Powered Commissioning:** embedding innovation in practice, foreword by NAPC.

Acknowledgements

By Simon Morioka, Stephen Farrington, Phil Hope and Kieran Brett

We'd like to take this opportunity to acknowledge the ideas, hard work and insights of all the patients, service users, carers, practitioners and commissioners who have been part of the People Powered Health programme. Special thanks go to the teams in the six local teams in:

- Calderdale
- Earl's Court
- Lambeth
- Leeds
- Newcastle
- Stockport

We would also like to thank the People Powered Health programme team, colleagues at Nesta and Innovation Unit and specialist support providers:

- Geoff Mulgan, Philip Colligan, Halima Khan, Tina Strack, Peter Baeck, Ajay Khandelwal, Laura Bunt and Francesca Cignola at Nesta
- Matthew Horne, John Craig, David Albury, Leonie Shanks, Martha Hampson, Julie Temperley and Katharine Langford at Innovation Unit
- Professor Paul Corrigan

1 EXECUTIVE SUMMARY

The NHS in England could realise savings of at least £4.4 billion a year if it adopted People Powered Health innovations that involve patients, their families and communities more directly in the management of long term health conditions. These savings are based on the most reliable evidence and represent a 7 per cent reduction in terms of reduced A&E attendance, planned and unplanned admissions, and outpatient admissions.

There is therefore both a social and financial imperative to scale the People Powered Health approach.

Long-term conditions are a major strategic challenge for health systems around the world. In the UK, approximately one-third of the population now live with a long-term condition. Patients with long-term conditions account for more than 50 per cent of all GP appointments, 65 per cent of all outpatient appointments and over 70 per cent of all inpatient bed days.¹ This is an urgent challenge – to address the financial pressures on the system and to improve the lives of millions of people.

Internationally, evidence now suggests that changing the way in which patients and clinicians work has produced improved health outcomes in all the most common long-term conditions, including diabetes, COPD, hypertension, heart disease and asthma; with patients more stable, less prone to exacerbation and demonstrating improvements in their core clinical indicators.

The People Powered Health approach involves five areas of practice: **More than medicine** (new services), **People helping people** (peer support), **Redefining consultations, networks and partnerships**, and **user co-design and co-delivery**. The most robust research literature focuses on two of these - redefining consultations and peer support - and suggests these types of interventions can improve health outcomes in all the most common long-term conditions, with patients more stable, less prone to exacerbation and demonstrating improvements in their core clinical indicators. As a result, there is a reduction in the cost of delivering healthcare of approximately 7 per cent of the commissioning budget -- through decreasing A&E attendances, reducing hospital admissions, reduced length of stay and decreased patient attendances. Putting this into practice would save the NHS £4.4 billion across England.

However, we think that the People Powered Health approach could achieve even higher savings. This is both because the median of all available evidence, regardless of the relative merits of the studies, suggests the cost of managing patients with long-term conditions could be reduced more, by up to 20 per cent, and the experience of the six sites suggests People Powered Health interventions are enablers of each other at scale.

Typical annual costs associated with People Powered Health interventions ranged from just £100 to £400 per patient. Within the People Powered Health programme sites, much of this investment has been delivered within existing health and social care resources, with significant opportunities to prioritise patients at highest risk and with the highest immediate benefits from overall long-term condition cohorts.

The People Powered Health approach is consistent with the existing priorities for commissioners and providers of health. It offers a route for reducing demands on traditional services, including planned and unplanned care. It supports the NHS Quality, Innovation, Productivity and Prevention and Cost Improvement targets, as well as potentially leading to significant savings within local social care. It links directly to the

physical and mental health outcomes in the NHS National Outcome Framework and responds to demand for outcome-based services which put patients at their core. It also aligns closely with personal budgets, integrated care, care planning and case management.

Ultimately cashable savings will only be achieved if commissioners are prepared to commission and invest to support clinicians and patients to make the shift; and in doing so, encourage providers to respond to the shifting pattern of demands, from high-cost, un-planned and hospital-based care models to more effective co-management of conditions in the community. The teams that took part in the programme have nonetheless demonstrated how, across a range of different physical and mental health conditions, commissioners and providers can work together to help translate the principles into everyday practice.

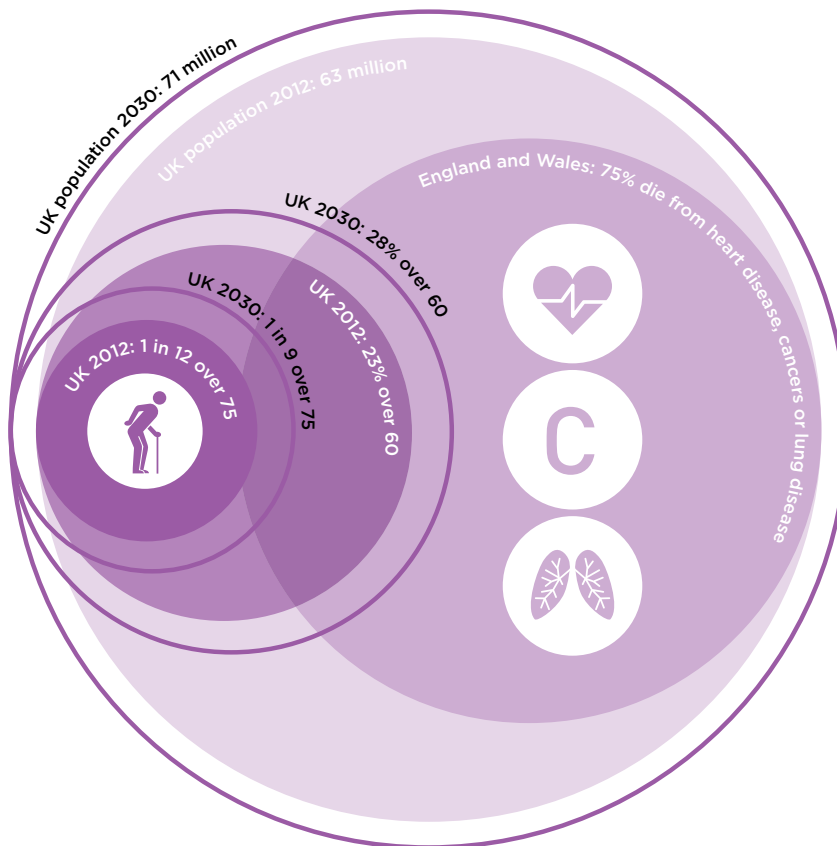
For organisations seeking to balance increasing demand against growing financial pressures, these results are hard to ignore. The changes advocated by the People Powered Health approach are significant and require considerable effort; but the growing body of evidence shows patients, carers and their communities are central to delivering improvements in the management of long-term conditions, thereby reducing an otherwise unsustainable growth in costs. This document describes the specific investments required to evolve services in line with that recognition, and the practical benefits that can be achieved as a result.

2 INTRODUCTION

2.1 WHY NOW?

The scale of the challenge facing UK public services in the coming decade is unprecedented. The ONS estimates suggest that the UK population is projected to increase by 5 million from 62 million to 67 million over the 10-year period 2010–2020.² Within this broader population growth are increasing numbers of older people, at specific risk of developing one or more long-term conditions. For the first time since its inception, predicted demand for the NHS far outstrips its predicted funding.³ Commissioners, providers and patient groups are searching for new, sustainable approaches to improve health outcomes at lower cost.

Figure 1: Scale of challenge facing health and social care⁴



The Government has set a number of strategic priorities relevant to this:

- Reforming the way in which services are commissioned and provided, to focus on key outcome areas and moving services from hospitals into the community.
- Delivering on NHS quality, innovation, productivity and prevention (QIPP) initiatives.
- A mandate to empower and support people living with long-term conditions.

- Better integrating health and social care services around the needs of patients and service users.
- Recognising and addressing the role that mental health plays in physical health.
- Developing personal budgets and personalisation of care delivery to better meet the needs of individuals.

Focusing on long-term conditions is a prime opportunity for improvement as they make up the largest portion of health care demand. These conditions account for over 50 per cent of GP appointments, 65 per cent of outpatient appointments, and over 70 per cent of inpatient bed days. Without better on-going management, people often require expensive, unplanned acute care. Changing the way long-term conditions are managed by involving individuals in improving their own health has great potential, both to improve health outcomes and reduce demand on the health system.

Appendix I discusses the strategic context in more detail.

People Powered Health advocates changing three vital components of the current system:

Changing consultations to create purposeful, structured conversations that combine clinical expertise with patient-driven goals of well-being and which connect to interventions that change behaviour and build networks of support.

- **Consultations** that are flexible, collaborative and have alternative structures, including group consultations, built according to what is most useful to the patient.
- **Self-management** support⁵ through care planning⁶ and shared decision-making.⁷
- **Social prescribing:** a system of collaborative referral and prescription that incorporates social models of support in local communities, such as peer support groups.

Commissioning new services that provide ‘more than medicine’ to complement clinical care by supporting long term behaviour change, improving well-being and building social networks of support. Services are co-designed to configure and commission services around patients’ needs.

- **Peer support groups** where patients and service users with shared experience or goals come together to offer each other support and advice.⁸
- **Platforms** such as timebanks that facilitate the exchange of time and skills between people.⁹
- **Coaching, mentoring and buddying** from professionals or peers offering structured support to help a patient to build knowledge, skills and confidence. This includes health trainers and navigators who guide and support individuals to make healthy lifestyle choices.¹⁰

Co-designing pathways between patients and professionals to focus on long-term outcomes, recovery and prevention. These pathways include services commissioned from a range of providers including the voluntary and community sector.

- **Integrated care**¹¹ through collaboratives, partnerships and alliances that ensure care is joined-up from the service user’s perspective across health, care and voluntary providers.

- **Self-directed support** and personal health budgets^{12, 13} that allows service users to choose, with support, the solutions they need – increasing choice, control and personalisation.
- **Collaborative commissioning** focused on outcomes, including patient reported outcomes,¹⁴ and involving a wide range of people in commissioning, design and delivery of services.¹⁵

The People Powered Health approach is built on the knowledge that patients do better when they are involved in developing and delivering their own care. There are clear health and cost benefits to this approach, but there are organisational challenges as well. All of these are important when considering the business case for People Powered Health.

- Changes to how patients and professionals interact will impact on current health and care provision.
- Investment in changing organisations will be needed at a time when they are over-stretched.
- Large scale change to front-line service delivery has failed to deliver in the past.
- People need to be convinced by genuine, achievable health benefits and not a cost-cutting exercise.

The business case for People Powered Health is designed therefore to address not just the theoretical benefits of changing these relationships, but the organisational and individual experiences of putting this into practice.

2.2 THE EVIDENCE BASE

We wanted to develop the business case for People Powered Health on the best, most reliable evidence possible and we have looked globally for best practice. Our evidence base includes:

- A survey of best, most reliable evidence of similar interventions in the UK and best practice globally, including: the Co-creating Health Programme, Chronic Disease Self-Management Programme, Expert Patients Programme, Lambeth Living Well Collaborative, LinkAge Plus, Mental Health Care Improvement Initiative, National Refractory Angina Treatment Centre, Recovery Innovations, Service User Network, and Year of Care Programme.
- Early data and analysis from the work of the six teams that took part in the programme (Leeds, Calderdale, Stockport, Earl's Court, Lambeth and Newcastle).

Overall, the literature review findings were that:

- The evidence base is still evolving, with the results of a small number of randomised controlled trials mixed with related case series and associated extrapolations.
- Not all studies have been able to quantify benefits, especially when challenging measures such as quality of life are included.
- Sample sizes have varied significantly, from studies of tens of patients to studies involving thousands.
- However, there is evidence that related interventions do produce real benefits to both individuals and the health economy with the potential to scale.

