



Swansea University  
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School of Management  
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# Value-Based Healthcare in Wales

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# Disclosure

Swansea University is in receipt of grant funding for its Value-Based Healthcare Programme from Pfizer

I am grateful to Dr Sally Lewis, national Clinical Director for [Value-Based Health and Care Wales](#), for permission to use and publish some of the material in this presentation which was given to the EFPIA VBHC Think-Tank in December 2019

# We will discuss:

Value-Based healthcare  
policy in Wales

VBHC in action in Wales

VBHC and research in  
Wales

# Wales

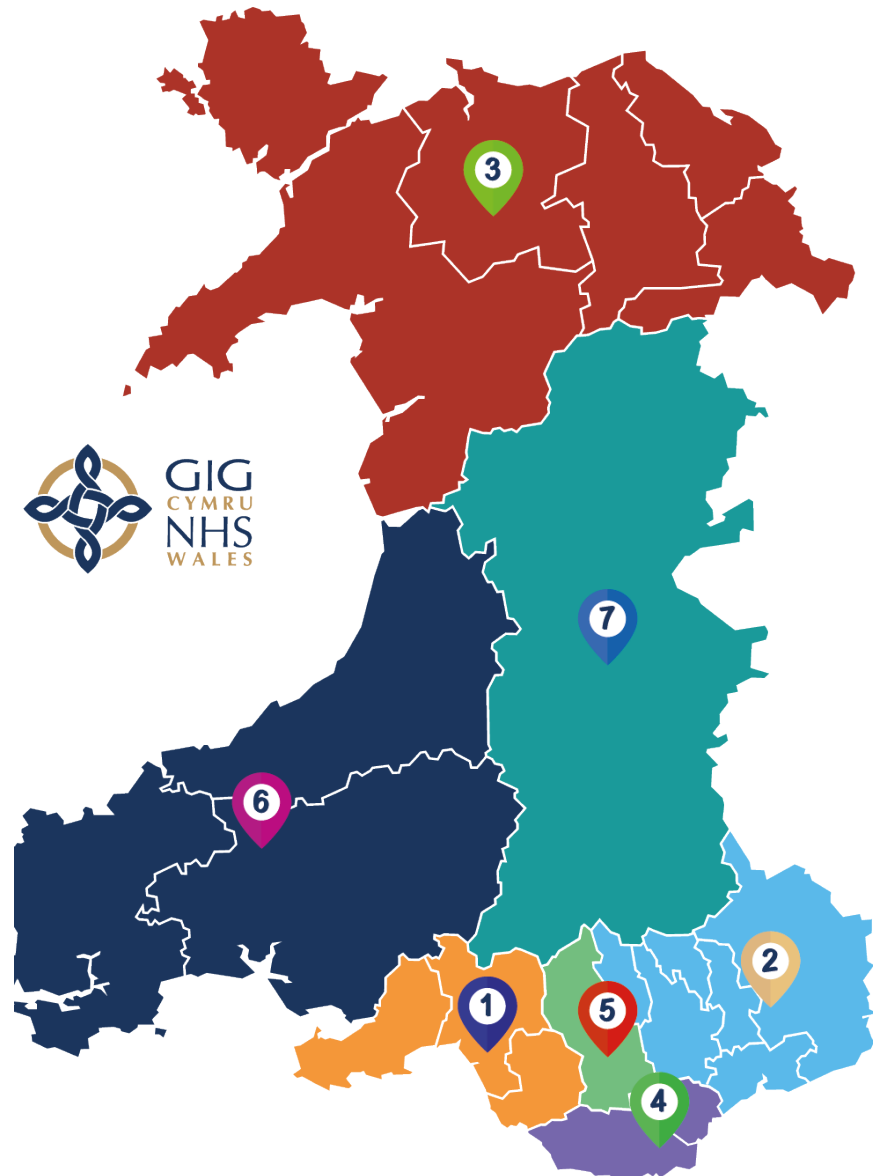
Population 3.2M

7 Integrated Health Boards

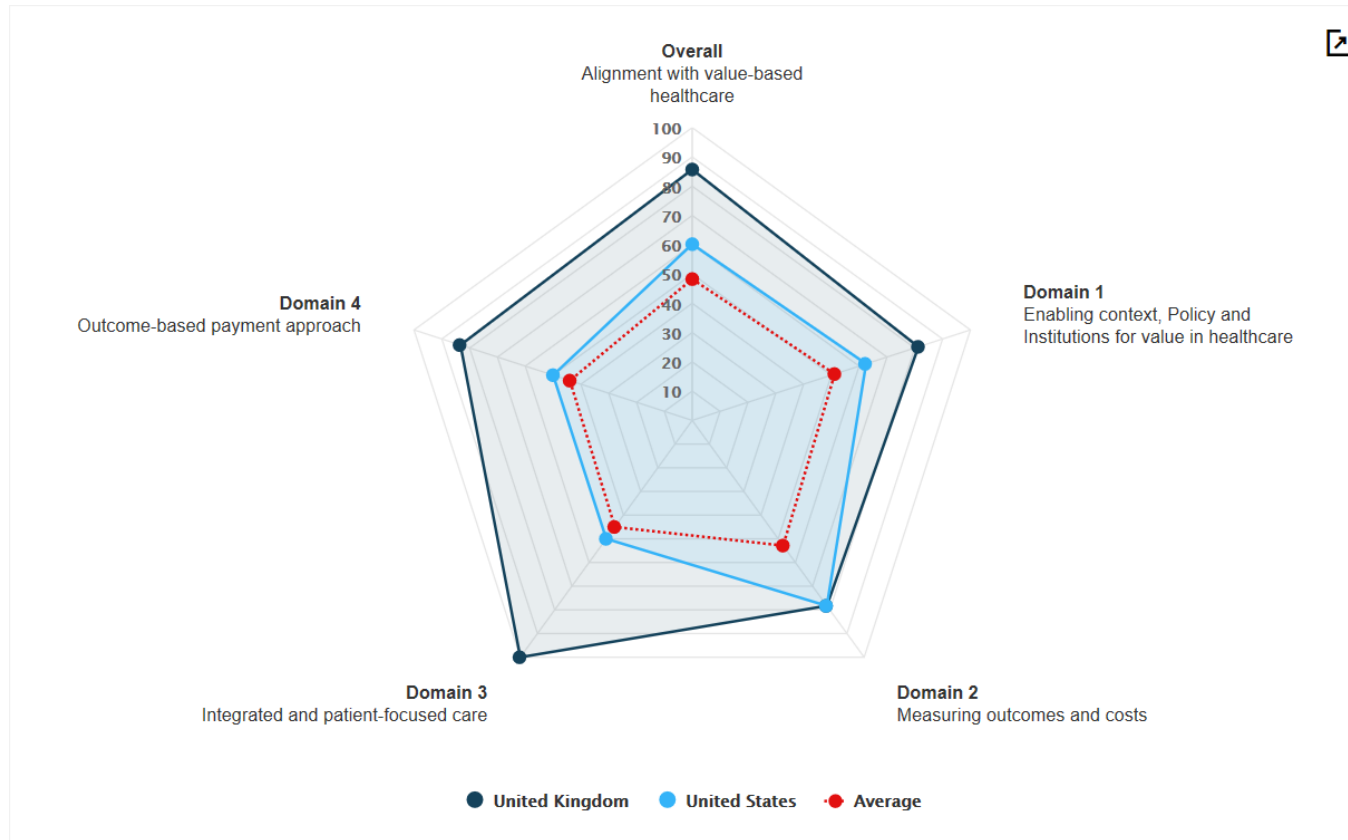
National VBHC programme and clinical lead

Standardised Patient Level Costing

3 Year plan for VBHC



# VBHC “readiness” by country




Source: Economist Intelligence Unit Report <http://vbhcglobalassessment.eiu.com/>

# Policy

Value-Based Healthcare

## THE PRINCIPLES OF PRUDENT HEALTHCARE

**The 4 principles of prudent healthcare**



Public and professionals are **EQUAL PARTNERS** through **CO-PRODUCTION**

**CARE FOR** those with the greatest health need **FIRST**


Do only **WHAT IS NEEDED**

and do **NO HARM**

Reduce **INAPPROPRIATE VARIATION**

through **EVIDENCE-BASED** approaches

For further information visit [www.prudenthealthcare.org.uk](http://www.prudenthealthcare.org.uk)



- Towards truly shared decisions
- Promoting equity
- Avoiding harm, including through overdiagnosis and treatment
- Tackling unwarranted variation



# Wales: a favourable environment

## Making prudent healthcare happen

### Welcome

The 'Making prudent healthcare happen' resource has been designed to explain some of the key concepts behind prudent healthcare. It captures perspectives of those working in or using health and social care services in Wales about what prudent healthcare means to them and its potential for Wales.

