Value-based healthcare: implications for tackling dementia, disability and dependence

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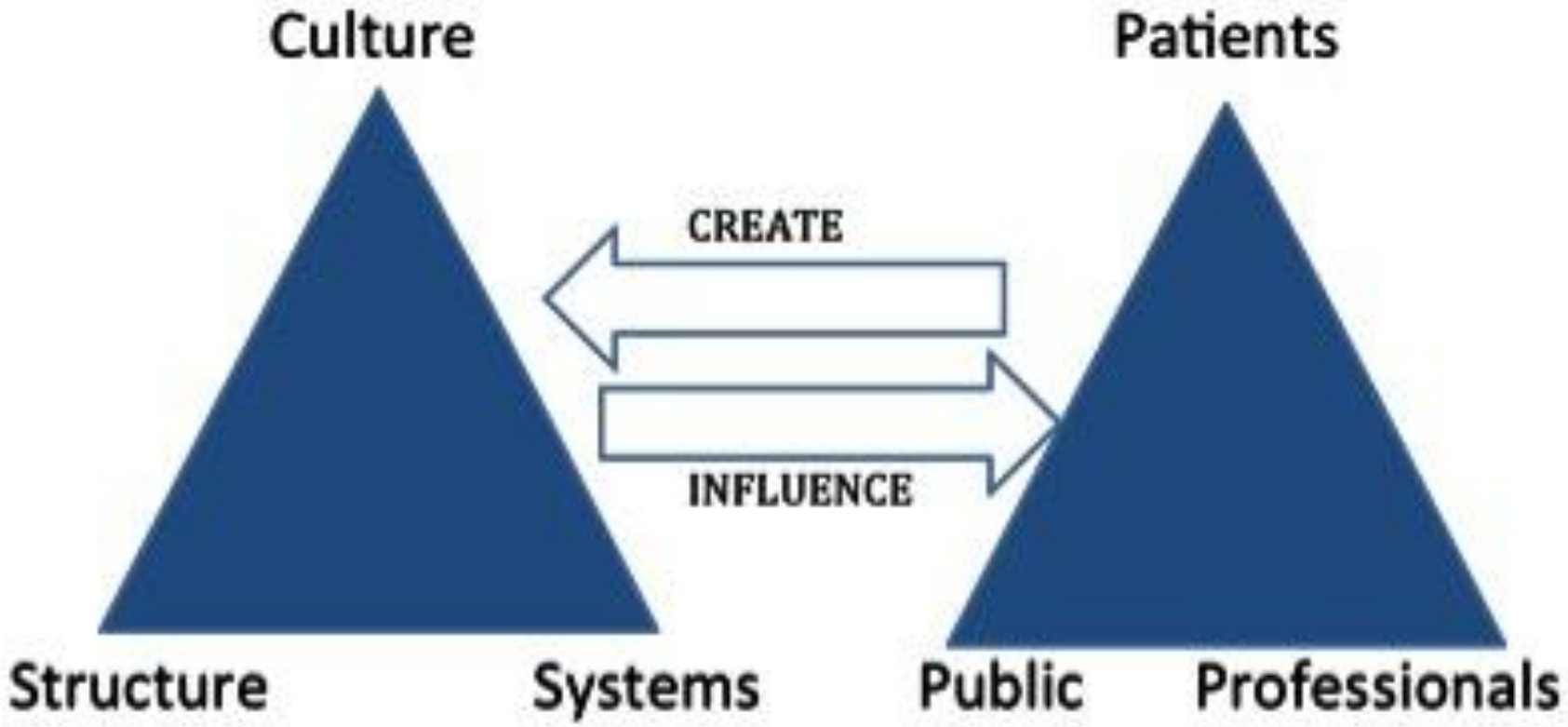
International Health-Promoting Hospitals Conference, Bologna

6-8 June 2018

Speeches in Plenary 1 and Plenary 2

- Importance of Systems and Change Management– Alex Berland
- Need for Innovation, Transformation, Leadership – Walter Ricciardi
- Governance as a Foundation for Health Promotion – Sally Fawkes
- Bringing Together Systems, Structure and Culture – Carlo Favoretti
- Importance of Building Relationships and Developing Trust - Christina Dietscher
- What matters to patients and their families/carers and the need for empathy – Susan B. Frampton
- The trajectory of implementing integrated care – Carmen Hernandez
- Maintaining functional ability in older people – Shu-Ti Chou
- Children: Empowerment, Participation and Measurement – Ilaria Simonelli


Culture
Patients
CREATE
INFLUENCE
Structure
Systems
Public
Professionals

Summary

Two main topics to cover:

1. What is value-based healthcare? A new paradigm in healthcare
2. What are the implications for people with dementia and the people responsible for caring for them

Healthcare revolutions since the 19th century

The Public Health Revolution

The Technological Revolution

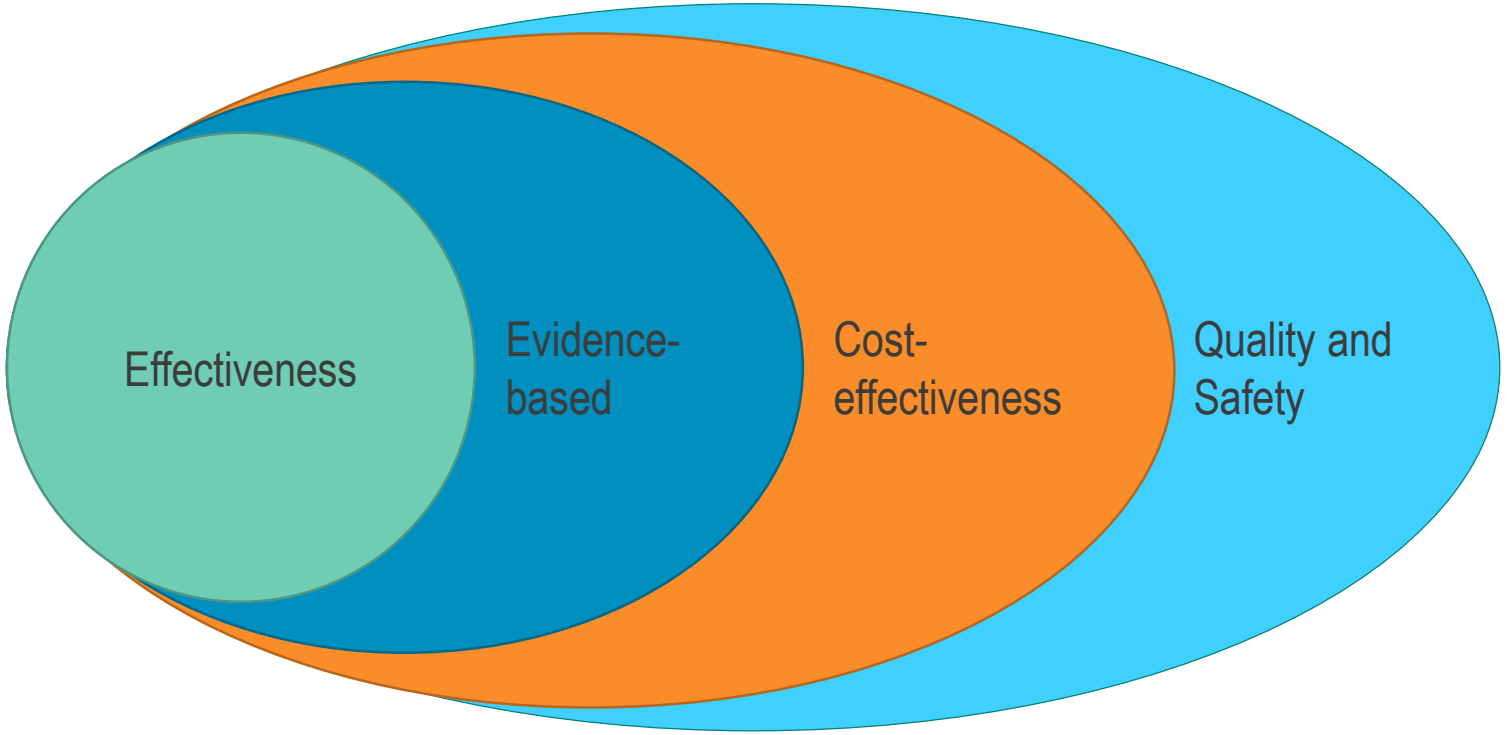
- 50 years of increased investment
- 20 years of evidence-based medicine, quality and safety improvement

- MR and CT imaging
- Coronary artery bypass graft surgery
- Statins
- Hip and knee replacement
- Stenting for STEMI
- Organ transplantation
- Randomised controlled trials
- Systematic reviews

Successive 20th-century healthcare paradigms

- Effectiveness
- Evidence-based
- Cost-effectiveness
- Quality and safety

Successive 20th-century healthcare paradigms



All necessary BUT not sufficient …

Problems and challenges of 21st century healthcare

All health services face 4 major problems, the first of which is:

Unwarranted variation

"Variation in the utilization of health care services that cannot be explained by variation in patient illness or patient preferences."