There will be additional social benefits beyond those directly realised by patients, commissioners and providers. Sometimes classified as 'social return on investment' (SROI), these are additional to the benefits identified here and have been deliberately excluded for the purposes of this review to focus on 'cashable savings' that are most relevant to commissioners at the moment.

3 COSTS AND BENEFITS OF PEOPLE POWERED HEALTH INTERVENTIONS

3.1 COSTS OF PEOPLE POWERED HEALTH INTERVENTIONS

The evidence review suggests that typical interventions associated with People Powered Health can be delivered for an annual cost of between £100 – £450 per patient, depending on the type of intervention. These are direct costs of interventions and services not currently delivered within health and social care, for example, a patient health training programme.

Costs can vary significantly. A health training programme can provide comprehensive patient education across 80 hours of class time for £888 per patient, or be delivered by volunteers with fewer, larger classes for £44 per patient. Figure 2 below shows direct, per-patient costs of a number of broadly comparable schemes supporting self-management.

People Powered Health interventions, by their nature, include significant time commitments from patients, volunteers and carers:

- Patients will be required to use their time to contribute to their care in different ways: learning, monitoring, evaluating.
- Volunteers give time, for example, peer mentoring and through time banks.
- Changes to consultation patterns and clinical working practices may increase the time clinicians need for each patient.

Figure 2: Direct annual per patient costs of comparator schemes

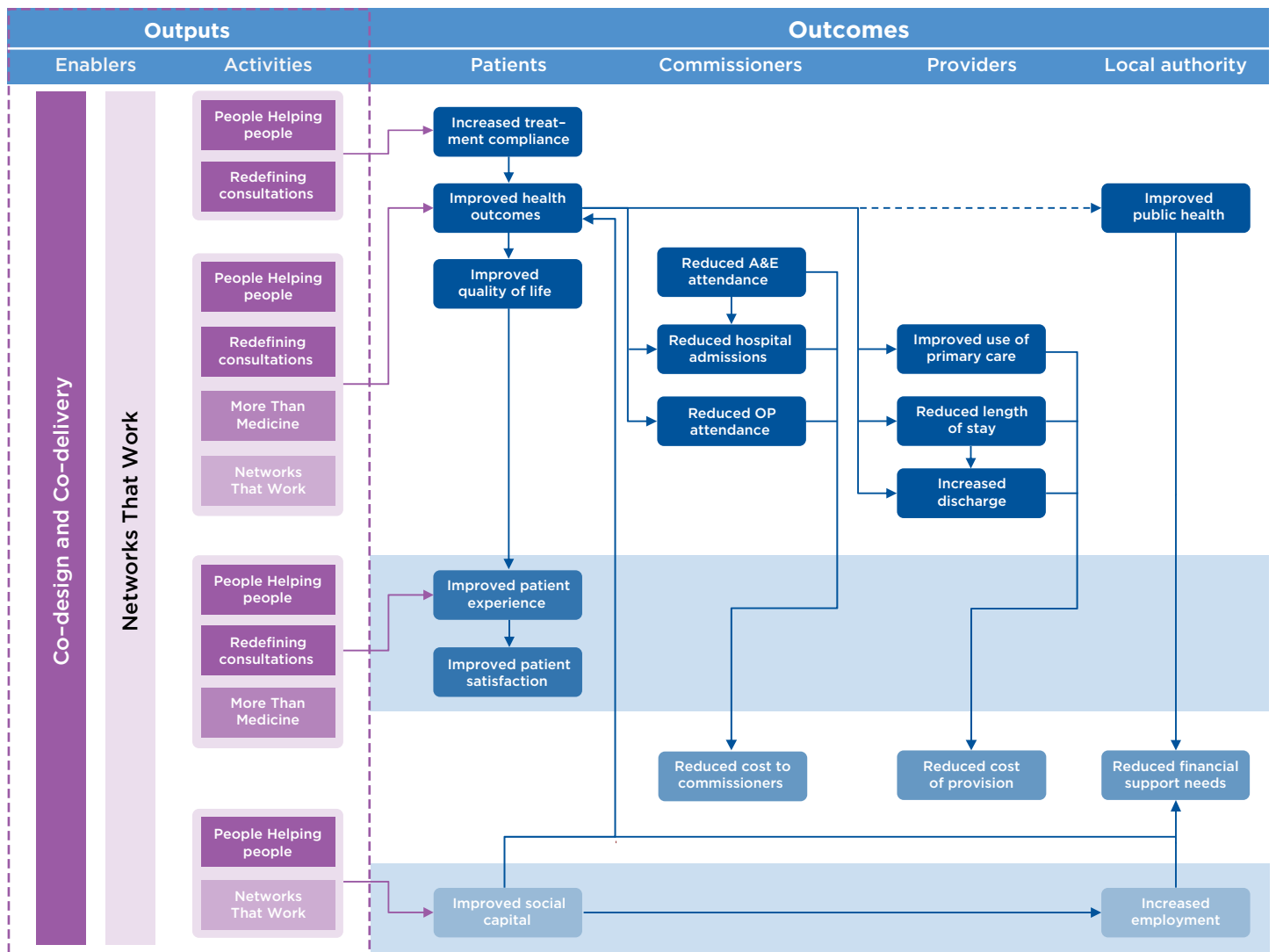
Expert Patient Programme, UK	£250
Devon LinkAge Plus	£360
Chronic Disease Self-management Programmes	\$70-714 (£44-445)
Recovery Innovations, Arizona, USA	\$1,395 (£888)
Mental Health Care Improvement Initiative, Australia	\$405 (£265)
Lambeth Living Well Collaborative	£99

Costs can be reduced through service design and effective use of clinical, volunteer and patient time, improving overall cost effectiveness. It is important to recognise that these interventions are not cost-free and will not be delivered or sustained without investment.

3.2 BENEFITS OF PEOPLE POWERED HEALTH INTERVENTIONS

People Powered Health interventions also demonstrate numerous benefits. The relationship between benefits and their component activities and enablers can be complex: a high level view is shown in the logic diagram below. The logic diagram shows that multiple interventions within work together to deliver these benefits.

Figure 3: Logic model of benefits of People Powered Health interventions



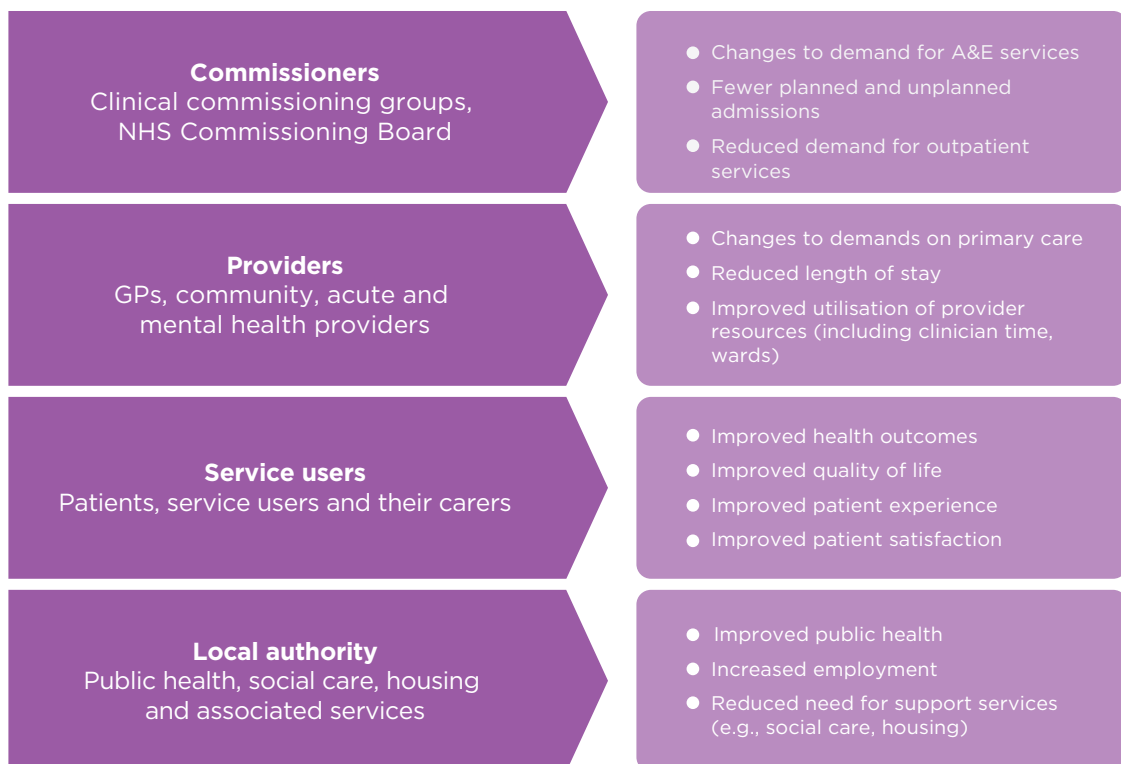
The linkages between outcomes and the activities and enablers are:

- **Increased treatment compliance** as patients co-design and self-manage.
- **Improved health outcomes** for patients as they are better able to manage their long-term condition.
- **Improved quality of life** for patients by improving self-efficacy, autonomy and health status.

- **Reduced A&E attendance** by improving the stability of patients' health and patients' ability to manage exacerbations.
- **Reduced hospital admissions**, OP attendance, and length of stay, and increased discharge by improving patients' self-efficacy, the effectiveness of clinical interventions, and condition management.
- **Improved use of primary care** by improving patients' ability to self-manage.
- **Improved patient experience** by involving patients in the delivery of their care and delivering patient-centred services.
- **Improved patient satisfaction** by improving the effectiveness of clinical treatment and the patient experience.
- **Reduced the cost of healthcare** by reducing the need for primary and secondary care.
- Improved social capital by building networks of support around the patient and involving them in community activities.

The interaction between activities and benefits can also be understood in terms of their benefits for different parts of the NHS. Figure 4 outlines the benefits for key NHS stakeholders.

Figure 4: Summary of benefits of People Powered Health



Data on the costs and benefits from the localities and research on related programmes also shows that each People Powered Health intervention has its own range of benefit areas. Some programmes have addressed network and enabling costs and some have not; the interdependencies shown in the logic diagram helps explain some of the cost/benefit differences, and suggests careful selection of activities with a People Powered Health programme to balance short and long term costs and benefits.

“ I think the assumption is [risk stratification, integrated care and self-management] will reduce the number of hospital admissions – what it will do is make sure the patients who do go into hospital are the right ones – the ones that can’t be dealt with in their community and I’m not sure that this always happens. I think there are patients who go into hospital at the moment who could be managed more effectively in the community but I think there is obvious pressure on the acute sector particularly around urgent care and this is one of the drivers for this approach but it’s not the main driver. The main driver is about quality of care for patients.”

Dr Andy Harris, Shadow Accountable Officer and GP with Leeds South and East Clinical Commissioning Group

“ Once you see how it works, how it can reduce patient consultations, how when patients are taking on board their own, they’ve got a health trainer, they’ve got a new lifestyle, they’re exercising more, they do come and see you less – so there are real benefits for the GPs from that perspective as well as real benefits for the patients which is what we are really hoping for here.”

