

# The third health care revolution: A new paradigm for better value health care

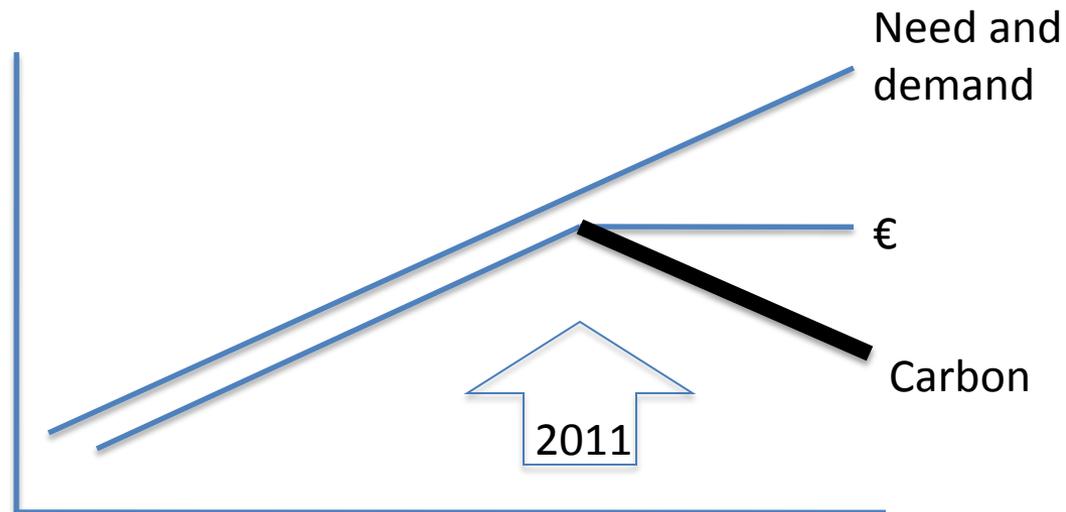
Professor Sir Muir Gray, Co-Director  
NHS QIPP Programme, Right Care  
Workstream – Department of Health,  
Director, Better Value Healthcare



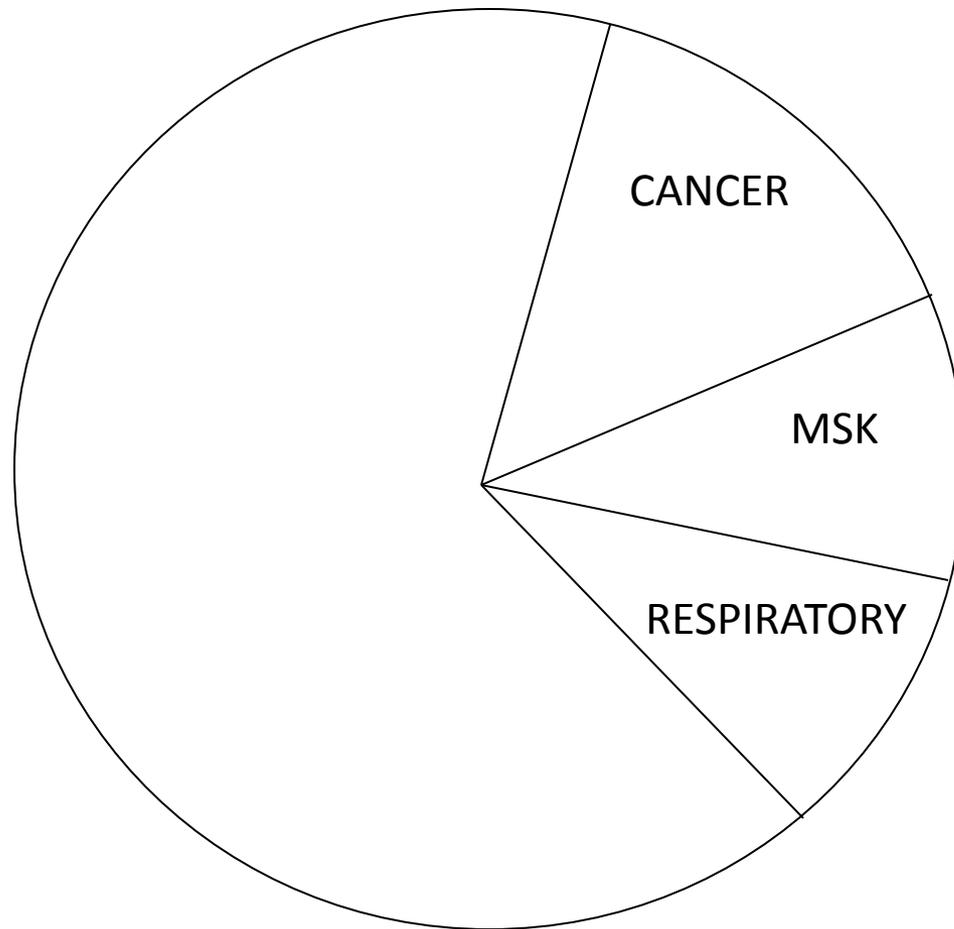
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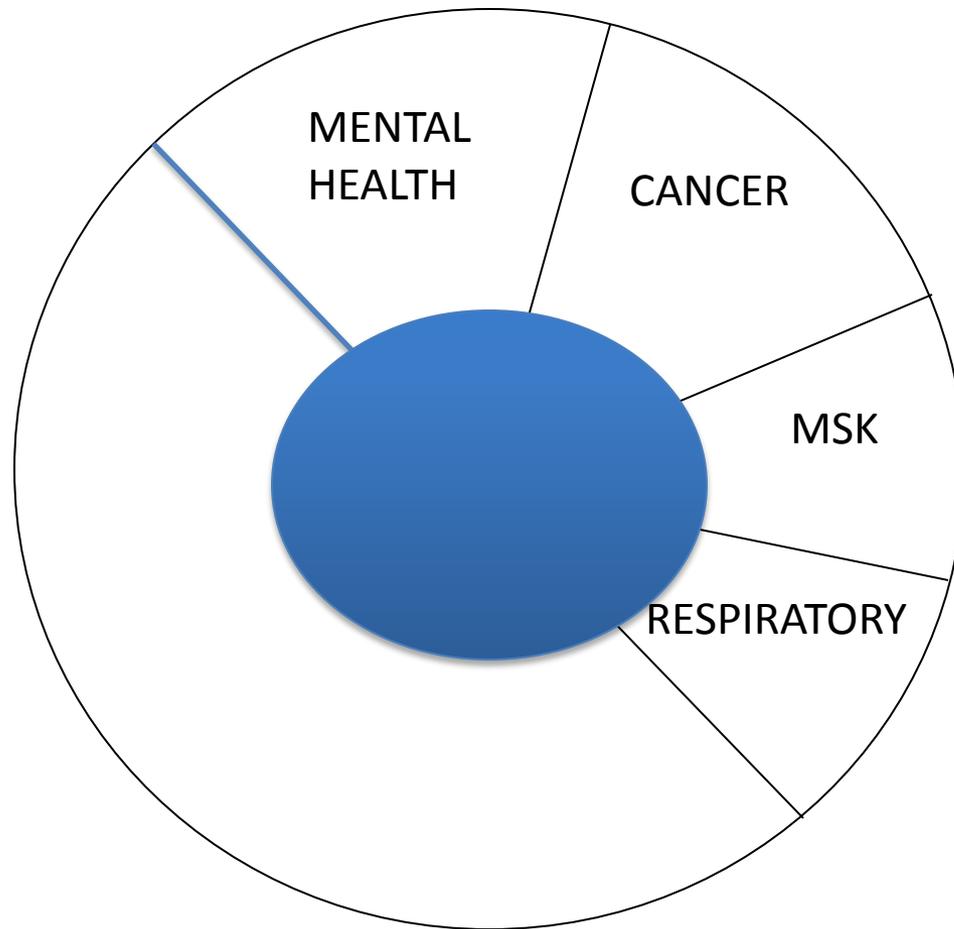
All health services worldwide, face five major problems:

- patient harm
- unwarranted variation in
  - quality, safety and outcome
  - activity and cost
- inequalities and inequity
- failure to prevent preventable disease
- waste

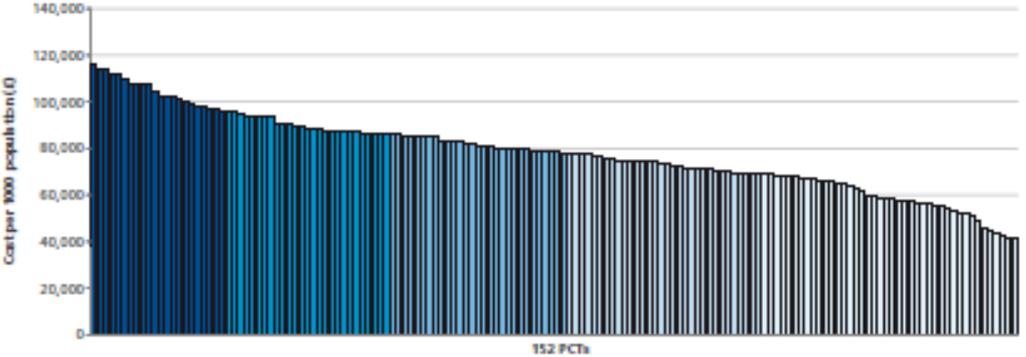
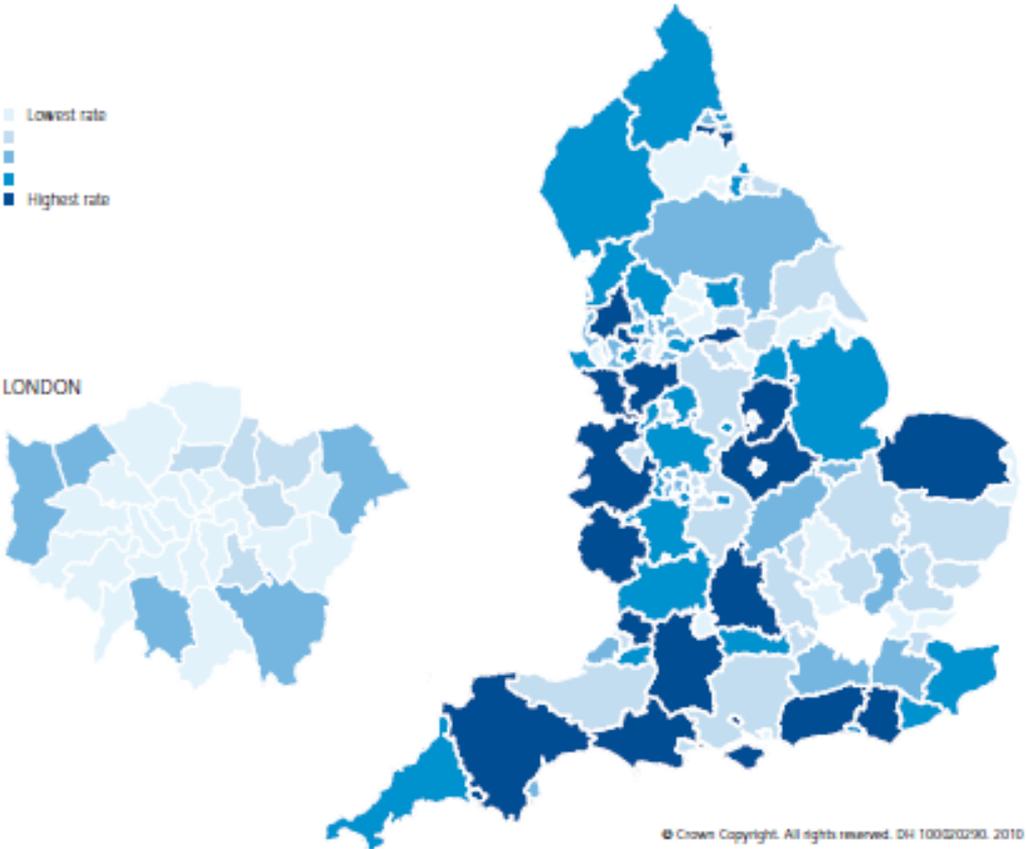