John Wennberg

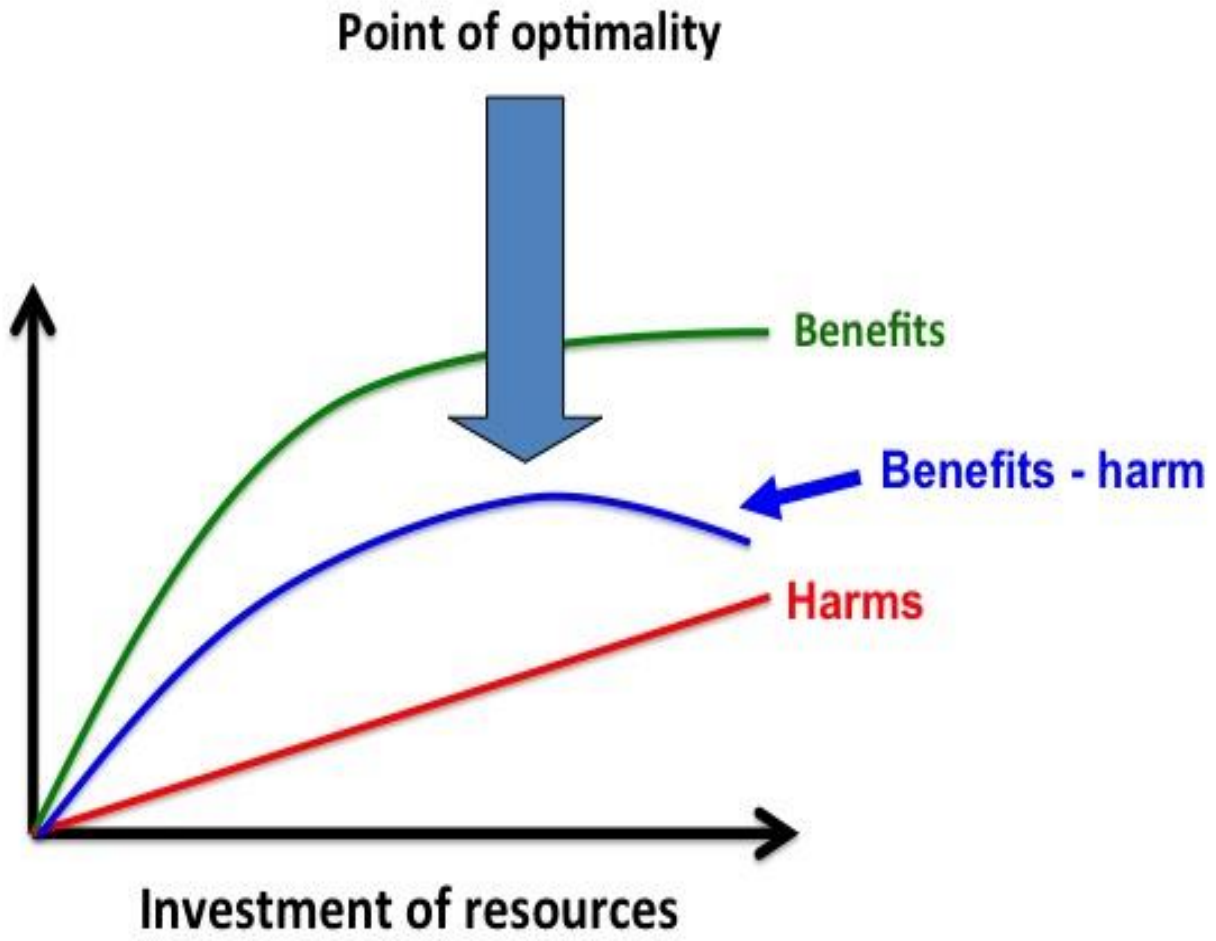
Unwarranted variation reveals the 3 other major problems in health services worldwide

Problems and challenges of 21st century healthcare

- Overuse of interventions
  - can cause harm even when quality and safety are high
  - always wastes resources
- Underuse of effective interventions especially for population groups in high need causing inequity in the provision of healthcare
- Failure to prevent disease and disability

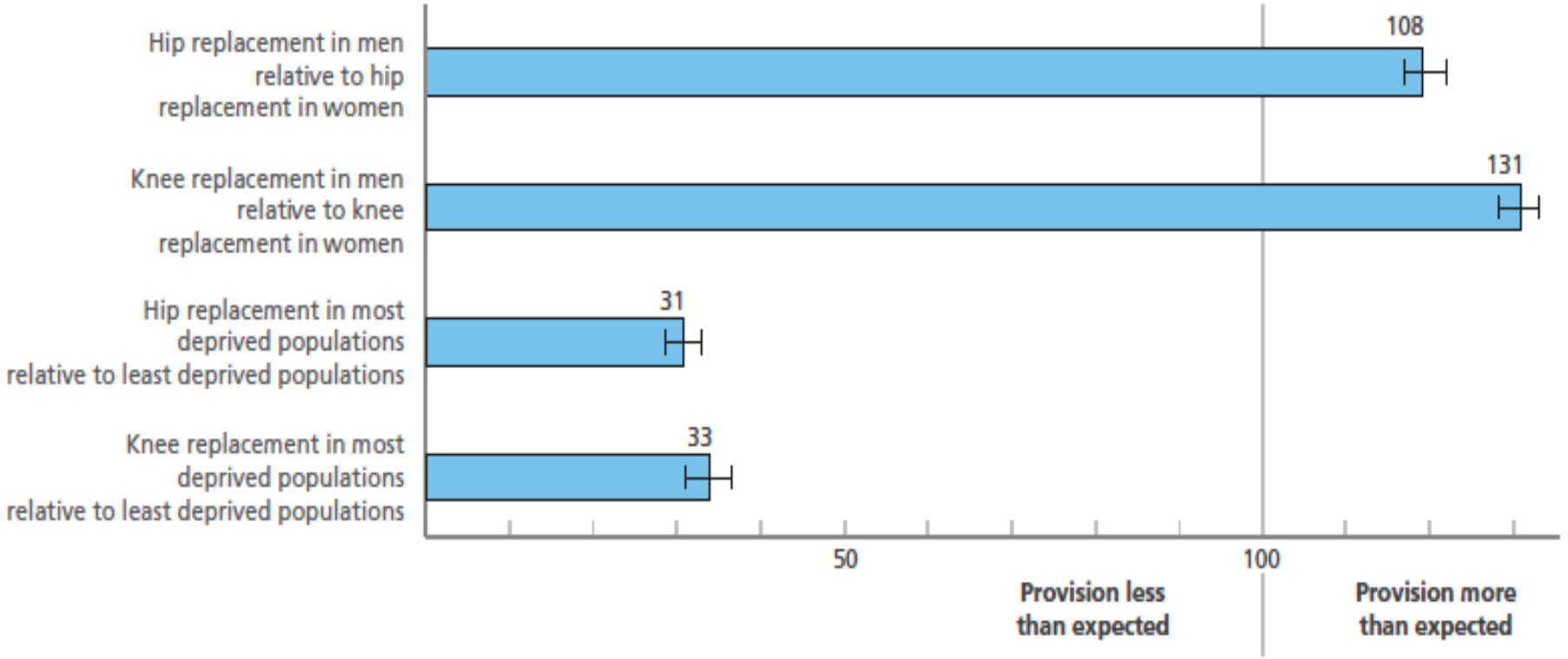
Overuse of interventions

Overuse always wastes resources, and can cause harm even when quality is high



Underuse of effective interventions reveals inequitable provision for people in need

