

The Moment of Truth for Healthcare Spending: How Payment Models can Transform Healthcare Systems

INSIGHT REPORT

JANUARY 2023



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Executive summary

Healthcare systems worldwide urgently need transformation, but this change is possible only alongside broadscale adoption of value-based payment models.

The change to value-based payment models is a vital transformation, albeit a difficult task. There are many hurdles to overcome that require a willingness to leave behind volume-based payments, invest in new data and IT systems, develop new business models around care delivery models, and accept longer-term time horizons. Greater efforts must be made globally to bring together shared understanding of the opportunities, challenges and solutions to make this urgent transformation possible and expedient.

Background

The World Economic Forum's [Global Coalition for Value in Healthcare](#) launched the Global Enablers Payments Community, a multistakeholder network aimed at cultivating collaboration, exchanging experiences and accelerating healthcare transformation for this critical lever for value-based healthcare systems.

The community consisted of experts from sectors including healthcare providers, payers, pharmaceuticals, medtech, governments, consulting and academia, who met regularly to exchange case studies on value-based payment models to bring local and regional learnings to a global platform. Additionally, non-community healthcare sector leaders were brought into the research to further understand the key issues.

This insight report is a thematic exploration by the coalition into payment models as an enabler of value-based healthcare. The purpose is to take current perspectives using real experiences and case studies across healthcare stakeholders to provide guiding principles and concrete recommendations for implementing and deploying value-based healthcare payments across the globe.

Specifically, the report aims to:

- Raise the urgency and need to scale up the adoption of value-based payment models
- Guide healthcare leaders, including system leaders, payers, providers and policy-makers, towards a common understanding of value-based payment models
- Create greater awareness and inspiration by sharing success stories, drive increased willingness to participate in value-based payment models and motivate stakeholders to invest time, energy and resources
- Identify the critical barriers and potential solutions to progressing the focus from theory to value-based healthcare implementation.

Key findings include:

- Payment models based on fee-for-service (FFS) and diagnosis-related groups (DRG) contribute to the unsustainable development of today's healthcare systems. Several key opportunities can be fulfilled through value-based payments models:
 - Emphasize quality of care over volume
 - Reduce waste and unnecessary interventions
 - Deliver integrated care
 - Address health equity in outcomes
 - Reduce workforce burnout
 - Motivate high-value innovation
 - Create a more sustainable healthcare system

- Changes in payment models alone are not enough; all levers of change must be addressed. For example, value-based payment models can drive faster change when they help enable a shift in provider behaviour and care delivery.
 - Though value-based payment models have not yet been widely scaled, healthcare stakeholders worldwide are eager to create a reality where the healthcare system focuses on the outcomes that matter to patients.
 - The pathway for payment change requires stakeholders to decide at the leadership level to pursue value-based healthcare, align with partners on a common mission, design a payment model that will assess outcomes, implement the model to incentivize behaviour change, assess and improve the model and scale-up models across geographies and patient groups.
 - The major barriers to systemwide adoption and scale-up of value-based payment models are the investment hurdles (near-term financial constraints, short-term focus and resistance to change) and the limited use of levers that tie stakeholders to the current system (policy, care delivery, tools and informatics levers).
 - Solutions to barriers will include increasing transparency, policy direction, education and standardization.
 - The importance of establishing consensus across stakeholders: value is about outcomes that matter most to patients.
- Scale will require collaboration and partnerships – opportunities lie in systems that are willing to take a multistakeholder approach to ensure that all facets of the complicated healthcare system can come together simultaneously. Together stakeholders can agree on a set of steps and move forward to implement value-creating systems.



Introduction: Value in healthcare – then and now

Healthcare delivery needs to transform and re-focus on healthcare that creates value.



The healthcare sector is facing three major crises – value, evidence and purpose. Across the world, pioneers have shown that value-based healthcare can address all three.

Stefan Larsson, Distinguished Fellow, World Economic Forum; Chairman and Co-Founder, International Consortium for Health Outcomes Measurement (ICHOM) in *The Patient Priority*

The global healthcare affordability crisis is not a new topic. Individuals and healthcare systems are reaching the limits of what they can afford to spend on healthcare, and this spend is not correlated with improved patient outcomes. While many mistakenly assume these issues emerge from a **cost** crisis in healthcare, they are driven by a global **value** crisis in healthcare, as stated by Stefan Larsson, Jennifer Clawson and Josh Kellar in *The Patient Priority*.¹

There is an urgent need to change the way healthcare is delivered globally. Healthcare delivery needs to transform and re-focus on healthcare that creates value, as guided by patient outcomes and accountability for resources in the healthcare systems.

Value-based payment models should no longer be considered a leap of faith. The World Economic Forum is advancing this call to action using a value-based healthcare framework under the purview of the [Global Coalition for Value in Health](#).

This patient-centred approach focuses on improving outcomes and costs for defined population segments that receive segment-specific interventions. Healthcare transformation is complex, and its metamorphosis requires the orchestration of many levers of change. The 2017 [Value in Healthcare: Laying the Foundation for Health System Transformation](#) report outlined key interdependent levers of change: payments, benchmarking, research and tools, delivery organization, informatics standards and policy.²

FIGURE 1 The value in healthcare framework for a value-based health system

A patient-centered approach focuses on improving outcomes and costs for defined population segments who receive segment-specific interventions.

Informatics that permit capture, analysis and sharing of health outcomes and relevant data for each population segment

Policies and regulation that support learning and continuous improvement to drive value-based healthcare.



Payments that reimburse for value, rather than volume of care

Tools to analyse data and generate insights through benchmarking, clinical decision support, predictive analytics, risk stratification, etc.

Care delivery models that enable better access to care, ensure continuous improvement and measure performance

Source: World Economic Forum, *Accelerating the Pace of Health System Transformation*, 2018

Value-based healthcare cannot exist without a focus on outcomes that matter to patients

Michael Porter and Elizabeth Teisberg introduced value-based healthcare in 2006, suggesting a radical transformation of the global healthcare systems, which resonated across stakeholders, given the urgent need for reform. Understanding what **value** in healthcare means is critical. The widely accepted definition of value in healthcare is the health outcomes that matter to patients relative to the resources or costs required to deliver those outcomes. **Value-based healthcare** is an approach that aligns industry stakeholders (payers, providers, pharma/medtech, policy-makers) around a shared objective of improving patient health outcomes, providing the autonomy and accountability to providers to pursue the best way to deliver healthcare for the money spent.³ The defining

aspect of value-based healthcare is that it seeks to address the issues experienced in healthcare today by reminding stakeholders that they all share a singular objective, providing value to the patient.

Aligning on “value for the patient”

The [World Economic Forum's value-based healthcare report series](#) set a comprehensive framework describing the components of a value-based health system, sharing that “a patient-centred approach focuses on improving outcomes and costs for defined population segments who received segment-specific interventions”. There cannot be a value-based healthcare system without being patient- or population-segment-centric in improving outcomes and costs. True value-based healthcare goes beyond reducing costs, seeking to enable integrated patient care aligned with patient outcomes and quality.



“ Transformation will only be financially sustainable if care delivery and payment models are interlinked and if the payment system reinforces value creation.

Payment reform to drive value-based healthcare

To enable value-based healthcare across integrated, multidisciplinary teams, incentives and payment models must exist to support it. Transformation will only be financially sustainable if care delivery and payment models are interlinked and if the payment system reinforces value creation.

Payment models have a powerful influence over healthcare impacting organizational and provider behaviour, health equity and innovation. These three areas are sources of challenges and levers to drive change, and how healthcare systems structure their payments can impact all three.

1. **Provider behaviour:** Legacy reimbursement systems have created volume-based business models. These payment models influence their sense of accountability for patients and their outcomes, and how they feel about their purpose and value as caretakers.
2. **Health equity:** Updated payment mechanisms have the potential to improve health equity

by incentivizing integrated care models and generating transparency for outcomes. However, if payment models are constructed without an intentional goal of equity or if resources for transformation are not available to traditionally under-resourced provider organizations, any new payment model could end up widening disparities.

3. **Innovation:** Healthcare payments received across stakeholders influence their motivations to innovate. At the provider level, a payment model can incentivize or disincentivize the use of innovative treatments on a patient, especially when payers delineate which activities they will reimburse. Payment models that incentivize higher patient value will drive industry, suppliers and providers to focus on innovation.

This report is designed to urge and galvanize a broader scale-up of value-based payment models. It outlines key findings from case studies provided by experienced organizations and stakeholders, a shared lexicon adopted from Porter/Teisberg, and suggested action to align an environment that enables scale.

1

Moving to a high-value equitable healthcare system: the urgent case for value-based payments

Understanding today's status quo – the predominance of activity-based models (FFS) – and making the case for a move to value.



Though there are variations across countries in how healthcare is financed and provided, the most common payment model globally is paying for individual services. These payment models share the same limitations that drive the need for payment reform.

Limitations of paying for volume of activity

The current widespread use of activity-based payments (fee-for-service (FFS) and diagnosis-related groups (DRG)) contributes to healthcare inefficiencies and limits healthcare transformation. The predominant use of these models creates five main limitations, as depicted in Table 1.

TABLE 1 Summary of issues and effects of widespread use of activity-based payment

Issues and effects of activity-based payment					
1	2	3	4	5	6
Volume incentive	Lack of accountability for outcomes	Care fragmentation	Workforce burnout	Obstruction to innovation	Systematic obstacles for health equity
<ul style="list-style-type: none"> – Leads to more healthcare services, duplication, and complexity, and reduces valuable non-billable services – Contributes to higher healthcare spend – Inhibits price transparency for patients with high care volume 	<ul style="list-style-type: none"> – Removes accountability for patient outcomes and patient experience – Generates income for health systems even if patient outcomes do not improve 	<ul style="list-style-type: none"> – Disincentivizes collaboration across the patient care pathway – Limits pharma and medtech integration into value-based care pathway 	<ul style="list-style-type: none"> – Leads to clinician burnout due to the misalignment of purpose and incentives – Creates administrative burden of billing and coding 	<ul style="list-style-type: none"> – Limits provider flexibility to experiment with new services and products – Limits payer ability to encourage use of innovative products and services when payers assume full risk – Discourages innovations that may raise costs for one “activity” or department in the care pathway, but save on the total costs for the patient group 	<ul style="list-style-type: none"> – Creates differential affects for populations with poor access to healthcare – Obstructs ability to measure disparities, given limited outcome measurement – Limits payment adjustments for patients with disadvantaged social drivers of health, creating provider incentives to prefer patients with adequate insurance coverage or ability to pay

Value-based payment models reward stakeholders that positively contribute to outcomes that matter to patients

The principles of value-based healthcare can be applied to countries, care settings and diagnoses across the globe. Coronary heart disease or schizophrenia are the same conditions whether occurring in Asia, Africa or the US. While system-driven differences impact healthcare delivery in many ways, no matter the healthcare system type, creating the best outcomes for patients in

a cost-effective manner is an innate goal of value-based payment models. These models motivate behaviours that help address the limitations described above. They incentivize an emphasis on good patient outcomes, care coordination and integration over working independently, an engaged healthcare workforce, innovative solutions and health equity, as detailed in Table 2.

Value-based payment models present an opportunity for providers, pharma, medtech and payers to drive continuous improvement in care through measuring patient outcomes and efficiently allocating scarce resources.

TABLE 2 | Benefits of value-based payment models across stakeholders

Stakeholder	Value-based model benefit	Value-based payment opportunities for the stakeholder
Patients/Public: 	<ul style="list-style-type: none"> – Emphasizes quality of care over volume – Has potential to help address health disparities 	<ul style="list-style-type: none"> – Focuses on patient outcomes and prioritizes patient value – Limits waste in the system and can liberate finances for other purposes – Enables shared patient and provider decision-making – Contributes to solutions for health inequities
Providers 	<ul style="list-style-type: none"> – Enhances motivation and addresses workforce burnout, reducing waste and unnecessary interventions – Addresses care fragmentation 	<p>Provider organization</p> <ul style="list-style-type: none"> – Offers more financial sustainability and flexibility to improve care delivery⁴ – Creates staff motivation when impact of care is reflected in outcomes that matter to patients – Enables efficient resource allocation, allowing staff to work smarter and avoid repeat interventions and waste – Reduces burnout experienced within organizations and workforce capacity concerns <p>Individual clinicians</p> <ul style="list-style-type: none"> – Refocuses clinicians on their motivators and drivers as clinicians, helping patients – Encourages collaboration and care coordination across clinicians and specialties
Pharma/medtech 	<ul style="list-style-type: none"> – Encourages and supports high-value innovation 	<ul style="list-style-type: none"> – Enables conversations regarding value between pharma/medtech with payers and providers earlier in the development process, focused on innovation that enhances patient outcomes – Drives innovation for patients that lead to improved outcomes – Enables pharma and medtech to grow “beyond the pill” and engage in the delivery of better care – Enables innovative evidence-generation processes to evaluate effectiveness within the context of the total patient care pathway – Encourages accountability for outcomes delivered
Payers 	<ul style="list-style-type: none"> – Creates more sustainable healthcare 	<ul style="list-style-type: none"> – Helps manage increasing healthcare costs and works to reduce the estimated 20-40% of wasted healthcare spend – Allows for focus on efficiency and healthcare sustainability – Allows payers to buy healthcare-based on outcomes that matter to their beneficiaries

Foundational principles of value-based care and their applicability to value-based payments

Value-based payment models encourage behaviour changes that drive the benefits listed in Table 2.

They do this by adhering to the three foundational principles as laid out in the 2018 World Economic Forum report, [Laying the Foundation of Health System Transformation](#).

FIGURE 2 Foundational principles of value-based healthcare



A decade of value-based payment model experimentation across countries

Value-based payment models have been growing in use worldwide, with more and more examples of payment models across countries.

These programmes showed many examples of success but also many with limited impact, particularly those models that did not include outcomes measurement. Where outcomes measurement has occurred, results have been very convincing.

Over the last ten years, the US has tested value-based payment models extensively through the Center for Medicare and Medicaid Innovation (CMMI) with the Center for Medicare and Medicaid Services (CMS). CMMI published the *Innovation enter Strategy Refresh* in 2021, outlining the learnings and way forward. One of the key learnings was to drive accountable care through outcome measures that are meaningful to patients to create meaningful quality improvements.⁵

Additionally, a 2016 report by the Economist Intelligence Unit (EIU) put forth a global assessment of value-based healthcare. At the time of the assessment, higher-income countries in the European region were leading in adopting value-based healthcare payments (France, Germany, Sweden, Netherlands, UK, Australia and Canada), followed by lower-income countries in the early stages of their journey.⁶

Of the many regions represented in the community, the Kingdom of Saudi Arabia and Singapore have created a focus on value-based healthcare. Saudi Arabia's political commitment to transform the health sector was established as a part of its Vision 2030. They made the key strategic decision to start with value-based care models and involved political sectors beyond healthcare. Singapore created a robust infrastructure and health clusters to enable value-based payments, population health for residents across their entire life span, and capitated payments.



