Designing and Implementing a value-based agreement

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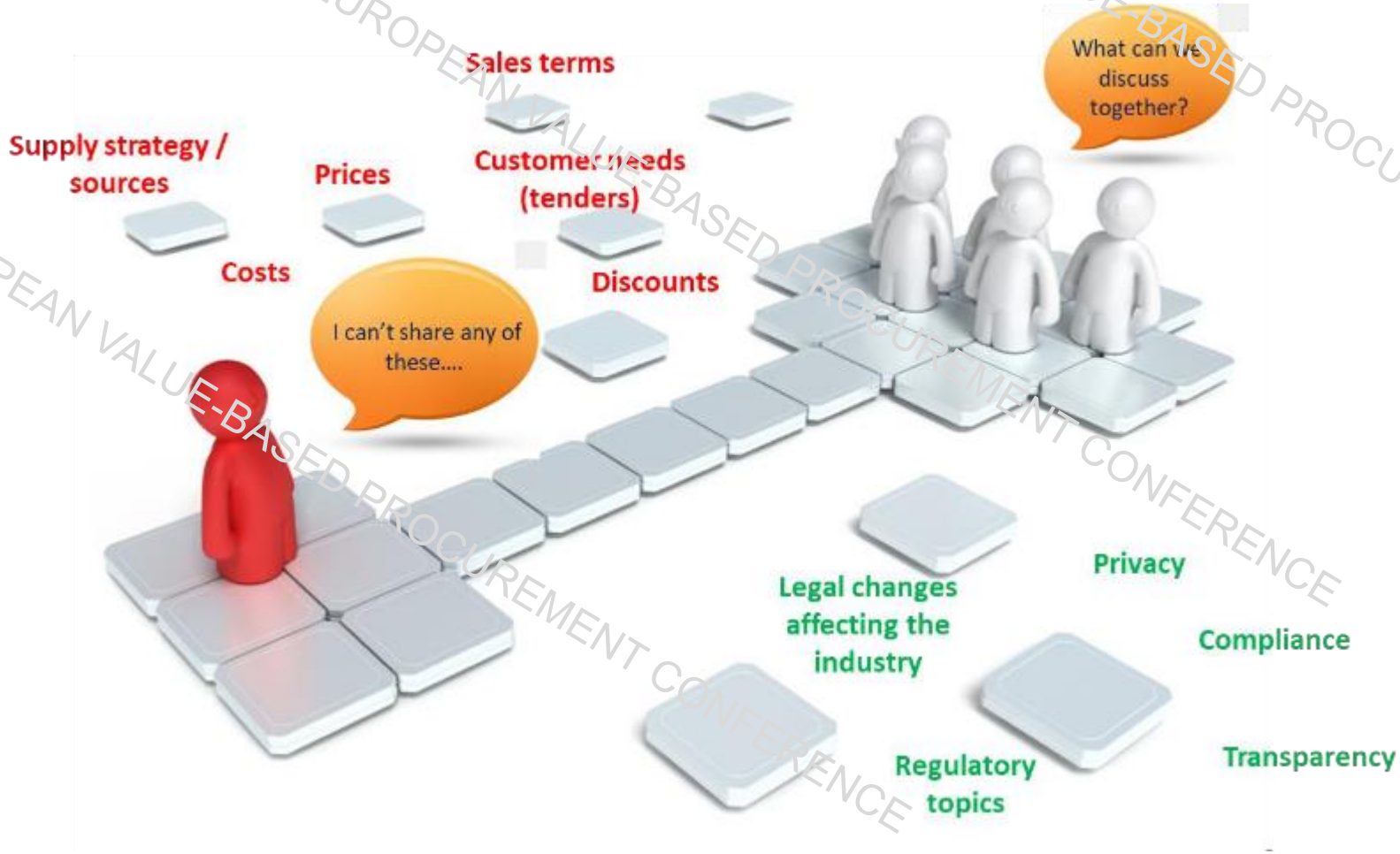
LCP Health Analytics