Maximise value by  
allocating  
optimally



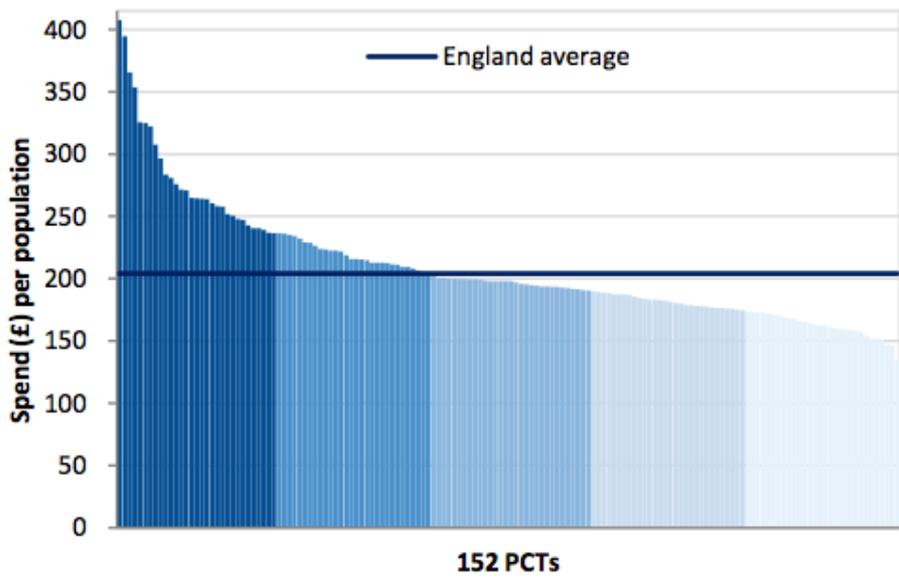


**Musculo-skeletal expenditure per 1000 population by PCT**  
**Weighted by age, sex, and need**  
**2008/09**

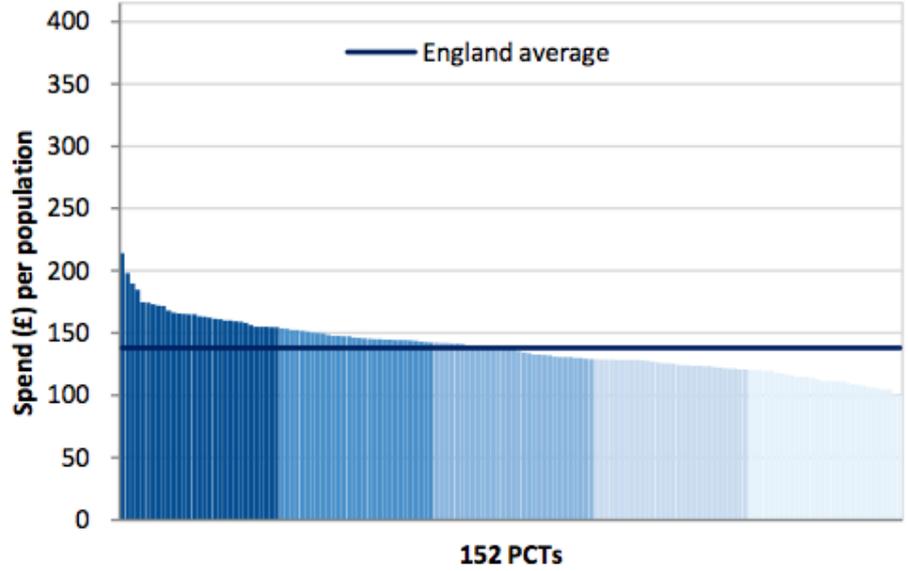


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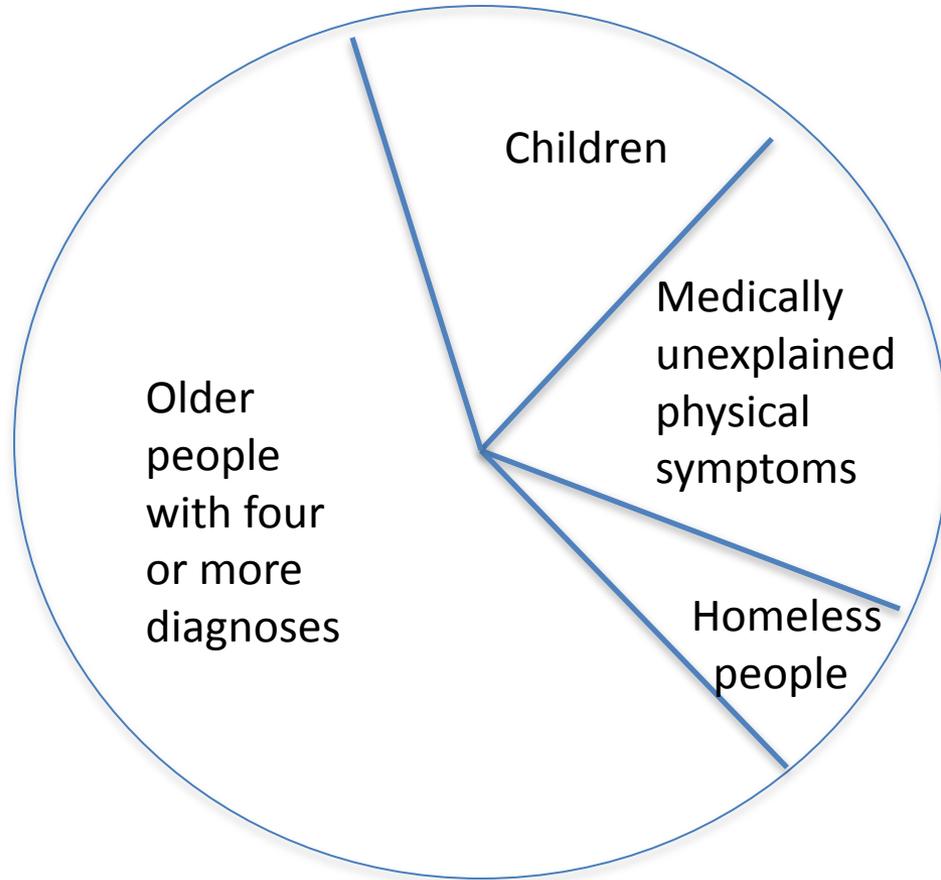
### Mental health disorders



### Problems of circulation



Mental health £M324-151/Million  
Circulation £M174-106



PROGRAMME  
BUDGETS  
2009/2010  
MILLION / MILLION  
POPULATION

225	<b>Mental Health</b>
160	<b>CVD</b>
117	<b>Cancer</b>
95	<b>GU</b>
95	<b>MSK</b>
92	<b>Respiratory</b>
92	<b>GI</b>
82	<b>Neuro</b>
74	<b>Trauma</b>
72	<b>Maternity</b>
70	<b>Social</b>
66	<b>Dental</b>
	<b>Learning</b>
63	<b>Disabilty</b>
58	<b>Endocrine</b>
42	<b>Healthy</b>
42	<b>Skin</b>
40	<b>Vision</b>
40	<b>ID</b>
28	<b>Blood</b>
	<b>Adverse</b>
21	<b>Effects</b>
10	<b>Hearing</b>
65	<b>Other</b>