### Before you start

Read the welcome from Minister for Health and Social Services, Professor Mark Drakeford AM. Scroll over the images below to view the article title, or click to see a full list of articles on this site.

Click here to read the "Securing Health and Well-being for Future Generations" document



[www.bevancommission.org/en/prudent-healthcare](http://www.bevancommission.org/en/prudent-healthcare)





# A Healthier Wales:

## *our Plan for Health and Social Care (2018)*

### The Quadruple Aim

(4): *“increase the value achieved from funding of health and care through improvement, innovation, use of best practice, and eliminating waste”.*

### Ten Design Principles

(7): *“ **Higher Value** – achieving better outcomes and a better experience for people at reduced cost; care and treatment which is designed to achieve ‘what matters’ and which is delivered by the right person at the right time; less variation and harm”.*



## HOW DO WE LOOK AT VALUE IN AN INTEGRATED HEALTHCARE SYSTEM?

### VALUE = OUTCOMES / COSTS

- ✓ Total costs of care over the care cycle, and
- ✓ Outcomes that matter for the patient's condition over the care cycle.

*'Have we allocated resources to different groups equitably and in a way that maximises value for the whole population?'*

Sir Muir Gray

### VALUE

- Between programmes
- Between systems in each programme
- Between interventions within each system

# Expert Panel on Effective Ways of Investing in Health (EXPH)

*A comprehensive* concept built on **four** pillars:

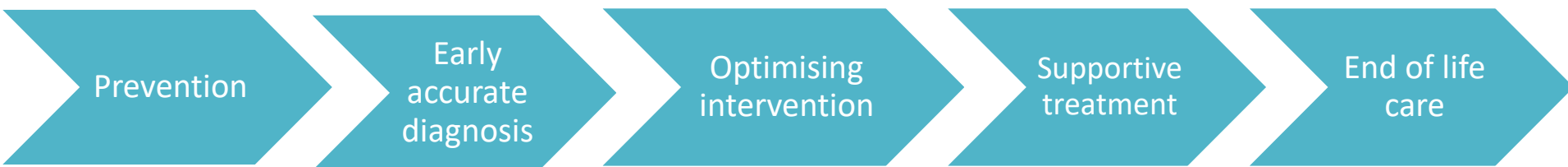
- Appropriate care to achieve patients' personal goals (**personal value**)
- Achievement of best possible outcomes with available resources (**technical value**)
- Equitable resource distribution across all patient groups (**allocative value**)
- Contribution of healthcare to societal participation and connectedness (**societal value**)