Illustration of the Inverse Care Law



Equity in access to total joint replacement of the hips and knee in England: cross-sectional study.
Judge A, Welton NJ Sandhu J, Ben-Shlomo Y. BMJ 2010;341:c4092. doi: 10.1136/bmj.c4092

Problems and challenges of 21st century healthcare

In addition to the 4 major problems facing health services worldwide, there are:

- Rising expectations of people being treated, families/carers, and healthcare professionals
- Increasing need, e.g. ageing population, the development of effective interventions
- Financial constraints, e.g. austerity measures, efficiency drives
- Global climate change and carbon emissions

Conceptualising Value: a 21st-century paradigm

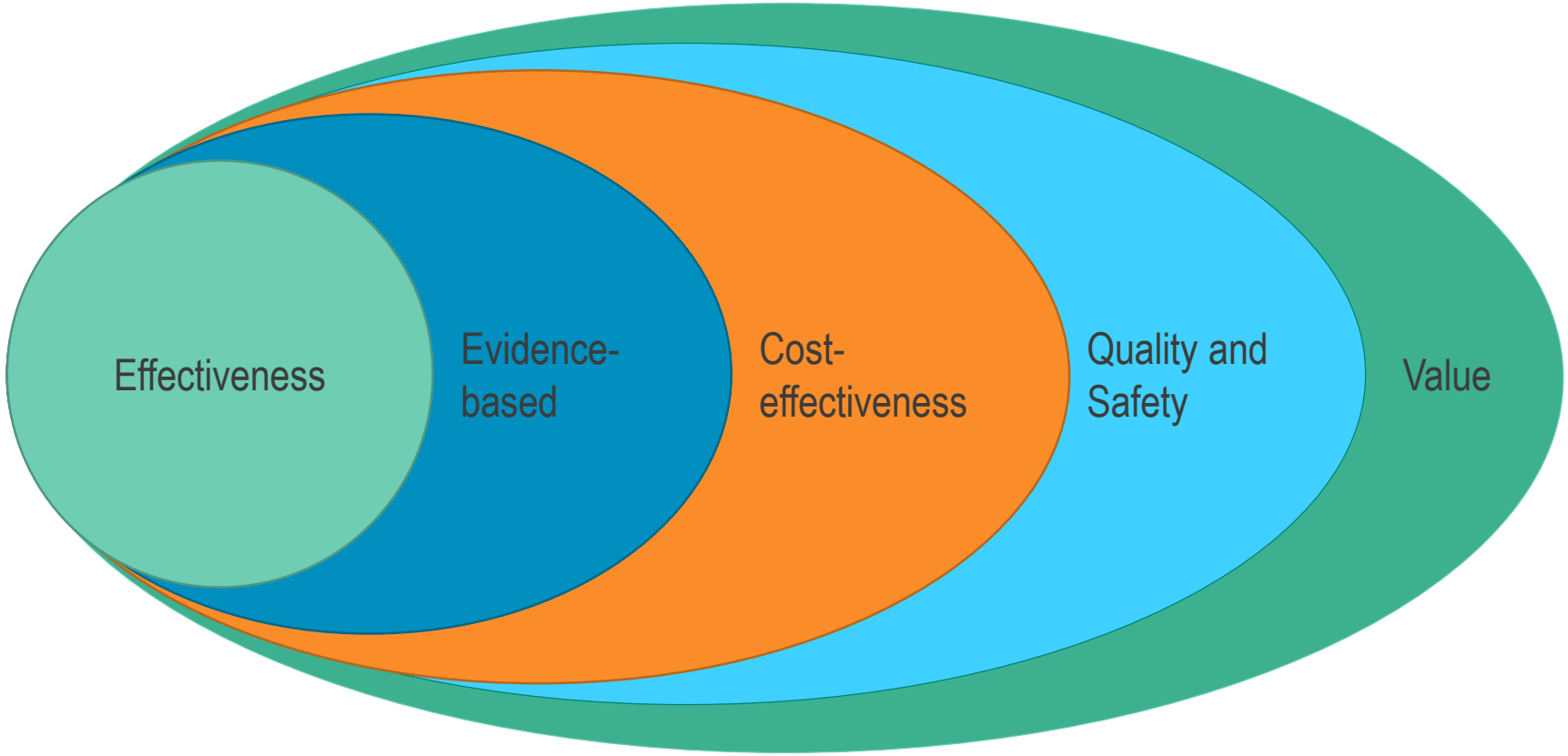
Value = Outcomes/Costs

Value = Outcomes [Benefits – Harms] ÷ Costs [Money + Time + Carbon]

Outcomes:

Benefits (EBM & quality initiatives) minus Harms (safety)

for the 'right' person or people in need at the 'right' time


Effectiveness
Evidence-based
Cost-effectiveness
Quality and Safety
Value

Three Elements of 'Triple Value'

- Personal value: how well the outcome relates to the values of each individual
- Allocative value: how well the assets are distributed to different subgroups in the population
- Technical value: how well resources are used for all the people in need in the population

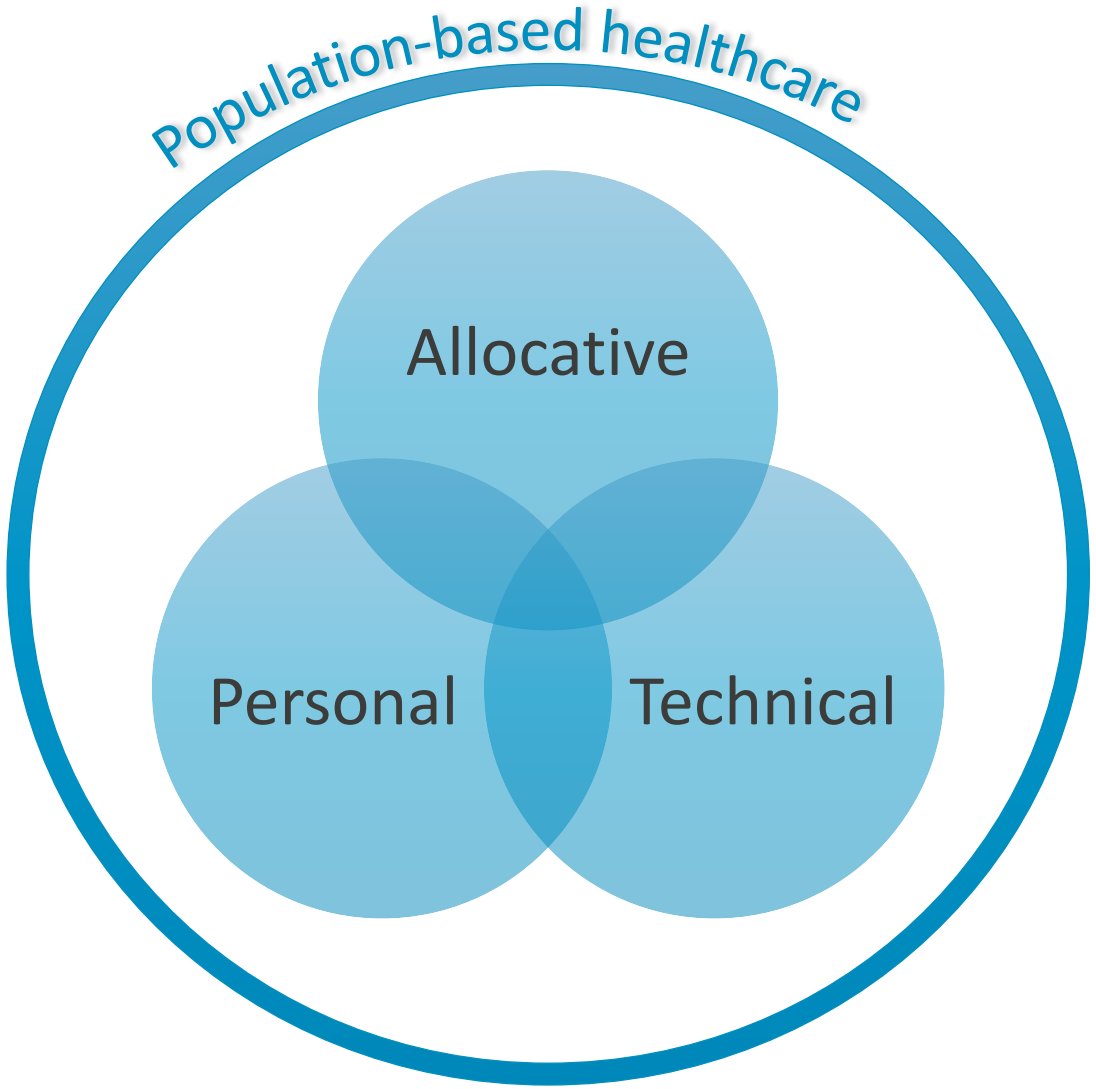
'Waste' is anything that does not add value.