**PROGRAMME**

**BUDGETS**

**2009/2010**

**MILLION / MILLION**

**POPULATION**

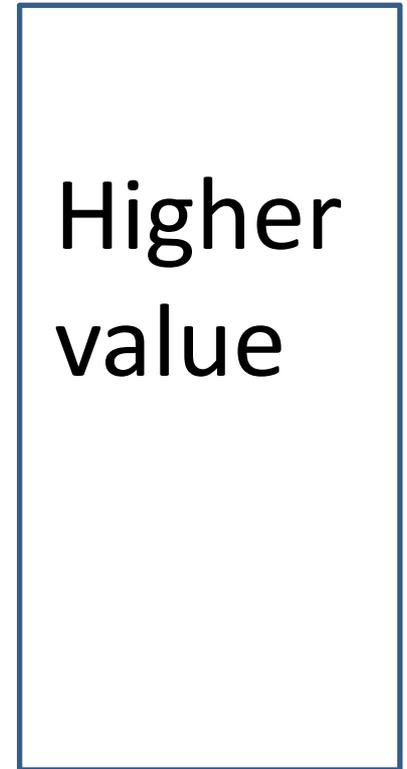
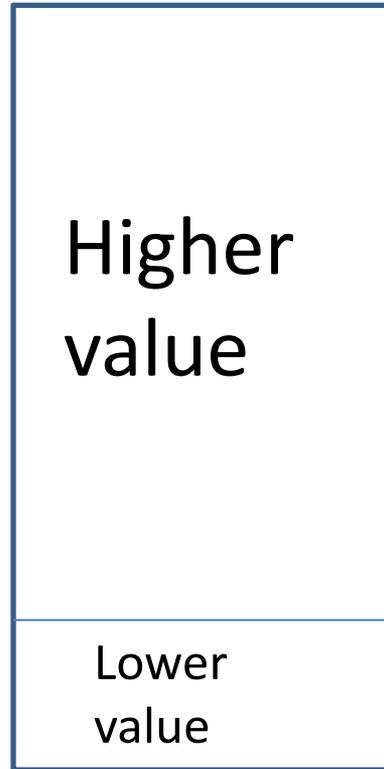
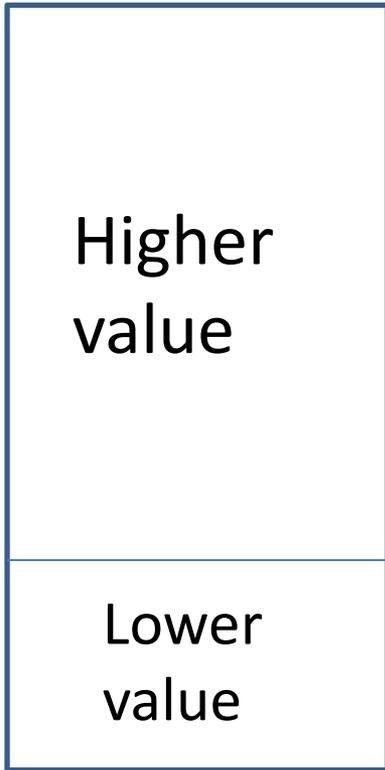
**154 GP/PMS**

**92 SHA**

**226 Miscellaneous**

**225 Mental Health**  
**160 CVD**  
**117 Cancer**  
**95 GU**  
**95 MSK**  
**92 Respiratory**  
**92 GI**  
**82 Neuro**  
**74 Trauma**  
**72 Maternity**  
**70 Social**  
**66 Dental**  
**Learning**  
**63 Disability**  
**58 Endocrine**  
**42 Healthy**  
**42 Skin**  
**40 Vision**  
**40 ID**  
**28 Blood**  
**Adverse**  
**21 Effects**  
**10 Hearing**  
**65 Other**

Maximise value by using  
resources optimally

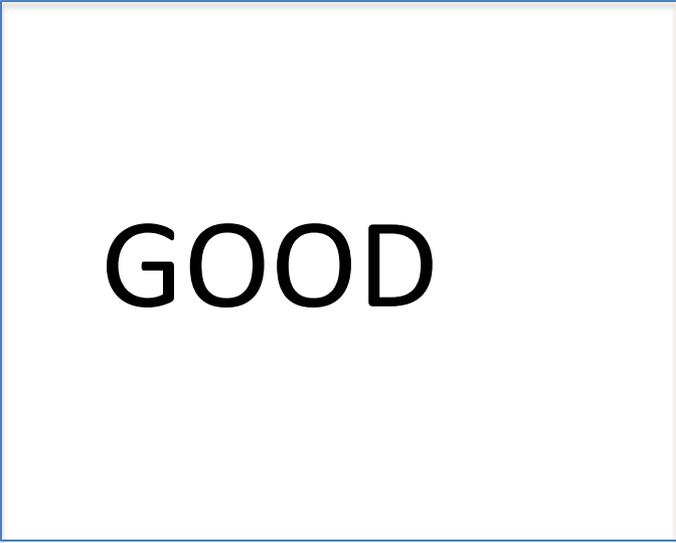


Added value  
from doing  
things right  
(quality  
improvement +  
cost  
improvement )

Added value  
from doing the  
right things)  
making the  
right decisions

# Unwarranted variation in quality, safety & outcome

- patient harm
- health inequalities
- failure to prevent preventable disease



**GOOD**

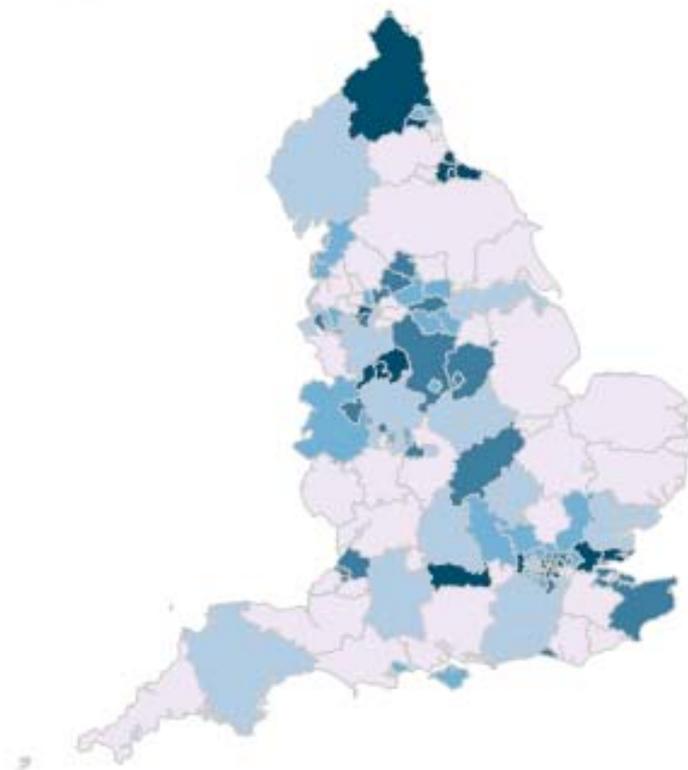


**BAD**



# Right Care NHS Atlas of Variation in Healthcare

Percentage of patients admitted to hospital following a stroke who spend 90% of their time on a stroke unit, by PCT, 2009/10



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Unwarranted variation in activity and cost

Waste of resources

Higher value      Lower value



Value = Outcomes/Costs

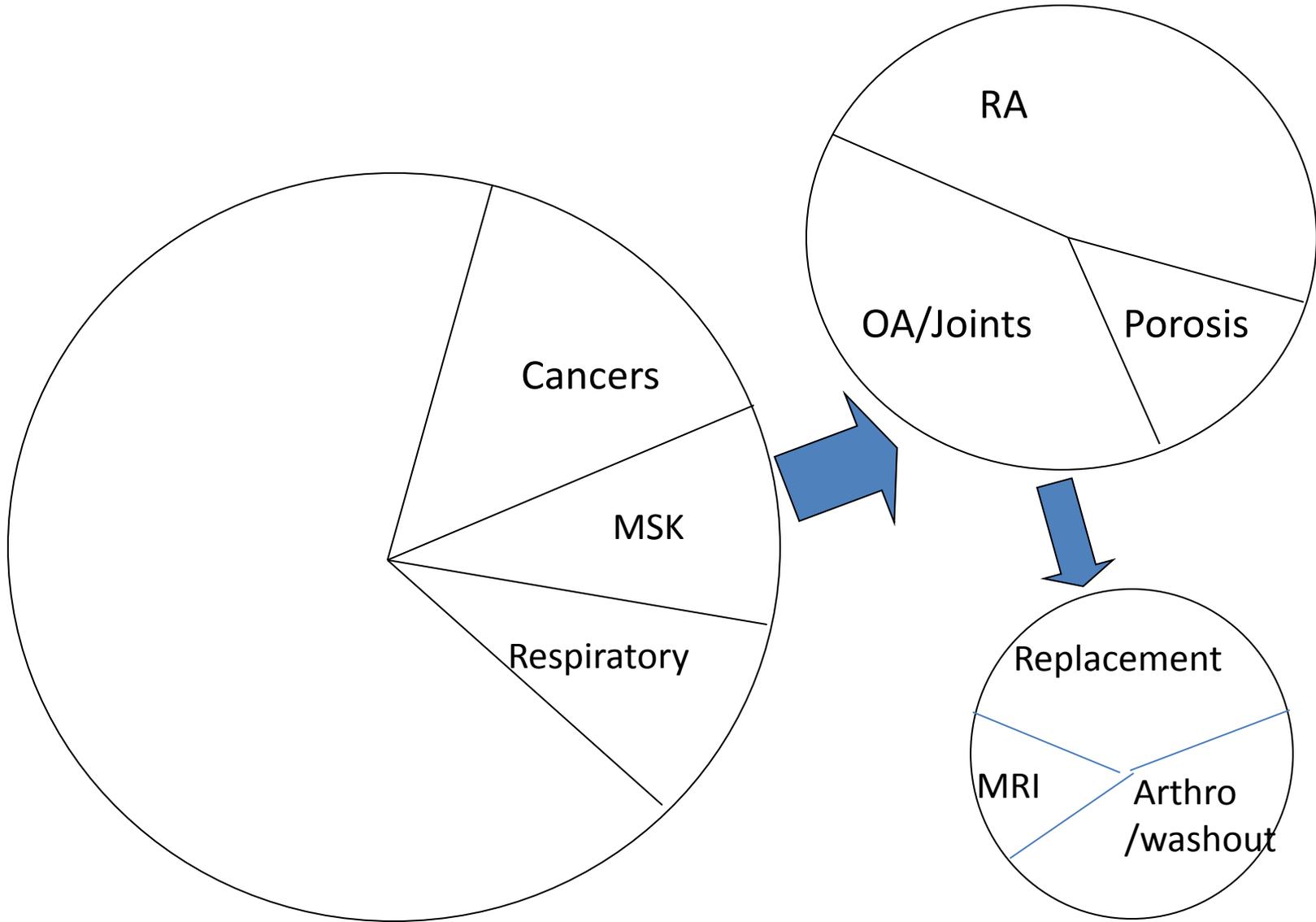
Outcome = Good – Bad  
(Outcome = Effectiveness – Harm)