*Source:* Expert panel on effective ways of investing in Health (EXPH), Defining value in “Value-Based Healthcare”

*[http://ec.europa.eu/health/expert\\_panel/index\\_en.htm](http://ec.europa.eu/health/expert_panel/index_en.htm)*



# How do we plan to generate value across a pathway of care?



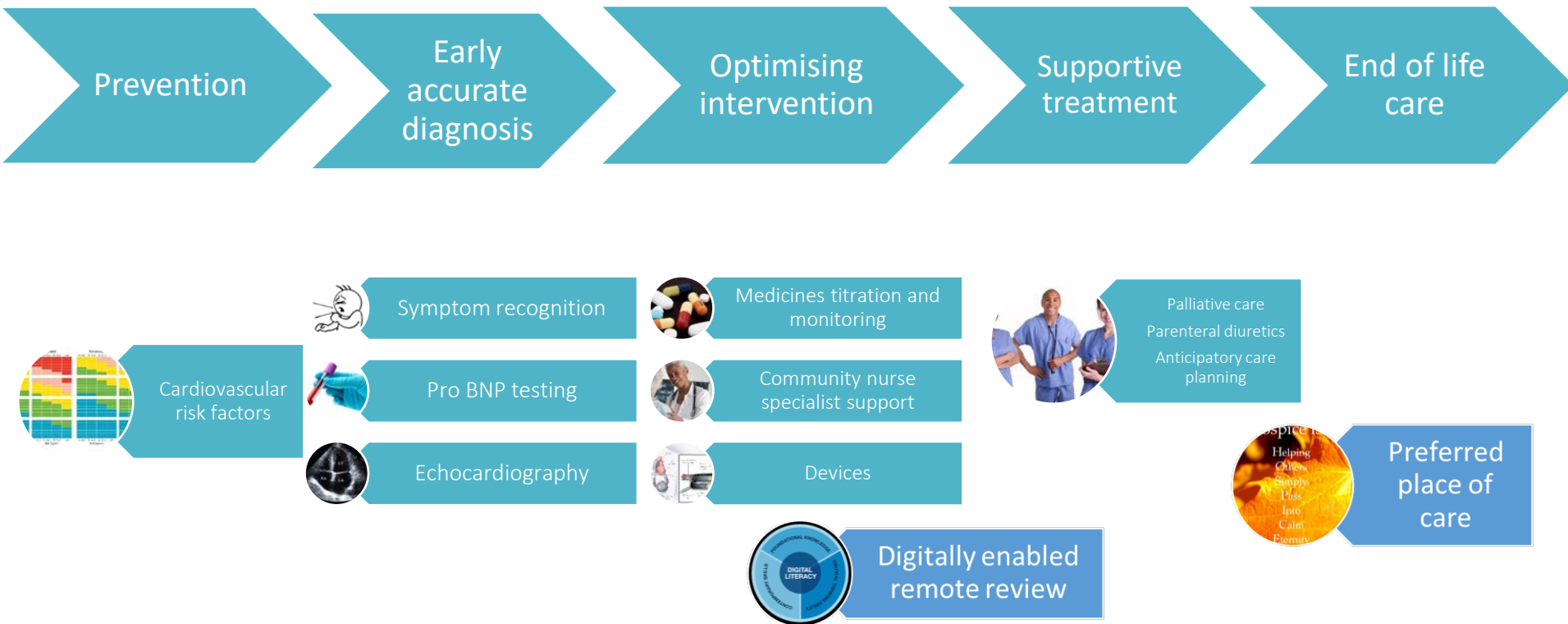
## Patient factors

- Raise health literacy
- Support healthy behaviours
- Support shared understanding of medicine - towards the best choices