December 2023

Competition law reminder



Agenda

01 **Value-based healthcare and LCP**

02 **Financial modelling**

03 **Design**

04 **Implementation**

Background

Our mission is to help transition health systems from importers of illness to exporters of health

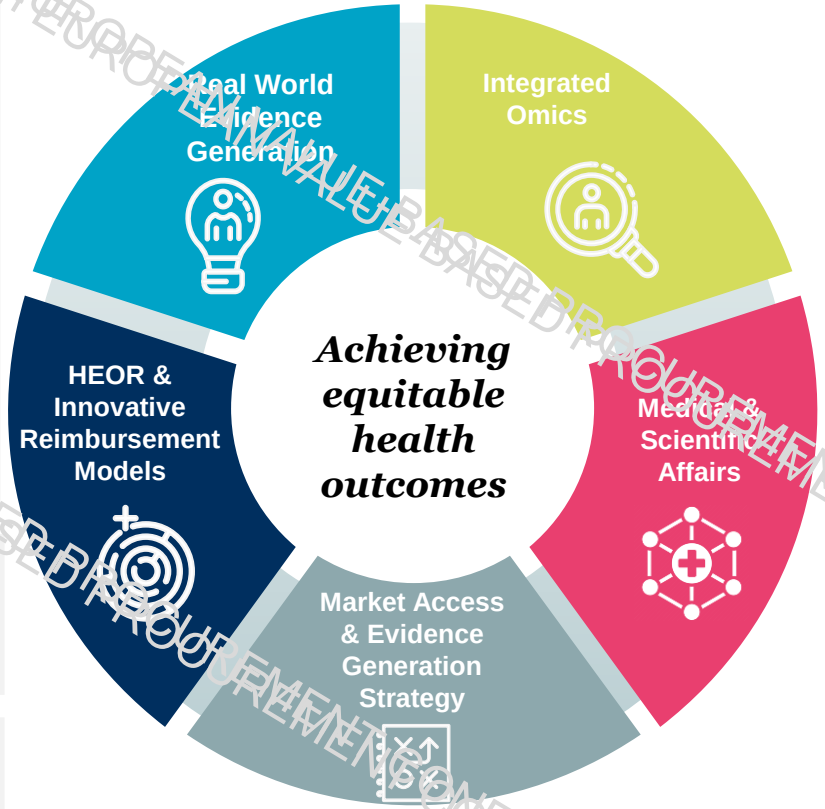
Addressing the two driving challenges for health systems:

- Increasingly complex multimorbid unmet patient needs
- A misalignment of how HTA bodies and governments value medicines and the value – healthcare and wider societal – of health to patients, populations and economies.

Underpinned by our approach to support clients to improve the population's health and reduce inequalities

Expertise in data science, medicine, research, health economics, epidemiology & statistics

State of the art expertise, methods and technology



Why LCP Health Analytics?

Visionary approach to our clients' challenges

- Leading the market in identifying solutions for tomorrow's challenges for patients, health systems and our clients
- Clear mission-based team and approach

Unique leadership team & sector experience

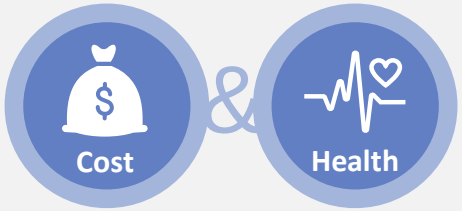
- Unique combination of leadership experience across science, medicine, pharmaceutical consultancy and policy sectors
- Demonstrative partnerships and network with key decision makers across the sector

Delivering greater value to clients

- Thought partners who deliver value beyond core issues and leverage early access to emerging datasets and collaborations
- Continuity of team from pitch to delivery, with hands on project leadership by senior experts across service areas

We leverage real world datasets and applied analytics to enable clear articulation of health and economic value of medicines in an increasingly complex healthcare environment.

Innovative reimbursement could align incentives of payers and providers of therapeutics around population health



Outcomes linked to payment

Value-based agreements

- Value-based agreements are a form of **innovative reimbursement model**
- They **link payment** of an intervention to achievement of **predefined outcomes**

Why do we need innovative approaches?