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Costs = Money  
Costs = Carbon + Opportunity Lost

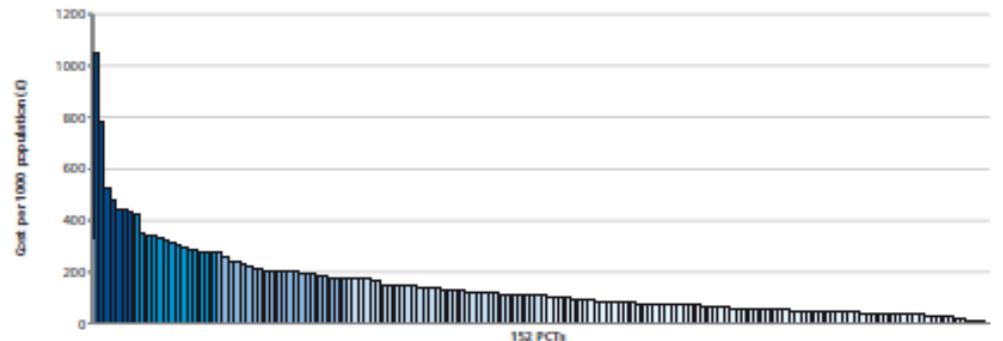
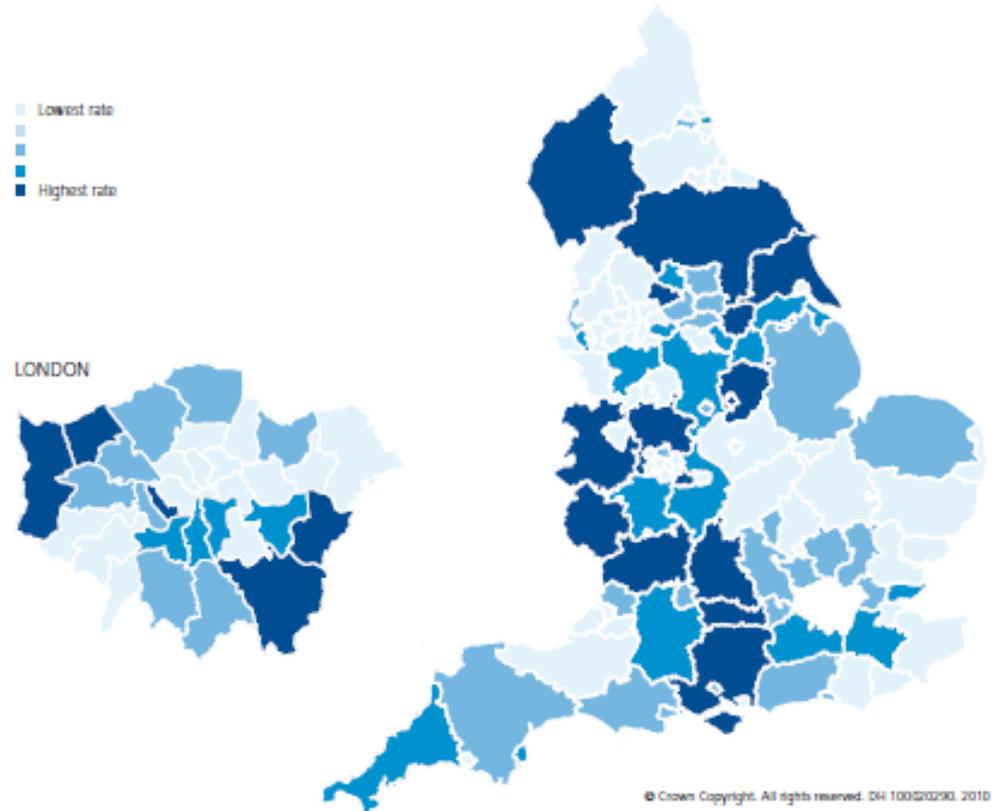
# Examples of lower value activities are those which:

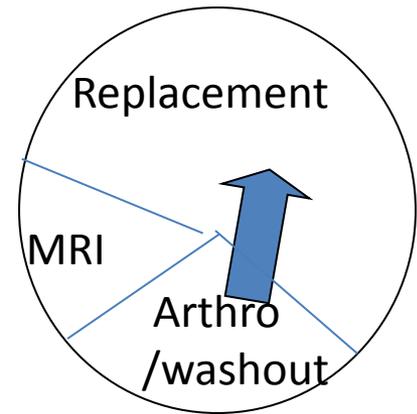
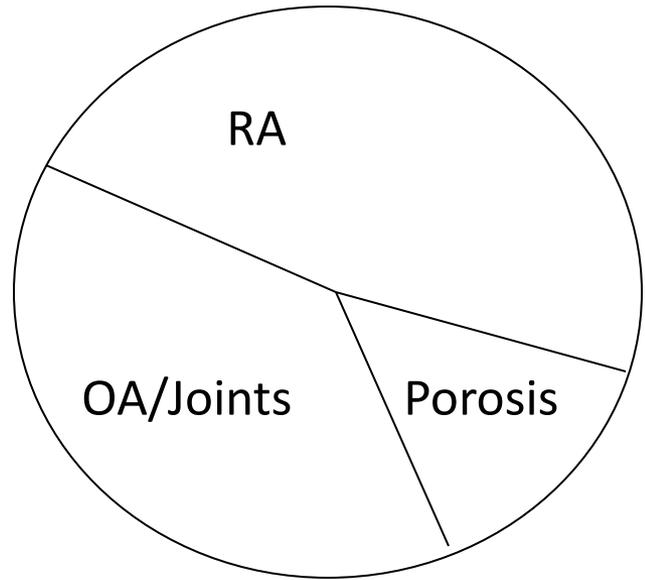
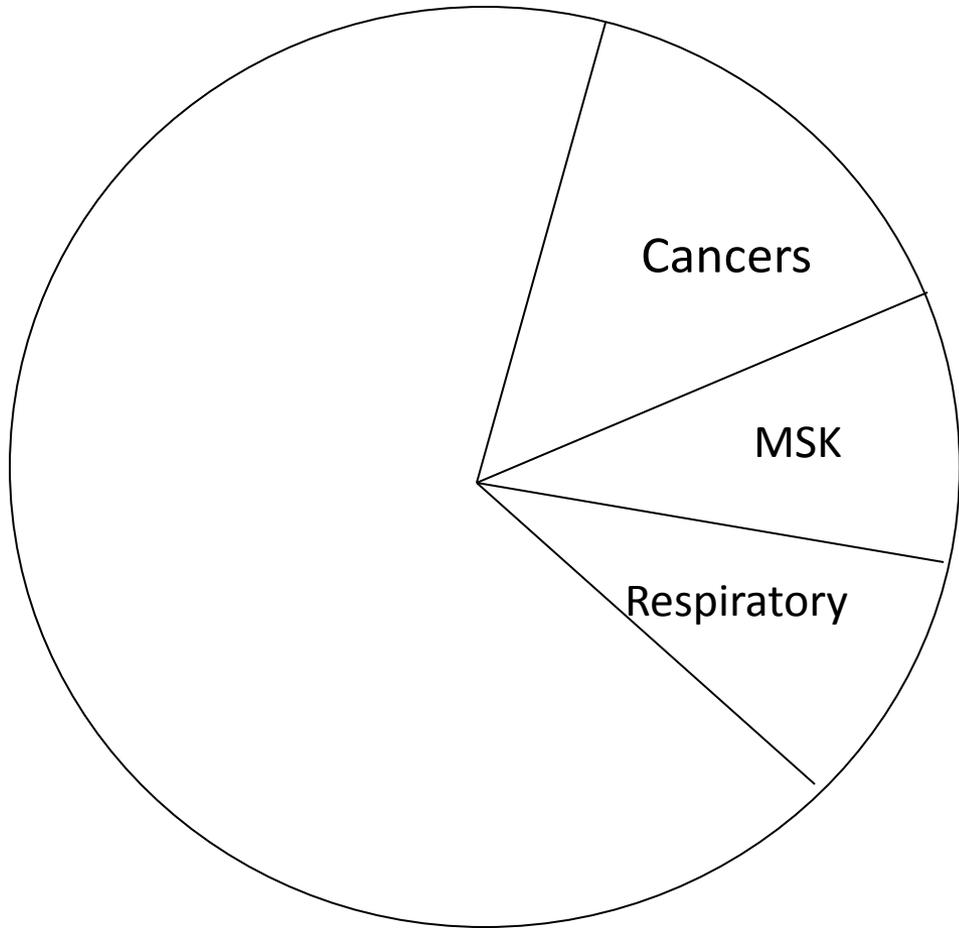
1. Have clear evidence that they are ineffective or that they do more harm than good.
2. Have no evidence of effectiveness but are **not** being delivered in the context of research that would allow evidence to judge effectiveness to be gathered.
3. Use resources which would produce more value, namely a better balance of benefit to harm, if used for some other group of patients.