## Healthcare factors

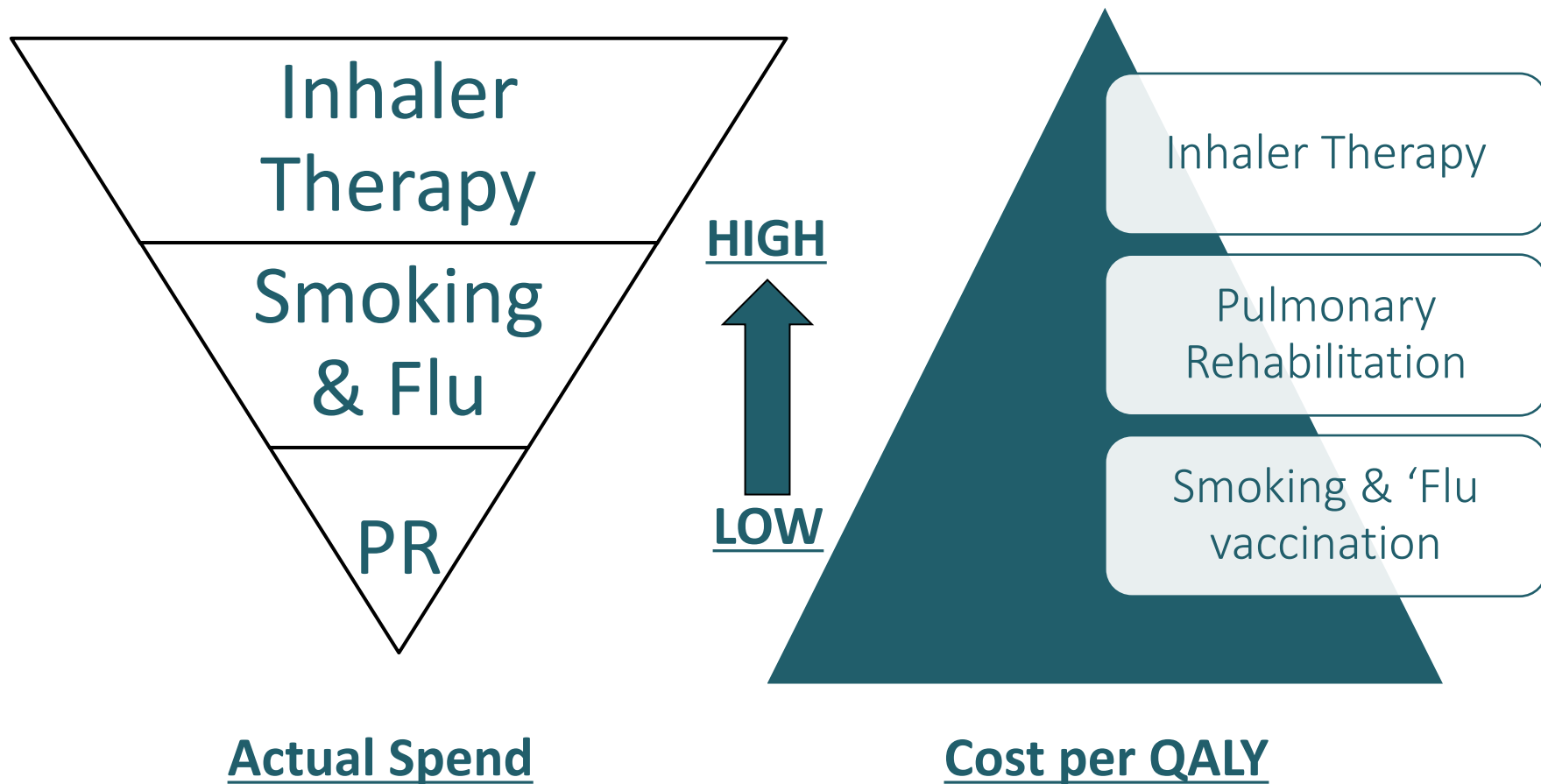
- Decrease unwarranted variation
- Optimum positioning of drugs and devices
- Ideal population to real population
- Generalised care to personalised care
- Focus on meeting true need
- Resource allocation

# Improving outcomes, improving population value in heart failure





# Reallocating resource for Value across a pathway of care (COPD)



# The consequences of not knowing?

*“Doctors are men who prescribe medicines of which they know little, to cure diseases of which they know less, in human beings of whom they know nothing.”*