Dr Brigid Joughin, GP in Newcastle

Table 1: Summary of costs and benefits of interventions associated with People Powered Health

	Calderdale & Huddersfield*	Co-creating Health Programme	Chronic Disease Self-management Programme	Earl’s Court*	Expert Patients Programme	Lambeth Living Well Collaborative*	Leeds*	LinkAge Plus	Mental Health Care Improvement Initiative	National Refractory Angina Treatment Centre	Newcastle*	Recovery Innovations	Service User Network	Stockport*	Year of Care Programme	
Cost (per patient, £)			44–445	14	250	99		360	265		438	888		1320	25	
Benefits	Improved health outcomes	●	●		●	●	●	●			●			●	●	
	Quality of life		●	●	●	●				●						
	Reduced A&E attendance					●	●				●		●			
	Reduced use of primary care				●	●		●								
	Reduced hospital admissions (planned and unplanned)			●	●	●	●	●		●	●	●	●	●		
	Reduced length of stay			●		●	●	●	●				●	●		
	Improved patient satisfaction			●		●	●									
	Improved patient experience						●	●			●				●	
	Cost of healthcare			●	●	●	●	●	●			●			●	
	Improved social capital					●	●									

* People Powered Health programme teams

3.3 EVALUATING THE EVIDENCE

To create a realistic view of the evidence used in the business case, the studies have been evaluated to get a view of the scalability, applicability and overall robustness of the data.

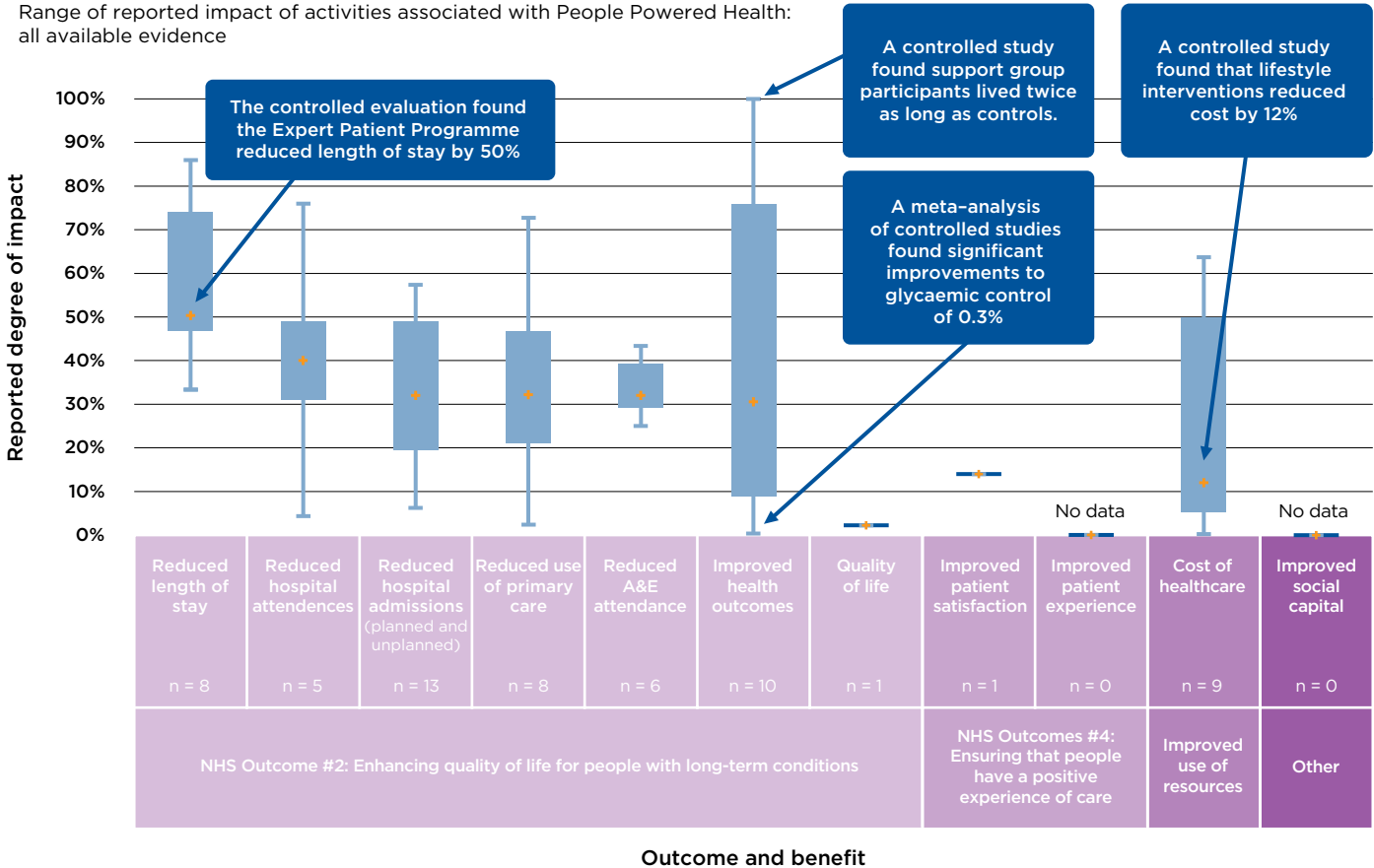
Variability in the design and focus of each study is reflected in the range of results – for example the 8 studies looking at impact on length of hospital stays produced a range of reductions from 30 per cent to well over 80 per cent. Some studies focused on high-risk individuals, others on the broader population – this is particularly evident in the second category where reductions in hospital attendance ranged from 5 per cent to 75 per cent.

Three of the categories included measures of improved quality of life, improved patient experience and improved social capital. Clear, comparable definition and collection criteria for these data have yet to be identified, making results more variable.

Figure 5: The benefits of People Powered Health Interventions: all available evidence^{16, 17, 18, 19}

The impact of People Powered Health

Range of reported impact of activities associated with People Powered Health: all available evidence

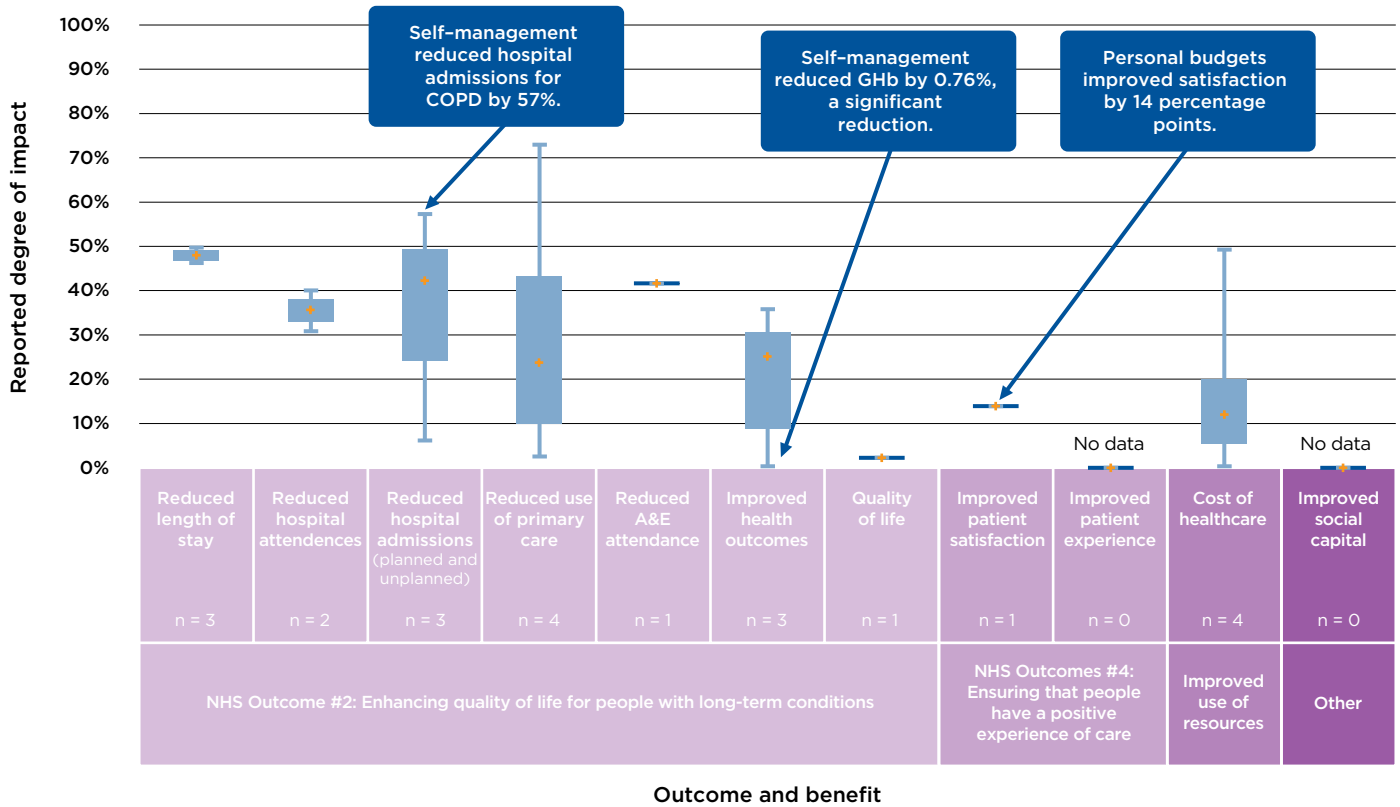


If we examine only Level A studies – supported randomised controlled trials with strong quantitative data – the three studies examining reduced length of hospital stay show significantly more ‘bunched’ results with reductions of between 47–50 per cent. This is shown in Figure 6.

Figure 6: The benefits of People Powered Health Interventions: Level A evidence only^{20, 21, 22}

The potential impact of People Powered Health

Range of reported impact of activities associated with People Powered Health: Level A evidence only



Appendix II discusses the evidence base in more depth.

3.4 FINANCIAL BENEFITS OF PEOPLE POWERED HEALTH INTERVENTIONS

Using best current evidence, People Powered Health interventions could deliver savings of 7 per cent for clinical commissioning groups – over £21 million per average clinical commissioning group or £4.4 billion across England.²³

These projections of financial benefit are based on a detailed analysis described in Appendices II and III. Appendix II details and assesses the quality of the evidence, and Appendix III develops three scenarios, based on this assessment. Scenario 3, based on Level A studies²⁴, is a robust, conservative estimate. Potential benefits derive from reductions in A&E attendance, planned and unplanned hospital admissions, and outpatient attendance – all direct costs to commissioners. Selected quantitative examples from de Silva (2011), Rogers et al (2006) and Lorig et al (2001) are included in Appendix III.

Table 2: Summary of potential financial benefits of People Powered Health

Measure	Total benefit (£m)	Percentage of average CCG budget (per cent)	Benefit per patient (£)
Scenario 1: Median of all studies	59	20	322
Scenario 2: Minimum reported impact	12	4	64
Scenario 3: Highest level of evidence	21	7	113

Projected benefits from the first year of intervention in the localities strongly support these estimates:

Reductions in the overall use of healthcare services and length of hospital stay have not been included in the financial case above but improvements in this area will certainly add to the business case for People Powered Health:

- Where patients are admitted to hospital, existing studies show that effective joint management can reduce the length of stay by 46–86 per cent through improved recovery times, and improve the utilisation of acute beds, as seen within the Croydon Service User Network.²⁵
- The reduction in hospital attendances used in the financial case maps to similar reductions in demands on primary care services, especially practice nurses and allied health professionals, with a 2–73 per cent reduction, for example, associated with expert patient programmes. This suggests that reductions in secondary care use do not necessarily increase the burden on primary care and represent a real improvement in the management of conditions.

PROJECTED BENEFITS OF PEOPLE POWERED HEALTH INTERVENTIONS

In Stockport, the new mental health pathway expects to reduce referrals to secondary care by 65 per cent, discharge rates by 25 per cent and re-presentation by 60 per cent. This will lead to a net savings of over £500 per patient reducing the cost per patient from £1,880 to £1,320.

In Newcastle, new pathway aims to reduce the cost per patient by £437 through an 11 per cent reduction in non-elective admissions and reduced outpatient and emergency episodes.

The health centre in Earl's Court plans to reduce unplanned admissions by up to 60 per cent and reduce the use of primary care by 34 per cent, which would lead to savings of almost £600 per service user.