We need to develop a 'culture of stewardship' to ensure health services will continue to function in 2028, 2038, and so on …

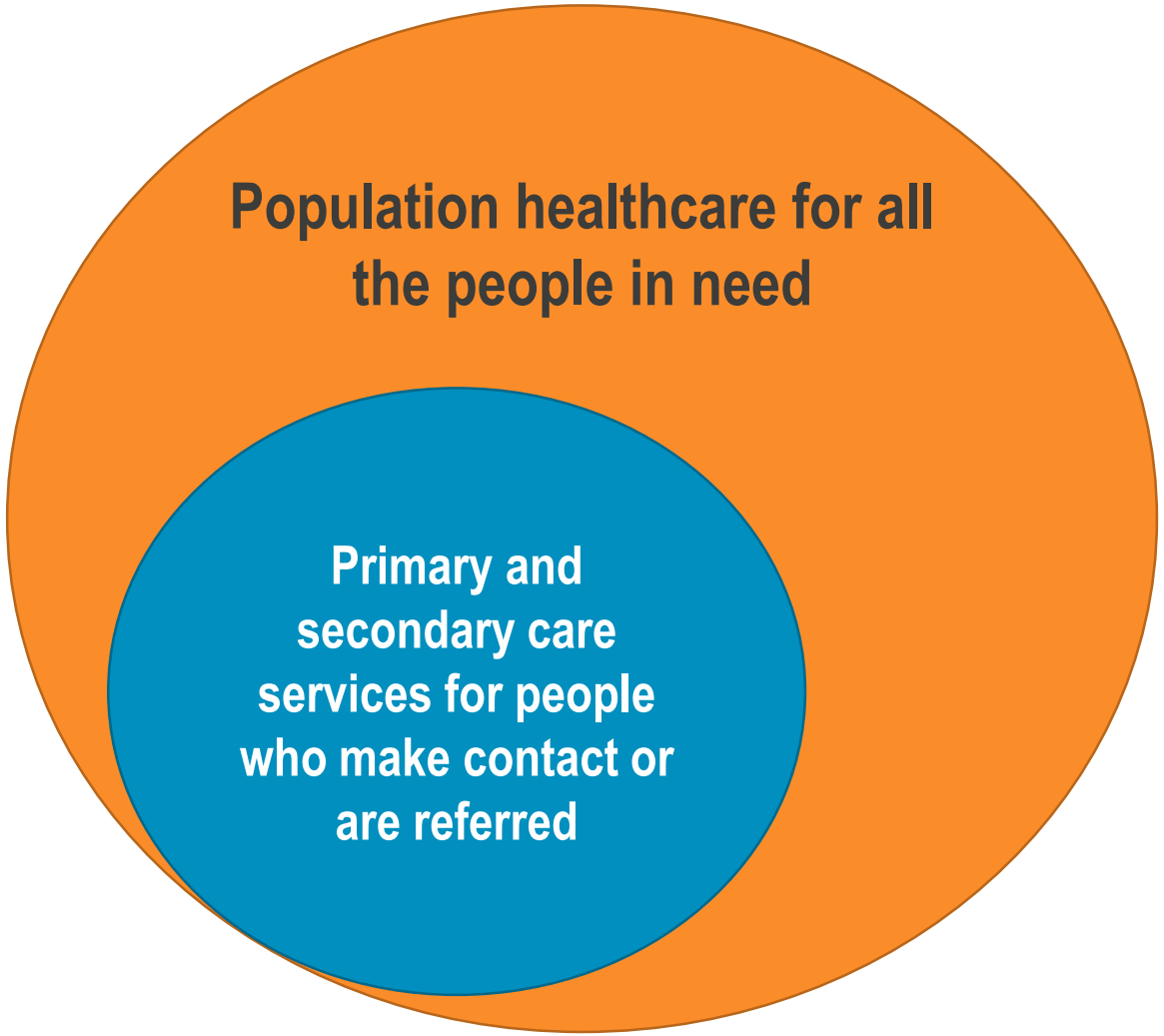
Increasing value for individuals and populations

- Ensuring every individual receives high personal value by providing people with full information about the risks and benefits of the intervention being offered
- Shifting resource from budgets where there is evidence of overuse or lower value to budgets in which there is evidence of underuse and inequity – across programme budgets and within programme budgets
- Developing population-based systems and networks that not only deliver cost-effective care at high quality and efficiency but also:
  - address the needs of all the people in need, with the specialist service seeing those who would benefit most
  - implement high-value innovation funded by reduced spending on lower-value intervention
  - increase rates of higher-value interventions funded by reduced spending on lower-value interventions, such as shifting resources across a care pathway from treatment to prevention

‘Triple Value’ healthcare complements Population-based healthcare



Current situation vs Population healthcare



Addressing the needs of all the people in need

Developing population-based systems

To develop population-based systems that deliver not only high-quality care efficiently but also:

- address the needs of all the people in need with the specialist service seeing those who would benefit most
- implement high-value innovation funded by reduced spending on lower-value intervention
- increase rates of higher-value intervention funded by reduced spending on lower-value intervention e.g. shifting resources from treatment to prevention