Value

Currently the system defaults to price-based solutions irrespective of potential value

Wider societal benefit

Societal impact is not easily captured in current structures limiting how much this benefit is accounted for

Medical devices can provide major cost-saving solutions in healthcare

But this isn't well-evidenced and they are still too often measured in isolation

Risk mitigation

Uncertainty is a major challenge (particularly in rare diseases). Risk-sharing schemes can help balance this risk and adjust appropriately to meet each party's risk appetite

Data opportunities

Data collected by healthcare systems is an under-utilised resource which can be leveraged to provide value to patients and improve care

Today we will provide an overview of considerations and challenges in enabling a successful value-based agreement. We welcome discussion to share experiences, challenges and solutions

Background

Our work with a large pharmaceutical client: Modelling the payments of an outcome-based agreement under a range of design scenarios

LCP powering possibility

Outcome based agreements (OBAs) have the potential to **align incentives around patient and population health to help transition healthcare systems from importers of illness to exporters of health.** OBAs have not been routinely implemented due to a variety of barriers including the multi-disciplinary skillset required and opaqueness of potential implications for all stakeholders.

Our work case

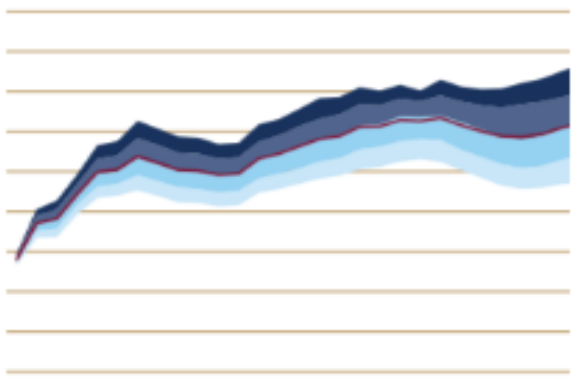
We worked with a large pharmaceutical client to **design and simulate retrospective hypothetical OBA with real-world data** for 3 scenarios**.**

- Our design gained consensus across stakeholders and aligns incentives between patient and populations, the pharmaceutical company and healthcare provider.
- We carried out multidisciplinary workshops and data feasibility assessments to develop the scenarios.
- We used a NHS data to estimate the impact of each OBA scenario compared to fixed-payment through **simulation modelling and bootstrapping the population**.
- We carried out a volatility analysis to identify the clinical and financial OBA design elements with the most material impact on the payments and associated volatility.

12 step process to design an OBA

Relevant population •The population inclusion criteria against which outcomes are measured	**Outcomes** •The relevant outcomes and how they are identified within the data	**Outcome measurement** •How the raw data is converted into a metric against which outcome is determined	**Risk stratifications** •Identification of the relevant sub population risk factors that require separate measurement
Outcome benchmark •How the metric is benchmarked to establish a baseline for evaluating performance	**Defining performance metrics** •How the performance (or performance relative to benchmark) is converted into the metric rewarded	**Outcome aggregation** •How the outcomes are aggregated across risk strata and across outcomes.	**Contract structure** •How the contract is structured in terms of reward/penalty construction
Risk sharing •The level of risk sharing or equivalently the proportion of contract payments that are subject to OBA outcomes	**Payment formula** •The precise form of the payment formula that converts the performance metric to the financial payment and caps/floors	**Contract period and term** •The overall term of the agreement and the contract period over which OBA payments are calculated	**Contract revision provisions** •Provisions for the contract parameters/design to be updated during the term

Illustrative data of the volatility of payments over the three years of data



Details in our ISPOR abstracts

More details are available in our ISPOR abstracts covering: using real world data to measure outcomes, designing clinical and financial parameters for an OBA and modelling outcomes and payment volatility in a hypothetical OBA

Financial modelling

Early revenue modelling will help identify approaches most aligned with the company

Why perform internal revenue modelling?