There is a natural cynicism around the promise of significant savings, for what may seem like relatively small investments of time and money. This cynicism is based on the experience of many of those working in health and social care that have seen such promises fail to materialise many times before. Feedback from the People Powered Health programme teams suggests that savings of this order or more are achievable, if commissioners and providers work together with individuals and communities to translate the principles of the People Powered Health approach into practice. This will in some cases involve looking fundamentally at the configuration of existing services, and how savings are realised as patterns of demand change.

If the People Powered Health approach is to happen at scale, it will involve aligning such interventions with other system-wide developments, such as personalisation and integrated care. However, the evidence suggests that such developments are far more likely to succeed, and deliver the intended quality and efficiency benefits, when investment is made in developing the patient-clinician relationship to transform the roles of each in the delivery process.

3.5 HEALTH OUTCOMES AND OTHER NON-FINANCIAL BENEFITS

People Powered Health interventions impact two key NHS outcomes, shown in Table 3: NHS Outcome #2, enhancing quality of life for people with long-term conditions, and #4, ensuring that people have a positive experience of care. Reducing time in hospital, whether planned or emergency, has quality of life benefits to patients as well as contributing to the financial case for change.

Table 3: Non-financial benefits of People Powered Health interventions

Outcome	Measure	Reported impact
Enhancing quality of life for people with long-term conditions	Improved health outcomes	0-100%
	Improved quality of life	2%
	Reduced A&E attendance	25-43%
	Reduced length of stay	33-86%
	Reduced use of primary care	2-73%
	Reduced hospital admissions (planned and unplanned)	6-57%
	Reduced hospital attendances	4-76%
Ensuring that people have a positive experience of care	Improved patient satisfaction	14%
	Improved patient experience	-
Improved use of resources	Cost of healthcare per patient	0-64%
Other	Improved social capital	-

3.5.1 Health outcomes

An important purpose of People Powered Health interventions is to improve health outcomes for patients. Self-management has been shown in multiple studies to improve health outcomes by up to 100 per cent (e.g. doubling life expectancy from point of diagnosis for terminal patients (see also the chronic care model).^{26, 27} For specific conditions, health improvements include:

- **Diabetes:** improvements to control of GHb (-0.76 per cent), HbA1c (-0.22), blood pressure and EQ-5D scores (+0.12).^{28, 29, 30, 31, 32}
- **COPD:** improvements to condition management.³³
- **Hypertension:** improved blood pressure (-4.4 mm Hg).³⁴
- **Heart disease:** improved condition management and need for secondary care.³⁵
- **Asthma:** improved lung function.^{36, 37, 38, 39, 40}

CHRONIC CARE MODEL, USA

In separate studies from the USA, self-management has been shown to improve health outcomes. Collaborative models of care for bipolar disorder pioneered by Veteran Affairs hospitals reduced the average length of an affective episode by 6.2 weeks. Another intervention, focusing on improving diabetes care in underserved communities, showed significant improvements to cholesterol and blood glucose and reductions in HbA1c.

EXPERT PATIENT PROGRAMME (EPP)

The EPP showed significant improvements in patient-reported quality of life for patients involved with the programme when compared with a control group. On a 7-point scale, the group participating in the scheme reported quality of life scores of 4.88, 0.11 higher than the control group (4.77).

SERVICE USER NETWORK (SUN)

The SUN focuses on patients with long-term emotional and behavioural problems. Its model of peer support reduced planned hospital visits by its cohort from 725 to 596 (18 per cent), reduced unplanned visits from 414 to 286 (31 per cent), reduced A&E attendances by 30 per cent, and reduced the total time spent in hospital by patients from 330 to 162 days (51 per cent).

Source: Piatt, G. A. et al. (2006); Adams, S. G. et al. (2007); Rogers, A. et al. (2006); Nesta, Innovation Unit and nef (2012)

3.5.2 Quality of life and positive experiences of care

Projects like the Expert Patients Programme have shown genuine improvements to reported quality of life for patients with long-term conditions.⁴¹ While the measured impact can be small, the change can nonetheless be significant in the context of individual patients' experience.

Meta-analysis of 40 self-care interventions shows 24 as having a positive effect on the patient experience.⁴² Positive experiences of care are primarily reflected in improvements to patient satisfaction; there is evidence of peer support and personal budgets improving patients' satisfaction with care by up to 14 per cent.

3.5.3 Social integration and social capital

People Powered Health interventions have the potential to improve patients' social functioning, community integration and social support. This improves their health and well-being by ensuring they have robust networks of support and are not isolated. This has particular health benefits for patients with mental health conditions.

A meta-analysis of co-production in mental health services found interventions – and in particular peer support – improved social skills, involvement with and integration into the community, and patients' number of friends and social support networks.⁴³

THE IMPORTANCE OF SOCIAL INTEGRATION AND SOCIAL CAPITAL

Though it is not included in the NHS Outcomes Framework, social capital – the stock of an individual's relationships and integration into his community – can be a significant determinant of health outcomes. Social isolation and loneliness are linked to hypertension, depression, dementia, disability and control of weight, drinking and smoking.

These effects are particularly pronounced in mental health. People with more social contacts, and higher quality relationships, tend to report better mental health than those without, especially if they are also in work.

As a risk factor for physical health, social isolation compares with smoking and heavy drinking. Reducing social isolation in this way can significantly increase the health outcomes and life expectancy of individuals, increasing the likelihood of survival by 50 per cent – its impact is similar to smoking cessation for patients with chronic heart disease. This places social isolation on a par with current public health priorities.

These ideas – of building social capital and individual efficacy – are being translated into public health campaigns in Scotland, with the aim of developing the 'health assets' and control of individuals and building resilient, capable communities. It aims to reduce mortality by 15 per cent by 2015 and reduce adverse effects by 30 per cent.

Source: Campaign to End Loneliness; Halpern, D. (2004); Holt-Lunstad, Smith and Layton (2010); Burns (2011); Burns (2012)

3.6 REALISING THE BENEFITS OF THE PEOPLE POWERED HEALTH APPROACH

The People Powered Health approach represents an innovative and potentially radical intervention into the way in which health and social care services are delivered. Implementing it and realising its benefits will also contribute to broader changes to the systems and structures of healthcare in the UK.

It is different from other interventions in that it changes patients and service users from costs and liabilities into assets. This has a huge impact on the health economy and landscape, changing patterns of demand and supply.

To sustain and scale the People Powered Health approach, health services must be reconfigured and rationalised. The benefits will only be achieved when paired with other initiatives that reconfigure local health services and integrate budgets and funding around patients and service users.

The People Powered Health approach needs to form part of clinical commissioning processes. This means:

- Incorporating the People Powered Health approach into the overall vision and strategy for healthcare in the area and closely linking it to other initiatives.
- Including People Powered Health approaches in commissioning intentions.
- Working with providers and patients to commission or develop services through co-production, building key aspects into service specifications and contracts.
- Managing contracts pro-actively to maintain the emphasis of co-delivery and co-design.
- Ensuring close control over activity and cost levels to ensure potential benefits are realised.
- Reviewing services periodically with users to understand their strengths and areas for improvement.

LAMBETH LIVING WELL COLLABORATIVE

NHS Lambeth aims to save £8 million from its mental health budget by 2013/14 and has already saved £2 million from its inpatient services.

Engaging health commissioners, the local Mental Health Trust, the local authority, community and voluntary sector providers, they have collaboratively redesigned mental health pathways with service users in Lambeth based on an 'easy in easy out' principle which works towards prompt discharge from secondary care combined with an easy route back in to see a consultant if the condition deteriorates.

This has enabled NHS Lambeth to already achieve a significant reduction in expenditure in the acute setting, whilst developing further towards an 'Alliance Contracting' model of future service delivery across the different parts of the local health economy.

LEEDS COMMUNITY HEALTHCARE NHS TRUST

The Leeds Transformation Programme aims to save £5 million from the improved management of long-term conditions as part of its £65 million programme.

Two key innovations are already being introduced in health and social care services in Leeds: the use of risk stratification and the integration of health and social care teams. These will enable the proactive and systematic management of people identified as being at risk of needing health and social care. Co-production forms the third part of an overall innovation strategy designed to deliver a sustainable health and care model in each of the 3 neighbourhood groupings in Leeds.

This reflects the way that Leeds has built co-production into its overall vision and strategy for service change across the city, allowing the team to realise significant benefits through improved patient self-management. This is now being translated into new services on the group that can deliver improved care.

4 CONCLUSION: THE BUSINESS CASE FOR PEOPLE POWERED HEALTH

Health and social care services across the UK face a period of unprecedented change. After a period of significant growth in funding and investment, new approaches are required if improvements in health and well-being are to be sustained and built upon. Nowhere is this truer than the management of long-term conditions, which currently consume a significant percentage of health services.

Our finding is that the financial business case for People Powered Health rests on two key areas of benefit.

The first is the ability to mobilise the asset base that is patients, service users and their communities. Those who live with long-term conditions everyday already contribute hugely to their own clinical outcomes. Developments within and beyond the People Powered Health programme have shown the effect of relatively small organisational investments (of as little as £100 per patient per year) in recognising, supporting and joining up these individual efforts to allow them to add to far more than the sum of the parts.

The second area of benefit is reductions in unplanned admissions and the requirements for expensive, acute care which provide an immediate benefit to healthcare commissioners and providers alike. This change supports the development of more sustainable models of health and care and allows the reconfiguration of services to proceed on the basis of improvements in the quality of care.

Beyond the realm of financial costs and benefits, findings to-date point to a broad range of clinical and quality gains from greater patient involvement in the development and delivery of their care. These benefits show that the potential for collaboration between professionals and those they are trying to help are not limited to the financial sphere, and that the People Powered Health approach can be both more cost effective and deliver higher-quality outcomes.

In no area is the evidence base yet unequivocal, and in many areas the formal capture of benefits associated with People Powered Health interventions has just begun. However, our contention is that there is enough evidence to support further scaling of those approaches which have been shown to make a qualitative and quantitative difference on the ground. Ultimately, the People Powered Health approach represents part of a broader agenda of change within public services, including the integration of health and social care; and benefits may only be realised over time, in parallel with system-wide change. As the People Powered Health teams have demonstrated, there is nonetheless an opportunity to start realising value today, with relatively simple local interventions that can make a genuine difference to the lives of individual patients and service users, together with the organisations which exist to serve them.

5 ANNEX: ASSUMPTIONS

5.1 CLINICAL COMMISSIONING GROUP SIZE AND BUDGETS

- An average CCG covers 342,000 patients and includes 39 GP practices.⁴⁴
- Nationally, there will be 211 CCGs.
- The average CCG budget will be £290 million.⁴⁵

5.2 MODEL OF FINANCIAL BENEFIT

- Seventy per cent of all activity relates to long-term conditions and can be affected by People Powered Health interventions.
- An average market forces factor of 1.09 is to be added to all tariff costs.⁴⁶
- The People Powered Health approach will be provided at scale, to all patients with a long-term condition within the area served by a CCG.

6 APPENDIX 1

STRATEGIC DRIVERS FOR PEOPLE POWERED HEALTH

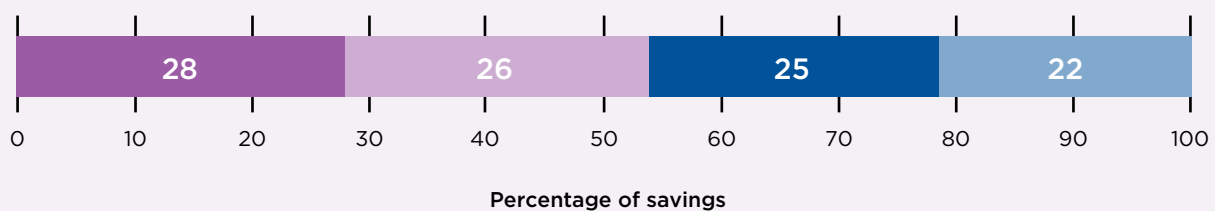
The following sections describe some of the key strategic drivers in health, and how the People Powered Health approach fits within this framework.