Population-based systems

Aim

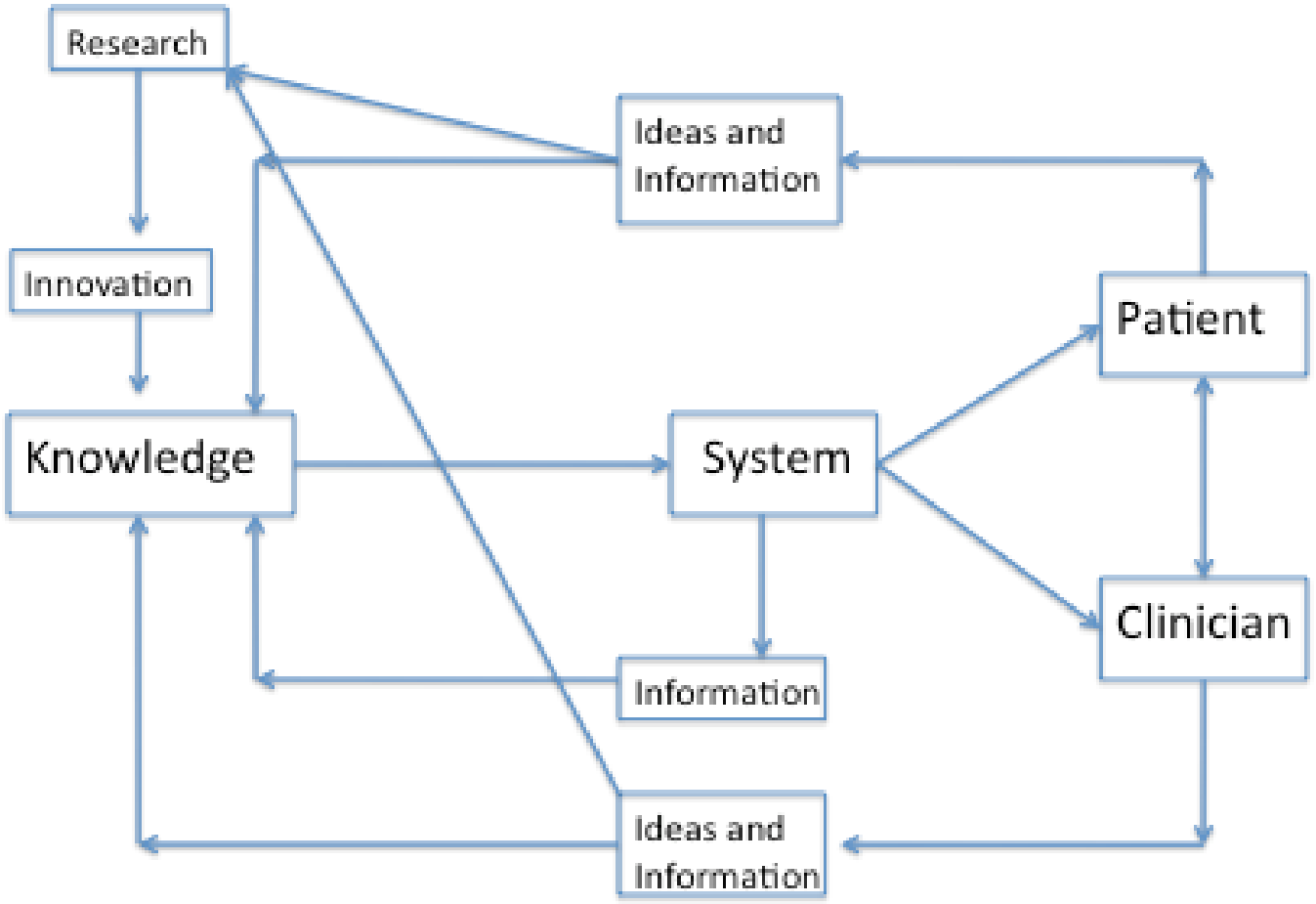
- To optimise value for populations and the individuals within those populations

Focus

- Primarily on populations defined by a common need
  - A symptom
  - A characteristic
  - A condition
- Care delivered by networks of organisations and people through pathways

The language of value and population healthcare

- SYSTEM: a set of activities with a common set of objectives and outcomes, and an annual report; systems can focus on symptoms, conditions or subgroups of the population; a system is delivered as a service, the configuration of which may vary from one population to another
- NETWORK: a set of individuals and organisations that deliver the system's objectives; a team is a set of individuals or departments within one organization
- PATHWAY: the route patients usually follow through the network
- PROGRAMME: a set of systems with a common knowledge base and a common budget


Research
Ideas and Information
Innovation
Patient
Knowledge
System
Clinician
Information
Ideas and Information

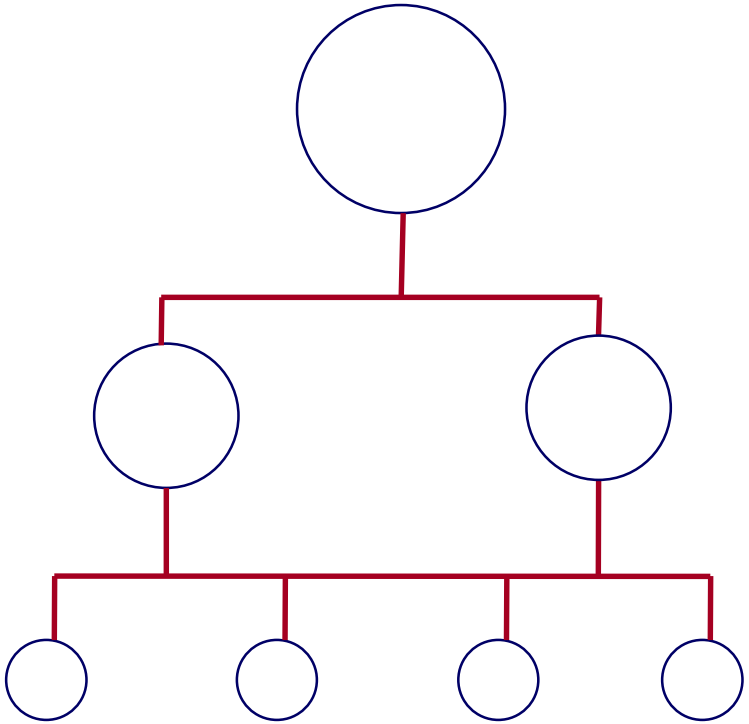
Choosing criteria and setting standards

Newborn Screening for Sickle Cell Disorders Programme Standards

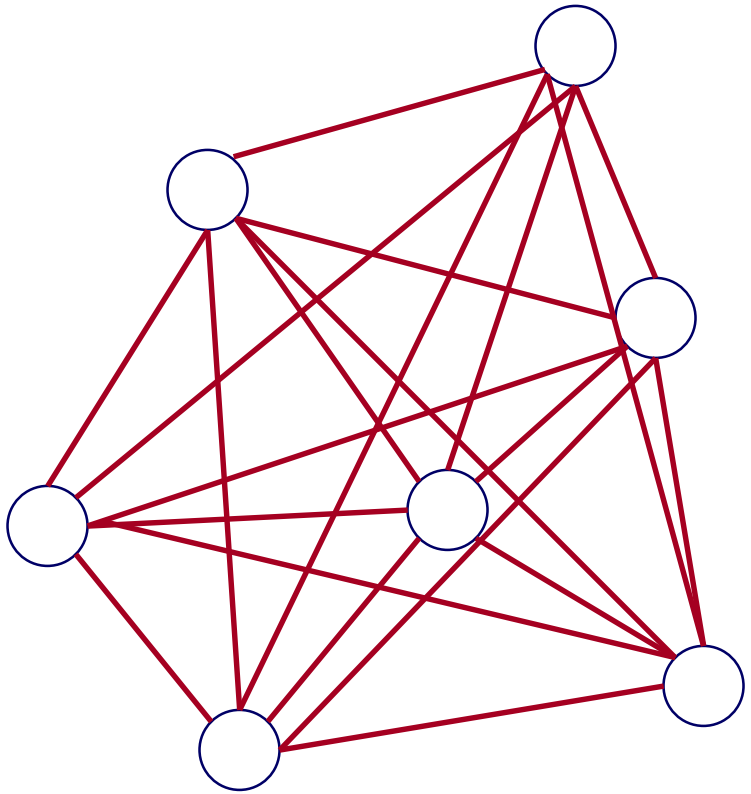
NEWBORN PROGRAMME OBJECTIVES:	CRITERIA	STANDARDS	
		Minimum (Core)	Achievable (Developmental)
Programme Outcome			
Best possible survival for infants detected with a sickle cell disorder by the screening programme	**Mortality rates expressed in person years**	**Mortality rate from sickle cell disease and it's complications in children under five of less than four per 1000 person years of life (two deaths per 100 affected children)**	**Mortality rate in children under five of less than two per 1000 person years of life (one death per 100 affected children)**
Programme Outcome			
Accurate detection of all infants born with major clinically significant haemoglobin disorders*	Sensitivity of the screening process (offer, test and repeat test)	99% detection for Hb-SS 98% detection for Hb-SC 95% detection for other variants	99.5% for Hb-SS 99% for Hb-SC 97% for other variants

An example of a national service set up as a system

Hierarchy



Network



Work like an ant colony, a complex adaptive system to solve the challenges of healthcare [complex problem]

