

# **Economic Benefits of Self Care**

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## Aim and contents

### Aim of work

**To estimate the costs and benefits of self care skills training to different parts of the health and social care system**

**1**

Aim and methods

**2**

Costs and benefits for generic skills training

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Costs and benefits for disease specific skills training

**4**

What does this mean for primary care policy?

## Section 1: Aim and methods

### Aim of work

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What does this mean for self care policy and what are next steps?

## Economic Benefits of Self Care - Introduction

### What's the problem?

- **There is a need to influence actors in the health and social care system to commission more self care interventions**
- **It is difficult to separate out the costs and benefits of commissioning self care to individual parts of the healthcare system**
- **Needs a joined-up approach i.e. primary and secondary services need to work together to deliver self care**



### What's the solution?

- **Collate economic evidence from self care studies;**
- **Estimate the savings for each part of the healthcare system e.g. GP visits, hospital, A&E based on average costs of these services;**
- **Estimate how many people can benefit from a self care intervention**
- **Estimate net benefit of commissioning self care**

## Section 2: Costs and benefits for generic skills training

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What does this mean for self care policy and what are next steps?

## Little economic benefit found in US study of people in high risk groups

### Details of study

- Based on a study in 1998 of 2,586 people identified with a high risk of illness or who have high medical use.
- High risk groups were arthritis, back pain, high blood pressure, diabetes, heart problems, smoking, obesity, stroke, chronic obstructive pulmonary disease.
- Patients allocated to a specific self care educational module

### Savings in healthcare services after intervention

- Doctors visits reduced by 1.6 per person per year (pppy)
- Nurses visits reduced by 0.2 pppy
- Hospital inpatient bed days reduced by 0.4 pppy
- A&E attendances reduced by 0.2 pppy

### Economic benefits

- Savings to primary care pppy = £50.90
- Savings to providers of secondary care services pppy = £94.60
- Total savings pppy = £145.50

## However, the recent RCT of Expert Patients Programme showed much bigger savings

### Details of study

- Based on a study of 629 patients with a wide range of self-defined long-term conditions
- Self care support groups involved 6 weekly sessions to teach self care skills

### Savings in healthcare services after intervention

- Doctors visits reduced by 0.2 per person per year (pppy)
- Nurses visits reduced by 0.2 pppy
- Hospital inpatient bed days reduced by 1.6 pppy
- A&E attendances reduced by 0.2 pppy
- Outpatient appointments reduced by 0.4 pppy
- Medication costs reduced by £48 pppy


### Economic benefits

- Savings to primary care pppy = £56.69
- Savings to secondary care services pppy = £395.04
- Total savings pppy = £451.73

# It is projected that EPP and other self care interventions could save the NHS millions over the next few years

## Estimated benefits from EPP and other self care interventions

- The population that could benefit from EPP and other self care support are an estimated 15 million people in England with at least one chronic illness
- It is assumed that up to 800,000 people could have attended EPP and a further 1.5 million people could have received other self care support by 2010/11
- It is assumed EPP costs £240 per person and other self care interventions £100 per person
- It is assumed that the savings are the same for all types of self care intervention



Year	EPP	Other Self care	Total Costs	Total Savings	Total Benefits
2008/09	200,000	300,000	£78,000,000	£225,864,800	£147,864,800
2009/10	200,000	500,000	£98,000,000	£316,210,720	£218,210,720
2010/11	300,000	700,000	£142,000,000	£451,729,600	£309,729,600

## Section 3: Costs and benefits for disease specific skills training

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Costs and benefits for disease specific skills training