In light of the Kingdom of Saudi Arabia's commitment to achieving and sustaining Universal Health Coverage, the Kingdom's health sector transformation agenda explicitly has a strategic goal of shifting to delivering high value. As part of this transformation, a public purchaser and payer entity was established, 'The Center for National Health Insurance', that aims to apply value-based payment models.

Center for Value in Health, Ministry of Health, Kingdom of Saudi Arabia

2

How value-based payments are used today

There are a variety of payment models being explored today that create a focus on value.



“ Bundled payments that create the most impact are those designed around a condition segment and group all services required.

Value-based payment models tend to organize across three types: activity-based with links to quality and value, bundled payments and capitated payments.

Activity-based with links to quality and value:

These payment models still use some level of an activity-based payment but adjust the payment based on the activity's link to pre-determined quality and/or value metrics, improvements in infrastructure, and/or the act of reporting of outcomes data.

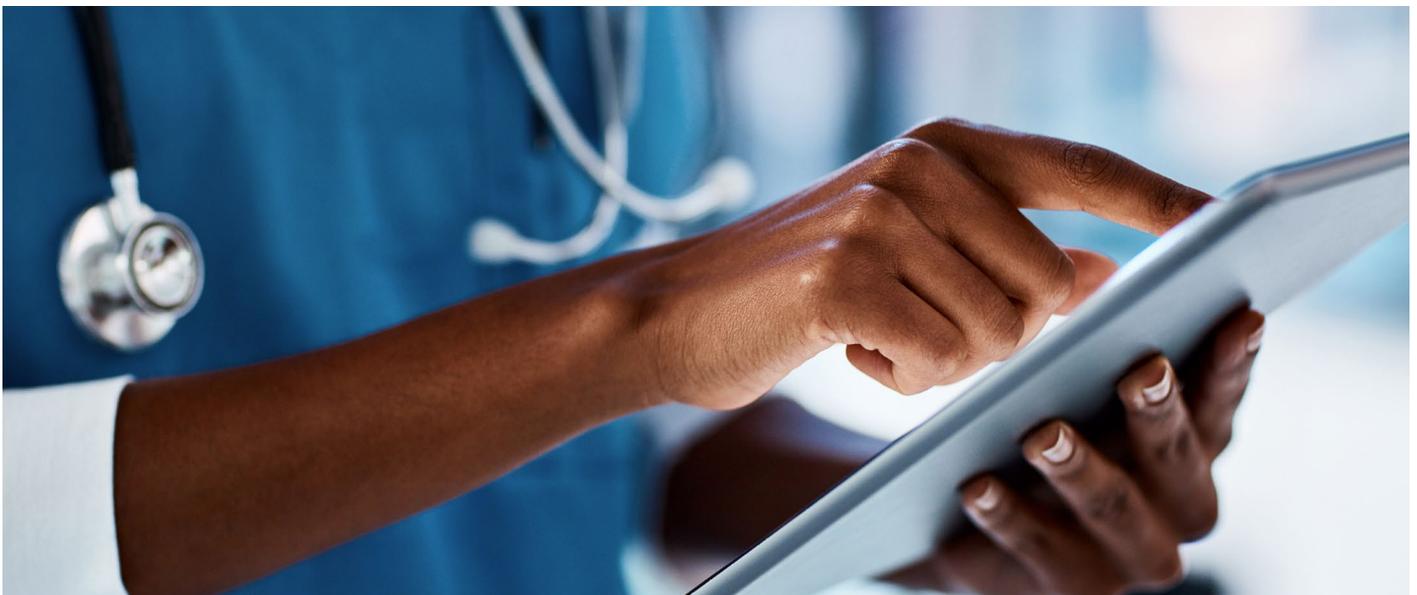
At the pharma or medtech level, this payment model would look like a risk- or gain-sharing agreement with a payer or a provider. An outcomes-based agreement that links payments to manufacturers for predefined outcomes over time. Medtronic uses outcomes-based agreements for its Tyrx antibacterial sleeve that requires Medtronic to reimburse hospitals for a portion of the cost if the antibacterial sleeve fails to prevent infection in cardiac implant patients.

Bundled payments: A bundled payment model links the payment to the effective management of a patient condition, as opposed to payment for each individual service provided to the patients across their care journey for an acute condition or for a period of time for a chronic condition. These agreements hold providers financially accountable for the outcomes of the defined patient segment with the condition while offering opportunities for increased autonomy in decision-making and participating in risk and reward.

There are two common types of bundled payments: episode of care bundles and condition-based bundles. Episode of care bundles often have a short time horizon anchored in a surgical event and lasting for 30-90 days. Episode-based bundles are often used to cover multiple services and supplies included in a surgical procedure. For example, in Sweden, a procedure-based bundled payment called OrthoChoice was implemented for hip and

knee replacements. The bundle negotiating points and components were critically important, as was the involvement of providers and clinicians in the creation of the bundle. The bundled payment held 3.2% of the cost back and was paid only if the provider met the outcome goals. Providers added follow-up visits, education and earlier physical therapy. Complications and revisions decreased by 20%. Total costs for the surgical procedure and rehab declined by 17% in 2011 versus 2008.⁷ Outcomes were assessed two years post-surgery. Thus, the accountability for longer-term outcomes created stronger care coordination between the professional groups.

However, bundled payments that create the most impact are those designed around a condition segment and group all services required, including both surgical and non-surgical pathways, to treat a patient over the course of their condition. In the case of chronic condition-based bundles, the payment model includes treatment of the condition and its most relevant co-morbidities for a period of time and is renewed for the patient as needed. UT Health Austin, the clinical arm of Dell Medical School in the US, uses value-based payment models in the form of condition-based bundled payments for musculoskeletal conditions. These bundles include all outpatient services and surgical professional fees for upper or lower limb extremities. For example, UT Health Austin uses a lower extremity bundle. This payment encompasses a set of musculoskeletal conditions in the lower extremities, the only exclusions being the obvious high-risk carve-outs like patients with cancer in the lower extremities. If a patient comes in with knee pain and the provider accepts them, their care will be covered under the lower extremity bundled payment. UT Health Austin is responsible for recording patient-reported outcomes (PROs) bi-annually and has incorporated other specialties into their practice, like rheumatologists, chiropractors, physical therapists and sports medicine physicians, to treat patients holistically.



Capitated payments:

Bundled payments tend to exist for specific conditions whereas, capitation often comes into play as payment models for overall health issues. Capitated payments provide a predetermined rate for all the health needs of an individual in a defined patient group or population segment.

Risk and risk adjustment are important for providers with capitated payments. Thus, typical capitated payment models are implemented across a sub-segment of the population with similar needs for health maintenance and care, like the frail elderly. The focus on a sub-segment, like the multimorbid elderly, allows for standard outcome measures and cost estimates to be benchmarked for that patient population.

Oak Street Health is a network of primary care centres in the US for older adults covered by Medicare Advantage. Oak Street has a global primary care capitated payment model that gives them a fixed payment “by patient” adjusted for risk factors. The model was built to address social drivers of health in which primary care plays a large part. As a part of the value-based care model, they can use the funds flexibly to provide the best outcomes for their patients. They have been able to invest savings into unique services that drive patient outcomes, for example, providing transport to and from the centres to allow patients to be seen in primary care and offering remote home monitoring to handle any concerns that might put a patient in the hospital. Oak Street says they have cut hospital readmissions by 40% and changed the way care is delivered.⁸



Ongoing value creation and contracting innovations

Pharma and medtech have also been experimenting with innovative contracting agreements that address short-term affordability and cost issues. These contracting agreements include discounts and rebates, price/volume agreements, use or price capping, subscription services (where providers contract technology), management services (where providers outsource labs/clinics) and annuities payments that are standalone models. While these address urgent cost concerns, in most cases, these agreements do not track outcomes in the way value-based payment models do, which could be for reasons beyond their control. While these would not be considered value-based payments for the purposes of this report, they do offer innovative solutions to the pressing affordability issues.^{9,10}

Value-based procurement has also been used as a means of creating value. The European procurement legislation mandated an appropriate price-to-quality ratio for products and services. As most technologies delivered in the public provider sector need to go through public procurement processes, the inclusion of value criteria in the tender specification, for example outcomes that matter to the patient, has been a very effective stepping-stone to value-based care delivery.

These models must measure outcomes to improve patient health for the same or lower spend. Behaviour change won't be enabled without transparency of outcomes. A bundled or capitated payment without outcomes measurement could lead to a rationing exercise that does not put patient outcomes at the centre. These payment models have proven to make a difference in driving patient outcomes and improving healthcare sustainability. They are no longer a leap of faith.

3 Pathway for payment change

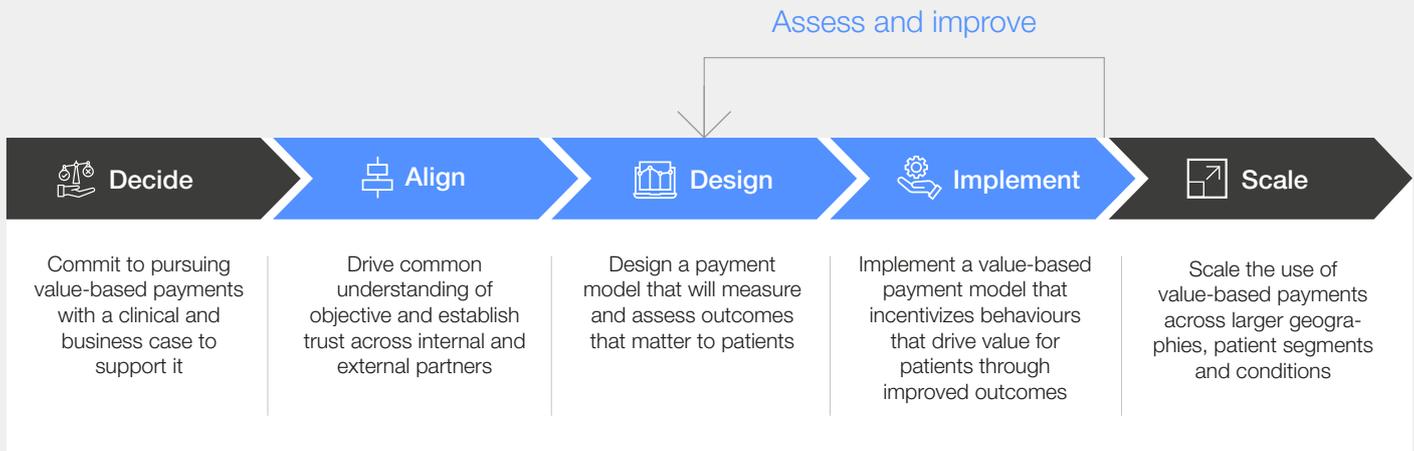
Healthcare stakeholders around the world are eager to use value-based payment models, with many organizations considering how to progress their experience.



Using the value-based payment model case studies explored within the community, key stages and learnings of the value-based payment model

journey have been identified and synthesized into a practical pathway for payment change for any stakeholder.

FIGURE 3 Pathway for payment change



Stage 1: Decide

Objective: Commit to pursuing value-based payments with a clinical and business case to support it. Additionally, to define the specific (or initial) patient population, care journey, condition or segment to which the value-based payment model will be applied.

Challenges: Typical challenges within this stage include an organization's ability to commit to value-based payment. Committing to a change requires internal resource investment in the form of a dedicated team. The pathway to change can be labour-intensive. Second, because the dissemination of success stories and evidence of improved outcomes and potentially reduced costs has been somewhat limited in the past, it can be challenging for organizational leadership to convince their teams to pursue value-based payment models.

Key considerations:

- 1. Ensure commitment to value-based healthcare:** Ensure internal leadership is committed to value-based healthcare and that it is aligned with the organizational strategy centred around creating value for patients. See case study 1 for an example from NHS Wales regarding commitment to value-based healthcare payments.
- 2. Decide where and when to use value-based payments:** Identify the specific conditions, other

patient segments and geographies applicable for value-based payments. Given the investments needed in effort and resources, prioritize areas with large overall spend, high volume of patients, opportunity for clinical or outcomes improvement and clear ability to measure outcomes. See case study 2 for an example from the US Navy on the learnings relating to selecting a value-based payment model.

- 3. Consider how models will:** address health inequity, be affected by legal and regulatory barriers and unite partners.

Key success factors: The involvement of clinicians is critical in the decision to move forward with value-based payment models.

Additionally, two organizational capabilities are crucial in the decide stage:

- A cross-functional team including finance, legal, regulatory, sales and marketing teams to push the initiative forward and ensure sustainability.
- Expertise in economic evaluation to drive confidence in the ability to assess the long-term economic value of the intervention and the downstream financial impacts.

Lastly, experienced organizations highlight the importance of getting started. There is a point of diminishing marginal returns in preparing for value-based payment models.

CASE STUDY 1

How NHS Wales committed to value-based healthcare laying the foundation for new payment models

NHS Wales is taking a broad system-level approach through to a specific pathway or condition-level approach, to support the transition that balances volume and the delivery of outcomes that matter to patients. NHS Wales took a system-level approach during the decide and implement stages whereby they secured resources to elevate the current infrastructure, learnings, education, patient-reported outcome measures (PROMs) and financing to facilitate

their journey from decide to scale. They have begun implementing a structure for PROMs at the national level and are building the capability for local adaptation that meets the national centralized key performance indicators (KPIs) for outcomes. They have also established a value team in each health board that geographically covers the entire nation. NHS Wales has decided to invest in value-based healthcare and is taking steps to ensure value-based payments are possible.

CASE STUDY 2

What the US Navy learned about selecting a condition for value-based healthcare

The United States Navy launched a value-based healthcare pilot in 2016 focused on integrated practice units (IPUs) to better enable the mission of readiness for active duty personnel. Lower back pain, osteoarthritis, diabetes and high-risk pregnancy were identified as initial areas of focus based on high spend, volume and ability to improve outcomes and access to care. Three of the four conditions piloted saw improved outcomes. However, one pilot was considered unsuccessful and not continued due to the

narrowing of scope to high-risk pregnancy. The number of high-risk pregnancy patients in this population was too small to detect meaningful results within 12 months. Condition selection for measurable outcomes played a key role in the success of the pilots. When deciding whether to use a value-based payment model, it is vital to consider the achievable volume of data that would be large enough to measure statistically significant changes in outcomes.¹¹

CASE STUDY 3

How Alcon focused on patient participation in their health decisions and co-payment for personalized outcomes

Alcon committed to personalizing care in cataract and refractive surgery and involving patients in care decisions that matter to them. Cataract surgery is one of the most performed operations, and the procedure using standard mono-focal lenses is fully covered across European healthcare systems and beyond. Many cataract patients independently experience presbyopia or astigmatism and are required to wear glasses, for which they usually pay out of pocket. Technology options exist for the patient to simultaneously have cataract surgery and refractive correction and reduce or eliminate dependence on spectacles. Often these advanced options are not proposed to the patient, however, as they are not reimbursed. Patients wishing to

pursue cataract refractive surgery typically must forfeit public reimbursement for their standard cataract and pay for everything out of pocket. Alcon has been advocating for patients' right to be informed of their treatment options and to co-pay for additional astigmatism or presbyopia correction without losing the reimbursement for the cataract procedure. In 2012, Germany was the first European country to develop the legislation, entrenching the patient's right to cataract reimbursement and allowing co-payment for additional outcomes. Alcon has been collaborating with policy-makers and providers to adapt the patient journey and awareness and training medical staff to deliver care that provides patient-centric options.