Dementia – a syndrome

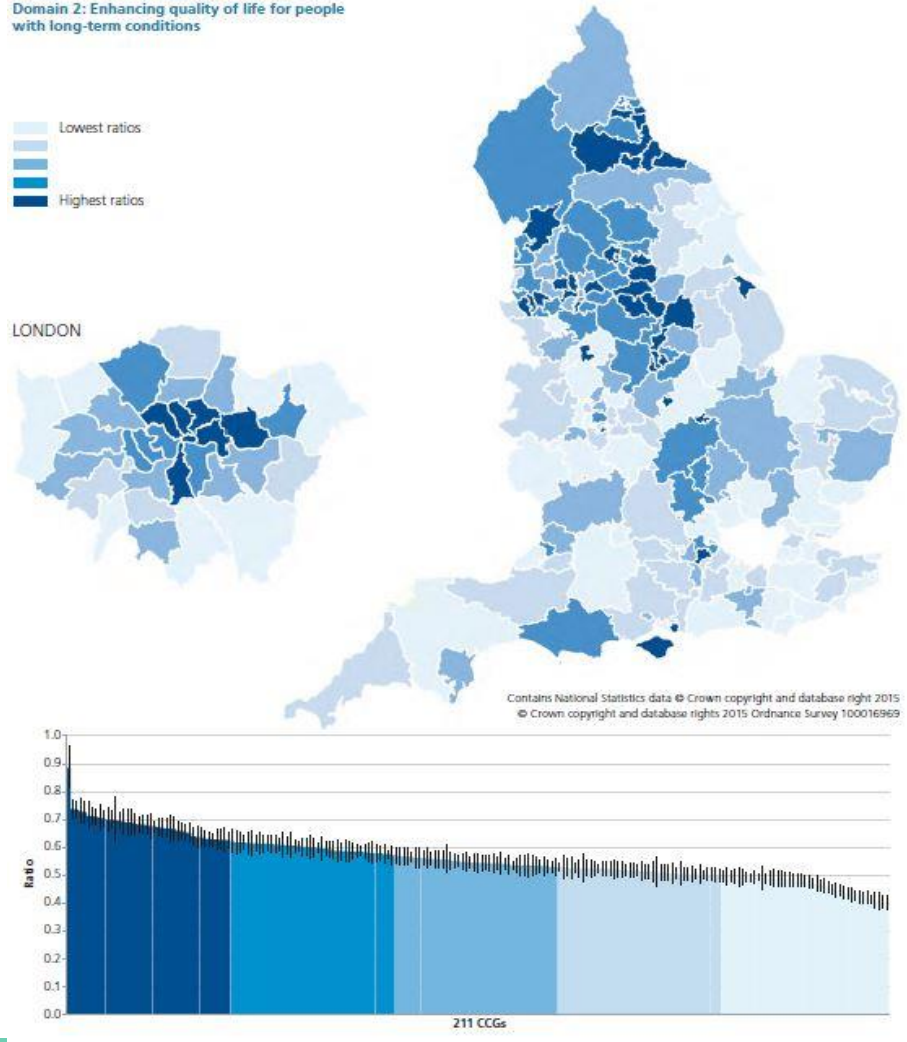
- A group of related symptoms associated with increased age in which there is a decline in brain function especially of memory
- 4 main types: Alzheimer's disease, vascular dementia, Lewy body dementia & fronto-temporal dementia
- A person may have more than one type of dementia
- An illness that people fear: there is no cure; symptoms deteriorate over time
- Treatments are available that improve quality of life therefore timely/early diagnosis is important and can confer psychological benefits
- Prevention is better than "no cure"

Variation in dementia care in England

Map 50: Ratio of reported to expected prevalence of dementia by CCG

October 2014

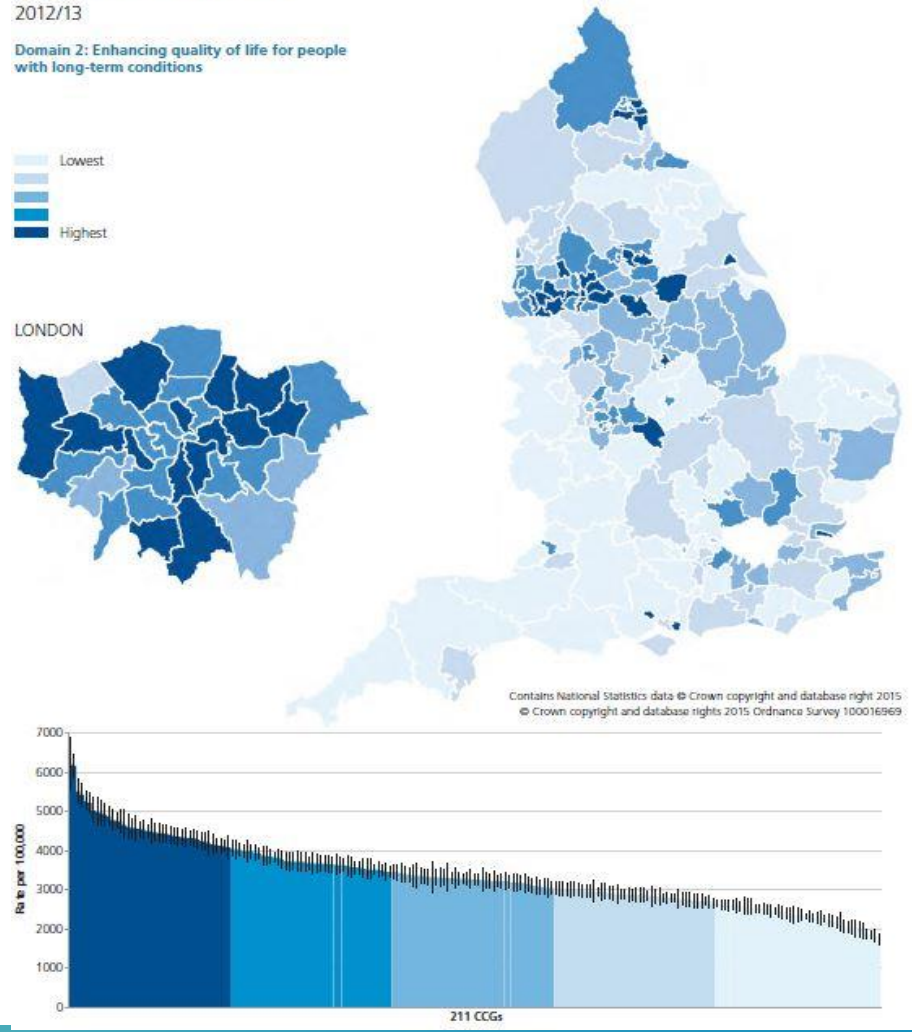
Domain 2: Enhancing quality of life for people with long-term conditions



Map 55: Rate of emergency admissions to hospital of people with dementia aged 65 years and over per population by CCG