No way of knowing objectively how people are getting on at home

Real-world clinical effectiveness unknown

Multi-morbidity effects

Patient preference and context

Clinical variation

Incomplete information /advice for people to be able to make decisions



FRANÇOIS-MARIE D'AROUET  
“VOLTAIRE” 1694-1778

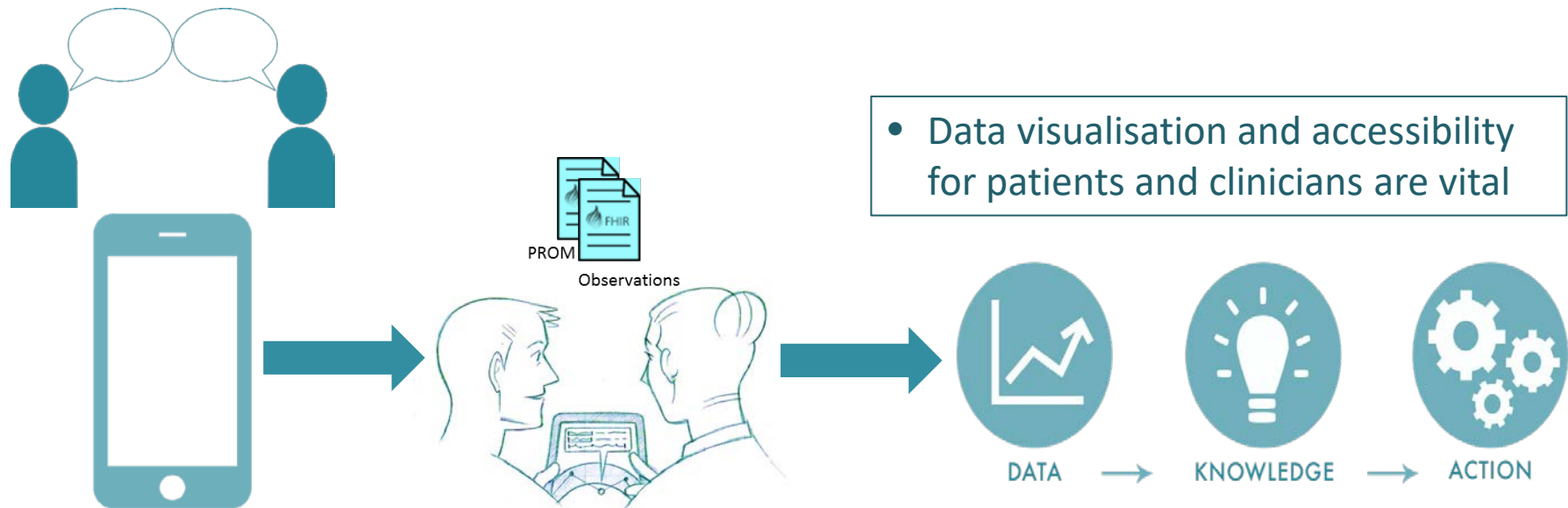


# Practice

Value-Based Healthcare

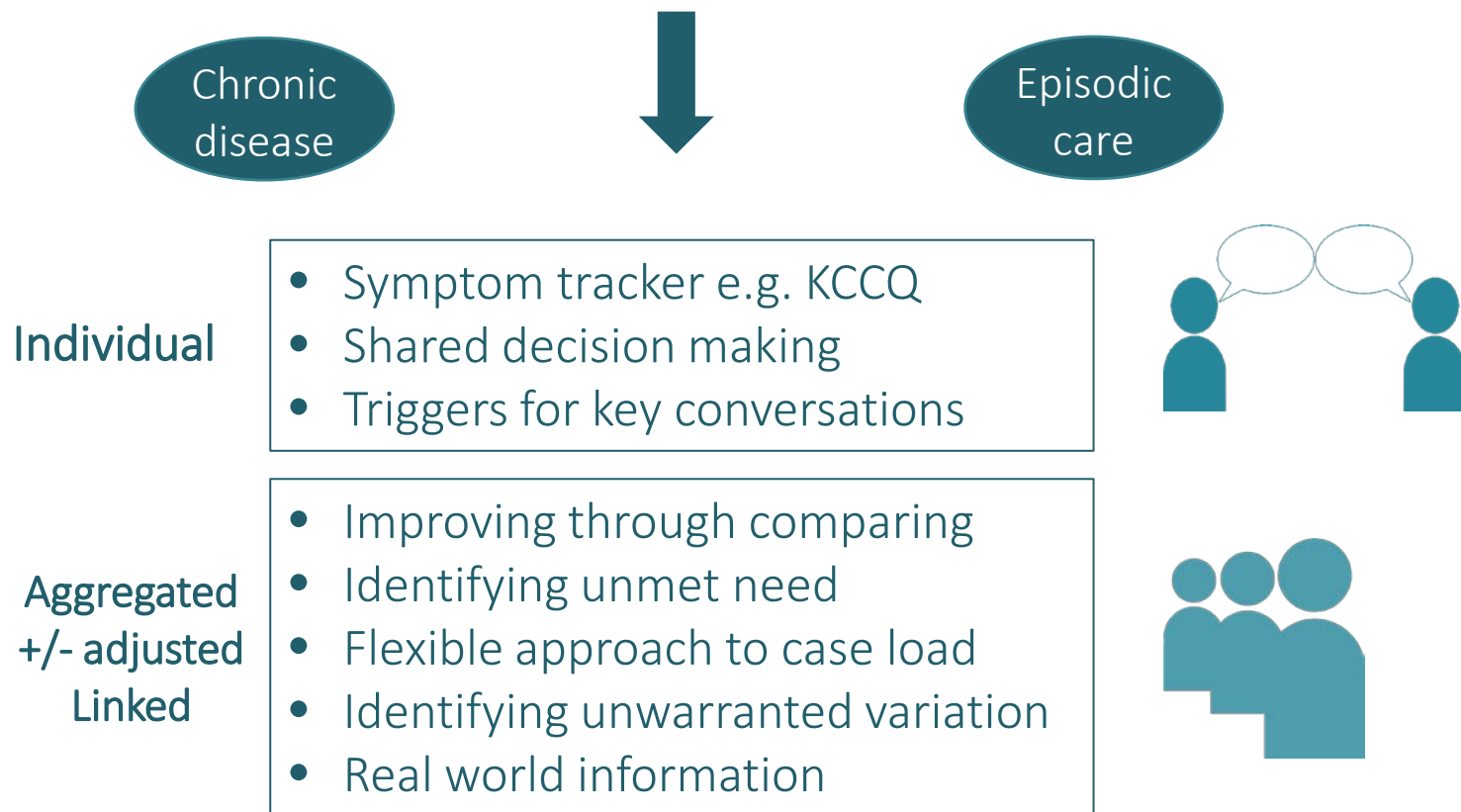
# Collecting patient-reported outcomes – key lessons

- Enhancing electronic communication with patients facilitates data capture
- It also enables other tasks to be completed by the patient/clinician
- This allows large scale semi-automated collection of patient-reported outcomes



# Using patient-reported outcomes – key lessons

‘An outcome is a milestone, endpoint or consequence *which matters to a person*’



# Visualisation Best Practice

Following the design principles enables the development of clean, uncluttered report pages that are easy to use and understand. Key features are highlighted below:

Card and KPI visuals clearly display key metrics and can be effective in the header bar.

Filters allow users to interact with the report and explore subsets of the full dataset.

Provide details of how users of the report(s) can access support or assistance if needed.

Limiting the number of charts on a page can help to give the report a cleaner feel and aid understanding. Too much information on a page makes understanding the key messages more difficult.

Bar charts and histograms clearly display data. Data labels can be added to allow axes to be removed, reducing clutter on the page

Data slicers quickly enable users to alter the time period shown in the dashboard.

Pie or doughnut charts can be effective where the number of categories displayed is low (e.g. 2-3)

Add meaningful headers and, if needed, use text boxes to provide context.

NWIS and NHS themed PowerBI templates available to enable the efficient deployment of consistent and professionally branded reports.