Stage 2: Align

Objective: Drive a common understanding of the objective and establish trust across internal and external partners.

Challenges: During the align stage, partner organizations must consider their investment's impact on a future value-based payment model approach. It is a challenge in the align stage to identify partners that understand the potential for upfront investment to support the long-term value-based mission (see case study 4). If the partner isn't fully aligned, the move to value-based payment could be at risk. In some situations, other external partners should be considered to bring value.

Key considerations: Two key considerations were discussed across case examples:

1. **Spend time creating buy-in both internally and externally:** The importance of spending time educating cross-functional groups (e.g. finance teams, marketing teams, IT, public affairs and others) within your organization should not be underestimated as they play a

valuable role in later stages to enable the design and implementation stages. Additionally, taking the time to truly understand and map individual external partners, their needs, concerns and goals enables strong partnership and coordination throughout the pathway based on trust.

2. **Use targeted communication based on stakeholder goals:** Discuss early how partners see value-based healthcare within their organization and how it relates to their overall mission and vision. This helps establish their commitment as partners to a common purpose and a general agreement across key considerations within the align stage.

Key success factors: Investing in onboarding and relationship building across internal and external partners enables the organization to build trust and partnership. The investment helps in understanding the concerns related to cross-functional teams within an organization, partner organizations and even patients. Within this stage, the most critical capability will be building relationships. Trusted relationships are key to managing risks, as value-based payment models require organizations to step out of the status quo and into the unknown.

CASE STUDY 4

How Diabeter engaged with stakeholders to create alignment

Diabeter closed a groundbreaking ten-year value-based healthcare partnership with Zilveren Kruis, the largest insurance company in the Netherlands. This is the first value-based agreement that includes short- and long-term complications for type 1 diabetes. The partnership is based on a shared ambition of a complication-free life for type 1 diabetes patients now and in the future at a minimal cost.

Diabeter credits the success in implementing this value-based payment model to the significant time spent on the alignment stage with internal stakeholders, Medtronic, Dutch Health Authority,

and the insurance company. Diabeter ushered partners through change management processes to create alignment on a shared objective of improved patient value, enabling their value-based payment model pathway. The partnerships helped the organizations involved deliver superior outcomes for patients. They were able to set ambitious outcomes targets, incentivize improvements in value and shared savings, share integral responsibility of the diabetes care pathway, commit to long-term innovation, share data on outcomes and costs to improve value, and gain mutual trust and understanding.



CASE STUDY 5

How Novo Nordisk leveraged a unique third-party partnership to align stakeholders

Novo Nordisk, a company oriented around providing care to individuals with diabetes and obesity, sought to explore how payment for value can play a role in the design of care beyond medicines and attract new funding to expand the quality of services and increase the number of citizens supported. Novo Nordisk helped develop a social impact bond project to invest in preventing type 2 diabetes complications, reducing future health burden and cost impact. The solution aligns actors (city administrators, local community and healthcare) on the intervention protocol for diabetes and boosts diabetes management in the community, closely linked to each citizen's general practitioner. The

partners engaged third-party investors and a national and local social investment fund to fund the initiative. This enabled the city to commit to an upfront investment that will lead to cost savings despite tight budgets. The investment fund loans finances to the city and service providers who run the programme and evaluate if agreed outcomes measures are achieved. The city will pay the loan with interest if the programme succeeds after three years. If the city does not meet its goals, it will not repay the loan. The city has since allocated considerable additional budgets to make more initiatives like this that are attractive for third-party investment, preferably at a much larger scale.

CASE STUDY 6

How Medtronic partnered with an Italian payer

Medtronic and Estar, the regional purchasing body in the Italian region of Tuscany, worked together on the first outcomes-based agreement in the public procurement environment in Italy. Like Medtronic, Estar sought to move towards a healthcare system with a strong emphasis on patient outcomes. Physicians were already beginning to monitor clinical outcomes and, at times, were doing so through a tool supplied by Medtronic. Medtronic and Estar found alignment

through a common goal. The outcomes-based agreement has been established on the tender for cryoablation in atrial fibrillation. Estar added performance measures relevant to them, including the most relevant clinical outcomes for the selected patient population. Through this partnership, Medtronic, and the region of Tuscany, entered a longer-term agreement (of three years) that is more suitable to value-based payment models that seek to improve patient outcomes.



Stage 3: Design

Objective: Design a payment model that will measure and assess outcomes that matter to patients based on an agreed-upon disease and patient segment-defining criteria, risk adjustment, outcome targets, warranty terms and price.

Challenges: During the design stage, challenges related to data (i.e. standardization of data types like PROMs, sources, minimum volumes, etc.) are likely to emerge. Non-unified data standards will likely require an investment in informatics and data processes to measure and track outcomes data broadly. In addition, a minimum volume of patients will be required to measure impact. This can be an issue with lower patient volumes among certain providers. It is important to understand these challenges when aligning the key design elements of the payment model.

Key considerations: Including all the key design elements of a payment model and the appropriate governance are the key considerations for the design stage.

Key design elements of a payment model (adapted from Harvard Business School workshops and white paper *The State of Bundled Payments*):

1. **Scope:** Define the medical condition and cycle of care (for condition-based bundles) or the primary care patient segment (for a primary care capitation). The scope will also include the timing and geography to be included in the payment model. For example, instead of a bundle for "knee replacement", the bundle could be for "severe knee pain with osteoarthritis".
2. **Stakeholders:** Assign an accountable entity responsible for taking on the risk of delivering outcomes within the value-based payment model.



3. **Patient population:** Define the patient population, appropriate inclusion criteria and risk adjustment, including socioeconomic drivers of health.
 4. **Outcomes measures:** Define the minimum set of outcome measures and/or quality metrics used for contracting. Value-based payments are ideally tied to achieving patient outcomes targets or patient experience metrics.
 5. **Warranty:** Specify the warranty and terms of risk/value sharing.
 6. **Price setting:** Determine the price and how the payout occurs with risk stratification and cohort selection.
- Key success factors:** Experienced organizations shared success factors in the design stage.
1. Ensure there are tools in place for compliant data sharing across organizations.
 2. Establish capabilities internally regarding:
 - a. Collaboration skills: it takes time and headspace to work through the design elements with partner organizations, which may require negotiation and coalition-building skills.
 - b. Outcomes measurement: collecting, measuring, and uploading patient outcomes data will be necessary.
 - c. Complex data analytics: to arrive at the payment, the organization will need skills in cleaning data, risk adjustment, translation of outcomes and compliant data sharing.
 - i. Providers often discuss their lack of capabilities to complete the analytics required for new payment models.

CASE STUDY 7

How data transparency enabled robust patient pathway design for the Hospital for Special Surgery's value-based payment model

The Hospital for Special Surgery (HSS), headquartered in New York City with multiple care points on the US East Coast, is a leading medical system focused on musculoskeletal health. While participating in the Bundles Payment for Care Improvement (BPCI) model 2 and subsequently the Comprehensive Care for Joint Replacement (CJR) model, HSS successfully implemented a bundled payment programme for lower extremity total joint replacement that demonstrated net savings for CMS in the US of an estimated \$23.9 million, with impacts to quality of care. As voluntary participants, HSS had access to the 90-day CMS claims data from

patients who had undergone a lower extremity joint replacement to track outcomes and use. Without the transparency to claims data, HSS had little visibility into the patient experience post-discharge but now recognize that 40% of the costs were incurred post-discharge. Within the bundled payment programme, HSS developed an episode of care that mapped the patient pathway programme with a multidisciplinary team and included new pathway components like a new role for physical therapists to track the patients post-discharge. The programme created direct savings and decreased the intensity of post-acute care services.

How Novartis used early engagement in the design process

Between 2018 and 2022, Novartis sought to market three of the first ex- and in-vivo gene therapies. The treatments are unique in that they bring value over a patient's lifetime, but payers globally manage yearly budgets. Novartis sought to establish the value of the treatments with multiple methodologies to ascribe appropriate value, then held early value discussions with stakeholders. These early connections were key given the unique value situation of the products. For one of these therapies, for example, Novartis had early

collaborations with the Institute for Clinical and Economic Review (ICER) in the US and Health Technology Assessment (HTA) bodies elsewhere, like the National Institute for Health and Care Excellence (NICE) in the UK, to help develop the right value assessment approach. They held value conversations that enabled a strong understanding of payer needs related to the specifics of evidence generation and payment models. Internally, close connections with financial teams to run payment model risk evaluations proved beneficial.



Stage 4: Implement

Objective: Implement a value-based payment model that incentivizes behaviours that drive value for patients through improved outcomes at the lowest appropriate resource use while recognizing the need for investment in people, communication and capabilities during the transition stage.

Challenges: Challenges during the implementation stage across case examples included legal and regulatory variability across countries. The legal and regulatory landscape must be well-understood, and the processes, in some cases, must be tailored for each country. From the outcomes standpoint, a key challenge is motivating providers (clinicians and organizations) to change behaviours, measuring and analysing outcomes, adapting care delivery to what works best, and focusing on value over volume. Often, incentives aren't seen as strong enough to drive change. Remaining with the status quo would need to be made less attractive. The most robust designs include strong incentives to encourage behaviour changes.

Key considerations: Multiple key considerations were discussed for the implement stage to ensure successful model launch and execution:

1. **Change management:** Changing systems, processes and, above all, care practices is hard and specific attention needs to be given to keep all stakeholders engaged on the rationale for change. It is also important to create an understanding across partners that the agreement could change over time depending on the assessment of its impact and effects. Additionally, employee turnover is likely across organizations implementing value-based payment models, so it is key to establish strong change management practices to ensure continuity.

2. **External expertise:** External third-party organizations can provide great encouragement in areas of implementation where outsourcing their expertise and experience is easier than building it in-house. These skills, capabilities and resources from third parties can help accelerate adoption. For example, expert digital companies and consultants specialize in facilitating the contracting life cycle and collecting claims data to run analytic modelling and reconciliation for value-based payment models.
3. **Impact assessment and follow-up:** During the implementation phase, unintended consequences for the health systems and patients are detected early. Unintended consequences can include risk adjustment issues, such as overly wide risk stratification that can lead to avoiding higher-risk patients within a strata ("cherry picking") or claiming a patient is at higher risk for larger payments ("upcoding"). These consequences often speak to the importance of the design stage and creating a payment model that is built around the needs of the patient segment that it is serving and incorporates key considerations of risk for that population.
4. **Auditing model:** It is important to incorporate an auditing model into the implementation stage to remove any desire to use inappropriate coding or risk score growth. The penalty for falsification of risk adjustment should discourage the behaviour, for example, financial penalties or public disclosures.

Key success factors: Experienced organizations shared three key success factors for the implement stage.

1. Provide visibility of outcomes data to stakeholders involved in the payment models to facilitate the payment reconciliation and to providers to self-monitor and inform their decisions.

2. Spend time educating clinical staff to optimize interventions for better outcomes and ensure change to care delivery approach. See the example from Philips and Holston Valley Medical Center in case study 9.
3. Establish capabilities internally regarding:
 - a. Payment reconciliation: to execute and reconcile the payment model, the organization must quickly collect and analyse data and organize financials.
 - b. Change management: it is important to have capabilities to manage internal and external stakeholder fears to combat the tendency to remain with the status quo.
 - c. Audit capabilities: during the implement phase, it is critical to have the capability to manage financial flow between stakeholders for the payment model accurately and audit risk indications.

CASE STUDY 9

How Philips and Ballad-CVA Heart Institute used change management and clinical education to drive success

Philips IGT sought to partner with a forward-thinking, data-driven organization that implemented technology and medical devices but might be underusing them. Philips manufactures an optical imaging intravascular ultrasound (IVUS) and the diagnostic instant wave-free ratio (iFR), both of which have clinical evidence enabling better outcomes but are underused. Philips engaged with Holston Valley Medical Center in Tennessee to pilot a risk-sharing programme that assessed the clinical and quality outcomes of real-world use of these two products. By partnering, Philips was looking to extend device

performance to impact key outcome metrics through value-based risk sharing. Philips created buy-in to enable optimized use of their devices and provided data insights on the provider outcomes. The partnership created an environment to effectively implement the devices into relevant procedures and extend their performance. The healthcare delivery organization improved outcomes, including a reduction in revascularizations (zero with iFR/IVUS patients), reduced procedure supply costs by \$99,393, increased same-day discharge by 12.5% and lowered acute kidney injury rate.

CASE STUDY 10

How Discovery Health uses continuous learning and iteration

Discovery Health is a South African-founded financial services organization. Their mission is to make people healthier and enhance and protect their lives. Discovery is committed to funding differently in healthcare, resulting in years of investment into alternative value-driven contracts. While Discovery Health has value-based payments across conditions, including arthroplasty and diabetes, they have also implemented a primary care value-based multiplier to improve quality outcomes and cost efficiency. They set up and implemented a multiple payment system for their

general practitioners (GPs) in primary care. When providers met certain criteria, including digital engagement, cost-efficiency and value-based score expectations, they received a percentage increase in remuneration. While the return on investments were high, the shift in quality was less tangible, perhaps due to the only 8.2% of GP practices receiving enhanced payments or outcomes selection. Discovery Health has updated and incorporated additional tools and funding to support efforts by GPs to enhance quality outcomes in the primary care setting.



CASE STUDY 11

How PharmAccess used existing technology to support implementation

PharmAccess launched MomCare in 2017 to address the 200,000 deaths that resulted from pregnancy-related complications in sub-Saharan Africa. MomCare is a value-based healthcare initiative that incorporates three dimensions of care: mobile health wallets that entitle women to care, support for improving quality according to SafeCare standards and transparency on the value of care. MomCare uses the mobile technology already in place in Kenya and Tanzania to communicate with patients, combining claims data, SMS surveys and data from calls. Through the surveys and data collection, MomCare can track user behaviour, well-being, care experience and outcomes during the journey, as well as risk mitigation by providers. The clinics enrol women,

who then get a digital wallet (M-TIBA in Kenya) that they use for each visit. The digital wallet entitles them to a care bundle encompassing the entire pregnancy journey, including postnatal and neonatal care. This helps empower mothers and support continuous improvement.

MomCare has been implemented in over 70 clinics across Tanzania and Kenya, supporting over 55,000 mothers. Providers themselves actively engaged with data-based insights for quality improvements, actionable feedback and the pay-for-performance system. MomCare identified unmet needs like mental health support for (teenage) mothers or breastfeeding support and designed care activities accordingly.