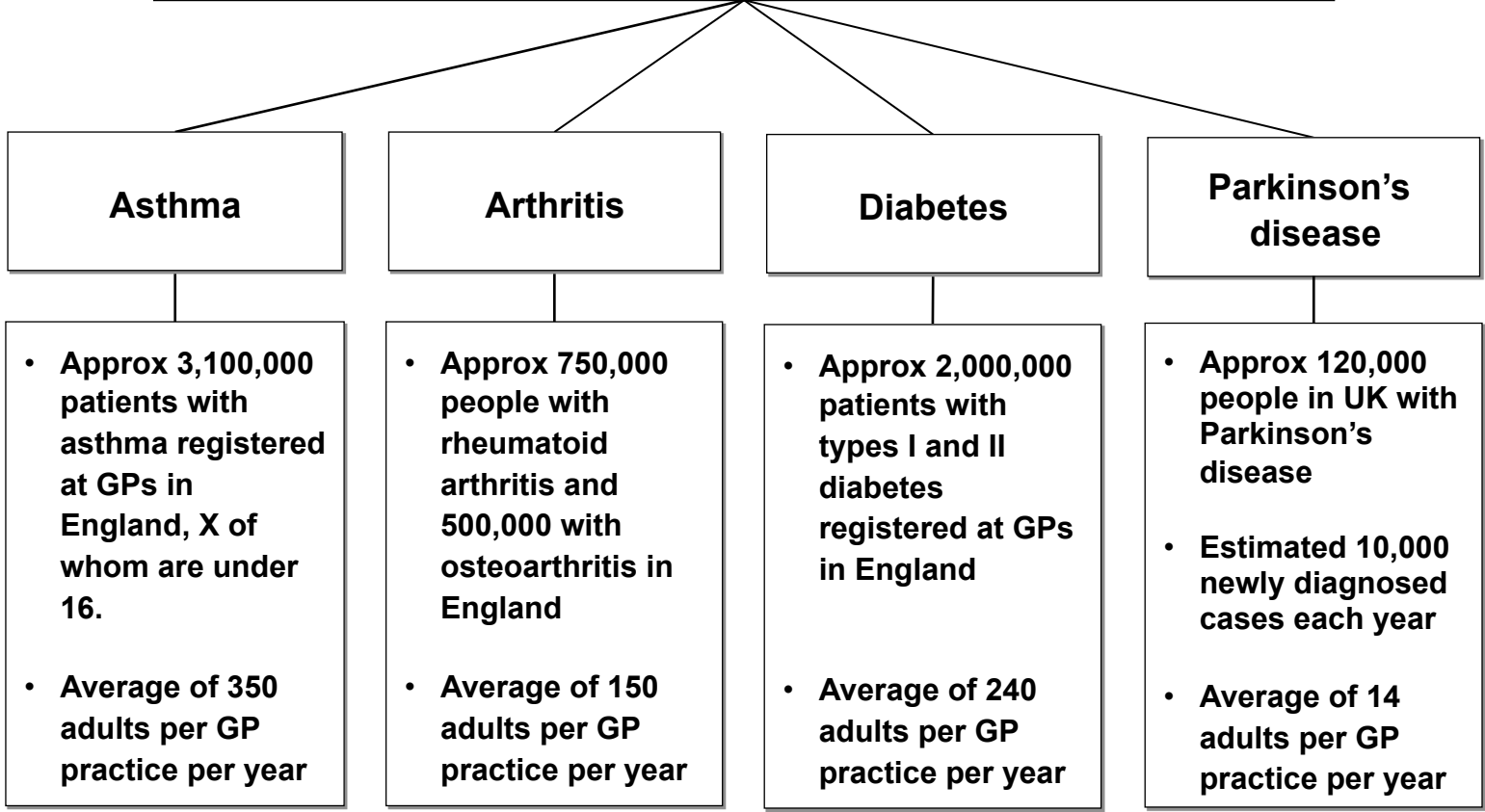
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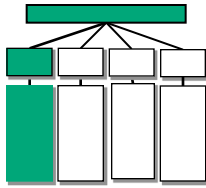
What does this mean for self care policy and what are next steps?

# Most evidence looks at self care for all LTCs

## Need for economic benefits of self care for specific conditions

### Economic benefits of self care for specific conditions





## Evidence of a self care education programme for people with asthma show significant savings

### Details of study

- Based on a study of 230 asthma patients who had not received self care education before.
- Patients attended a specific asthma education programme
- Patients with moderate to severe asthma were found to benefit the most

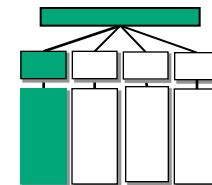
### Savings in healthcare services after intervention

- Doctors visits reduced by 4.3 per person per year (pppy)
- Nurses visits reduced by 0.3 pppy
- Hospital admissions reduced by 0.3 pppy
- A&E attendances reduced by 0.7 pppy

### Economic benefits

- Savings to primary care pppy = £131.45
- Savings to providers of secondary care services pppy = £52.56
- Savings to commissioners of secondary care services pppy = £97.50
- Total savings pppy = £281.51

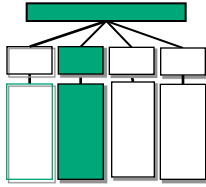
It is projected that self care interventions for just 5% of asthma patients could save the NHS millions each year



### Estimated benefits from asthma self care interventions

- Approximately 3,100,000 patients were registered at GPs in England in 2006/07
- It is assumed that 5% of these will receive a self care intervention, around 155,000 per year
- Benefits are based on a range of costs for self care interventions, from £100 to £250 each
- It is assumed that the savings are the same for all types of self care intervention