# Proms - Heart Failure

679

Number of Records

04/12/2018

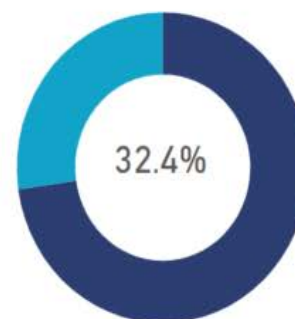
11/10/2019



## The Patient Health Questionnaire-2 (PHQ-2)

The PHQ-2 inquires about frequency of depressed mood and anhedonia over the past 2 weeks

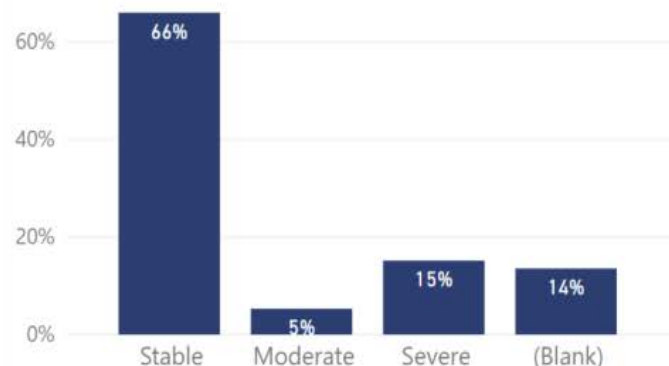
Prevalence of a significant trigger score for depression



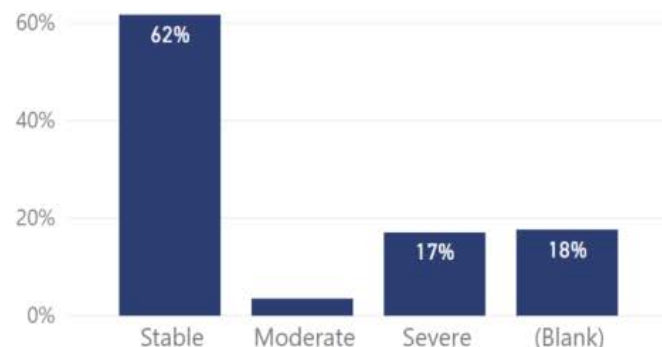
## Cardiomyopathy Questionnaire (KCCQ-12)

The KCCQ-12 inquires about how heart failure affects the patients life

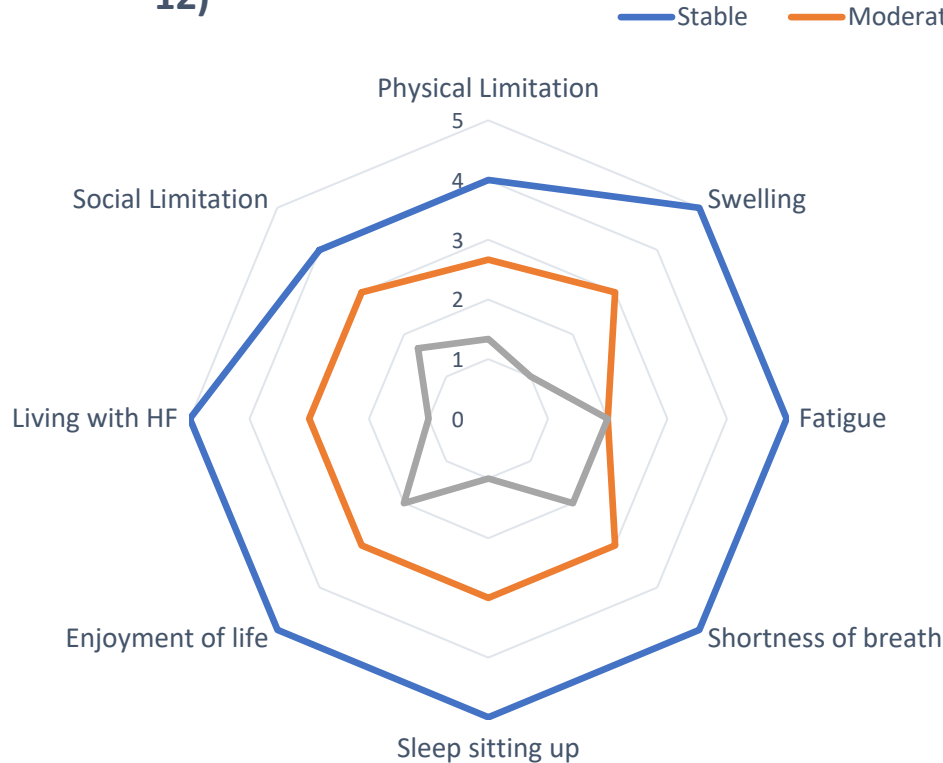
### Patient reported swelling in morning



### Patient reported sleeping sitting up



# Individual Level Radar Chart representing 3 heart failure patients that responded to the Cardiomyopathy Questionnaire (Kansas City KCCQ-12)



## Radar Chart Notes

The radar chart represents 3 individual patients that have been randomly selected from the PROM data based on their responses to question 2: Occurrence of leg/feet swelling, and question 5: Occurrence of being forced to sleep sitting up. 3 patients have been randomly selected and assigned to the following categories:

Stable: recorded 5 for both questions

Moderate: recorded 3 for both questions

Severe: recorded 1 for both question.

It should be noted that a subsequent selection of patients may yield different results.

The Kansas City KCCQ-12 PROM questions have a varying number of available responses. To create the radar chart, we have had to standardise the number of responses for each question by grouping all answers into 5 groups.