Stage 5: Scale

This stage aims to scale value-based payments across larger geographies, patient segments and conditions. While there haven't yet been many examples of significant national scaling-up of value-

based payment models around the world, some providers have scaled models within their practice setting, and some pharma and medtech companies have scaled models across countries.

The learnings and sentiments are quite positive for those with experience.

CASE STUDY 12

How Takeda prepared to scale value-based payment models implementation

Takeda prepared in advance at a global level, a scalable framework for the launch of a new innovative treatment for Hereditary Angioedema (HAE) called Takhzyro. To do so, Takeda mapped the patient journey with global feedback from cross-functional teams such as finance, patient advocacy, legal, access, health economics, etc. Takeda then developed a detailed playbook for the affiliates that supported the design, implementation and addressed the individual

country's healthcare system's uncertainties. Designing the framework up front for multiple health systems empowered the country teams to engage earlier with the proper tools and data required to address their potential uncertainties around the value of Takhzyro. Takeda's framework brought rigour to the payment model, allowing Takhzyro to achieve broad access in 27 countries three years post-launch.



Having worked under a condition-based payment model for the past four years, I really believe it is the way of the future for musculoskeletal care. A prospective annual payment for the full breadth of care for a given condition allows the patient and provider to work together towards better health rather than primarily anchoring reimbursement to sick care and procedures. It puts the treatment decision into a more appropriate context and allows financial incentives to be much more aligned with overall patient health.

Karl Koenig, Orthopaedic Surgeon and Clinical Director,
Lower Extremity Integrated Practice Unit, UT Health Austin

CASE STUDY 13

How Medtronic and Maastricht University Medical Centre+ deploy a data-driven approach to improve patient outcomes further

Medtronic's Integrated Health Solutions (IHS), a business unit offering innovative services and solutions to healthcare providers, partnered with Maastricht University Medical Centre+ (MUMC+) to implement patient-centric care delivery model.

This example illustrates an improvement in the care pathway to treat patients with cardiac resynchronization therapy (CRT). The novel multi-disciplinary nurse-led pathway was implemented for CRT and resulted in a significant reduction of the combination of all-cause mortality and heart failure hospitalizations at reduced costs. The

key to scaling was creating and using a value-based healthcare dashboard that enables patient stratification combined with real-time measurement of outcomes, processes and costs to allow for continuous improvement, better decision-making and facilitate potential novel payment models with payers. This framework was developed in the Heart and Vascular Center and is currently being deployed and scaled across numerous medical conditions at MUMC+. This public-private collaboration illustrated how a supplier can take an active role in long-term partnerships that hinge on risk and value-sharing schemes.



We have designed a model to actually translate the value-based healthcare theory into practice.

Michael Jacobs, Professor of Surgery, Department of Vascular Surgery and Chief and Executive Director, Heart and Vascular Center, Maastricht University Medical Centre+



4

Barriers to adoption and scaling of value-based payments

The barriers that prevent system-wide adoption and scale-up include investment hurdles and current ways of working in our healthcare systems.



“As in any pervasive structural transformation, the investment hurdle is considerable, requiring organizations to devote significant resources, including time and monetary resources.”

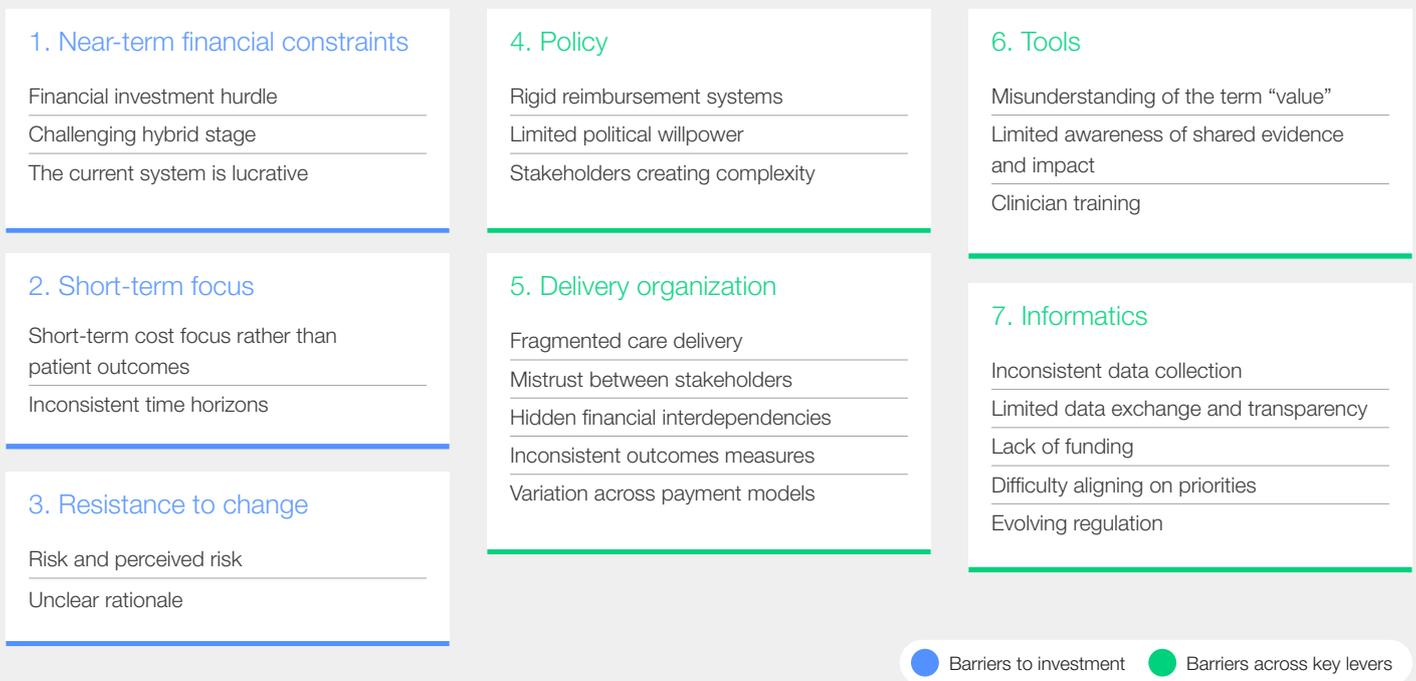
Several barriers constitute the constraints of implementation and scale-up of value-based payment models across countries and healthcare systems, which remain largely chained to the current framework. Thus, it is important to identify them to raise awareness of the challenges organizations committed to value-based payments will likely face so that they can be better prepared to invest time, attention and capital to overcome them. Additionally, identifying current system-level barriers helps policy-makers, governments and educators work on developing solutions for them. This is because payments are one of many enablers that should be addressed concurrently to pave the way for value-based healthcare.

As in any pervasive structural transformation, the investment hurdle is considerable, requiring

organizations to devote significant resources, including time and monetary resources. Most benefits of value-based healthcare likely realize only in the medium-long term. There hasn't yet been enough dissemination of value-creation data to make appropriate predictions for organizations to assess the impact of the payment model. Thus, their willingness to engage in transformational initiatives and experiments can be limited.

These barriers contribute to further resistance to change by creating a sense of hesitancy across healthcare systems and stakeholders when progressing towards a value-based payment system. Chapter 5 suggests system-level recommendations to address these barriers.

FIGURE 4 Summary of barriers to systemwide adoption and scale



1. Near-term financial hurdles

Investment hurdles

Any sizeable change requires money, time, management, attention and a high-level commitment to the long-term vision. Resource-constrained environments limit the bandwidth and willingness to engage in deep transformation initiatives, especially for smaller and underfunded institutions.

Challenging hybrid stage

The transition between two equilibria often involves transitioning through a hybrid period. During the transition phase of change, provider organizations need to continue to deliver care while at the same time changing their delivery model and related payments. These additional demands on the system introduce affordability issues and complicate the prioritization of activities competing for the same constrained set of resources. The coexistence of multiple payment models can raise unusual administrative issues in billing and collection activities.

“ Policy is a key driver of payment model change, yet political leaders still need to enact and communicate its urgency.

The current system is lucrative

Organizations have learned to work with the current system in a way that provides sufficient aggregate revenue to cover aggregate costs. Thus, despite the best intentions, making a change that could impact financial sustainability, albeit only in the short term, may appear to be an irrational organizational decision.

2. Short-term focus

Short-term cost-focus rather than patient outcomes

The widespread pressure to contain the growth in healthcare delivery costs has led to the implementation of short-term cost-controlling measures in attempts to regain control over healthcare spend. Governments, procurers, payers and purchasers prioritize curbing the cost curve over planning the transition to a more sustainable healthcare system. Value-based delivery models often require sizeable upfront investments, which could appear as cost-increasing initiatives, but will provide the longer-term benefits of improved costs and patient outcomes. To motivate upfront investments, payers, purchasers and providers must be focused on the long-term and require standardized outcome measurement to be included in value-based payment models.

Inconsistent time horizons

The time horizon to capture the benefits of value-based healthcare is inconsistent across stakeholders. Payers often manage yearly budgets, but patient outcomes could take longer than one year to improve, depending on the patient's condition. Care delivery is fragmented, so provider time horizons vary depending on the portion of the care cycle in which they participate. This disconnect leads to misalignment between the investment made by each stakeholder and the benefits they receive from that investment (for example, the stakeholder providing an upfront investment may not be the same stakeholder that receives the benefit from that investment). This is often a concern for the US, where patients change payers as they change employers or age into Medicare.

3. Resistance to change

Risk and perceived risk

Organizations fear the new business models because they are unknown. Some question their

organization's relevance in the future state, the profitability of new payment models and the value they can provide across the care pathway.

Unclear rationale

Many organizations are also unsure how the change to value-based payment models will impact their needs and the needs of other stakeholders (regulators, policy stakeholders and providers).

4. Policy

Rigid reimbursement systems

Current reimbursement mechanisms offer limited flexibility for alternative payment models. Legacy systems have many interlinked processes. The rigidity of these systems can make even small-scale changes difficult. The variation in processes, tools and care cycle timelines across disease areas introduces additional complications in transitioning to value-based payments. This added burden can demotivate stakeholders from adopting even smaller changes. Thus, stepwise change could be more burdensome than a comprehensive value-based payment makeover.

Limited political willpower

In some countries, there is political resistance to introducing sweeping changes in the healthcare system given the potential to affect the constituents that political leaders serve. Additionally, priorities may vary across political terms, thus impacting movement and momentum, further supporting a short-term view and introducing uncertainty among stakeholders. Policy is a key driver of payment model change, yet political leaders still need to enact and communicate its urgency. Though healthcare is frequently discussed in political conversations, policy leaders rarely provide clear direction on a way forward, especially when enabling a focus on value.

Stakeholders creating complexity

Most organizations across countries in the community indicated that challenges remain with the regulatory and policy landscape. Even where there is political willpower to address healthcare system issues, well-intentioned regulators and policy stakeholders often have a limited understanding of ways to accelerate desired change. For example, in some countries, laws designed to prevent collusion in the current system hinder the ability of stakeholders to get financially rewarded for their contributions to shared processes that improve patient outcomes.

“ Sharing evidence of successful implementations, best practices and lessons learned can encourage others to engage in similar transformations.

5. Delivery organization

Fragmented care delivery

Because the current payment model does not incentivize care integration, payment model reform is required. Without a push for integrated care, it is much easier to remain in current payment models where each clinician bills for individual care services. The current system lends itself to change paralysis.

Mistrust between stakeholders

Value-based payments need to allow for the coordination and alignment of different stakeholder perspectives. This contributes to the misalignment of goals and objectives. In the absence of a unifying principle across the care pathway, stakeholders might be less incentivized to collaborate and share information and data across organizations.

Hidden financial interdependencies

The current payment system embeds many financial interdependencies within and across stakeholders that hinder change. Most pointedly, as described in ongoing work by Susanna Gallani and Mary Witkowski at Harvard Business School, from the provider side, cross-subsidization across organizational units, payers, patients and processes within the care pathway causes concerns that lowering payments for some services could impact the ability to fund other services. These interdependencies make it hard to unwind from current payment models.

Inconsistent outcomes measures

Patient outcomes data is vital for measuring the value and impact of care for patients. Across value-based payment models already in practice today, organizations defining outcomes to measure may select multiple sets across payment models. Many factors impact the selection of outcome measures. One factor is that stakeholders tend to choose metrics that show their performance in the best light, but these are not always the right measures to evaluate patient well-being.

Variation across payment models

Scale-up of value-based payment models is possible. However, one of the biggest challenges in scaling is the need to customize each payment model with each partner. This adds to the burden both in terms of design and implementation. For example, if a medtech company is looking to scale-up value-based payment models with providers in the US, they could have thousands of unique payment models to design, implement and maintain. This could prove to be unsustainable for many organizations.

6. Tools

Misunderstanding of the term “value”

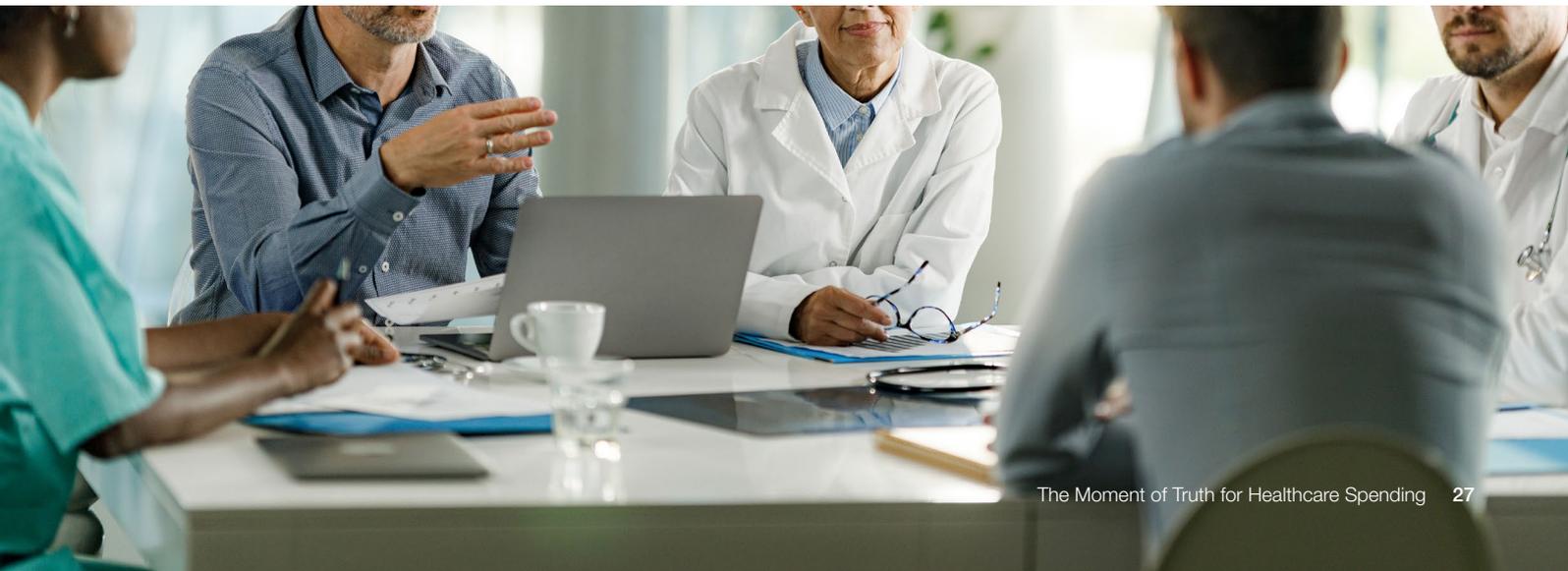
When discussing value in healthcare, many comment that each stakeholder could have a different definition of value. However, value should be universally defined as the health outcomes that matter to patients relative to the resources or costs required to deliver those outcomes. A shared definition of value contributes to aligning different stakeholders in the industry by setting shared objectives.