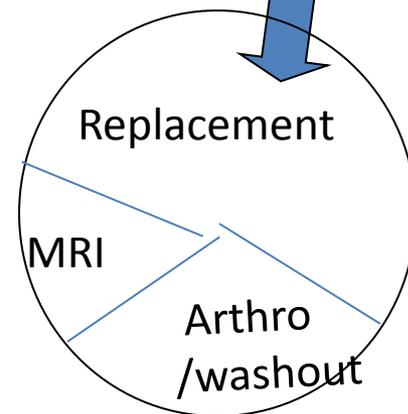
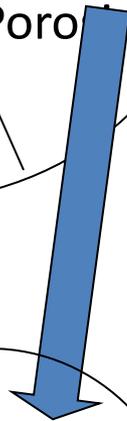
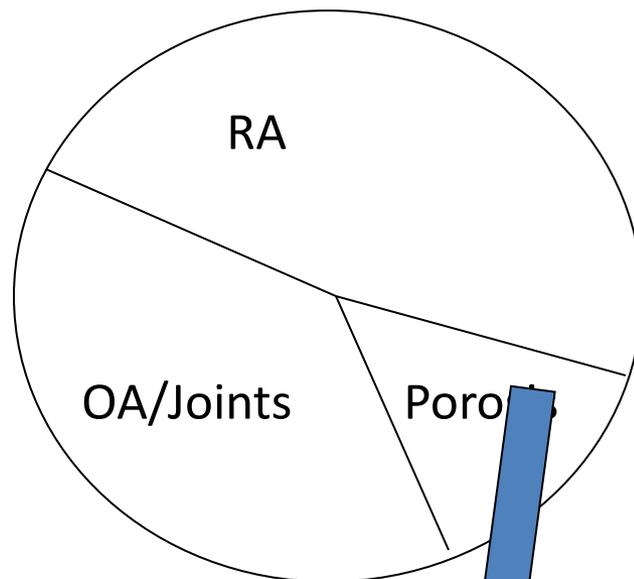
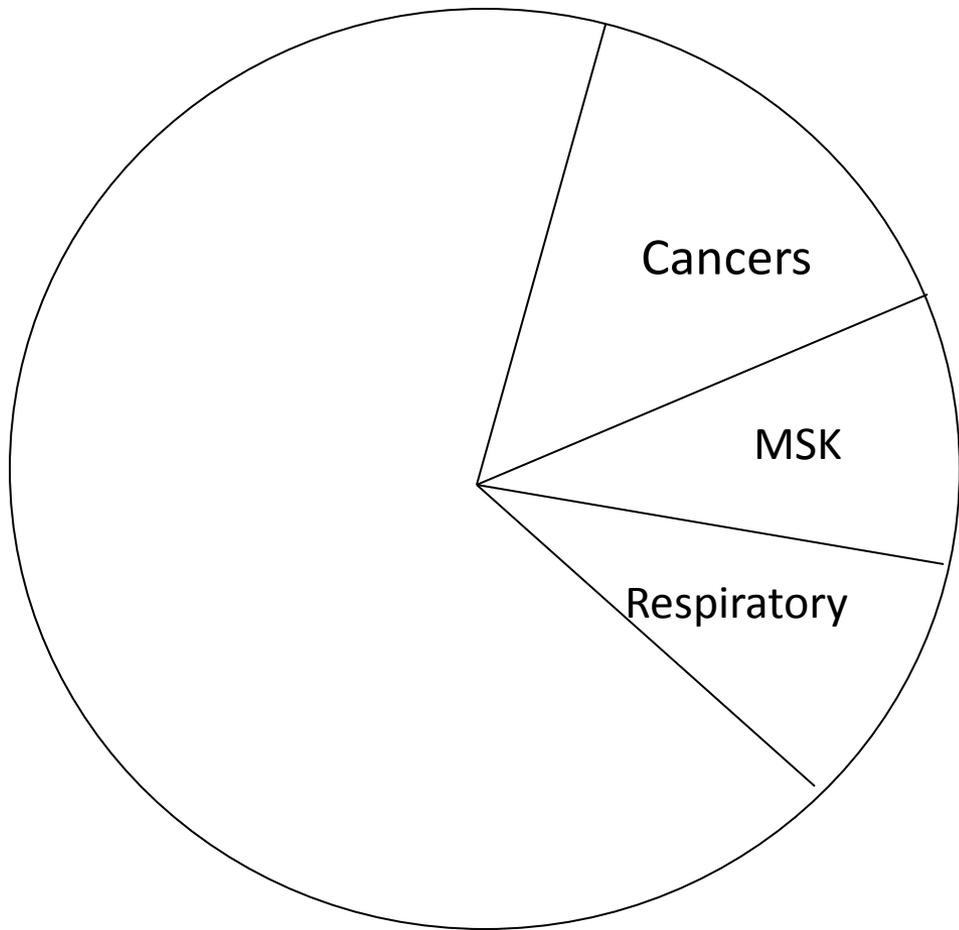


## Rate of anterior cruciate ligament reconstruction expenditure per 1000 population by PCT Weighted by age, sex and need, 2008/09

The variation among PCTs in the rate of expenditure for anterior cruciate ligament reconstruction per 1000 population is 50-fold.







RESOURCES FOR LEADERSHIP, TRANSFORMATION, AND REVOLUTION

*'Value is the most important concept for healthcare worldwide for the next twenty years'* J.A. MUIR GRAY

We are now in a new era – the era of better value. It is no longer sufficient to provide safe, effective, and high quality care. These characteristics will be taken for granted. Value is the most important term for the next twenty years.

*'Value in any field must be defined around the customer, not the supplier. Value must also be measured by outputs, not inputs. Hence it is patient health results that matter, not the volume of services delivered. But results are achieved at some cost. Therefore, the proper objective is the value of health care delivery, or the patient health outcomes relative to the total cost (inputs) of attaining those outcomes.'*  
Porter, M.E. (2008) What is Value in Health Care? Harvard Business School, Institute for Strategy and Competitiveness.

*How To Get Better Value Healthcare* provides an understanding of the concept of healthcare value and how it can be increased, and is written primarily for people who pay for or manage health services. The focus for action is on the top ten questions about value:

How much money should we spend on healthcare? Is the money allocated for the infrastructure that supports clinical care at a level which will maximise value? Have we distributed the money for clinical care to different parts of the country by a method that recognises both variation in need and maximises value for the whole population? Has money been distributed to different patient groups by decision-making that is not only equitable but also maximises value for the whole population? Are all the interventions offered likely to confer a good balance of benefit and harm, at an affordable cost, for this group of patients? Are the patients most likely to benefit from the interventions, and least likely to be harmed by them, clearly defined? Is effectiveness being maximised? Are the risks of care being minimised? Can costs be reduced further without increasing harm or reducing benefit? Could each patient's experience be improved?

*Muir Gray* qualified in medicine in Glasgow, and has worked for many years in public health for the NHS. He was the founding director of the UK National Screening Programmes, and also of the National Library for Health. He was awarded the CBE, and later a knighthood, for services to the NHS.