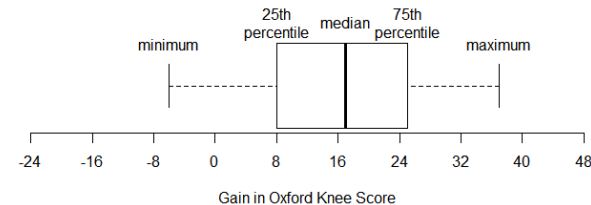
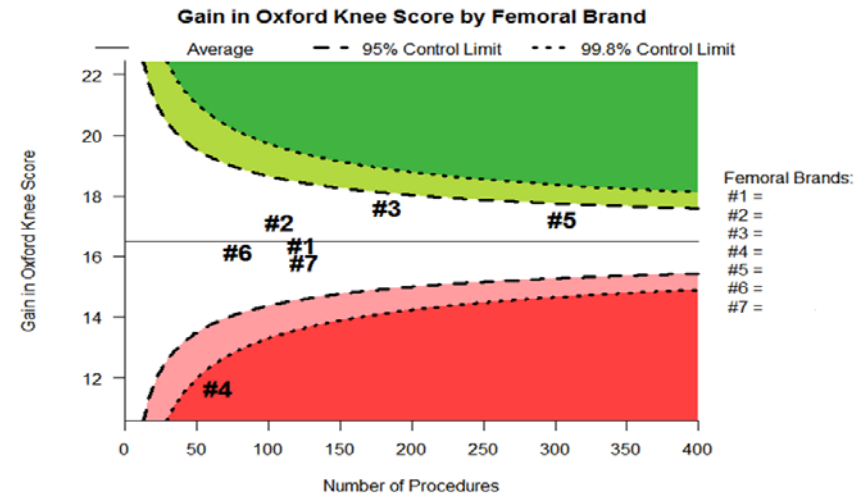
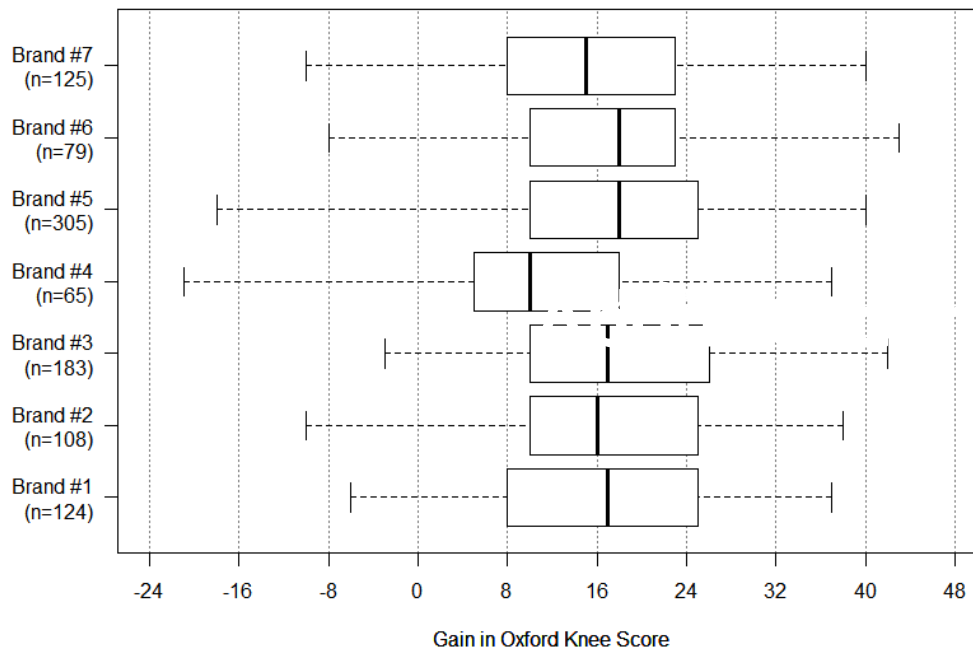
The axis has been labeled 1 - 5 and represents question specific responses. In general, 1 is the most negative responses a HF patient could give and 5 is the most positive.

Please note that the Social Limitation and Physical Limitation categories illustrate the mean response from 3 questions in each category.

# Cemented TKR Patients

## Femoral brand

Boxplots of the gain in Oxford Knee Scores by Femoral Brand





# Value-Based Healthcare and Industry

How does it impact on Life-Science Industries

# Value-Based Healthcare and Pharma

## Current state

- Business model based on medicines as a *commodity*
- Pricing is based largely on *volume* and discounting
- Drug budgets are being squeezed everywhere
- Sales workforce incentivised on volume and share
- Outcomes determined in (not Real World) trials prior to approval
- Outcomes in *Real World* receive less attention
- Medicines *adherence* is a real problem

# Value-Based Healthcare and Pharma

## Future state

- Business model based on *value* created by medicines
- Pricing based largely on *outcomes that matter*
- Reimbursement mechanisms include consideration of value
- Place of medicines in the whole pathway of care is critical: patient segmentation.
- Medicines that do not add value are not supported
- Outcomes that matter are routinely collected in *Real World*
- Medicines *adherence* is improved. *Digital* technologies support adherence.
- *Workforce* are skilled in VBHC and industry supports healthpayers understanding

# Outcomes-based Pricing

## Key success factors

- Shared accountability for delivering outcomes
- Measure outcomes at every stage
- Deliver value through innovation
- Create new business models and payment systems that align financial incentives to deliver value
- Capture costs across the whole pathway
- Stop doing things that don't deliver value



Blog

<http://bit.ly/2BCGFii>





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# Our VBHC Research programme

## In partnership with Pfizer

Outcomes-based pricing modelling study

Outcomes that matter in IBD (PROUD-UC)