Limited awareness of shared evidence and impact

The lack of information and shared understanding of value-based healthcare creates a barrier to widespread adoption. Many organizations feel there needs to be more information exchange about successful models, their impact and their return on investment. Sharing evidence of successful implementations, best practices and lessons learned can encourage others to engage in similar transformations.

Clinician training

Educational curricula for clinicians' training rarely include information about value-based healthcare. Consequently, new physicians are more likely to follow traditional care delivery models rooted in the current norms, making it harder to change clinicians' mindsets and facilitate their adaptation to a new system.



7. Informatics

Inconsistent data collection

Outcomes data is not often collected, but when it is, it is frequently inconsistent over time, across countries, within countries and even across providers. Inconsistent data collection, processes, systems and data sharing make it difficult to assess outcomes meaningfully. The lack of comparability impedes the evaluation of successful initiatives and care models and the consequent sharing of best practices.

Limited data exchange and transparency

While healthcare organizations collect data, this is done in isolation. Absent exchange and transparency make it hard to draw conclusions about where value is created or wasted along the care delivery pathway.

Difficulty aligning priorities

When partner organizations work together to implement value-based payment models, a key obstacle is aligning stakeholders in building a singular data platform to meet all stakeholder needs.

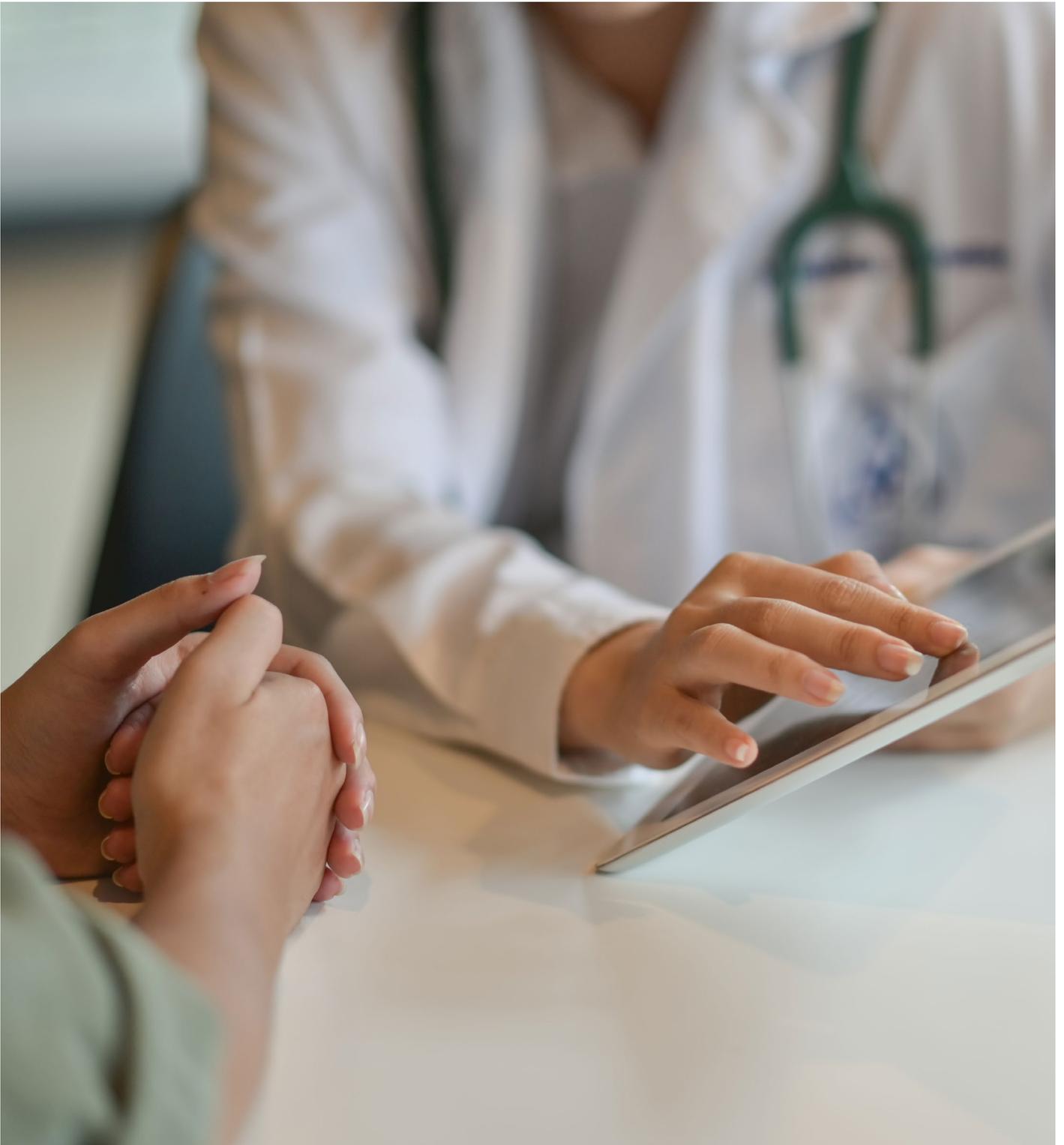
Evolving data management regulation

Data sharing and interoperability regulation (e.g. data privacy legislation) is continuously evolving and not always in a direction that facilitates outcomes data sharing. This introduces uncertainty for stakeholders looking to implement and scale data-sharing solutions.

5

Recommendations to drive payment change

Healthcare system transformation will enable investments to be spent on what works best for patients.



“ In the old marketplace, the product was “treatment” and the measure was “volume”. In the new marketplace the product is “health” and the measure is “value”.

The move to value-based payments is not an incremental one but rather disruptive in the ways healthcare delivery must be organized, measured, rewarded and paid. In the old marketplace, the product was “treatment” and the measure was “volume”. In the new marketplace the product is “health” and the measure is “value”.¹² Healthcare systems that engaged in the implementation of value-based healthcare and payment have begun to experience the benefits of the transformation and are not turning back.

The future marketplace must enable three overarching principles:

1. The healthcare system must meet the needs of all patients.
2. It must demand the measurement of patient outcomes.
3. The system must organize around groups of patients with shared needs and drive integrated care delivery.

To drive payment change, all stakeholders must come to the table committed to progress (see Figure 5).

Recommendations to address barriers

The major barriers to system-wide adoption and scale-up of value-based payment models make clear that to catalyse change the recommended solutions would need to create:

- Transparency of outcomes and payments
- Policy direction
- Education
- Greater standardization of outcome measurement and value-based payment models.

FIGURE 5 Summary of barriers and recommendations

	 Transparency of outcomes and payments	 Policy direction	 Education	 Standardization of outcomes and payments
Near-term financial hurdles	National-level scorecards	Policy landscape assessment	Awareness campaign	Collaborative approach for standard rules on embedding value-based transformation
Short-term focus				
Resistance to change	Tools for connected data flow and transparency	Policy reform ideas	Example and case dissemination	Standardize outcomes measures across countries
Policy				
Delivery organization	National healthcare spend assessment	Funder influence	Clinician education to empower	Standard payment model elements nationally
Tools				
Informatics				Accreditation agency requirements for value-based healthcare

“ It is recommended to create national-level scorecards for collecting summative data on value-based healthcare metrics, including patient outcomes and system metrics.

Transparency of outcomes and payments:

1 National-level scorecards

Objective: Create shared learning, competition and motivation to continue the value-based healthcare journey with national transparency of patient outcomes and system metrics to shift the focus from cost as a percentage of gross domestic product (GDP) to outcomes and value delivered.

Rationale: A national-level scorecard would provide macro-level outcomes and metrics and help countries identify their improvement areas for value and create comparisons across countries across these metrics.

Recommendations: Modelled based on national disease registries, it is recommended

to create national-level scorecards for collecting summative data on value-based healthcare metrics, including patient outcomes and system metrics. The scorecard could include performance in outcomes that matter to patients for priority conditions. The metrics should come from a range of conditions often represented across countries.

The scorecard should also include system-level metrics to evaluate the movement towards more patient-centred value-based care, like the percentage of value-based payments versus activity-based payments, mandatory reporting of outcomes, shared decision-making, tracking of social drivers of health, maturity of data connectivity, and others.

These scorecards could be especially influential if owned by an organization like the World Health Organization, which has significant reach worldwide and already develops country-level health reports through the Global Health Observatory.

CASE STUDY 14 Patient registries

Patient registries have been created around the world to measure patient outcomes for specific diseases at the national level, e.g. the Cystic Fibrosis patient registry in the US or the Dutch Institute for Clinical

Auditing in the Netherlands. Though these scorecards need to be built for measures that are most meaningful to patients and nations holistically, they can be modelled on a few prominent registry examples.

2 Tools for connected data flow and transparency

Objective: Enable national-level development tools that create data interoperability and transparency.

Rationale: Several national and regional e-Health strategies have been implemented globally over the past decade to enable connected data flow. However, fragmentation continues, given insufficient levels of investment in key infrastructure, proprietary standards, coordination between authorities and the weight of legacy systems.

Recommendations: Two approaches are recommended:

1. Public-private partnerships at the national level should meet to assess the landscape, requirements and drivers for a national informatics system. This should include discussions around the objectives of a tool to enable data flow and transparency, operating guidelines, legal, regulatory and policy barriers, and the other organizations that need to be involved.
2. The national government should hold full responsibility and leadership for establishing an integrated health information system across the country that adheres to the FAIR principles, which means that all relevant data – including healthcare data as well as public health data and social care data are findable, accessible, interoperable and reusable.

CASE STUDY 15

The Organisation for Economic Co-operation and Development's integrated information system

In January 2021, the Ministry of Health, Welfare and Sport of the Netherlands commissioned the Organisation for Economic Co-operation and Development (OECD) to gather evidence and recommend legal, policy and organizational reforms to transform the existing arrangements into an integrated information system that supports the government in achieving their goals. To understand the strengths and weaknesses of the current health information system and to develop

recommendations, the OECD, through a series of focus groups and interviews, consulted national experts from academia, business and government regarding the Netherlands' health information system from January to March of 2021. The information gathered through consultations with experts was complemented with information on the Netherlands and other OECD countries through the OECD's regular programme of monitoring countries' health information systems.

3 National healthcare spend assessment

Objective: Highlight how healthcare spend is being allocated today to identify areas of underinvestment in certain conditions and patient populations to better inform solutions and priorities.

Rationale: If stakeholders had access to detailed spend metrics across national healthcare systems, this could motivate action when seeing where problems lie and where spend is inequitable.

Recommendation: Create a national healthcare spend assessment that can be compared internationally with greater detail than healthcare spend as a percentage of GDP, including a breakdown of the total spend on healthcare across two measures: the type of expense (labour, facilities, etc.) and the type of care (preventative, acute, etc.).

Policy direction

4 Policy landscape assessment

Objective: Arm policy stakeholders with policies across countries that have enabled the spread of value-based payment models.

Rationale: Value-based payments go beyond the healthcare sector. Healthy citizens impact the economy, workforce and healthcare payments, so there are financial sector impacts as well. The policy conversation is therefore crucial because healthcare and financial policies have meaningful impact on behaviour.

Recommendation: Complete a policy assessment to identify policies that enable value-based payment models across geographies that will allow countries to understand how to create a meaningful impact on value-based payment model acceleration.

CASE STUDY 16

The OECD

The OECD is an international organization with a mission to create better policies for better lives. The OECD has published multiple reports referenced by the community specifically around

payment systems in health. The OECD seeks to help countries measure health outcomes, use health resources and analyse policies.

5 Policy reform ideas

Objective: Engage policy-makers to motivate the simple act of collecting valuable health data, to help understand where value is being created and then use it to enable better outcomes for their citizens and solve the rising healthcare costs.

Rationale: Though a policy assessment is still needed, policy levers have been recommended

by multiple organizations within the community. Additionally, there is an interesting overlap with existing policy imperatives, like environmental, social and governance (ESG), for which value-based healthcare and value-based payment policies could reinforce the responsible use of resources and equity. This makes for impactful, joint policy solutions, as seen in the NHS metrics and targets on carbon footprint, waste reduction and recyclability.

“ There is a huge opportunity to create change by policy-makers requiring outcomes collection.

Recommendations: Consider policy recommendations that could address barriers to system-wide adoption and scale-up, including:

1. National mandates for collecting and processing outcomes measures: There is a huge opportunity to create change by policy-makers requiring outcomes collection. The ability to review outcomes data and assess patient impact will help direct providers, payers, pharma and medtech to solutions that create value.
2. Establish health credits to manage inconsistent time horizons: One way to combat the inconsistent time horizon barrier is to have policy-makers establish government-level health credits. Health credits could incentivize payer investment in value by ensuring a payer receives a return on investment. This could be particularly useful in a country like the US, where there is a multi-payer system, and the payer investing in the treatment may not be the payer benefiting from avoided long-term costs.

CASE STUDY 17

German Heartbeat Medical

The German government played a crucial role in incentivizing performance-based payments by introducing “quality contracts” in 2018, in which health insurers and hospitals could agree on additional payments outside the rigid DRG system. In 2021, the German legislature went one step further and stipulated a minimum budget that health insurers had to spend on quality contracts. Health insurers were to allocate funds to quality-

centred care and closely monitor individual treatment paths. To improve the value for patients and increase the incentives for healthcare providers to integrate PROs into clinical practice, German Heartbeat Medical, a Berlin-based tech company, developed a new value-based payment framework that combined PRO-monitoring with an outcome-based payment.



6 Funder influence

Objective: Use the influence of funders (governments, private insurance companies, non-profits payers and other purchasers of care) to create progress against chains to the current system.

Rationale: Funders can impact transformation through legislation and policy reform. Policy and funders are often connected, and policy pieces often need to be in place for funders to create impact or vice versa.

Recommendations: Funders should use their influence to enable value-based payment models.

1. Create incentives to make the current activity-based payment models less attractive and value-based payment models less risky, potentially by introducing tax waivers or financial incentives to implement or participate in government value-based payment model programmes.
2. Create incentives for providers with limited funding to invest in value-based healthcare infrastructure by offering funding for:
 - a. Areas of healthcare that are often underinvested in by payers, like mental health.
 - b. Collection of outcomes data, as well as race and ethnicity data, to help models address health equity.