6.3 QUALITY, INNOVATION, PERFORMANCE AND PRODUCTIVITY (QIPP)

The NHS has a target of saving £15–20 billion by 2014/5⁴⁷ through QIPP, with 40 per cent of savings delivered nationally and 60 per cent locally.⁴⁸

Figure 7: QIPP savings to 2014/15

Savings to be achieved over the four-year period 2011–12 to 2014–15



■ 2011-12 ■ 2012-13 ■ 2013-14 ■ 2014-15

NOTE: Data may not sum due to rounding

Source: Strategic health authority integrated plans (March 2011 submissions)

Early efficiencies in areas such as medicines management, back office redesign, procurement or improved staffing productivity are increasingly being replaced by fundamental reviews of service delivery. According to the Department of Health: “Many provider-driven and commissioner-driven savings will require service change, such as migrating services from hospitals into the community. The Department recognises that these savings will be the most difficult to achieve.”⁴⁹

6.4 THE MANDATE

In November 2012 the Government issued the new NHS Commissioning Board (NCB) with its Mandate for this parliament⁵⁰ This document sets priorities for the NCB’s spend of £85 million, directly and through local Clinical Commissioning Groups (CCGs).

“ 2.1 We want to empower and support the increasing number of people living with long-term conditions. One in three people are living with at least one chronic disease. By 2018 nearly 3 million people, mainly older people, will have three or more conditions all at once.

2.5 The NHS commissioning board's objective is to ensure the NHS becomes dramatically better at involving patients and their carers and empowering them to manage and make decisions about their own healthcare and treatment. For all the hours that most people spend with a doctor or nurse, they spend thousands more looking after themselves or a loved one.”⁵¹

6.5 INTEGRATION

Effectively managing complex patients with long-term needs requires co-ordinated, integrated and holistic care. However, care is often fragmented, siloed and condition-specific.⁵² Providers have incentives to maximise activity volume (and therefore revenue), organisations have distinct clinical and financial decision-making structures, and information flows between organisations are limited. The Mandate also identifies the measurement of the patient experience of care, the sharing of information, the process of procurement and contracting, and the development of new pricing structures as barriers.

To incentivise organisations to overcome these, the Department of Health has stated it will “reward value based integrated care that keeps people healthy and independent as possible”.

6.6 MENTAL HEALTH

The national mental health strategy – *No Health Without Mental Health* – has a guiding principle that people with mental health problems must be involved in planning and decision making by professional staff.⁵³ The implementation framework states that providers of mental health services should adopt a culture based on service user engagement and co-production.⁵⁴

Peer support has been identified as one way in which the Government’s priorities for mental health will be delivered. The delivery document specifically cites examples of peer support services that improve outcomes and reduce costs with, in one study, 49 peer support packages saving 300 bed days.⁵⁵

6.7 PERSONALISATION

In social care, over 338,000 people had a personal budget at the end of March 2011; this is about a third of the 1 million people supported by councils, and represents over £1.5bn of local authority spending. £1 in every £7 spent by councils goes on care and support services.⁵⁶ The personal health budget supports an individual’s healthcare and well-being needs, and is planned and agreed between them or their representative and their local NHS team.

Thirty-six pilot sites began to trial direct payments for healthcare in June 2012. All CCGs need to have the capability to deliver personal health budgets by 2014. The most recent evaluation of the pilots shows that most budget holders reported improved health outcomes and increased satisfaction levels. They relied less on family carers; and relatives reported less anxiety and stress.⁵⁷

As the personal budget systems of the NHS and local authorities develop, they offer a powerful new way of integrating health and social care at the individual’s level. They offer the opportunity for service users to make purchasing decisions based on what best suits all their needs, rather than having to spend one budget on something to help their ‘health’ needs and another on their ‘social’ needs.⁵⁸ Whilst far from ubiquitous or uncontroversial, they represent a very practical step towards the personalisation of health and care services, and a genuine challenge to historic models of care.

6.8 THE CONTRIBUTION OF THE PEOPLE POWERED HEALTH APPROACH TO STRATEGIC PRIORITIES

The People Powered Health approach has impact across all these strategic drivers, as shown in Figure 8 below. This helps create resilience and mitigate risk within the programme, while enabling possible multiplier effects. This is however predicated on a clear understanding of both the potential costs and benefits related to introducing and scaling the People Powered Health approach on the ground.

Figure 8: Contribution of People Powered Health to NHS strategic priorities



7 APPENDIX 2

THE EVIDENCE BASE FOR ACTIVITIES ASSOCIATED WITH PEOPLE POWERED HEALTH INTERVENTIONS

This appendix sets out the results of a literature review of activities associated with a People Powered Health approach. This formal evidence base has been used to generate the business case, focusing particularly on randomised control trial level evidence.

The experience of the six programme teams helped to scope the literature review – to establish what practice combines to make the People Powered Health approach – and provided practical insights to the formal evidence base. However, this appendix, and the business case more broadly, focuses on the formal evidence base and also assesses the quality of the formal evidence base.

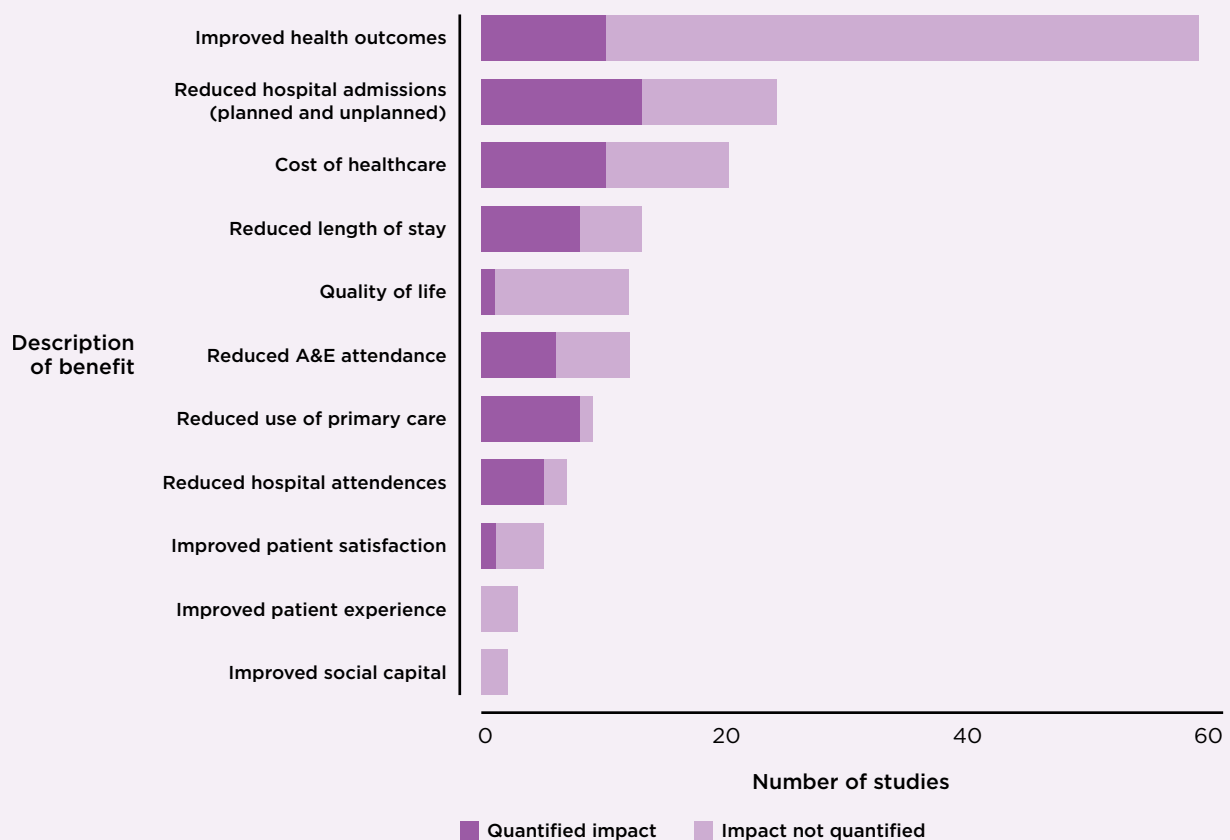
7.1 BENEFITS STUDIED AND QUANTIFIED

Of all 51 formal evidence studies reviewed in the literature, approximately 21 offered quantifiable benefits. These were benefits that were both reported in numerical terms and compared with a control group or previous performance, allowing us to derive relative performance.

Across all the benefits of People Powered Health interventions shown in Figure 9, studies focused in particular on the clinical outcomes for patients. Health outcomes, use of secondary care and the costs of healthcare were more frequently studied. In contrast, patient experience and social capital were both less likely to be studied and less likely to be quantified.

As shown in Figure 9, whilst quantification is often challenging, there are a number of common benefits – which were also reflected in the findings of the People Powered Health programme teams – especially around health outcomes, hospital activity and cost of healthcare.

Figure 9: Quality of the evidence base for People Powered Health interventions.

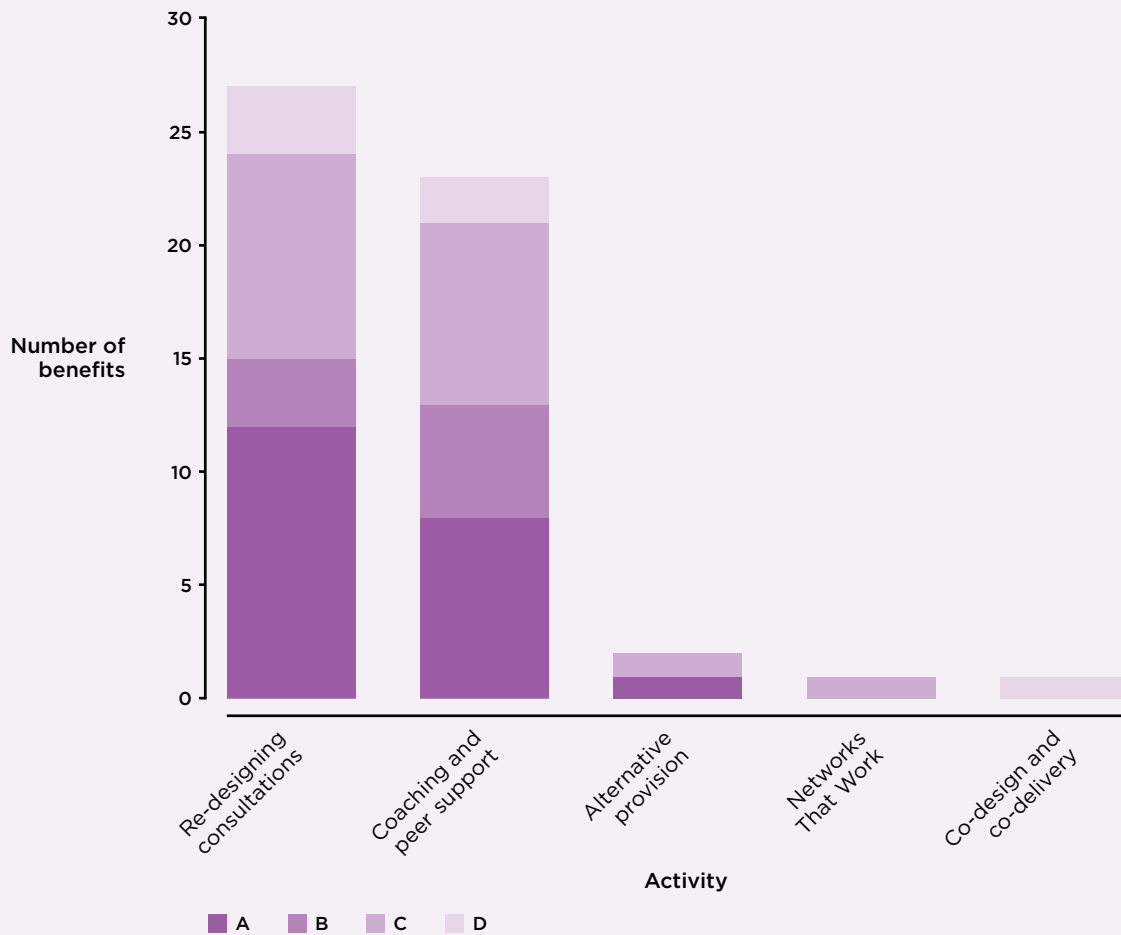


7.2 EVIDENCE BASE FOR PEOPLE POWERED HEALTH ACTIVITIES

As Figure 10 suggests, the evidence base developed to date is more mature around changes to consultations and self-management. The People Powered Health approach includes these activities and also includes a broader range of interventions – including networks of care and co-design of services – where the evidence base is less mature.