Societal Impact of Chronic Diseases

Skills and Capabilities of Life-Science Sector

## With other partners

Outcome-Based Agreements for ATMPs

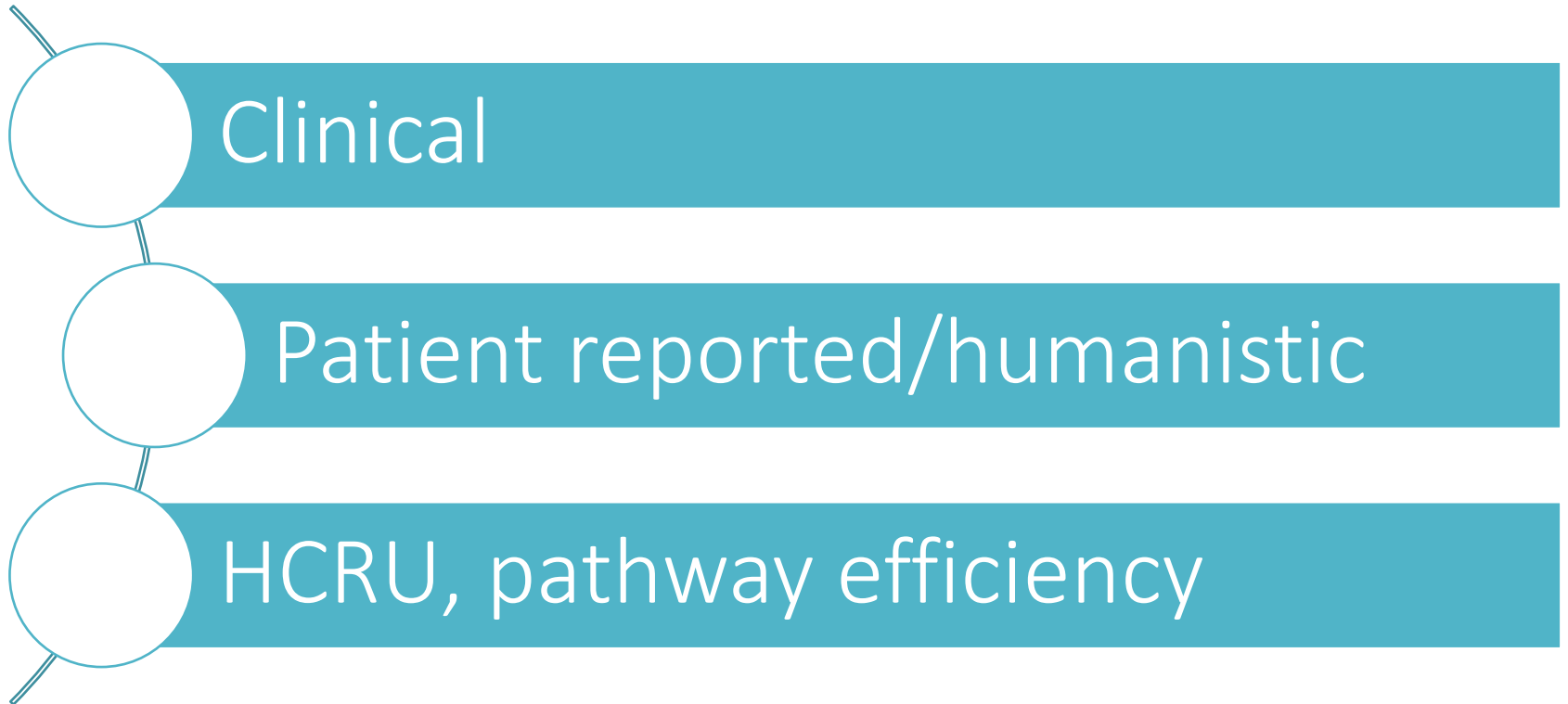
Executive Education for Health, Care and the Life-Science Sector

## Digital Initiatives

*Family Health Passport*

*Centre for Doctoral Training ([Computational Foundry](#), Swansea University)*

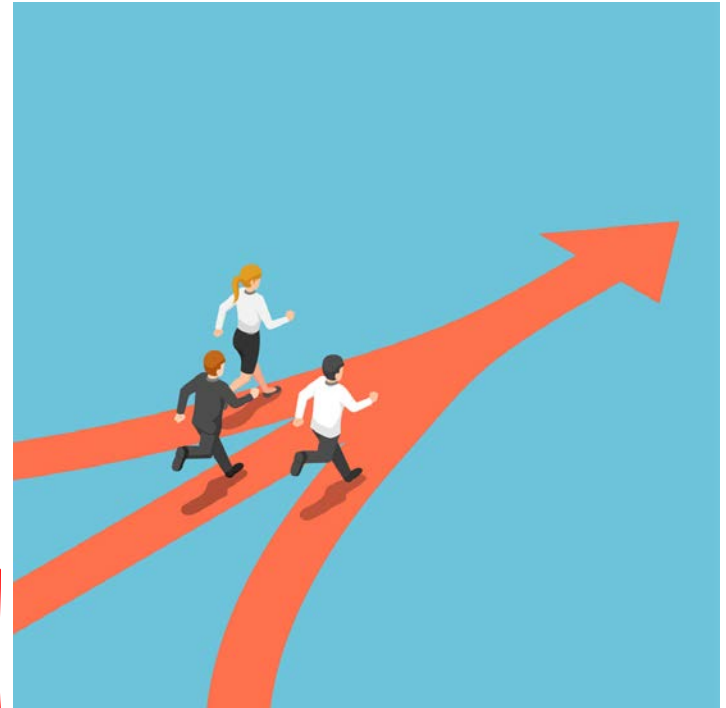
# Pricing for value: measures



# Outcomes-based agreements



- Is a whole new way of working
- Involves sharing of risk
- Requires trust between partners
- Needs openness and honesty about objectives
- Must be structured around getting better value for the patient, so that everyone wins



**TRUST!!!**



# Further information about Wales

*A Healthier Wales*: the long-term plan for Health and Care in Wales

[A healthier Wales: long term plan for health and social care | GOV.WALES](#)

**Wales National Action Plan** for Value-Based Health and Care

[National Action Plan - Value in Health \(nhs.wales\)](#)

**Value -Based Health and Care Academy**

[www.swansea.ac.uk/som/vbhc-academy](#)



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