CASE STUDY 18

CCMI's ACO REACH model

CMMI recently launched the ACO REACH model to advance equity through value-based payment. Using a “health equity benchmark” creates proportional funding for organizations to create upfront investments in infrastructure to help redesign care delivery models and services.

The CMMI model is essentially helping to create funding for these typically underfunded providers to manage the upfront investment costs, which is especially important as they serve the more vulnerable communities.¹³

3. Set an example that motivates other payers/providers nationally: The funder and government initiatives create energy behind efforts and encourage others to attempt similar initiatives by creating the “rules of the game”. Depending on the market situation, government payers or regulators could implement or encourage the following:
 - a. Longer-term agreements with providers, pharma or medtech to manage the longer timeframes required to measure outcomes to tie to payment models, with governments informing the best way to set multi-year agreement terms.
 - b. Scaled value-based payment model implementation at the national level.

CASE STUDY 19

Health Outcomes Observatory Project (H2O)

The Health Outcomes Observatory Project (H2O) seeks to create a standardized data governance and infrastructure system that incorporates patient experience and preferences data to inform care decisions, enhanced health research, promote the development of new treatments and sustain

efficient healthcare systems. The observatories collect data across patients and analyse and share evidence in Europe for health decisions. They guard data on patients' behalf, facilitate interoperability and promote the benefit of using patient outcomes.¹⁴

Education

7 Awareness campaign

Objective: Create informed purchasers of healthcare, including the public, providers and funders.

Rationale: A public awareness campaign could serve many purposes. First, the public is both the patient and the ultimate payer, who should be an informed purchaser of healthcare. Additionally, awareness of outcome variability can create better decision-making between patients and their providers.

Recommendation: Evaluate a public awareness campaign for value-based healthcare and its impacts and barriers. The campaign could focus on driving awareness around the variability of quality and patient outcomes, disparities in those outcomes, prices being set, failures of the existing payment model and the advantages and challenges of moving to a value-based system.

8 Examples and case dissemination

Objective: Motivate more implementation of value-based payment models by sharing examples that work and creating widespread awareness.

Rationale: Value-based payments have been widely piloted globally, yet the insights gained have been shared minimally. Organizations looking to launch a value-based payment programme or grow an existing programme need evidence and examples to help make good strategic and financial decisions.

Recommendation: These examples should include the evidence of success, key learnings, identification of challenges, impact on patient outcomes, financial implications and opportunity costs of not changing.



CASE STUDY 20

Global Coalition for Value in Healthcare's Global Innovation Hubs

The World Economic Forum's Global Coalition for Value in Healthcare established [Global Innovation Hubs](#) to bring together organizations with best-in-

class examples of successful implementation of value-based healthcare and shared learnings and experiences.

9 Clinician education to empower

Objective: Ensure that the next generations of clinicians are not demotivated by the barriers to value-based payment models but rather energized by their potential through their curriculum.

Rationale: Physicians are rarely given any training in value-based healthcare. For physicians to take leadership roles in organizations and the clinical

delivery system, they need education and skill development in this area.

Recommendation: Ensure that any clinician education curriculum includes courses related to value-based healthcare delivery and payment models, their impact, implementation and the importance of measuring outcomes. This education could occur during medical training with a course curriculum or as a part of continuing education.

CASE STUDY 21

Harvard Business School and Harvard Medical School

Some educational entities are already beginning to incorporate value-based healthcare in the medical school curriculum. Many medical schools offer MD-MBAs for those clinicians wanting to focus on management issues in which a value-based healthcare curriculum should be a key part.

Harvard Business School partners with Harvard Medical School to provide education in value-based healthcare as a part of the required curriculum for medical students so that a broader portion of the class has exposure to teaching value-based healthcare.

Standardization of outcomes and payments

10 Collaborative approach for standard rules on embedding value-based transformation

Objective: Bringing together a group dedicated to working towards transformational change in the value-based payment work, such as enabling the best price-to-value ratio methodology for healthcare procurement.

Rationale: The association can seek to progress other recommendations within this report and connect people and organizations to share best

practices and learnings. For example, in Europe and beyond, medical supplies, technologies and drugs used by publicly funded providers must go through formal, competitive tender processes. Procuring on standardized value considerations allows for the most economically advantageous purchasing and, therefore, spending of public money.

Recommendation: Establish an international consortium of public and private bodies to continue progressing on value-based payment model change. This collaborative partnership can also encourage public procurement processes to embed standardized and measurable value criteria specifically on outcomes that matter to patients as well as the total cost of ownership considerations in public tenders.

CASE STUDY 22

The Value-based Procurement Community of Practice

The Value-based Procurement Community of Practice (VBP CoP) in Europe brings together suppliers, providers, payers, procurement networks and policy-makers to encourage value-based procurement. The community has

developed a standardized value model, training materials and best practice examples, which are shared in regular meetings and conferences and have helped build significant momentum on value-based procurement implementation.

11 Standard outcomes measures across countries

Objective: Create consistency of outcome measures sets used across countries.

Rationale: Implementing standard measures will help ensure comparison and analysis of health interventions worldwide, while reducing the burden

of selecting outcome measures to use in payment models. Ensuring that outcome measures are available can help remove the conversation from price and costs and focus the conversation on value.

Recommendation: Governments and organizations should use consistent, internationally recognized outcome measures.

CASE STUDY 23

The International Consortium for Health Outcomes Measurements

The International Consortium for Health Outcomes Measurement (ICHOM) publishes the most comprehensive standardized metrics and risk-adjustment variables for 40 major conditions and

patient populations. The organization's standard aims to define a comprehensive but minimally sufficient set of metrics that all providers should track for a given condition.





12 Standard payment model elements nationally

Objective: Create consistency of payment model elements.

Rationale: Payment model element consistency will reduce the burden of design, implementation and scale of multiple value-based payment models within an organization.

Recommendation: Governments or national payers could develop and standardize payment model elements nationally at the pre-competitive level. This means they could create a set of consistency elements of payment models to create less variability. Competitive dynamics would continue at the next level down for those providers to compete based on their ability to create better outcomes at the same or lower costs.

13 Accreditation requirements for value-based healthcare

Objective: Standardize outcomes measurement expectations at the provider level through accreditation or certification.

Rationale: Accreditation bodies are a valuable lever to encourage behaviour change among providers. Societies and accreditors also benefit from outcomes measures as they inform their clinical practice guidelines.

Recommendation: Engage accreditation bodies to consider implementing requirements that providers progress towards value-based healthcare for certification.

CASE STUDY 24

German Cancer Society

The German Cancer Society's certification programme for prostate cancer centres requires outcomes measures for recertification. Centres seeking to recertify must meet quality indicators

reported to the public annually. Patient outcomes measurement in the recertification of speciality centres can help improve the capacity to collect and analyse outcomes data.

Conclusion

It is the intention of this insight report to instill a sense of urgency across all stakeholders to change the way healthcare is delivered globally, to invest every healthcare dollar spent in what works best for the patient through the acceleration of the adoption of value-based payment models.

It is important to reemphasize the need for healthcare stakeholders to work together and find a common mission. As the Forum truly believes, change can only occur when everyone comes to the table together, as the many examples provided show how rewarding, motivating and above all impactful such collaboration is.

Many things need to transform concurrently for payment models to change, including the other four enablers of value-based care: tools, care delivery models, informatics and policies. While this report focused on ways to galvanize the adoption and scale-up of value-based payments to progress the

overall value-based healthcare agenda, it is hoped that it encourages efforts across all four enablers in the value in healthcare framework to truly catalyse a health transformation.

The Forum's Platform for Shaping the Future of Health and Healthcare has hosted the Global Coalition for Value in Healthcare since its launch in 2019 under the auspices of the Forum's Annual Meeting. For more information, visit the [Global Coalition for Value in Healthcare website](#).

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**Global Coalition for
Value in Healthcare**

Appendix

CASE STUDY 25

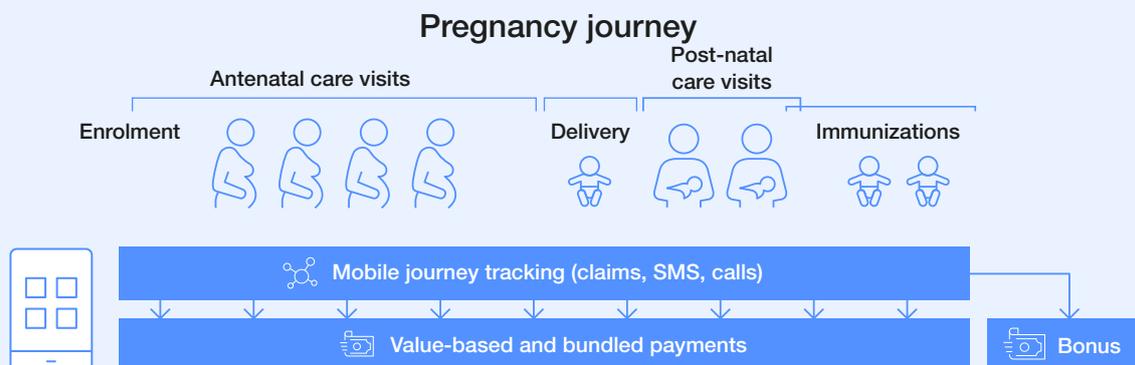
MomCare, Kenya

Background and starting point

- **Organization at a glance:** PharmAccess is a foundation to make inclusive health markets work in Sub-Saharan Africa, addressing both supply and demand-side through public-private partnerships.
- **Problem/challenge statement:** In Sub-Saharan Africa, health outcomes for pregnancy remain poor, mostly from preventable causes. Despite rising care budgets, outcomes remain unacceptably poor. A root cause is the fragmentation of both funding streams and care provision. Mothers face a journey with many gaps and uncertainties both on the availability of care (e.g. stock-outs, ultrasound availability) and financial risks (e.g. it is often unclear if caesarean sections are fully covered). Consequently, they do not seek or receive sufficient care.
- **Pathway scope:** Pregnancy journey including antenatal care (ANC) visits, delivery, postnatal care (PNC) visits and child immunizations.
- **Product or service focus:** Maternal and childcare.
- **Population segment:** Pregnant women and their newborns in Nairobi and Western Kenya.

Contracting/solution life cycle approach

- The MomCare mobile health wallet facilitates journey tracking at each step through claims data, SMS surveys and phone calls, resulting in value-based and bundled payments as well as actionable insights and benchmarking information for providers. SMS reminders are sent to mothers for their appointments alongside birth planning calls.
 - Percentage of risk mitigation expressed as journey score on a 1-5 scale
 - Equitable care access (teenage and high-risk mothers)
 - Percentage of maternal and neonatal morbidity and mortality
- Outcomes focus:**
- Percentage increase of adherence to timely care
- Cost of care focus:**
- The total cost of care per mother for the entire pregnancy journey stratified by risk and age



MomCare, Kenya

Context

- **Goal:** MomCare aims to improve maternal and neonatal health outcomes in Africa, by addressing the financing and quality of care over the full pregnancy journey.
- **Involved stakeholders:** Pregnant women, healthcare providers, social payers
- **Funders:** MSD for Mothers, the Children's Investment Fund Foundation (CIFF), ELMA, Dutch National Postcode Lottery, St. Antonius Foundation, Health Connect Foundation, and the Dutch Ministry of Foreign Affairs
- **Coverage:** Entire pregnancy journey
- **Payment type:** Bundled per visit plus performance-based periodic value-conditional payments

Impact generated and value created

Value for organization:

Quantitative (clinical and economic)

- 16% increase in adherence to antenatal care visits for all mothers and a 25% increase for high-risk mothers.
- 15% increase in antenatal care visits that have a full set of haemoglobin, syphilis, HIV, blood glucose, urine and tuberculosis tests.
- 17% increase in completed pregnancy journeys (≥ 3 out of 5).
- 37% decrease in journey costs for women who deliver through caesarean section.

Qualitative (brand reputation)

- PharmAccess is recognized as a pioneer of value-based healthcare in Africa.
- Clinic reputation and collaboration (e.g. expanded local hospital and clinic network).

Value for patients:

- Over 29,000 mothers in Kenya were given access to pregnancy care, including ~10% of high-risk mothers.
- Mothers are empowered through increased awareness about delivery signs, perinatal danger signs, breastfeeding and appointment reminders.
- Early risk stratification improved care for high-risk mothers.

Societal impact:

- MomCare paved the way for a data-driven and patient-centred approach, using bundles and bonus payments combined with insights and clinical support to improve access to and quality of care. In addition to the direct impact listed above, MomCare serves as inspirational best practice of value-based healthcare in low- and middle-income countries.



Background and starting point

– **Organization at a glance:** Takeda is a research-based global pharmaceutical company with a focus on prescription drugs. The vision of the company is to discover and deliver life-transforming treatments, guided by their commitment to patients, people and the planet by unleashing the power of data and digital equality and sustainability in access. Their commitment led them to build a disease-specific framework that can be used in multiple healthcare delivery systems addressing the

uncertainties identified by the payers for the treatment of hereditary angioedema (HAE).

- **Pathway scope:** Country healthcare delivery dependent
- **Product or service focus:** Subcutaneous, single-dose injection
- **Population segment:** Indicated for HAE long-term prophylaxis of recurrent HAE attacks in HAE patients aged 18 years and older

Contracting/solution life cycle approach

Model description:

– A framework tool has been designed to aid value-based contracting (VBC) selection and to support negotiations for Product X at launch. The framework model has been structured to allow countries a way to input data in order to simulate the comparison of different value-based contracts.

Outcomes focus:

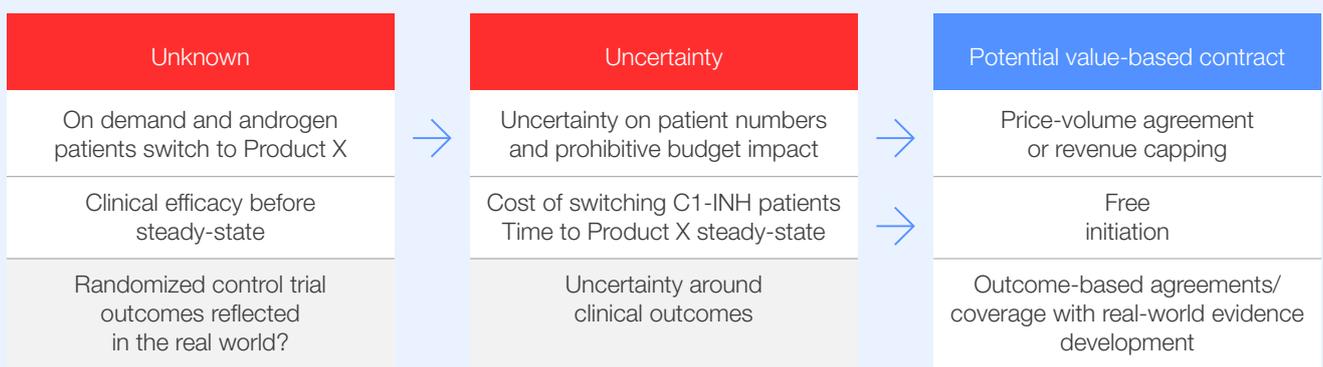
- Percentage of zero attacks in real-life
- Real-world dosing

- Efficacy during 70-day ramp-up
- Impact on patients' quality of life

Cost of care focus:

- Four weeks vs every eight weeks real-world dosing
- Number of patients switching to Product X based on improved outcomes
- Randomized control trial translation to clinical effectiveness

Each VBC was designed to address a specific uncertainty and demonstrate Product X's transformational benefit



Takeda, Switzerland

Context

- **Goals:** 1) Improved patient-centred outcomes, 2) Addressing the risks and uncertainty of a highly innovative product in different healthcare system archetypes.
- **Involved stakeholders:** Comprehensive mix of internal and external stakeholders.
- **Funder:** Pharmaceutical drug plans, and other payer channels for reimbursement.
- **Coverage:** Flexible and variable depending on the healthcare system.
- **Payment type:** Varied to address the healthcare systems uncertainties: outcomes-based, budget capping, price volume.