2012/13

Domain 2: Enhancing quality of life for people with long-term conditions

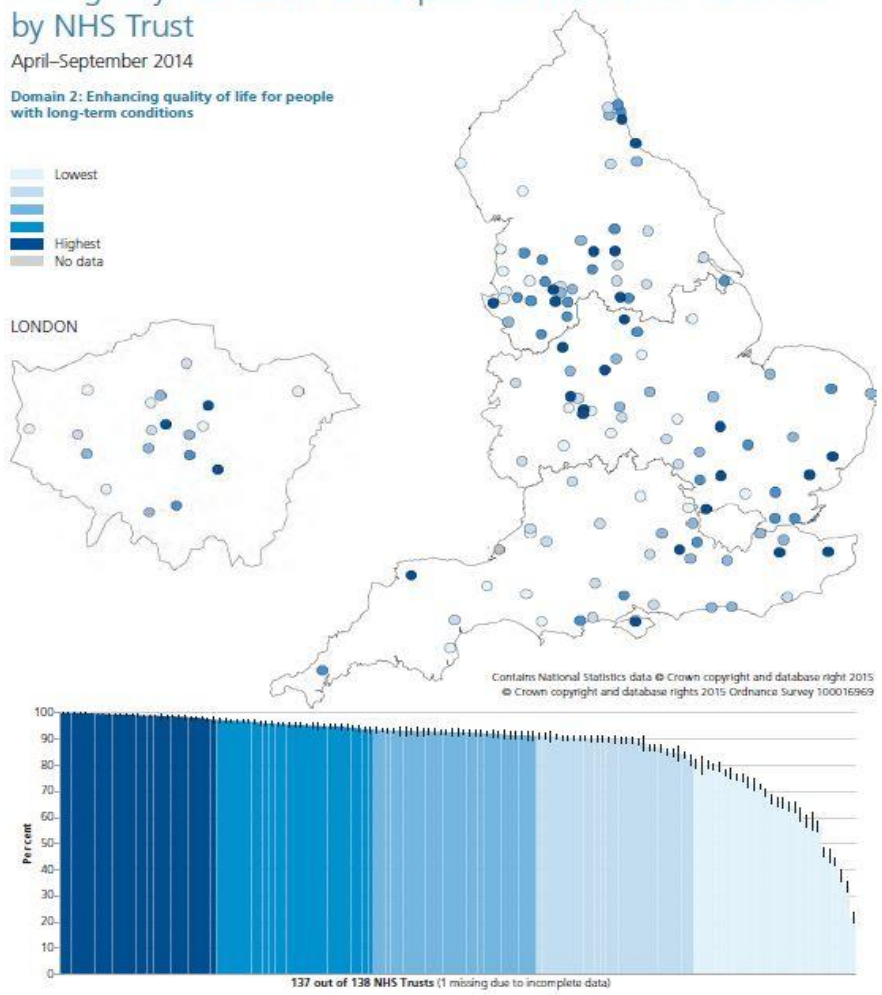


Variation in dementia care in England

Map 51: Percentage of people aged 75 years and over to whom dementia case-finding was applied following emergency admission to hospital for more than 72 hours by NHS Trust

April–September 2014

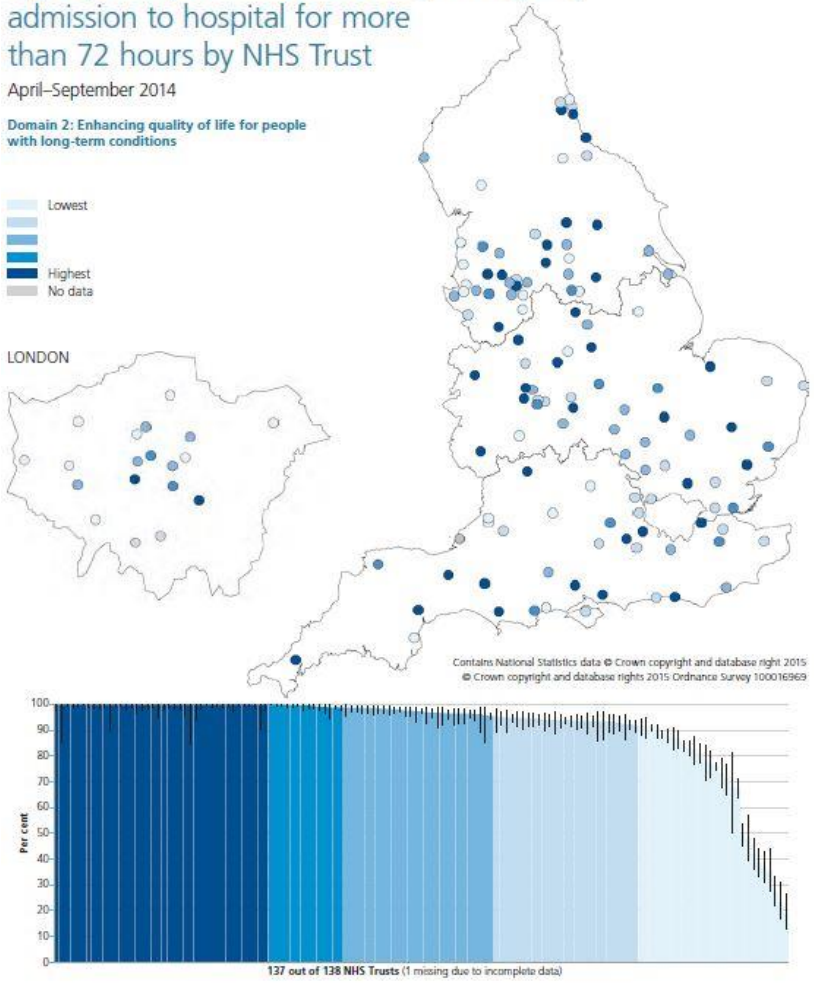
Domain 2: Enhancing quality of life for people with long-term conditions



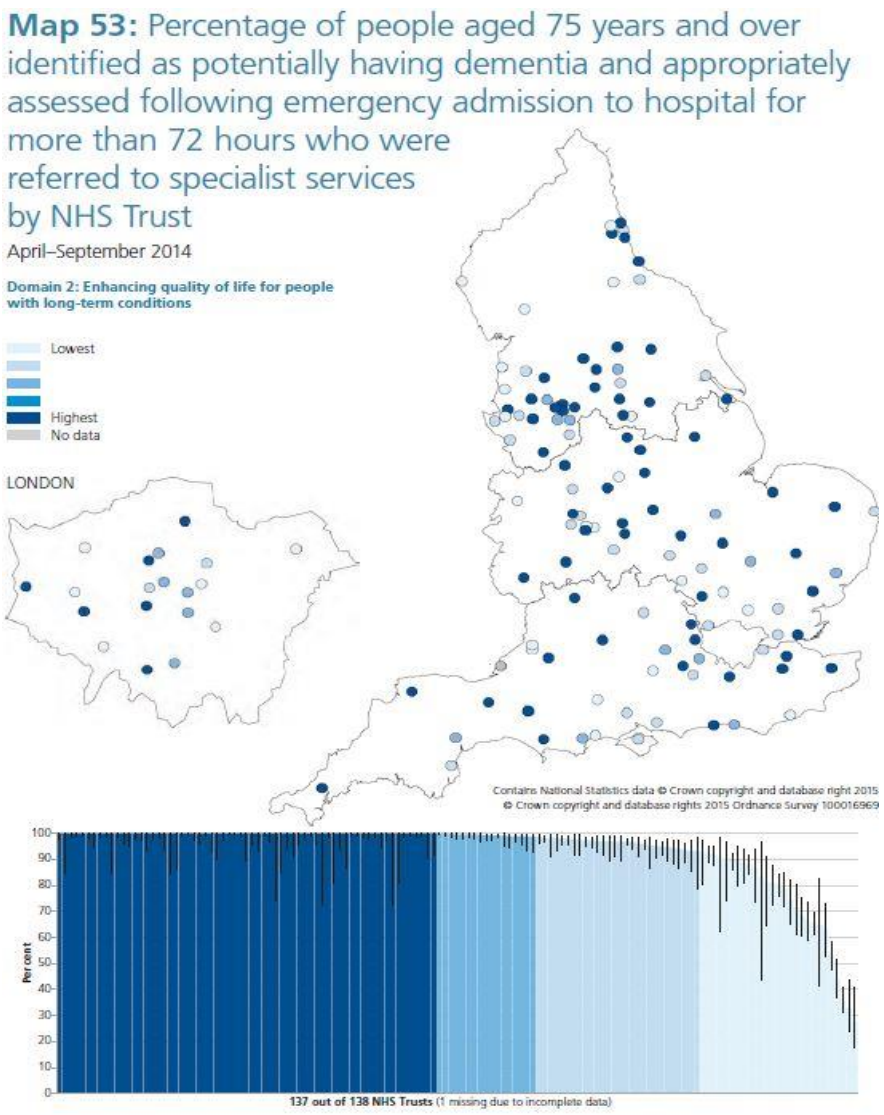
Map 52: Percentage of people aged 75 years and over identified as potentially having dementia who were appropriately assessed following emergency admission to hospital for more than 72 hours by NHS Trust