Cost of self care	Total Costs	Total Savings	Total Benefits
£100	£15,497,630	£43,626,882	£28,129,252
£200	£23,246,445	£43,626,882	£20,380,437
£200	£30,995,260	£43,626,882	£12,631,622
£250	£38,744,075	£43,626,882	£4,882,807



## Evidence of a self care education programme for people with arthritis also show significant savings

### Details of study

- Based on a RCT study of 809 rheumatoid arthritis and osteoarthritis patients.
- Patients participated in a mail delivered arthritis self-management programme

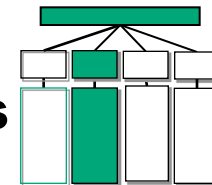
### Savings in healthcare services after intervention

- Doctors visits reduced by 1.3 per person per year (pppy)
- Nurses visits reduced by 0.3 pppy
- Hospital inpatient bed days reduced by 0.3 pppy
- A&E attendances reduced by 0.4 pppy

### Economic benefits

- Savings to primary care pppy = £44.10
- Savings to providers of secondary care services pppy = £199.90
- Total savings pppy = £244.00

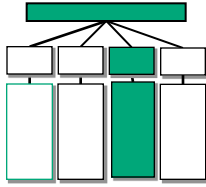
It is projected that self care interventions for just 5% of arthritis patients could save the NHS millions each year



### Estimated benefits from asthma self care interventions

- Approximately 2,225,000 people with arthritis in England
- It is assumed that 5% of these will receive a self care intervention, around 111,000 per year
- Benefits are based on a range of costs for self care interventions, from £100 to £250 each
- It is assumed that the savings are the same for all types of self care intervention

Cost of self care	Total Costs	Total Savings	Total Benefits
£100	£11,250,000	£27,450,338	£16,200,338
£200	£16,875,000	£27,450,338	£10,575,338
£200	£22,500,000	£27,450,338	£4,950,338
£250	£28,125,000	£27,450,338	-£674,663



## Significant savings were also found through self care intervention for patients with Parkinson's disease

### Details of study

- Based on results from RCT of 290 patients with Parkinson's disease
- Patients participated in a mail delivered education and health promotion program in the treatment of Parkinson's disease

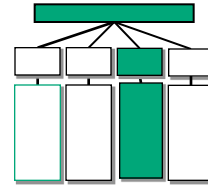
### Savings in healthcare services after intervention

- Doctors visits reduced by 1.2 per person per year (pppy)
- Nurses visits reduced by 0.3 pppy
- Hospital inpatient bed days reduced by 1.2 pppy
- A&E attendances reduced by 0.1 pppy

### Economic benefits


- Savings to primary care pppy = £41.17
- Savings to providers of secondary care services pppy = £247.30
- Total savings pppy = £288.47

## Self care interventions for just 5% of Parkinson's disease patients could save the NHS up to £1 million per year

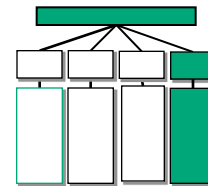


### Estimated benefits from asthma self care interventions

- Approximately 120,000 people with Parkinson's disease in the UK
- It is assumed that 5% of these will receive a self care intervention, around 12,000 per year
- Benefits are based on a range of costs for self care interventions, from £100 to £250 each
- It is assumed that the savings are the same for all types of self care intervention



Cost of self care	Total Costs	Total Savings	Total Benefits
£100	£600,000	£1,730,832	£1,130,832
£200	£900,000	£1,730,832	£830,832
£200	£1,200,000	£1,730,832	£530,832
£250	£1,500,000	£1,730,832	£230,832



## However, very few savings from self care intervention found for diabetes patients

### Details of study

- Based on results from 576 diabetes patients identified with high medical usage
- Patients allocated to diabetes self care educational module

### Savings in healthcare services after intervention

- Doctors visits reduced by 0.6 per person per year (pppy)
- Nurses visits reduced by 0.5 pppy
- Hospital inpatient bed days reduced by 0.0 pppy
- A&E attendances reduced by 0.5 pppy

### Economic benefits

- Savings to primary care pppy = £26.79
- Savings to providers of secondary care services pppy = £32.85
- Total savings pppy = £59.64