The practice of the six People Powered Health programme teams suggests that these types of intervention are important elements of delivering the People Powered Health approach at scale, even though the experimental literature is less developed in these areas than other areas (for the reasons suggested above). While we do not claim the same evidence base for all these activities – and the evidence base is stronger in some areas than others – we are suggesting these complementary activities are enablers of each other at scale, and are presenting the **full package of a People Powered Health approach as an important combination of activities.**

Figure 10: Quality of the evidence base for People Powered Health interventions.



7.3 STANDARDS OF EVIDENCE

Evidence within the NHS is commonly divided into 4 levels, A–D. These reflect differentials in the reliability of the evidence and the extent to which the study has been controlled.⁵⁹

The external studies used in this business case have been categorised into these levels or grades of recommendation.

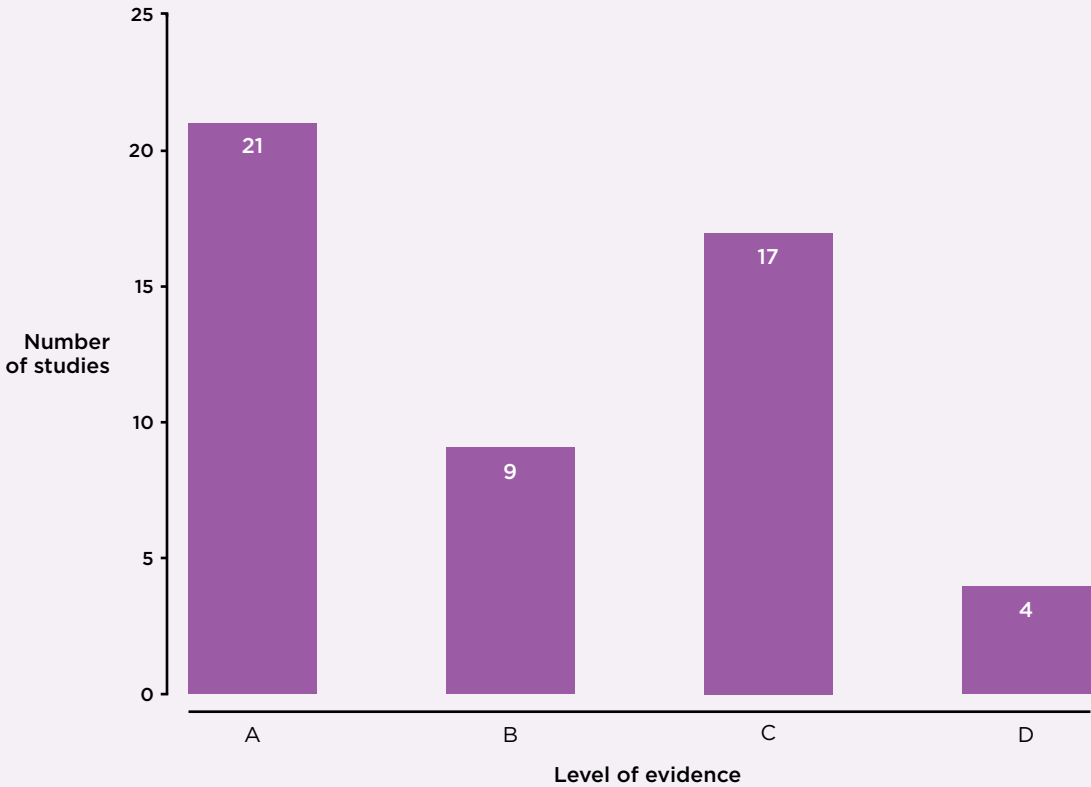
Figure 11 shows how the evidence base we have used is categorised. A large number of the studies identified were either randomised controlled trials or meta-analyses of randomised controlled trials.

However, some are of a lower rating, and where relevant these have been identified as such and/or excluded to ensure that the overall evidence base is represented with appropriate clarity and transparency.

Table 4: Levels of evidence in health

Level	Study types
A	<ul style="list-style-type: none"> • Randomised controlled trial (RCT) • Meta-analysis of RCTs
B	<ul style="list-style-type: none"> • Case-control • Cohort study • Meta-analysis of controlled studies
C	<ul style="list-style-type: none"> • Case series • Extrapolation from case-control studies • Meta-analysis of case series studies or with no criteria
D	<ul style="list-style-type: none"> • Not specified within the study

Figure 11: Quality of the evidence base for People Powered Health interventions.



7.4 SAMPLE SIZE

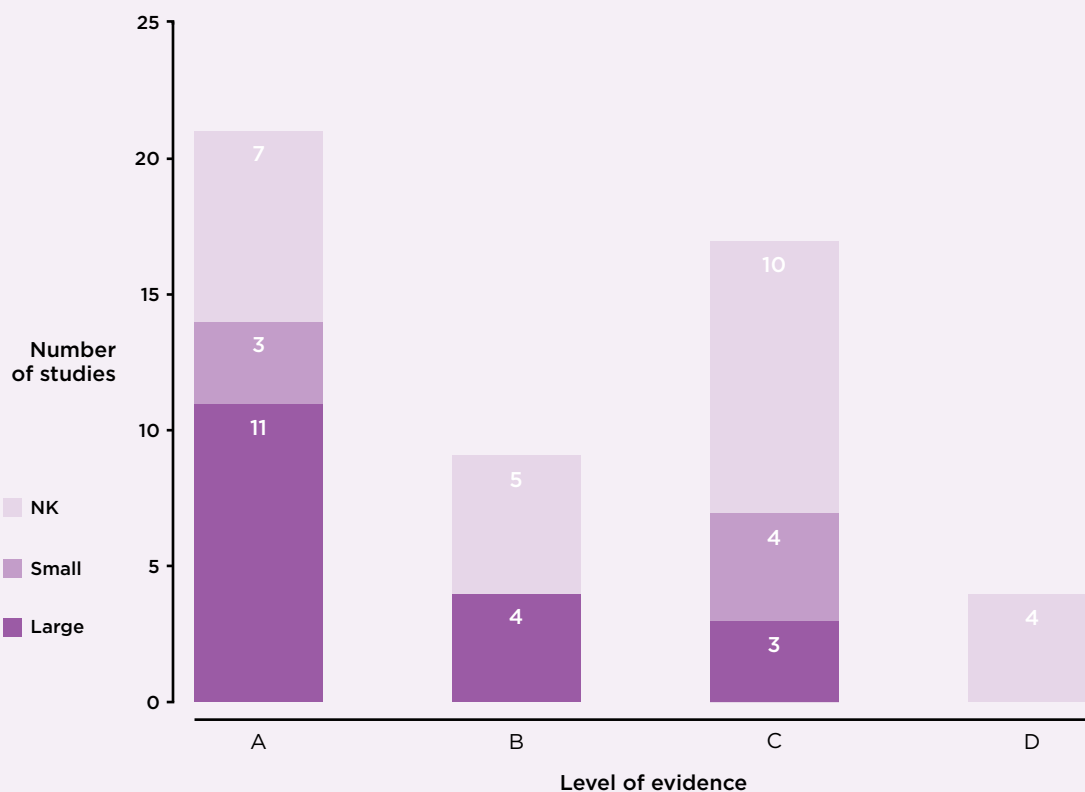
The number of patients included in each study also varied significantly across all levels of evidence. Many studies did not state the size of the study, limiting our ability to be assured of its rigour.

We have classified all 51 studies based on their number of participants. Studies with fewer than 100 participants are considered 'small-N', those with more 'large-N'. Amongst studies explicitly recording the number of participants, most were 'large-N' studies, with over 100 participants.

This pattern held across all types of study, though level C and D studies were more likely to not record a number of participants. Level A studies have the largest number of large-N studies; level C the largest number of small-N.

The frequency of large-N studies offers more confidence in the overall evidence base for People Powered Health.

Figure 12: Quality of the evidence base for People Powered Health interventions.



Small-N studies have fewer than 100 participants, large-N more than 100. 'NK' refers to studies where number of participants is not stated.

7.5 FURTHER RESEARCH INTO PEOPLE POWERED HEALTH INTERVENTIONS

To amplify the evidence-base for People Powered Health, there are 2 areas where further research would be beneficial:

- Quantified, controlled studies of the impact of People Powered Health interventions on patient satisfaction, the patient experience and quality of life.
- Quantification, in all studies, of the financial benefits of People Powered Health interventions with assurance the benefits had been delivered to commissioners or providers.

“Although there may not be a huge amount of data and evidence out there that social value services impact people’s health, there’s enough known about it to make it worth pursuing.”

Rebecca Gaster, GP, Earl’s Court

“My answer to the sceptics, whether it be professionals or service users, would be look at the local evidence base or local intelligence that we’re beginning to build up in the city of the impact of this way of working. We have enough professionals who can argue the case for the difference that co-production and self-management makes for service users and themselves. Also enough patients in the system who can articulate the added value in terms of what happens to them as an individual.”

Paul Morrin, Director of Integration, Leeds LA adult social care

8 APPENDIX 3

DEVELOPMENT OF SAVINGS ESTIMATES FOR PEOPLE POWERED HEALTH

This appendix sets out how the savings estimates for a People Powered Health approach were developed.

As described already, we have analysed the evidence base for People Powered Health interventions according to the strength of the evidence. We did this because the evidence base for the People Powered Health approach is emerging and some practice has stronger evidential underpinnings than others. We did not want to produce a headline from a business case based on low quality evidence.

This analysis of the quality of the formal evidence base resulted in the development of three scenarios:

- **Scenario 1:** The overall median based on all evidence for People Powered Health (an average estimate of savings).
- **Scenario 2:** The lowest reported impact on activity, based on all evidence for People Powered Health (a conservative estimate of savings).
- **Scenario 3:** The strongest single study⁶⁰ available for each type of activity (the estimate based on the most reliable evidence).

The first two scenarios summarise all the evidence based on their impact (either via the minimum or median value). This means they are summaries of all the available evidence for People Powered Health interventions. For each benefit, these scenarios take either the lowest or the median reported change, regardless of the relative merits of the studies.

The third scenario differs. It is based on quality, not quantity, of study, and uses the most robust – that is, highest clinical level of quality and sample size – study for any particular benefit. This means each benefit has a single point of reference, which can be assessed for quality and rigour.