Impact generated and value created

Value for organization:

- Improved global patient access despite countries' restricted access due to the innovative value-based contracting framework approach to value recognition.

Quantitative (clinical and economic)

- Appropriate patient dosing, reducing wastage
- Improved patient-reported outcomes – objectively measured
- Budget capping to limit healthcare cost impact
- Improved speed to access

Qualitative

- Supports the core values of Takeda-ism, which incorporates fairness, honesty and perseverance with

integrity at the core. They are brought to life through actions based on patient-trust-reputation-business, in that order.

Value for patients:

- Customized to patients' specific needs
- Earlier access to treatment
- Recognized relevant patient outcomes

Societal impact:

- Engaging in value-based contracting frameworks to address the uncertainty at a country level to ensure appropriate patient access and will continue to improve the sustainability of a value-based healthcare approach in the long term.



Background and starting point

Organization at a glance: German affiliate of a leading global eye care organization.

Pathway scope: Ability to upgrade from standard cataract to refractive cataract surgery.

Product or service focus: Intraocular lenses (IOLs) for presbyopia and/or astigmatism correction (advanced technology IOLs).

Population segment: Patients willing to co-pay the difference for the premium IOL, on top of the standard cataract procedure to be covered by the public health

system to obtain additional refractive correction yielding improved outcomes.

Cataracts are a progressive clouding of the lens and an inevitable fact of ageing. Cataract surgery replaces the cloudy lens with an IOL and is generally reimbursed when performed using a monofocal IOL.

Nearly half of cataract patients also have pre-operative astigmatism. The prevalence of presbyopia ranges from 43.8% in Japan (age ≥40 years) to 88.9% (age ≥45 years) in the US. Advanced technology intraocular lenses (AT-IOLs) exist to address these eye conditions while treating cataracts.

Contracting/solution life cycle approach

- 2010: First premium lens contract between the Federal Association of German Ophthalmic Surgeons and the Techniker Krankenkasse health insurance fund.
- 2011: Patient equity and freedom of choice in cataract surgery is introduced and discussed at the political level.
- 2012: During the legislative process of the government health insurance companies (GKV) care structure law, the additional cost regulation for cataract patients is decided and comes into effect on 1 January 2012.
- **Achievement:** Patients have a right to pay extra for innovation delivering additional outcomes. Providers have the right to charge extra for extra time spent and

for advanced technologies used. Payers face no additional costs. Greater innovation access.

Outcomes focus:

- Increased spectacle independence
- Quality of vision
- Vision-related quality of life

Cost focus

- Public payers, and health providers: no additional cost
- Patient: co-pay for additional outcomes achieved. Pay less for glasses. Net savings medium term.



Patient: freedom of choice



Payer: no additional cost



Health provider: funding for innovation

Obstacles:

- Time and volume pressure in standard cataracts – adjustments to patient flow
- Surgeon effort vs financial benefits
- Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) can be difficult to integrate

Change only happens if:

- Clinicians, payers, patients and industry share a vision
- Comprehensive change management and mindset shift

Alcon, Switzerland

Context

Problem/challenge statement: Before 2010, those German patients choosing AT-IOLs lost public coverage for a standard cataract procedure with monofocal IOL. Therefore, they had to pay the full AT-IOL procedure out of pocket. Patients that typically pay out of pocket for glasses, may be willing to pay extra for their refractive cataract surgery if they become spectacle-independent.

Involved stakeholders: Patients, public service providers and payers and policy-makers.

Funder: GKV and private health insurance companies (PKVs).

Coverage: Standard cataract surgery is publicly reimbursed. However, no coverage existed for cataract surgery with AT-IOL. Patients choosing that alternative had to pay the full procedure out of pocket, forfeiting their right to standard cataract surgery reimbursement.

Impact generated and value created

A co-payment solution enables greater personalization of cataract and refractive care based on desired patient outcomes. It generates more equitable patient access to innovation and more efficient distribution of financial resources.

Value for patients:

- Compared to monofocal IOLs, trifocal IOLs can provide patients with better visual acuity from near to far and higher spectacle independence. These have important benefits for patient visual function, productivity and vision-related quality of life.
- Potential cost savings over a lifetime, driven by a decreased need to pay for spectacles.

Societal impact:

- Greater equity of access means no patient loses the right to reimbursement for cataract surgery. More patients can afford innovation/better outcomes.
- Mitigation of potential productivity loss, falls and/or accidents due to uncorrected presbyopia and/or astigmatism.

Quantitative (clinical and economic)

- Providers: Increased revenue per procedure

Qualitative (brand reputation)

- Providers: ability to access and offer innovation to patients
- Premium procedure affordable for more patients



Background and starting point

Organization at a glance: The City of Aarhus, Denmark, had a growing number of citizens diagnosed with type 2 diabetes but no new budget to increase disease/life management support. The city was seeking allies to ramp up action for secondary prevention of type 2 diabetes complications among newly diagnosed, vulnerable citizens as part of the new diabetes action plan.

Problem/challenge statement: Create a solid case for pilot investment to ramp up this new diabetes action plan pursuing health equity for the citizens of Aarhus.

Pathway scope: In-community/at-home support to complement clinical care by care providers and hospitals.

Product or service focus: Healthy living/life navigation support delivered by the local health centre.

Population segment: Citizens at high risk of developing severe health complications from type 2 diabetes (working age).

Solution/approach/model details

Model

- The city convinces an investor to fund interventions to prevent the development of diabetes complications and, thus, reduce future demand for healthcare services.
- The investor provides funding upfront and receives a share of the cost savings, if interventions are successful.
- The service provider (the city itself, in this case) is paid to deliver the agreed interventions.
- The investor trusts that the intervention (co-designed with the Steno Diabetes Center) can achieve the stated goals.
- An independent evaluator (in this case, the regional Steno Diabetes Center) assesses if the agreed goals are achieved.
- **Outcomes:** Measured at kick-off (baseline) and annually for three years: long-term blood sugar, HbA1c (chosen after

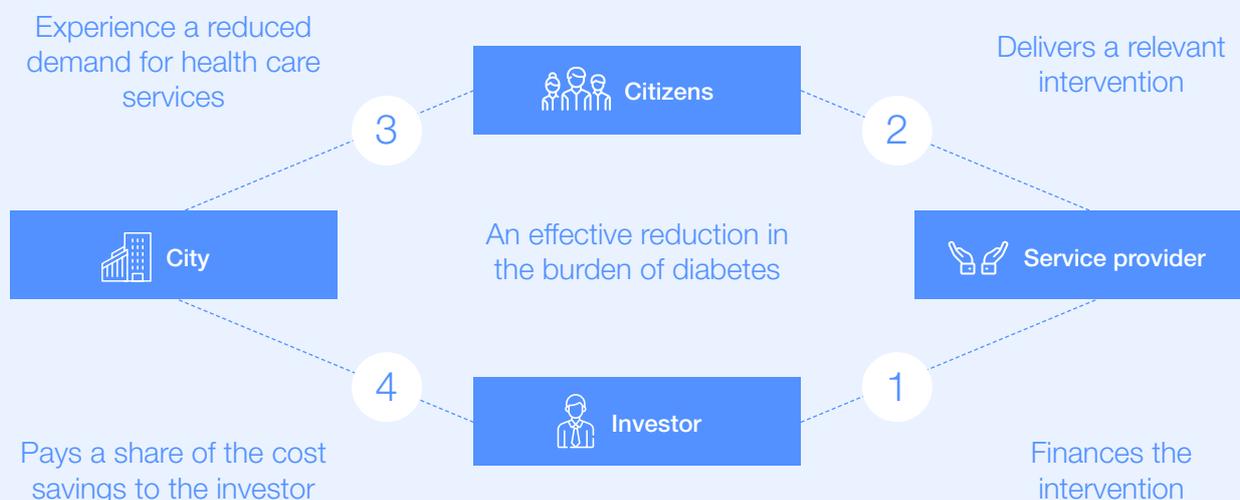
long deliberations about adding measures such as quality of life, sick days, etc.).

Outcomes focus: KPIs considered:

- Individual reduction of at least 5% HbA1c vs baseline
- Collective average reduction of 5% HbA1c vs baseline

Cost of care focus: KPIs considered:

- Primary: City costs of rehabilitation and long-term care (included in investment calculation)
- Secondary: Regional costs of hospitalization and provider consultations (a major benefit, not included in investment calculation)
- Tertiary: Citizens' family finances (not included in investment calculation)



Novo Nordisk, Denmark

Context

- **Goal:** Proof of concepts – health intervention and funding model for secondary prevention of type 2 diabetes
- **Involved stakeholders:** City of Aarhus, Regional/Steno Diabetes Center, local general practitioners, civil society/ community organizations/social hubs
- **Funder:** Danish and Aarhus Social Investment Funds
- **Goal:** (50%/\$1 million each), Novo Nordisk co-funded development costs
- **Coverage:** 450 citizens from vulnerable neighbourhoods recently diagnosed with type 2 diabetes
- **Payment type:** Social impact bond (goal success = payback + up to 5% interest/reward)

Impact generated and value created

Quantitative (clinical and economic)

- Blood sugar reduction = Minor diabetes-related complications do not become major complications. Major vs minor complications: Care costs +\$125,000 over 10 years (details not needed to make investment case).
- Postponing diabetes-related complications lead to 20-year cost savings of ~\$30,000/citizen.

Qualitative (brand reputation)

- City (and regional health system) demonstrates a strong commitment to social equity in health. Will build service delivery capacity over time that peers will wish to learn from.
- Novo Nordisk will use the initiative to catalyse the development of more cases, internationally to make impact bonds a recognized funding mechanism when

existing health budgets can't be increased according to need, and could be a short-term supporting mechanism.

Value for patients:

- Avoiding early retirement from the labour market (the minority of participants)
- Improved quality of life (not yet quantified)
- In Aarhus, a unanimous city council has increased the budget to develop more investable health programmes

Societal impact:

- Avoiding early retirement from the labour market (massive increase in city's social and health costs)
- Reduction in hospital admissions, number of provider consultations (not quantified in this case)
- Absence from work (not quantified in this case)



Diabeter, Netherlands

Background and starting point

- **Organization at a glance:** Diabeter is a chain of six diabetes centres in the Netherlands and the Kingdom of Saudi Arabia, organized in a so-called “integrated practice unit” (IPU). Diabeter’s mission is to create a complication-free life, doing so by providing the best possible care and value for patients with type 1 diabetes. Founded in 2006, Diabeter emerged as an EU centre of reference on value-based healthcare models. The centres are built around the patient and are continuously learning from experiences and outcomes to achieve

better results. Centres work together like one IPU and are supported by one dedicated IT platform that measures patient outcomes, costs per patient and other relevant parameters on a daily basis.

- **Pathway scope:** Type 1 diabetes pathway
- **Product or service focus:** End-to-end care delivery for type 1 diabetes excluding hospital admissions
- **Population segment:** Type 1 diabetes pediatric and adult patient population

Contracting/solution life cycle approach

- **The contract will be based on three basic principles:**
 - Bundled payment
 - Short-term savings sharing
 - Long-term savings sharing

The bundle consists of the costs that are directly related to Diabeter (care + devices) plus the diabetes-related cost that Diabeter patients induce outside Diabeter like the cost of admission, medicine etc.

Short-term shared savings: The total cost of the bundle is explored by the payer in a given year. The payer is able to do this because in their claims administration they see all patient-related declarations. Those costs explored in the specified year will be the benchmark for the bundle in the coming year.

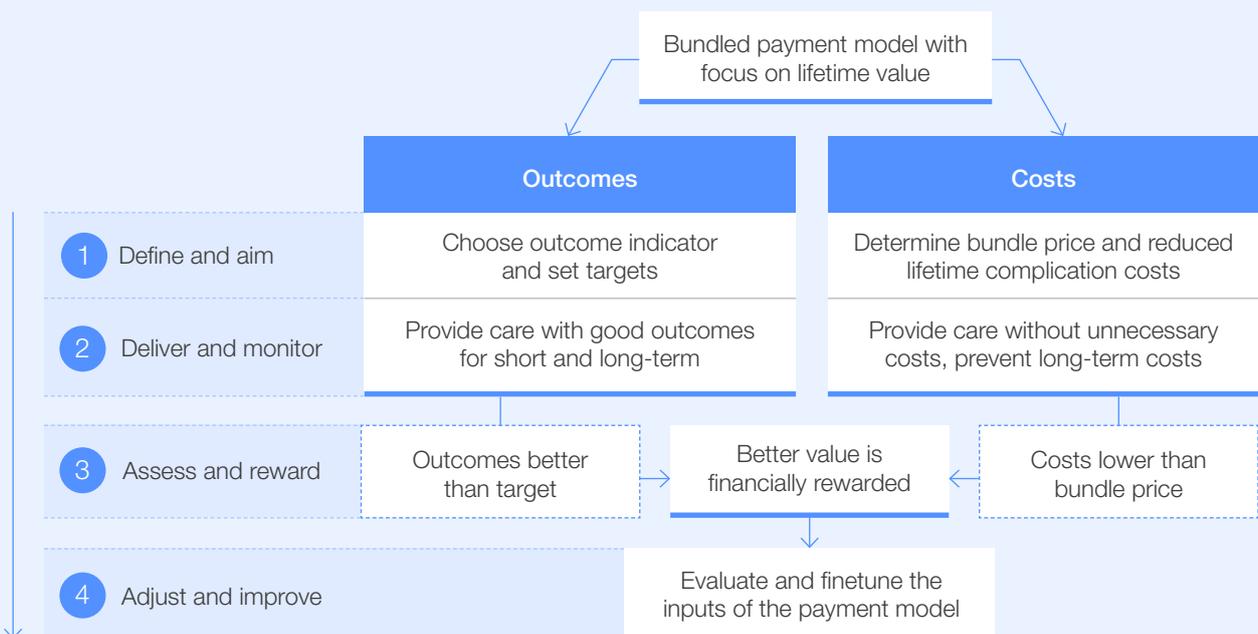
Diabeter developed a measurement method to measure those improvements and translate them to a number. The method is called the net improvement score (NIS). In this model, the team compares the HbA1c from an individual patient of last year with the HbA1c of the same patient this year as well data from other providers.