## Section 4: What does this mean for self care policy and what are next steps?

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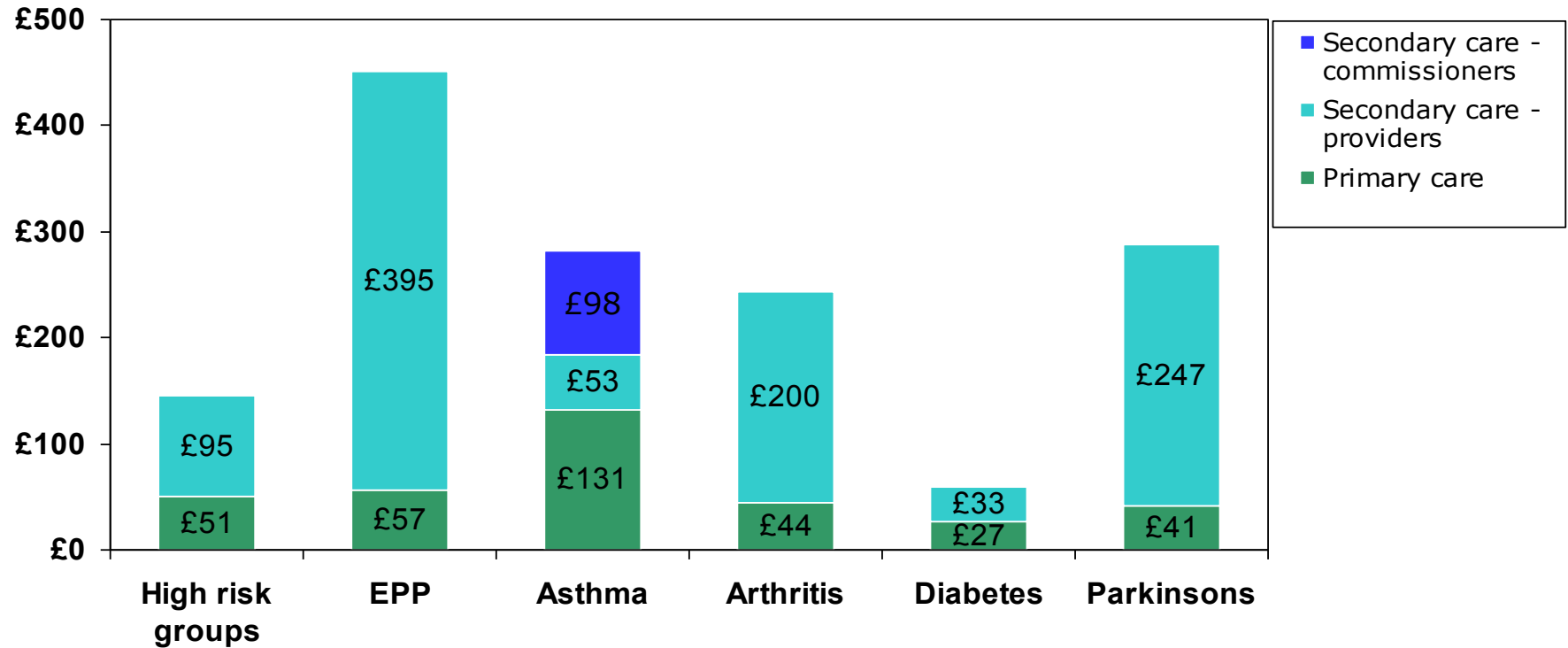
Costs and benefits for disease specific skills training

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# Economic Benefits of Self Care – Summary of Savings

### Savings from self care education programmes per person per year



## Economic Benefits of Self Care

### Conclusions

- Evidence shows that self care education programmes reduce the utilisation of healthcare services and are cost effective.
- No individual area of the health service has been shown to be cost effective therefore a joined-up approach is needed to maximise the benefits of self care.
- Many of the studies just looked at savings in individual areas of the healthcare system e.g. GP visits, hospital bed days, and did not take into account savings in such areas as outpatients visits or medication. Therefore the economic benefits given here could be an underestimate.
- Reducing the cost of training is key to delivering benefits. Need to try and find cheaper training than EPP.
- It is recommended that self care education programmes are initially targeted at patients who have higher than average medical usage to maximise the economic benefits. Perhaps decision aid for assignment to different types of training.

To deliver benefits of this work, we need to pursue further

### Recommendations

- Need to share with diabetes policy colleagues, strategy unit and advisors from service to get their take
- We find interested area to pilot more innovative system of funding self care training for specific disease areas.
- We investigate links to risk profiling and care planning

### Possible further analysis

- What influences individual actors to prescribe/commission self care? How important are economic benefit relative to other factors? e.g. cultural?
- How would we measure success in getting more people to prescribe/commission self care interventions?
- How long do benefits of self care training last?