April–September 2014

Domain 2: Enhancing quality of life for people with long-term conditions



Variation in dementia care in England



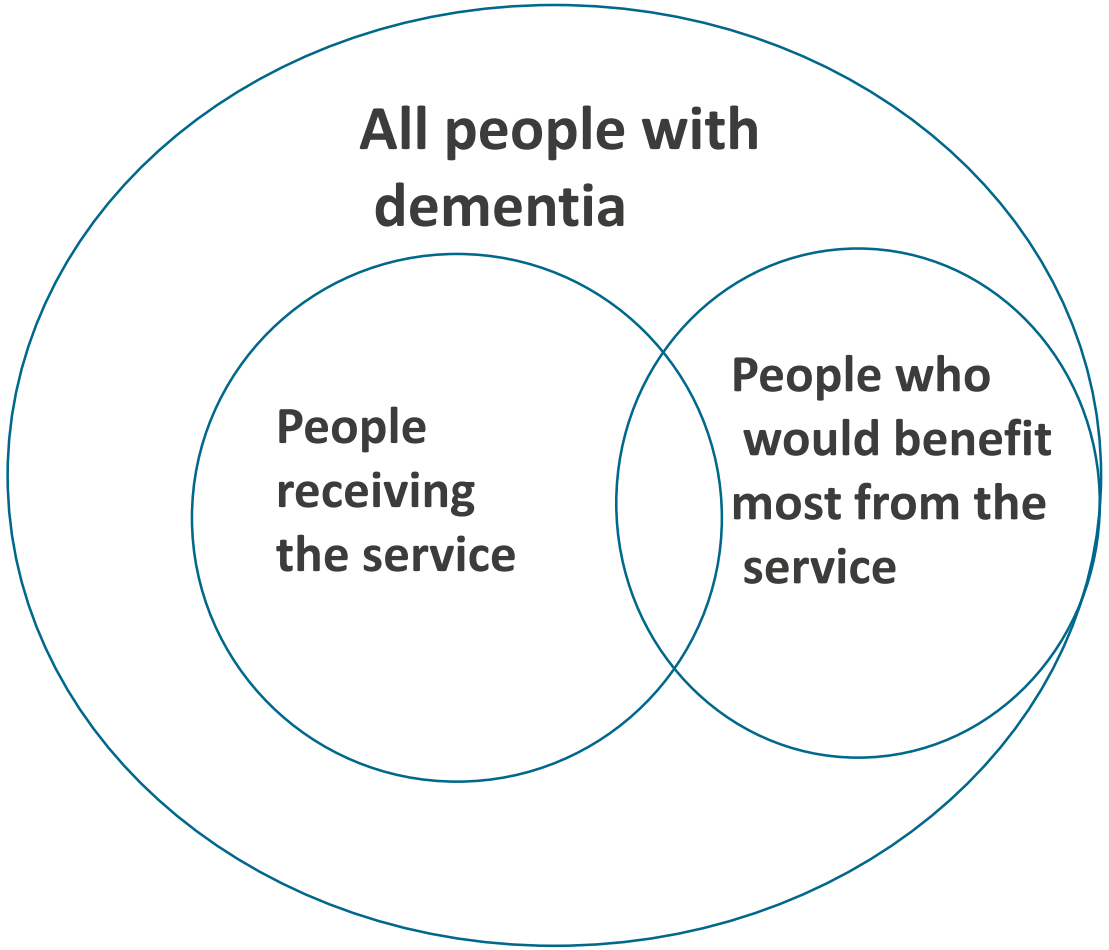
Variation in dementia care in England

Indicator	Geography	Date of data	Range	Fold-difference
Ratio of reported to expected prevalence of dementia	CCG	October 2014	0.40-0.89	**2.2**
Rate of emergency admissions to hospital of people with dementia aged 65 years and over	CCG	2012/13	1730-6217 per 100,000 population	**3.6**
Percentage of people aged 75 years and over to whom dementia case-finding was applied following emergency admission to hospital for >72 hours	NHS Trust	April-September 2014	21.7-100%	**4.6**
Percentage of people aged 75 years and over identified as potentially having dementia who were appropriately assessed following emergency admission to hospital for >72 hours	NHS Trust	April-September 2014	18.8-100%	**5.3**
Percentage of people aged 75 years and over identified as potentially having dementia and appropriately assessed following emergency admission to hospital for >72 hours who were referred to specialist services	NHS Trust	April-September 2014	27.8-100%	**3.6**

Reasons for warranted variation

- Prevalence of dementia:
  - age structure of local population
  - ethnic composition of local population
- Prevalence of risk factors for dementia:
  - Increased blood pressure
  - Increased levels of cholesterol
  - Increased use of alcohol
  - Obesity
  - Presence of diabetes
  - Presence of atrial fibrillation (AF)

Addressing the needs of all people with dementia?



Reasons for unwarranted variation

Reason/Differences in:	Observed vs expected prevalence	Emergency admissions to hospital	Case-finding, appropriate assessment & referral to specialist services
Awareness in primary & secondary care of dementia/dementia as a co-morbidity	Yes		Yes
Diagnosis in primary care	Yes	Yes	
Diagnosis in secondary care			Yes
Access to services	Memory assessment; mental health, primary & community care	Specialist services for diagnosis & management	Liaison & specialist services
Access to early intervention and community care models		Yes	
Education & skills development in primary care	Yes	Yes	
Education & skills development in secondary care			Yes

Options for action: Allocative value

- Need to identify lower-value interventions to fund the development of early intervention and community care models for people with dementia
  - Lower-value interventions could be sought within dementia care budget or from other care budgets within programme budget for mental health
- Need to identify lower-value interventions to fund the promotion of good brain health in collaboration with other specialists and generalists who also have a professional interest in reducing the common risk factors of physical inactivity, increased blood pressure, increased levels of cholesterol, obesity, presence of diabetes and presence of atrial fibrillation
  - GPs, specialists in cardiology, endocrinology/metabolic, stroke, kidney care, and so on …

Options for action: prevention

Let's Get Moving:

- An evidence-based intervention originally created and tested by the Department of Health and recommended by the National Institute for Health and Care Excellence (NICE)
- The programme places Exercise Professionals specially trained in motivational interviewing within GP surgeries, so that physical inactivity can be tackled at the heart of primary care
- 35 GP surgeries in Birmingham, Bedfordshire, Kent and Essex
- 20,000 participants
- Evaluation showed that on average participants increased physical activity by 89%

Options for action: Technical value

- Improve diagnosis rate of people with dementia, e.g. dementia-awareness training and skills development in early identification and diagnosis
- Develop and implement a patient-centred dementia care pathway
- Improve post-diagnostic support of people with dementia in accordance with evidence-based guidelines
- If possible, maintain people with dementia in their usual place of residence
- Develop ways to involve the people being treated, and their families/carers in care
- Provide appropriate support for families/carers
- Undertake effective care planning including advanced care planning
- Develop a summary care record to ensure continuity of care across the care pathway
- Increase access to relevant services

Roles in the dementia care network

Interventions	All network: collaboration of generalists and specialists	Role for Specialists to support generalists
Awareness training (risk factors, symptoms, benefits of diagnosis, services available) and skills development in early identification and diagnosis		Yes
Developing a patient-centred care pathway	Yes	
Effective post-diagnostic support in community	Yes	Yes
Maintaining people in their usual place of residence	Yes	Yes
Involving people being treated and their carers	Yes	
Effective care planning/advanced care planning	Yes	Yes
Developing summary care record	Yes	
Increase access to services	Yes	Yes

Population-based system for people with dementia

- Design a system
  - Develop system aim, scope, objectives, criteria and standards
- Establish, develop and maintain a network to deliver the system
  - GPs and other primary care providers, specialists in hospitals and other secondary care providers, mental health services, older people services, social services, ambulance services, professionals in residential and nursing care homes, voluntary and third sector organisations, people with the condition, patient organisations, carers organisations …
- Develop a patient-centred care pathway

The role of the specialist service

Dr Rosso is given 1 day a week for Population Dementia Health and Wellbeing and as the co-ordinator of the Bologna Network and Service has responsibility, authority and resources for:

- Working with Public Health/Health promotion individuals/organisations to improve brain health – increase physical activity, reduce blood pressure, reduce obesity and improve diet
- Working with general practitioners to support the appropriate and effective treatment of hypertension and atrial fibrillation
- Developing the Population Dementia Health and Wellbeing Network
- Improving quality of information/other resources for people with dementia and their carers
- Professional development of all generalists: diagnostic skills; care in the community
- Producing an Annual Report of the service