The studies used for Scenario 3 are:

- **Outpatient attendances – de Silva (2011):** A randomised controlled trial of 203 patients with a long-term condition using self-management techniques found that hospital outpatient attendances decreased by 31 per cent and use of primary care by 33 per cent.⁶¹
- **Hospital admissions – Rogers et al. (2006):** The randomised controlled trial of 629 patients to assess the Expert Patients Programme found that planned and unplanned hospital attendances dropped by 6 per cent, alongside reductions in the use of primary care and length of stay. The study also found corresponding reductions in the cost of healthcare of 5 per cent.⁶²
- **A&E attendances – Lorig et al. (2001):** A cohort study of 489 patients with a long-term condition found that a self-management intervention reduced A&E attendances by 25 per cent.⁶³

As this third approach offers the most robust way to develop estimates of savings, we have used its results throughout the business case. The other scenarios are included here for comparative purposes.

Despite this, the significantly greater savings suggested by Scenario 1 does suggest that 7 per cent is a prudent estimate. The 7 per cent estimate may be lower than the full potential of People Powered Health interventions. For this reason, we are also recommending further research to understand if there is greater potential within the concept.

Table 5: Breakdown of savings in all three scenarios

Based on an average Clinical Commissioning Group (covering 342,000 patients, 39 GP practices and an average budget of £290M)

Measure	Level of evidence	Impact (%)	Impact on quantity (000's)	Unit cost ⁶⁴ (£)	Total saving (£m)
Scenario 1: Median of all studies					
A&E attendances	N/A	-32	-16.3	147	-2.4
Planned admissions	N/A	-32	-10.1	2,931	-29.8
Unplanned admissions	N/A	-32	-5.6	2,334	-13.0
Outpatient attendances	N/A	-40	-92.8	147	-13.7
Total					-58.8
Scenario 2: Minimum reported impact					
A&E attendances ⁶⁵	B	-25	-12.7	147	-1.9
Planned admissions ⁶⁶	A	-6	-2.0	2,931	-5.8
Unplanned admissions ⁶⁷	A	-6	-1.1	2,334	-2.5
Outpatient attendances ⁶⁸	C	-4	-10.0	147	-1.5
Total					-11.6
Scenario 3: Strongest evidence base⁶⁹					
A&E attendances ⁷⁰	B	-25	-12.7	147	-1.9
Planned admissions ⁷¹	A	-6	-2.0	2,931	-5.8
Unplanned admissions ⁷²	A	-6	-1.1	2,334	-2.5
Outpatient attendances ⁷³	A	-31	-72.0	147	-10.6
Total					-20.8

9 APPENDIX 4

DETAILED FINDINGS OF LITERATURE REVIEW

The tables below detail the findings of the literature review supporting this business case.

When interpreting the tables, it should be noted that absence of evidence is not evidence of absence: many of these areas have not yet been thoroughly studied, limiting the available evidence base.

Table 6: Number of reported positive benefits from studies of activities associated with People Powered Health⁷⁴

Outcome	Measure	Frequency of reported benefits						
		Redefining consultations	People Helping People	More Than Medicine	Co-design and co-delivery	Networks That Work	Other	Total
Enhancing quality of life for people with long-term conditions	Improved health outcomes	38 (15)	3 (-)	17 (5)			1 (-)	59 (20)
	Improved quality of life	7 (4)	1 (-)	4 (1)				12 (5)
	Reduced A&E attendance	6 (1)	4 (-)	2 (2)				12 (3)
	Reduced hospital admissions (planned and unplanned)	13 (2)	7 (1)	4 (1)				24 (4)
	Reduced length of stay	9 (3)	4 (1)	1 (-)				14 (4)
	Reduced hospital attendances	5 (1)		2 (2)				7 (3)
	<i>Sub Total</i>		85 (29)	19 (2)	32 (13)			1 (-)
Ensuring that people have a positive experience of care	Improved patient satisfaction	1 (1)	1 (-)	3 (1)				5 (2)
	Improved patient experience	3 (-)						3 (-)
Improved use of resources	Cost of healthcare per patient	12 (6)	1 (1)	3 (-)		1 (-)	3 (-)	8 (7)
Other	Improved social capital		1 (-)			1 (-)		2 (-)
	<i>Total</i>	101	22	38		2 (-)	4 (-)	167

Table 7: Reported size of positive benefits from studies of activities associated with People Powered Health

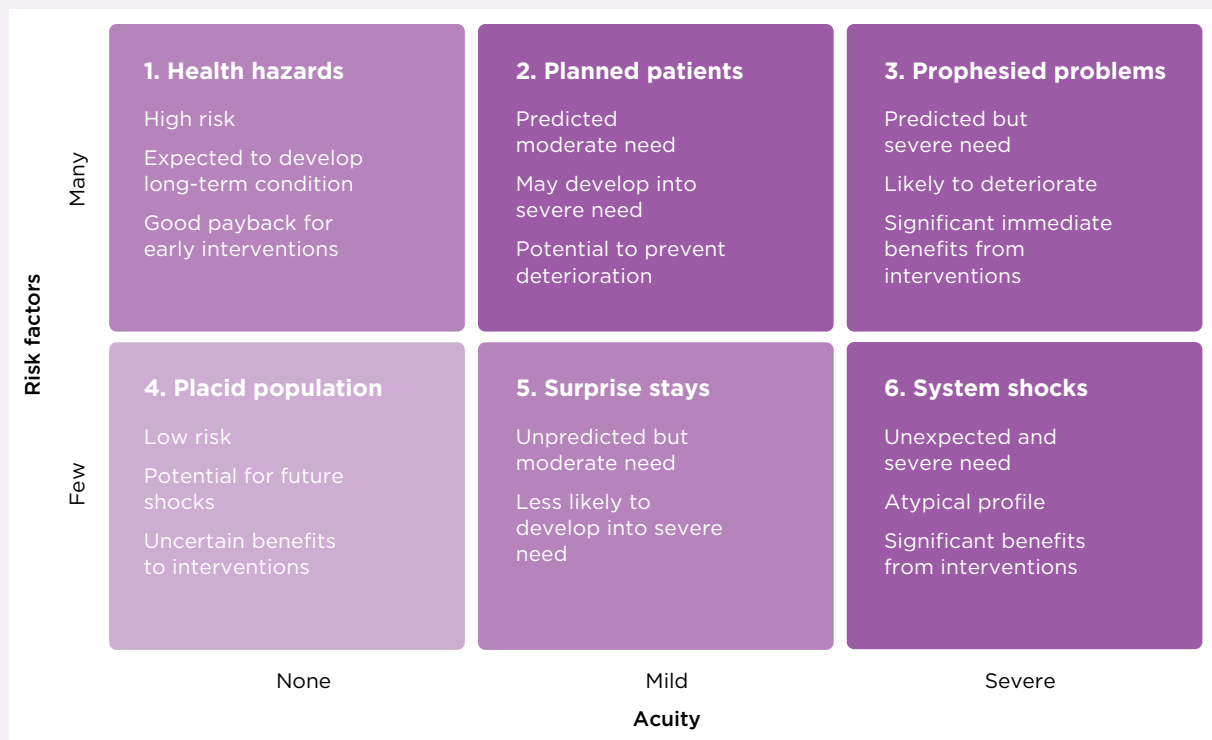
Outcome	Measure	Frequency of reported benefits						Total
		Redefining consultations	People Helping People	More Than Medicine	Co-design and co-delivery	Networks That Work	Other	
Enhancing quality of life for people with long-term conditions	Improved health outcomes	1-100%	22%	0-84%				4%
	Improved quality of life	2%	1 (-)	4 (1)				
	Reduced A&E attendance	25-34%	29-43%	41%				
	Reduced use of primary care	2-73%		33%				
	Reduced hospital admissions (planned and unplanned)	6-50%	18-47%	18-57%				
	Reduced length of stay	40-86%	47-51%	33%				
	Reduced hospital attendances	4-76%		31-40%				
Ensuring that people have a positive experience of care	Improved patient satisfaction			14%				
	Improved patient experience							
Improved use of resources	Cost of healthcare per patient	0-64%				7%		
Other	Improved social capital							

10 APPENDIX 5

SELECTING TARGET POPULATIONS FOR PEOPLE POWERED HEALTH INTERVENTIONS

Understand the current and future needs of patients with a long-term condition is necessary: both for People Powered Health interventions to work, and to identify priorities for implementation.

Figure 13: Segmentation of patients with a long-term condition.



Risk factors suggest whether someone is likely to develop a long-term condition in the future, Acuity measures the severity of the condition.

Combined, this suggests 6 segments of patients (see Figure 13).

In any business segmentation – tailoring specific interventions to specific groups of people – is essential. However, the NHS has historically focused on providing the same services for everyone. This will not work for People Powered Health interventions. It is vital to segment the population with some skill and then to construct specific interventions for each segment.

People Powered Health interventions can be focused on priority segments – for example, expensive interventions including detail case management can be focused on segments to the right, and lower cost interventions around peer support and time banks can be offered more widely.

This will reduce the costs of People Powered Health interventions at a population level while retaining the benefits in reduced use of secondary care.

11 APPENDIX 6

TIMESCALES FOR PEOPLE POWERED HEALTH INTERVENTIONS

Different activities have different timescales for delivery of benefits. Some can have an immediate impact, whereas others need time to embed and affect patient events in the future. Equally, different schemes have different set-up periods. Some can be established quite quickly – such as introducing health trainers – whereas others need longer to set-up – such as timebanks.

These two factors – set-up and payback periods – are outlined in Table 8.

Table 8: Timescales for People Powered Health⁷⁵

	Set-up period	Realisation period
Coaching and peer support		
Peer support	Short	Medium
Coaching	Short/Medium*	Medium/Long*
Self-management	Medium	Medium/Long*
Alternative provision		
Social prescribing	Short	Short
Health trainers	Short	Medium/Long*
Timebanks	Medium	Long
Personal budgets	Medium/Long*	Medium/Long*
Redesigning consultations		
Group consultations	Short	Medium
Care planning	Medium	Short/Medium*
Networks and consortia		
Partnerships	Short	Short
Semi-formal networks	Medium	Short
User-led service design		
Community researchers	Short	Short
User-led service design	Short	Short

*Realisation periods vary depending on cohort selected.