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HOW TO

GET BETTER VALUE HEALTHCARE

J.A. MUIR GRAY

OFFOX PRESS

# How To

## Get Better Value Healthcare

Second Edition

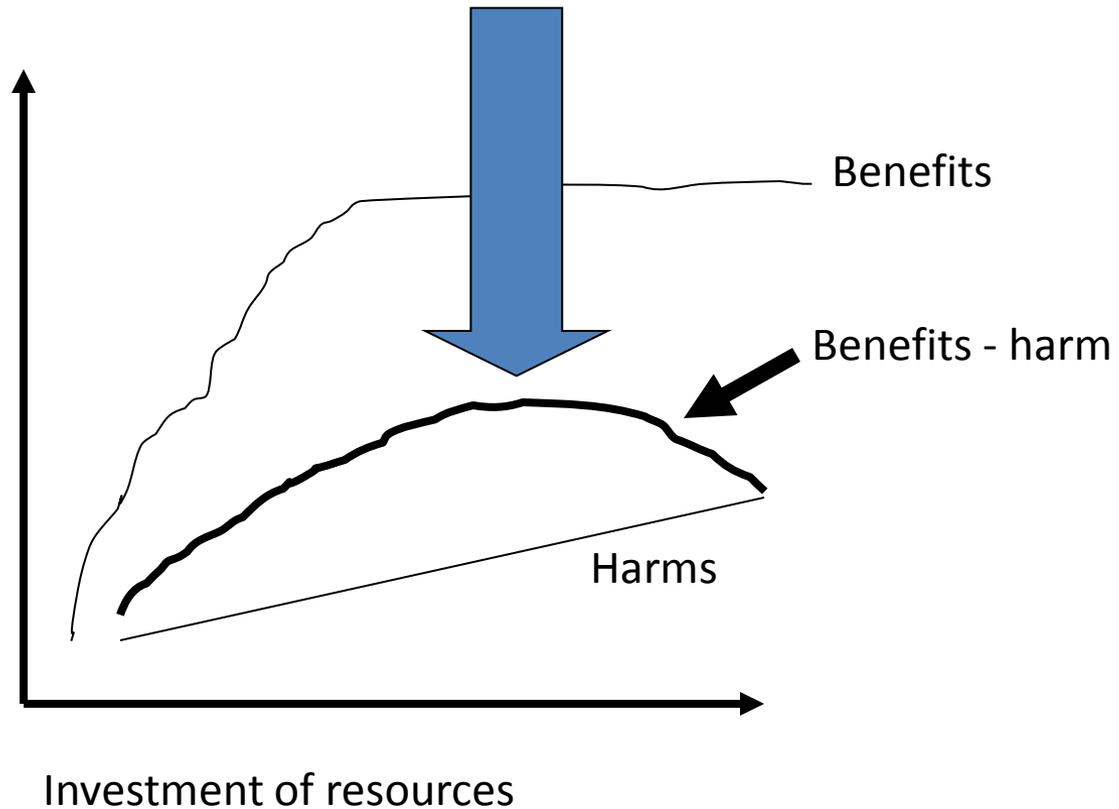


J.A. Muir Gray

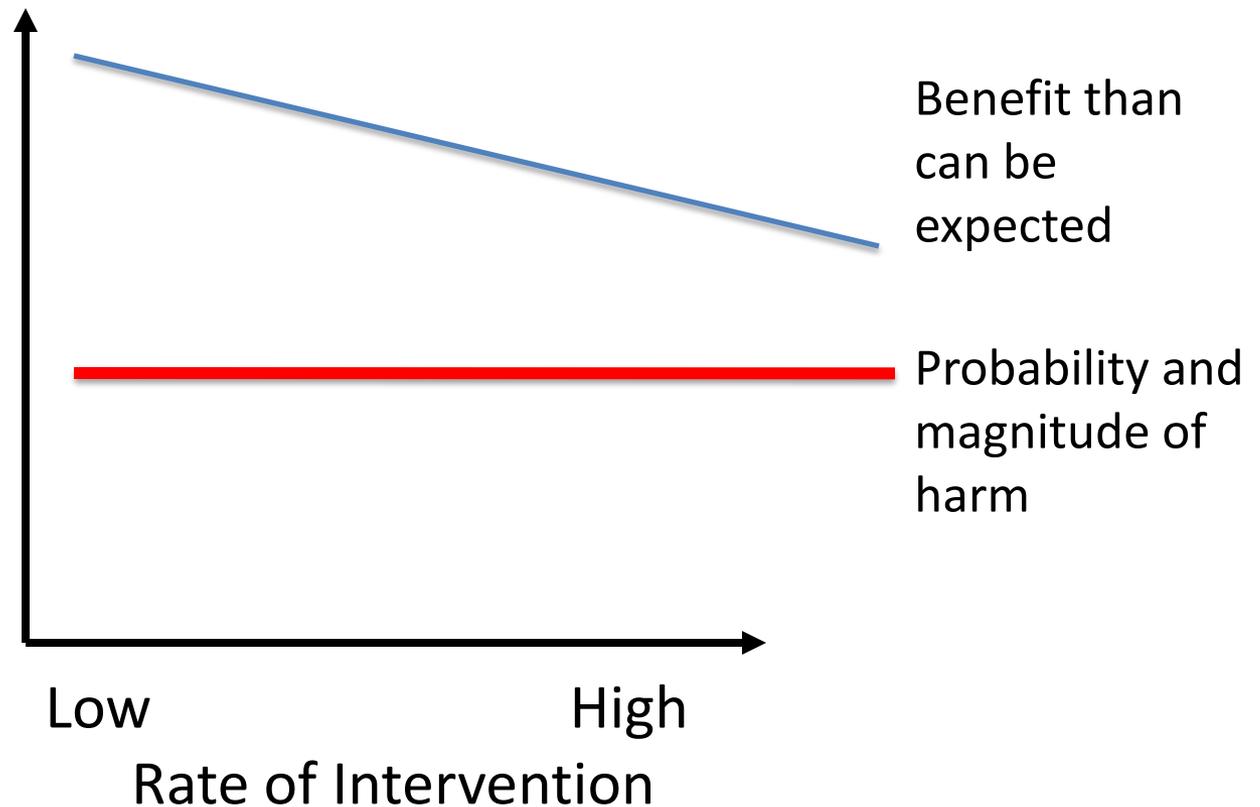
Ensuring no patient makes a fateful decision  
in avoidable ignorance

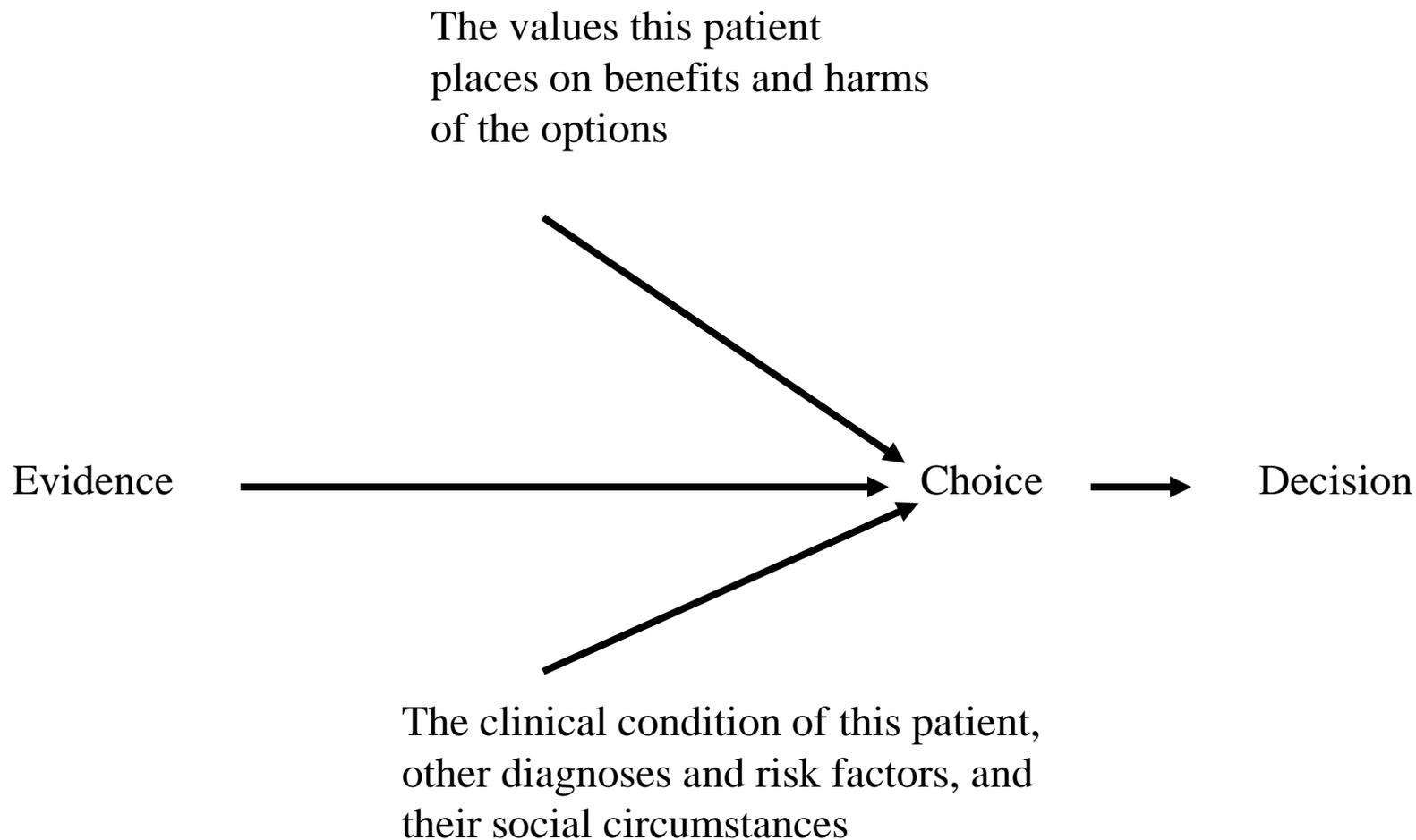
After a certain level of investment the health gain may start to decline:

## The point of optimality



As the rate of intervention increases the balance of benefit and harm changes for the individual patient

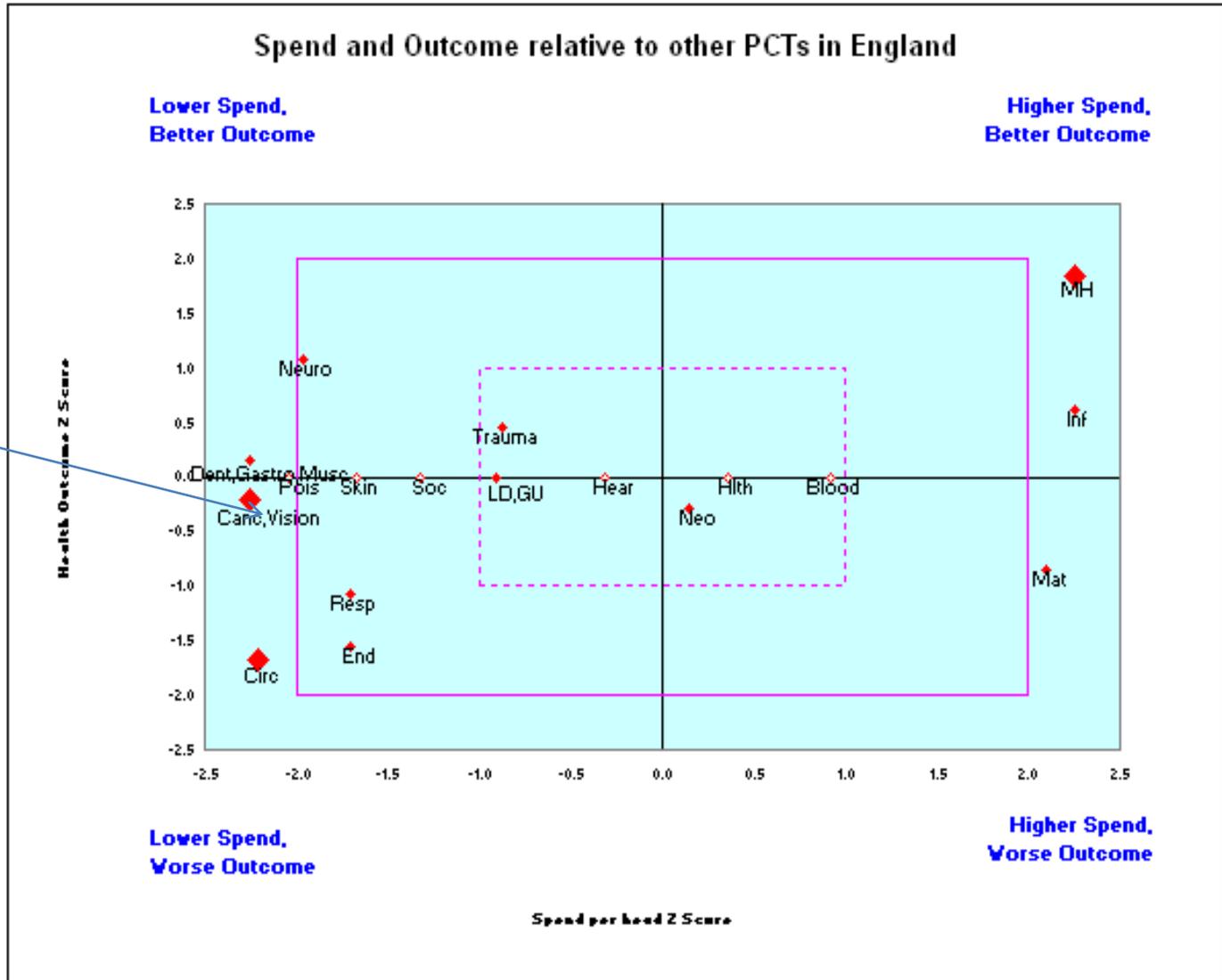




## Value-based and shared decision-making

Prioritising action

City and Hackney Teaching PCT 2008/09



# Outcome measures

- Vision: Total sight tests per 10,000 population



AVERAGE  
OUTCOME

LOWER  
SPEND,  
BETTER  
OUTCOME

HIGHER  
SPEND,  
BETTER  
OUTCOME

LOWER  
SPEND  
WORSE  
OUTCOME

HIGHER  
SPEND,  
WORSE  
OUTCOME

AVERAGE  
SPEND

Working in systems and networks

A SYSTEM is a set of activities with a common set of objectives ( also known as a service) and an annual report.