- Understand internally what the potential revenue flows and **volatility** of payments could be
- **Model multiple reimbursement strategies** to understand which models suit the asset and population's needs
- This modelling can be **updated** as additional information becomes available (e.g. clinical trials) to understand how this changes the approach
- The key of this is to **align internally** on the approaches that can be taken to provide focus going forward to discussions with payers.

Using initial estimates will help indicate the population and outcomes potential suited to innovate agreements

Initial information required will include:

- ✓ Patient population estimates
- ✓ Expected population profiles (e.g. age)
- ✓ Disease progression estimates
- ✓ Impact of treatment and uncertainty around it
- ✓ Expected price in a range of scenarios

Outcome development can begin at this stage

- ✓ The impact of treatment estimates could consider potential outcomes that could be measured
- ✓ This could be informed by literature or current clinical trials

As more information becomes available the model can be updated to ensure the most effective outcomes and reimbursement is being considered

Design

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Design of the agreement should consider 12-key areas

- Eligible population
- Outcomes measurement and benchmarking
- Payment structure
- Contract terms

01 Relevant population

02 Outcomes

03 Outcome measurement

04 Risk stratifications

05 Outcome benchmark

06 Defining performance metrics

07 Outcome aggregation

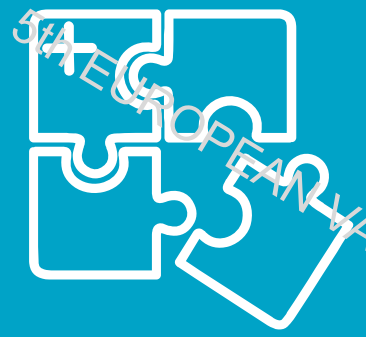
08 Contract structure

09 Risk sharing

10 Payment formula

11 Contract period and term

12 Contract revision provisions



Implementation

Data and it's availability will be crucial to understand

Data to collect should aim to minimise additional administrative burden

Outcomes should aim to be collected by healthcare professional already or be **easy to implement**

This could include data held within the healthcare system (e.g. hospital records) or **disease registries**

What do you need to understand about the data?

Available – is the metric of interest collected, or an appropriate surrogate available?

Support – what support would be required by stakeholders to ensure the implementation of the data collection?

Missingness – if the data has high missingness and if there are particular barriers to collecting such data

Alignment of clinical trials – if clinical trial end points are valid for use within the value-based agreement and if they can be collected in real-world data

Linkage – if linkage of multiple datasets is required to measure outcomes and if that is possible within the system

Monitoring – what is required for monitoring of the data during the process of the agreement?

Early stakeholder engagement will help inform the design of the agreement

Stakeholder engagement will be vital to build trust and show transparency

As a risk-sharing scheme it will be important to build consensus around the agreement early so a partnership can be formed;

Having a range of stakeholders involved throughout the design process can inform the outcomes, measurement, contract design and implementation strategy.

Who should be involved?

Clinicians and other healthcare professionals – to inform on outcomes and provide insight on how this would be captured in practice

Data specialists – experts in the databases to be used, this will help understand which elements of the agreement are feasible or not

HTA managers and procurement specialists – to identify any barriers to the agreement and consider solutions

Patients and patient groups – to provide valuable insight on what is important to them and the perceived impact of such an agreement (e.g. any additional burden to them)

Commercial teams specialising in MedTech/disease area – to consider financial implications and risk appetite

Value-based healthcare experts and statisticians – to advise on analysis implementation

This is not an exhaustive list and will be individual to the particular asset under consideration

Key takeaways

1

Ongoing modelling to align internally

2

Consider the whole design process early

3

Data landscaping to minimize additional burden

4

Stakeholder engagement to build trust

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Final questions and discussion

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The level of risk sharing or equivalently the proportion of contract payments that are subject to OBA outcomes

Payment formula

The precise form of the payment formula that converts the performance metric to the financial payment and caps/floors

Contract period and term

The overall term of the agreement and the contract period over which OBA payments are calculated

Contract revision provisions

Provisions for the contract parameters/design to be updated during the term