ENDNOTES

1. Department of Health (2010). Improving the health and well-being of people with long-term conditions. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_111187.pdf.
2. Office for National Statistics (2011). UK population projected to reach 70 million by mid-2027. <http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/sum-2010-based-national-population-projections.html>.
3. House of Commons Library (2012). NHS funding and expenditure. www.parliament.uk/briefing-papers/sn00724.pdf
4. Universities UK (2012). A picture of health and education. <http://www.universitiesuk.ac.uk/highereducation/Documents/2012/ApictureOfHealthAndEducation.pdf>
5. Health Foundation. See <http://www.health.org.uk/areas-of-work/programmes/co-creating-health/>
6. 'Year of Care - Care Planning House'. Accessed 27 August 2012. http://www.diabetes.nhs.uk/year_of_care/care_planning_what_is_it/the_care_planning_house/.
7. 'MAGIC: Shared Decision Making Case Studies'. Health Foundation. Accessed 27 August 2012. <http://health.org.uk/areas-of-work/programmes/shared-decision-making/magic-case-studies>.
8. Mental Health Foundation. Peer Support in Long Term Conditions: The Basics. . London: Mental Health Foundation, September 2012. http://www.mentalhealth.org.uk/content/assets/PDF/publications/peer_support_the_basics.pdf
9. Boyle, David. More Than Money: Platforms for Exchange and Reciprocity in Public Services. . Nesta. Accessed 27 August 2012. <http://www.nesta.org.uk/library/documents/MorethanMoneyv11.pdf>
10. Department of Health. Health Trainers: Questions and Answers. London: Department of Health, February 2010.
11. National Voices. Integrated Care: What Do Patients, Service Users and Carers Want?. London: National Voices, January 2012. http://www.nationalvoices.org.uk/sites/www.nationalvoices.org.uk/files/what_patients_want_from_integration_national_voices_paper.pdf
12. Department of Health. 'Personal health budgets'; Article. Accessed 4 January 2013. <http://www.dh.gov.uk/health/category/policy-areas/nhs/personal-budgets/>.
13. British Medical Association. Personal Health Budgets Discussion Paper. London: British Medical Association, November 2012. <http://bma.org.uk/-/media/Files/PDFs/Working%20for%20change/Shaping%20healthcare/Funding/personalhealthbudgetsNov2012.pdf>.
14. Devlin, John and Nancy Appleby. Getting the Most Out of PROMs: Putting Health Outcomes at the Heart of NHS Decision-making. London: King's Fund, 2010. <https://www.kingsfund.org.uk/sites/files/kf/Getting-the-most-out-of-PROMs-Nancy-Devlin-John-Appleby-Kings-Fund-March-2010.pdf>
15. Nesta. People Powered Commissioning (in press). See <http://www.nesta.org.uk/>
16. Department of Health (2007). Available at: http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_076913
17. Duke, S. A., Colaquiari, S. and Colaquiari, R. 'Individual patient education for people with type 2 diabetes mellitus'. Cochrane Database of Systematic Reviews. 2009: 1. <http://www.ncbi.nlm.nih.gov/pubmed/19160249>
18. Trento, M. et al. 'Lifestyle intervention by group care prevents deterioration of Type II diabetes: a 4-year randomized controlled clinical trial'. Diabetologia. 2002: 45(9). <http://www.ncbi.nlm.nih.gov/pubmed/12242455>.
19. Rogers, A. et al. (2006) The National Evaluation of the Pilot Phase of the Expert Patients Programme. National Primary Care Research & Development Centre. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_080683.pdf.
20. Norris, S. L. et al. 'Self-management education for adults with type 2 diabetes: a meta-analysis of the effect on glycaemic control'. Diabetes Care. 2002: 25(7). <http://www.ncbi.nlm.nih.gov/pubmed/12087014>.
21. Social Care Institute for Excellence and nef (2011). Budgets and Beyond: Interim Report. http://www.neweconomics.org/sites/neweconomics.org/files/Budgets_and_Beyond_Interim_Report.pdf.
22. de Silva, D. (2011) Evidence: Helping people help themselves. Health Foundation. http://www.health.org.uk/media_manager/public/75/publications_pdfs/Helping%20people%20help%20themselves.pdf.
23. Based on average CCG budget of £290m, 212 CCGs nationally, average 342,000 patients per CCG. NHS Commissioning Board (24 May 2012) <http://www.england.nhs.uk/2012/05/24/ccg-configuration/> and Health Service Journal (1 August 2012) <http://www.hsj.co.uk/news/finance/local-area-team-budgets-dwarf-ccg-funds/5047710.article>
24. Evidence-based medicine defines Level A here: http://en.wikipedia.org/wiki/Evidence-based_medicine
25. Nesta, Innovation Unit and nef (2012) People Powered Health: Co-production catalogue. http://www.nesta.org.uk/areas_of_work/assets/features/people-powered-health_catalogue.
26. Piatt, G. A. et al. 'Translating the chronic care model into the community'. Diabetes Care. 2006: 29(4). <http://www.ncbi.nlm.nih.gov/pubmed/16567820?dopt=AbstractPlus>.
27. Adams, S. G. et al. 'Systematic review of the chronic care model in chronic obstructive pulmonary disease prevention and management'. Archives of Internal Medicine. 2007: 167(6). <http://www.ncbi.nlm.nih.gov/pubmed/17389286>.
28. Norris, S. L. et al. 'Self-management education for adults with type 2 diabetes: a meta-analysis of the effect on glycaemic control'. Diabetes Care. 2002: 25(7). <http://www.ncbi.nlm.nih.gov/pubmed/12087014>.
29. St John, A. et al. 'The value of self-monitoring of blood glucose: a review of recent evidence'. Journal of diabetes and its complications. 2010: 24(2). <http://www.ncbi.nlm.nih.gov/pubmed/19230717>.
30. Shearer, A. et al. 'Cost-effectiveness of flexible intensive insulin management to enable dietary freedom in people with Type 1 diabetes in the UK'. Diabetic Medicine. 2004: 21(5). <http://www.ncbi.nlm.nih.gov/pubmed/15089791>.
31. Duke, S. A., Colaquiari, S. and Colaquiari, R. 'Individual patient education for people with type 2 diabetes mellitus'. Cochrane Database of Systematic Reviews. 2009: 1. <http://www.ncbi.nlm.nih.gov/pubmed/19160249>.
32. See: <http://www.va.gov/VATAP/docs/Patientcenteredcare2010.pdf>
33. de Silva, D. (2011) Evidence: Helping people help themselves. Health Foundation. http://www.health.org.uk/media_manager/public/75/publications_pdfs/Helping%20people%20help%20themselves.pdf.
34. Cappuccio, F. P. et al. 'Blood pressure control by home monitoring: meta-analysis of randomised trials'. British Medical Journal. 2004: 329(7458). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC478224/>.
35. Wheeler, J.R., Janz N.K., and Dodge J.A. 'Can a disease self-management program reduce health care costs? The case of older women with heart disease'. Medical Care. 2003: 41(6). <http://www.ncbi.nlm.nih.gov/pubmed/12773836>

36. Norris, S.L. et al. (2002). Self-management education for adults with type 2 diabetes: a meta-analysis of the effect on glycaemic control'. *Diabetes Care*. 2002; 25(7). <http://www.ncbi.nlm.nih.gov/pubmed/12087014>.
37. St John, A. et al. 'The value of self-monitoring of blood glucose: a review of recent evidence'. *Journal of diabetes and its complications*. 2010; 24(2). <http://www.ncbi.nlm.nih.gov/pubmed/19230717>.
38. Shearer, A. et al. 'Cost-effectiveness of flexible intensive insulin management to enable dietary freedom in people with Type 1 diabetes in the UK'. *Diabetic Medicine*. 2004; 21(5). <http://www.ncbi.nlm.nih.gov/pubmed/15089791>.
39. Duke, S. A., Colaquiari, S. and Colaquiari, R. 'Individual patient education for people with type 2 diabetes mellitus'. *Cochrane Database of Systematic Reviews*. 2009; 1. <http://www.ncbi.nlm.nih.gov/pubmed/19160249>.
40. See <http://www.va.gov/VATAP/docs/Patientcenteredcare2010.pdf>
41. Rogers, A. et al. (2006) The National Evaluation of the Pilot Phase of the Expert Patients Programme. National Primary Care Research & Development Centre.
42. Self-management: What works? Outcomes and effectiveness. Invest in engagement. <http://www.investinengagement.info/Self-managementOutcomes>
43. Repper, J. and Carter, T. 'A review of the literature on peer support in mental health services'. *Journal of Mental Health*. 2011; 20(4). <http://www.iimhl.com/iimhlupdates/20120115a.pdf>.
44. See: <http://www.england.nhs.uk/2012/05/24/ccg-configuration/>
45. See: <http://www.hsj.co.uk/news/finance/local-area-team-budgets-dwarf-ccg-funds/5047710.article>
46. Department of Health (2012) Confirmation of Payment by Results (PbR) arrangements for 2012-13. See: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132654.
47. HM Treasury (2010). Spending Review 2010. http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf.
48. National Audit Office (2011). Delivering efficiency savings in the NHS. <http://www.nao.org.uk/idoc.ashx?docId=7066ab9c-a64d-4af5-b722-0fec5733129b&version=1>.
49. House of Commons Committee of Public Accounts (2011). National Health Service Landscape Review. Thirty-third Report of Session 2010-12. <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmpubacc/764/764.pdf>.
50. Department of Health (2012). Confirmation of Payment by Results (PbR) arrangements for 2012-13. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132654.
51. Ibid.
52. Ham, C., Dixon, A. and Brooke, B. (2012) Transforming the Delivery of Health and Social Care: The case for fundamental change. http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/transforming-the-delivery-of-health-and-social-care-the-kings-fund-sep-2012.pdf.
53. HM Government (2011) No Health Without Mental Health: A cross-government mental health outcomes strategy for people of all ages. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123766.
54. Department of Health (2012) No Health Without Mental Health: implementation framework. <http://www.dh.gov.uk/health/files/2012/07/No-Health-Without-Mental-Health-Implementation-Framework-Report-accessible-version.pdf>.
55. HM Government (2011) No Health Without Mental Health: Delivering better mental health outcomes for people of all ages. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124057.pdf.
56. Think Local Act Personal (2011). Personal Budgets: Taking Stock, Moving Forward. http://www.thinklocalactpersonal.org.uk/_library/Resources/Personalisation/TLAP/Paper5TakingStockMovingForwards.pdf.
57. Department of Health (2012). Personal health budgets update. <http://www.dh.gov.uk/health/files/2012/06/Personal-health-budget-update-Summer-2012.pdf>.
58. NHS Confederation (2012). Joint personal budgets: a new solution to the problem of integrated care? http://www.nhsconfed.org/Publications/Documents/Joint_personal_budgets_a_new_solution_to_the_problem_of_integrated_care.pdf
59. Centre for Evidence-Based Medicine (2009). Levels of Evidence. <http://www.cebm.net/index.aspx?o=1025>.
60. The strongest study is that which offers the most rigorous study design (using the NHS hierarchy of evidence, and typically drawing on a Level A study) and largest sample size.
61. de Silva, D (2011). Evidence: Helping people help themselves. Health Foundation. http://www.health.org.uk/media_manager/public/75/publications_pdfs/Helping%20people%20help%20themselves.pdf.
62. Rogers, A et al. (2006). The National Evaluation of the Pilot Phase of the Expert Patients Programme. National Primary Care Research & Development Centre.
63. Lorig, K.R. et al. (2001). 'Chronic disease self-management program: 2-year health status and health care utilization outcomes'. *Medical Care*. 2001; 39(11). <http://www.ncbi.nlm.nih.gov/pubmed/11606875>.
64. Personal Social Services Research Unit (2010) Unit Costs of Health and Social Care 2011. <http://www.pssru.ac.uk/pdf/uc/uc2011/uc2011.pdf>.
65. Ibid.
66. Rogers, A. et al. (2006) The National Evaluation of the Pilot Phase of the Expert Patients Programme. National Primary Care Research & Development Centre.
67. Ibid
68. A New Dialogue with Citizens. Cabinet Office. <http://www.scribd.com/doc/30738445/A-New-Dialogue-1-Cabinet-Office>.
69. The strongest evidence base is those studies offer the highest level of evidence (typically Level A) and largest sample size.
70. Lorig, K.R. et al. (2001) 'Chronic disease self-management program: 2-year health status and health care utilization outcomes'. *Medical Care*. 2001; 39(11). <http://www.ncbi.nlm.nih.gov/pubmed/11606875>.
71. Rogers et al. (2006) Rogers, A. et al. (2006) The National Evaluation of the Pilot Phase of the Expert Patients Programme. National Primary Care Research & Development Centre.
72. Ibid
73. de Silva, D. (2011) Evidence: Helping people help themselves. Health Foundation. http://www.health.org.uk/media_manager/public/75/publications_pdfs/Helping%20people%20help%20themselves.pdf.
74. Figures in parentheses are Level A studies. Figures in bold suggest stronger evidence (over 10 studies and/or over 50% Level A).
75. Short term: 0-12 months; medium term: 12-24 months; long term: 24+ months.

Nesta...



Nesta

1 Plough Place
London EC4A 1DE

research@nesta.org.uk
www.twitter.com/nesta_uk
www.facebook.com/nesta.uk

www.nesta.org.uk

April 2013

Nesta Operating Company. English charity no. 7706036.
Scottish charity no. SC042833.