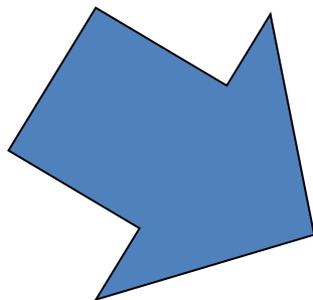
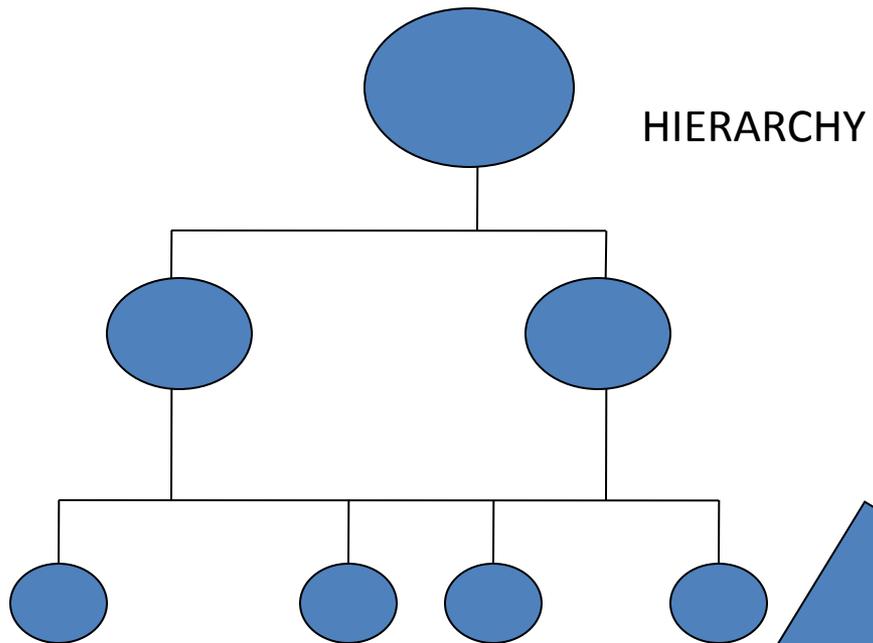
A NETWORK is a set of individuals and organisations that deliver the system's objectives (a team is a set of individuals or departments within one organisation).

A PATHWAY is the route patients usually follow through the network.

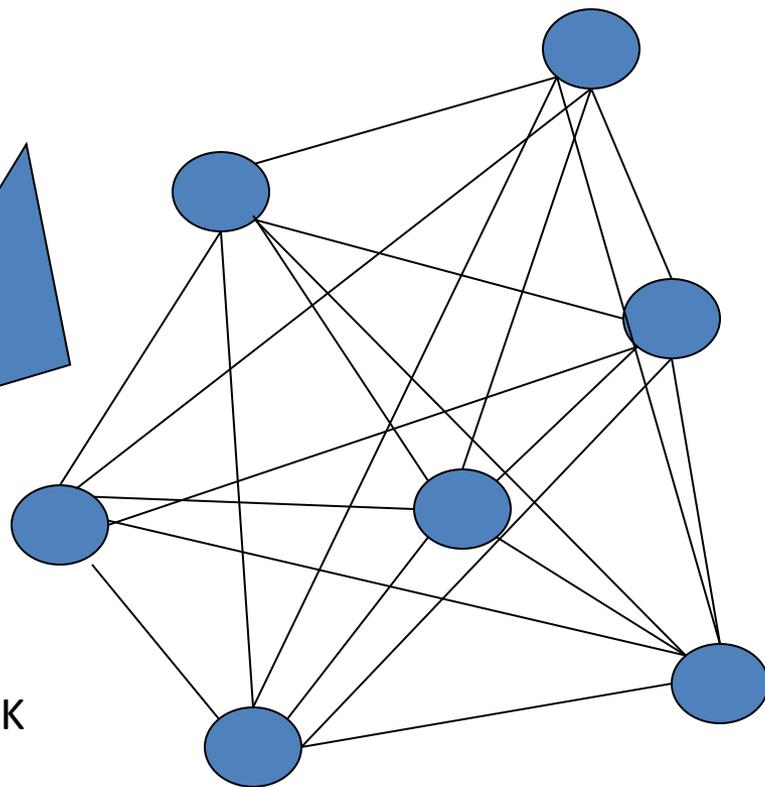
## Newborn Screening for Sickle Cell Disorders Programme Standards

NEWBORN PROGRAMME OBJECTIVES:	CRITERIA	STANDARDS	
		Minimum (Core)	Achievable (Developmental)
<b>Programme Outcome</b>			
Best possible survival for infants detected with a sickle cell disorder by the screening programme	Mortality rates expressed in person years	Mortality rate from sickle cell disease and it's complications in children under five of less than four per 1000 person years of life (two deaths per 100	Mortality rate in children under five of less than two per 1000 person years of life (one death per 100 affected children)

A **SYSTEM** is a set of activities with a common set of objectives (also known as a service) and an annual report; who is responsible for the annual report for asthma care for the population of Dusseldorf.



NETWORK



# How To

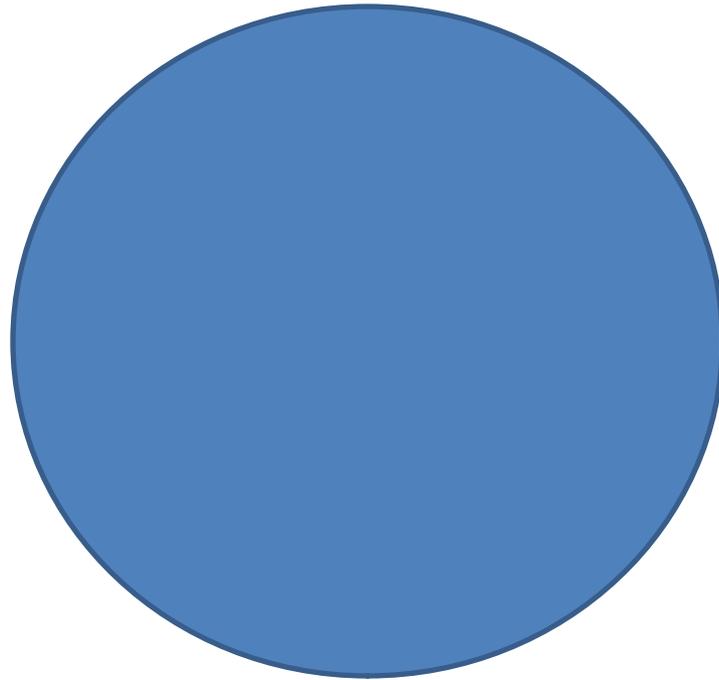
## Build Healthcare Systems



J.A. Muir Gray

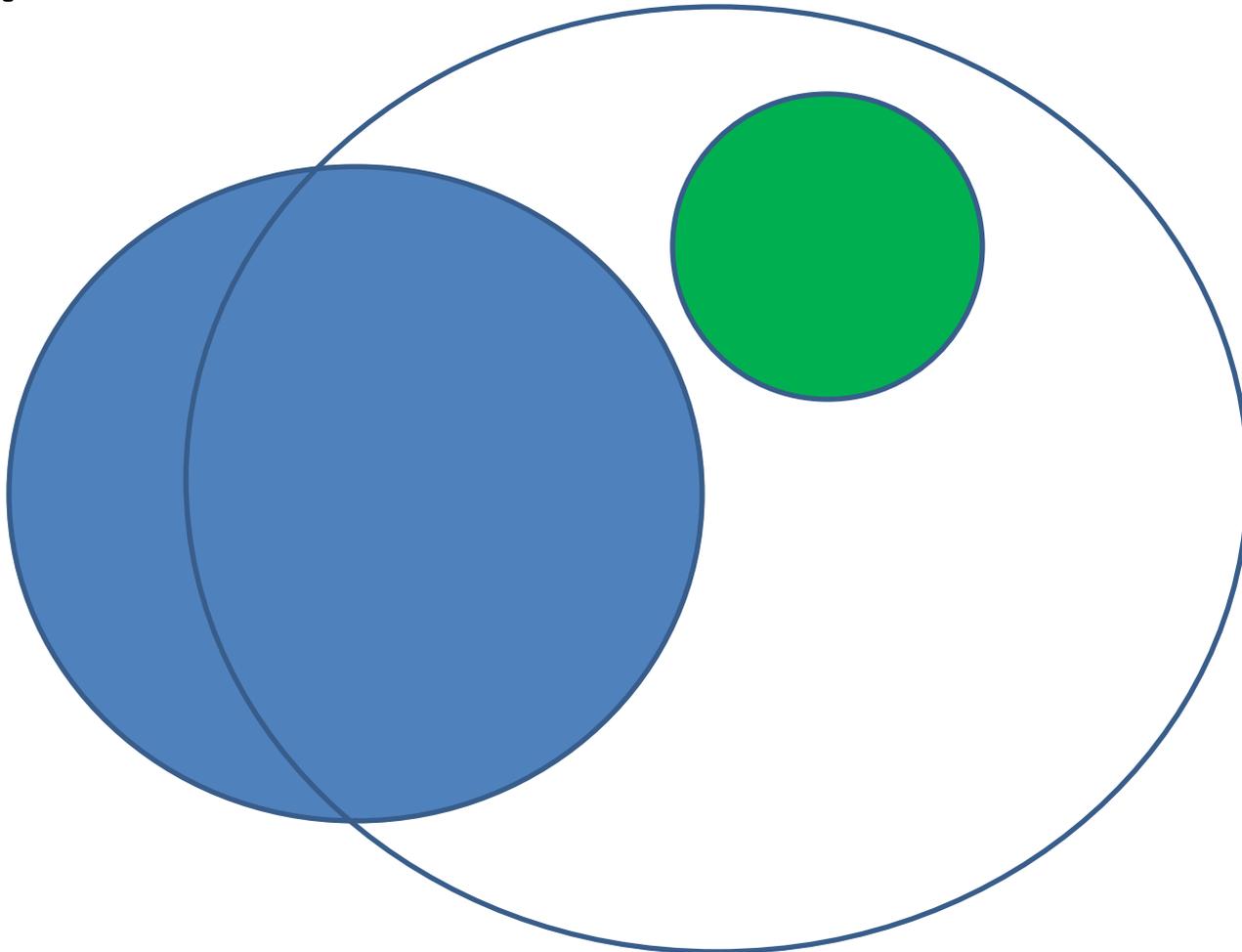
# Practicing population medicine

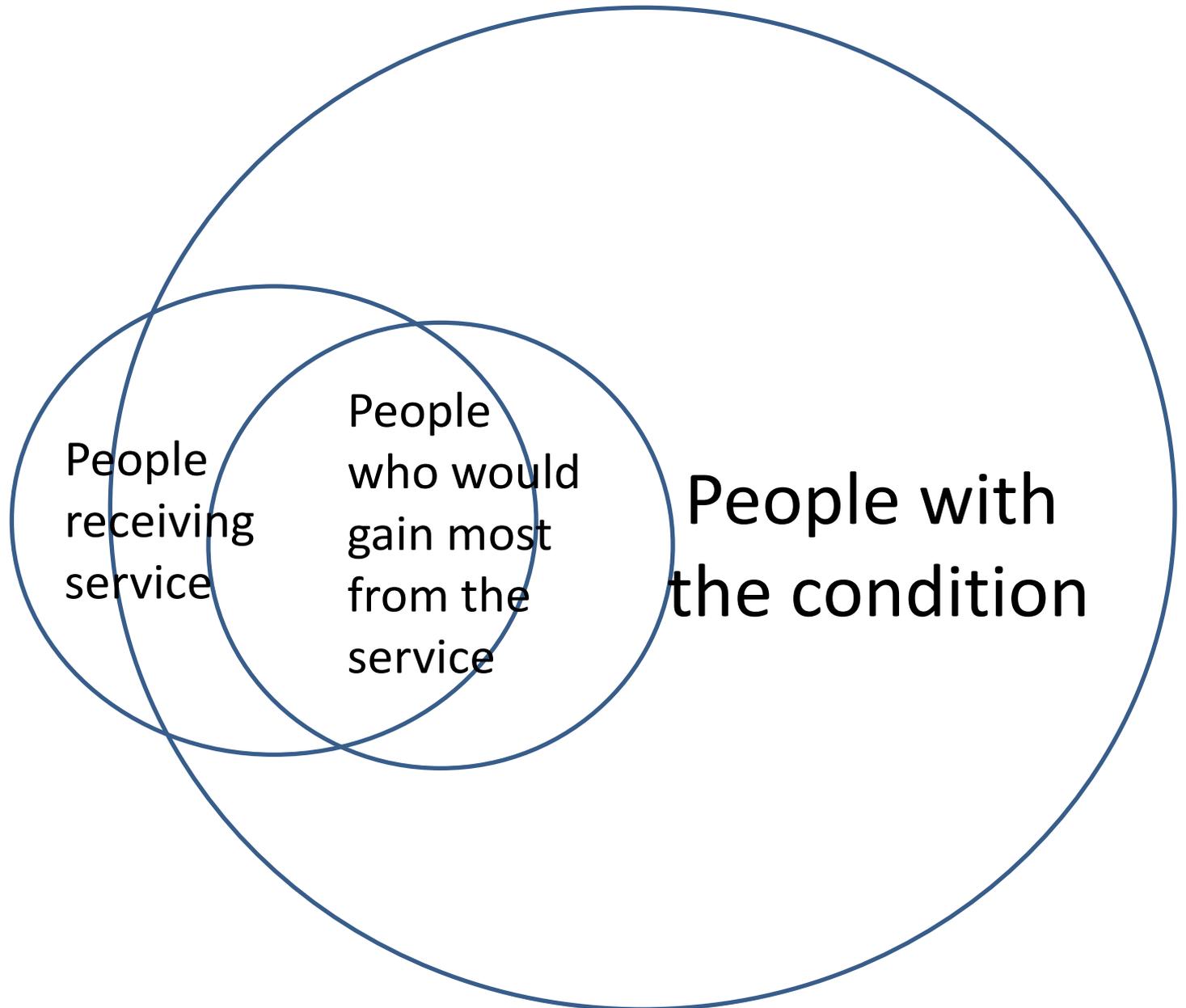
Dr Jones is a respiratory physician in the Brighton Hospital Trust and last year she saw 346 people with COPD. She hopes to provide evidence-based, patient-centred care, and to improve effectiveness, productivity and safety.



Dr Jones estimated that there are 1000 people with COPD in East Sussex and a population-based audit showed that there were 100 people who were not referred who would benefit : she needs to practise...

# population medicine.





People  
receiving  
service

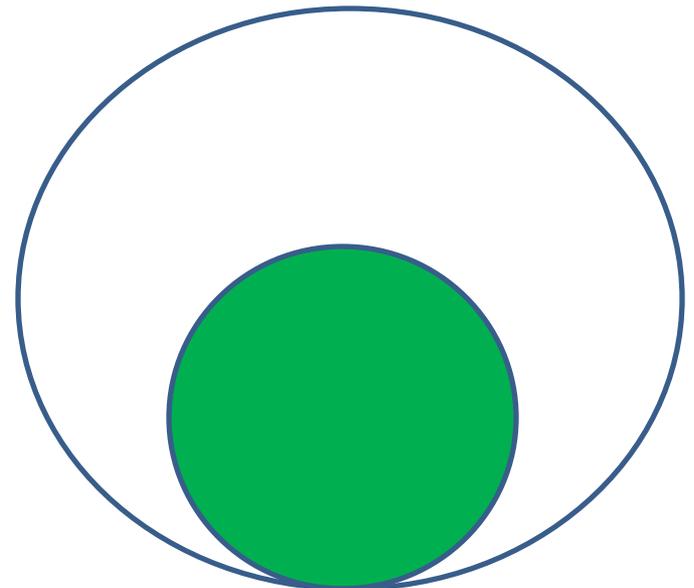
People  
who would  
gain most  
from the  
service

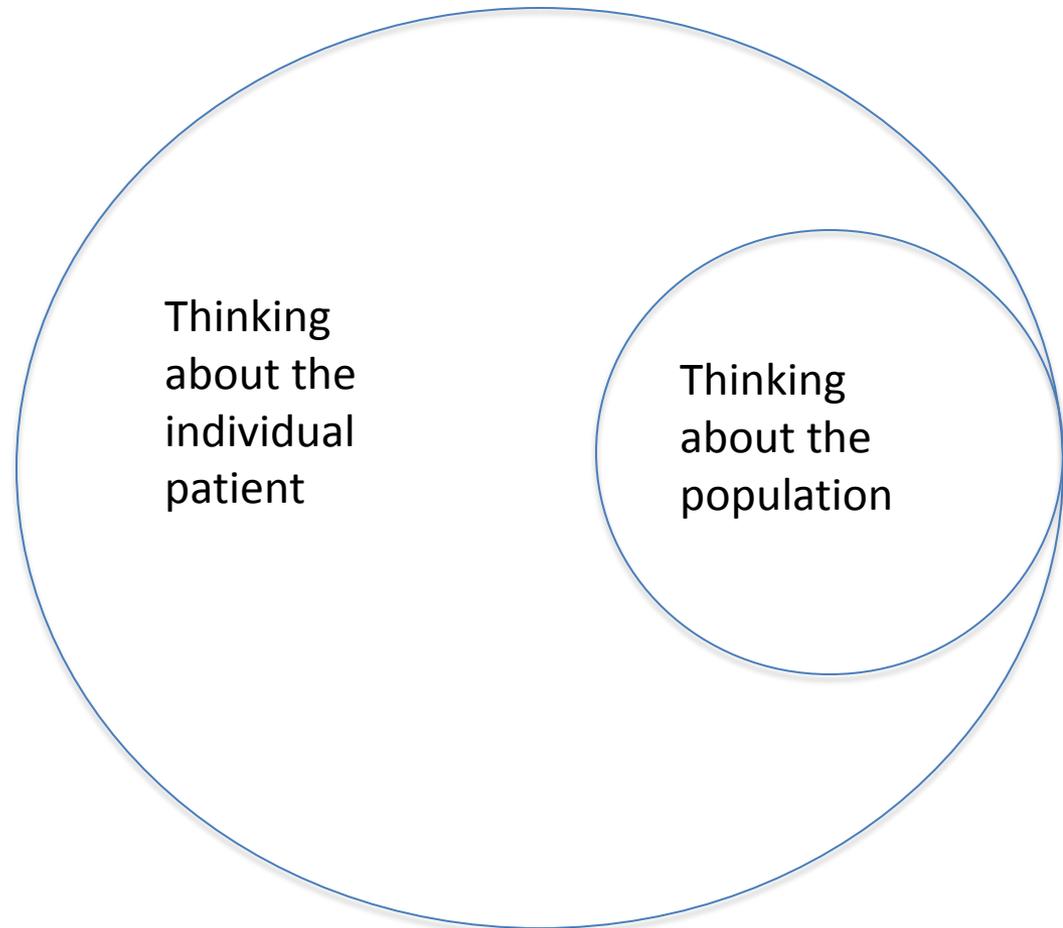
People with  
the condition

Dr Jones, the co-ordinator of the East Sussex COPD Network and Service, has responsibility, authority and resources (one day a week and support) for:

- network development
- localisation of the Map of Medicine
- quality of patient information
- professional development of generalists, and pharmacists
- production of the annual report of the service.

She is keen to improve her performance from being 27 out of the 106 COPD services, and of greater importance, 6 out of the 23 services in the prosperous counties.





Thinking  
about the  
individual  
patient

Thinking  
about the  
population

1. Is the service for people with seizures & epilepsy in Manchester better than the service in Liverpool?
2. Who is responsible for the headache service for people in Newcastle?
3. How many liver disease services are there in England and how many should there be?
4. Which service for frail elderly people in the south west provides the best value?
5. Which mental health service in London for children with mental health problems improved most in the last year ?

**CHANGE:** Both the bureaucracy and the market have a part to play but what is needed are complex adaptive systems because health care is too complex to be managed through the market or bureaucracy alone.