Outcomes focus:

- Percentage of patients in target HbA1c (<7.5%/58mmol/mol)

Cost of care focus:

- Cost of complications and frequency of short-term admissions like diabetic ketoacidosis etc.
- Per patient cost of care



Diabeter, Netherlands

Context

- Diabeter closed a ground-breaking ten-year value-based healthcare partnership with Zilveren Kruis, the largest insurance company in the Netherlands. This is the first value-based agreement worldwide that includes short- and long-term complications for type 1 diabetes. The partnership is based on a shared ambition of a complication-free life for type 1 patients now and in the

future at a minimal cost. **Diabeter has also established other outcome-based agreements with other health insurance companies.**

- **Involved stakeholders:** Health insurance “Zilveren Kruis”
- **Funder:** Healthcare budget
- **Coverage:** Type 1 patient population

Impact generated and value created

Value for organization:

Quantitative (clinical and economic)

- 57% of adults in Diabeter reach HBA1c target (<7.5%/58mmol/mol) versus 38% in the Netherlands
- Below 1.3% hospital admissions rate as compared to 8.0% in the Netherlands

Qualitative (brand reputation)

- 9.5/10 rating on Zorgkaart, a Dutch healthcare provider review website

Value for patients:

- Patient convenience option of remote care and limited time loss due to fewer clinic visits

- Better management and active engagement
- Proven better patient outcomes in the short and long term
- Lowest admission rate in the Netherlands
- Inclusive/health equity – A1c in all socio-economic groups reduced, access to technology
- PROMS part of evaluation and contracting

Value for organization:

- Improving healthcare professional/patient ratio (more experience etc., staff shortage solving)
- Constant improvement using outcome data (individual and clinic)



Background and starting point

- **Organization at a glance:** Wales is a country of 3.2 million people with wide geographical diversity, a mix of rural and urban areas and a wide variation in population health needs and determinants. Fourteen NHS Wales organizations provide the infrastructure and delivery of health services across Wales with seven integrated health boards responsible for the planning and delivery of services for its resident population.
- Growing demand for services and an increasing funding gap, in a system with a primary focus on the volume of services delivered versus the outcomes achieved.

In line with the Organisation for Economic Co-operation and Development (OECD) report, the UK performs well in overall care processes but is low performing in health outcomes.

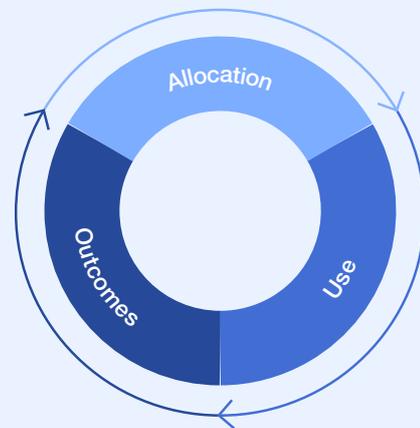
- NHS Wales is taking a system-level approach through to the pathway/condition level, to support a transition to a system with balance between volume and the delivery of outcomes that matter to patients. The approach builds on the 2014 launch by the Welsh government of the prudent healthcare policy.

Contracting/solution life cycle approach

- The policy position in NHS Wales, which includes prudent healthcare, A Healthier Wales and the Wellbeing of Future Generations Act; all provide the context and opportunity, alongside the integrated structure of healthcare services in Wales, to implement and deliver value-based healthcare for the population.
- NHS Wales established the Welsh Value in Health Centre in 2021, providing a core infrastructure, knowledge,

capacity and expertise to support and drive the system and the delivery of value-based healthcare in NHS Wales.

- There is a strategic focus in Wales on how resources are used with a clear understanding of outcomes and effectiveness. The aim is to allocate resources to improve outcomes through understanding how resources are used and the outcomes delivered.



NHS Wales, Wales

Context

- **Goal:** The aim is to allocate resources to drive improvement in outcomes and deliver allocative value while maximizing the use of limited resources to achieve health equity and deliver services that are focussed on delivering the outcomes that matter to patients.
- NHS Wales is a capitation-based system, with allocations to health boards based on a needs-based population formula updated in recent years to support a focus on population health through linking resource allocation, resource use and outcomes achieved across communities.
- Due to the system approach in Wales, optimizing value through the allocation of resources is being reviewed at a macro, meso and micro level: the allocation of resources from the Welsh government to NHS organizations; the allocative distribution of resources within NHS Wales organizations across pathways, conditions and services to meet the need of the population and the distribution of resources by NHS Wales organizations to other stakeholders to support patient care.

Impact generated and value created

The implementation of value-based healthcare within NHS Wales includes the following developments:

- The strategy outlined by the Welsh Value in Health Centre sets out the six strategic goals to facilitate the delivery of value-based care creating an environment in NHS Wales focused on outcomes that matter to patients and a changing infrastructure to create a more data-driven system.
- The release of the NHS Wales Planning Framework 2022-2025 outlines “prudent healthcare principles and value-based healthcare will be the basis on which services are planned and delivered”.
- The 2022-2023 NHS Wales allocation included a £20 million direct allocation to support progress and wider implementation of value-based healthcare.
- The national data resource programme, a strategic imperative for health and care in Wales is in development. It will support timely and seamless data flows across the system to support data-driven and informed decision-making inclusive of patient-reported outcomes.
- A PROMs standard operating model is being implemented across NHS Wales to ensure data standards, processes and information exchanges are aligned, allowing aggregation of a national PROM data set to be collected, reported and analysed on both a system basis, across conditions and with patients.
- Multiple approaches to financing for value are being harnessed: national allocation formula, direct allocations, allocative value: redistribution of resources, value-based procurement, value-based contracting and the use of data and remote care.
- The use of resources through analysing variation, adverse outcomes and high-value interventions has been a core development between clinicians and finance across multiple speciality and condition areas including diabetes, heart failure and lymphoedema.
- The development of an Intensive Learning Academy to support the education of value-based healthcare across the system and multiple professions within health.
- A developing evidence base of high-value interventions, to support implementation in clinical areas to maximize value.



Discovery Health, South Africa

Background and starting point

- **Organization at a glance:** Discovery is a South African-founded financial services organization that operates in the healthcare, life insurance, short-term insurance, banking, savings and investment, and wellness markets. Since its inception in 1992, Discovery has been guided by a clear core purpose – to make people healthier and to enhance and protect their lives. This has manifested in its globally recognized vitality shared-value insurance model, active in 40 markets impacting 40 million lives. Discovery Health is the leading medical scheme administrator in South Africa, providing administration and managed care services to over 3.3 million beneficiaries.
- Approximately 30-40% of Discovery's private medical insurance spend is currently within alternative value-driven contracts with private providers. Discovery's commitment to funding differently in healthcare has resulted in years of resource investment into the development of advanced clinical, analytical and digital software to support and scale their efforts.
- The arthroplasty value-based healthcare programme is just one of many Discovery programmes that have opened the door in South Africa to an increasing acceptance of funding healthcare on new principles.
- **Pathway scope:** The arthroplasty programme covers elective surgical episodes of care for unilateral hip and knee replacements performed in hospitals that belong to the Discovery Arthroplasty Network.
- **Product or service focus:** The payment model focuses on the service provided by the core arthroplasty team in the hospital and in the immediate follow-up period. This includes the hospital and nursing team, the lead and assistant surgeons, the anaesthetist, the physiotherapist and the prosthesis used.
- **Population segment:** All patients, regardless of plan type, are eligible to receive care from a network facility and team if they meet the clinical arthroplasty criteria as defined by professional medical societies.

Contracting/solution life cycle approach

Model description:

- Patients treated under network facility teams get access to unlimited arthroplasty care, as clinically indicated, without any out-of-pocket expenses being levied upon them. Care teams agree to align with best practice protocols, and to review and act on their outcome data as provided by Discovery Health on an annual basis.
- Higher volume arthroplasty facilities were invited into the network to partake in the programme. Additional facilities were included to ensure adequate national access to care for insured patients. All providers who are contracted under the network terms agree to accept the fixed fee amount for the named team and components. Any teams practising in facilities outside of the network incur co-payments to their patients.
- In the first phase of the contract, all teams receive the same fixed fee for arthroplasty. It is however discussed and agreed that the fee will evolve in line with the measured value derived by each team for their patients.
- This is a fixed fee for the episode of surgical care described above. The fee accounts for most of the core team and components that makeup arthroplasty costs. This does mean that some cases will incur additional fees for service costs that are variable and uncommon, hence they were excluded from the standard fee structure.

Key takeaways:

- In novel contracting agreements, patients must always be protected from financial burden, limitation of care, reduced access or other potentially negative impacts. This requires detailed due diligence and testing prior to the launch of new payment models.
- Care teams and insurers must agree on a path towards value, making steady changes that allow the teams and system sufficient time to respond and adjust.
- One of the biggest challenges is agreeing on and accepting the validity of shared comparable data sets. Care and time are required to define and explain the data science used, demonstrate the value of the insights and amend metrics that are found to be less pertinent based on local and international expertise.

Outcomes focus:

- Baseline PROMs data capture
- Short and medium term revision rates
- 30 day readmission rates

Cost focus:

- Length of stay
- Percentage increase in total cost of arthroplasty care to insurer year on year
- Percentage of cases with copayment levied upon the patient

Discovery Health, South Africa

Context

- **Problem/challenge statement:** For many privately insured patients, access to needed surgical care for hip and knee arthritis has been challenging due to wide variation in out-of-pocket expenses and a lack of understanding of their options. For health professionals in this field, there has been little to no comparable data outcome sharing to enable self and peer review and improvement cycles. From an insurance perspective, the costs associated with elective hip and knee arthroplasty have been increasing exponentially, with extensive variation between hospitals and care teams that cannot be accounted for by demographic or inflation changes.
- **Involved stakeholders:** This programme was designed and iterated over several years to account for the feedback of multiple stakeholders, including medical societies, private provider groups, regulators and insurers.
- **Funder:** The private medical aids administered by Discovery Health are the funders of the care given in the programme, which is largely covered by a fixed fee agreement.
- **Coverage:** Over 7,000 patients each year benefit from receiving arthroplasty care under the teams contracted to the value-based care network.

Impact generated and value created

Value for organization:

Quantitative (clinical and economic)

- Length of stay reduced by 25%.
- 30-day readmission rates reduced by 30%.

Qualitative (brand reputation)

- Surgical teams who have shown innovation and high-quality results have also ventured into new pilot programmes or been offered additional contracts for a wider service scope. This is mostly driven by the providers themselves who have increasingly challenged traditional models and contracts since this programme launched.

Value for patients:

- More than 97% of all elective hip and knee arthroplasty cases are now done under network care teams with no out-of-pocket payments from the patient.
- Increased optionality around place of recovery as more surgical teams offer same-day discharge to home after surgery.

Societal impact:

- Stimulus for surgical teams to offer innovative pathways for arthroplasty care: percentage of arthroplasty cases conducted in same-day discharge models increased 14-fold following the programme introduction.
- Better access to fully funded care outside of Discovery: other private health insurers followed suit and introduced arthroplasty fixed fee models in the years following the programme launch.



Background and starting point

- **Organization at a glance:** Novartis, a global pharmaceutical company, headquartered in Switzerland with approximately 769 million patient reach in 155 countries (2020).
- **Problem/challenge statement:** Demonstrating the value of one-time gene therapies within the current health technology assessment (HTA) context and designing access and innovative payment models to reach traditional markets and beyond.
- **Product or service focus:** One-time gene therapy
- **Disease area:** Spinal muscular atrophy (SMA), a rare degenerative neuro-muscular disease

Contracting/solution life cycle approach

- Demonstrating the value of a one-time therapy can be challenging, with no established methodologies for therapies with life-long effectiveness. A variety of methodological approaches were used (e.g. innovative analogues that reflect the life-long transformative impact, such as transplant surgery and benchmarking against other high-cost rare diseases – to analyse cost-effectiveness.
- Engaging early with HTA bodies and institutions like the Institute for Clinical and Economic Review (ICER) and National Institute for Health and Care Excellence (NICE) to share data and address questions, allowing for a cost-effective price assessment by independent institutions.
- Articulating one-time therapy prices on an annualized basis allowed for value-based pricing comparison with chronic therapies.
- Innovative payment models help address affordability and uncertainty concerns associated with innovative therapies. Models such as retroactive rebates, deferred payments and instalment options, and outcomes-based rebates offer the flexibility and partnership required to link payment to specifically agreed outcomes over time and allow gene therapies to fit into a “chronic therapy” model.

Context

- **Goal:** When considering transformative one-time gene therapies, health systems manage uncertainty about the durability of benefit, upfront payment for a lifetime benefit and affordability issues. In this context, traditional value assessment methodologies and payment models designed for chronic therapies may not be the right fit creating challenges for access to innovative therapies.
- **Involved stakeholders:** Patients, health authorities, health technology assessment (HTA) bodies, payer and reimbursement bodies, healthcare professionals.

Impact generated and value created

Value for organization:

Quantitative (clinical and economic)

- Access pathways in 30+ countries and enabling treatment of 2500+ patients

Qualitative (brand reputation)

- Demonstrating capabilities to successfully commercialize one of the first gene therapies

Value for patients:

- Rapid access to the only spinal muscular atrophy treatment designed to directly address the genetic root cause of the disease.

Societal impact:

- New approaches and innovative access pathways can be used by healthcare systems as new breakthrough cell and gene therapies continue to come to market. Emerging signs show healthcare systems are beginning to translate the science to adapt to transformative access models to rapidly accelerate access to these new modalities.

Background and starting point

- **Organization at a glance:** Medtronic is a medical technology company that develops, manufactures, distributes and sells device-based medical therapies and services. Estar is the regional technical-administrative body providing purchasing support to guide local health authorities, regional health institutions and hospitals. (Central Purchasing Healthcare Tuscany Region).
- **Problem/challenge statement:** Both Medtronic and Estar were looking for a first outcome-based experience in the current procurement system in the public environment in Italy.
- **Pathway scope:** The ablation treatment for atrial fibrillation (AF) disease has been identified as the testing therapeutical area to validate a regional outcome-based procurement approach.
- **Product or service focus:** Cryoablation procedure performed by Medtronic Arctic Front Cryoballoon. This technology was one of the therapeutical options selected by regional authorities and available for hospital use thanks to a regional tender established in 2018.
- **Population segment:** Patients with paroxysmal and persistent AF indicated for pulmonary vein isolation treatment by catheter ablation with cryoablative technology.

Contracting/solution life cycle approach

Model description:

- **Scope:** To review the traditional purchasing contract after tender award from volume-based to outcome-based
- Tender preparation and tender publication: Followed the traditional approach
- **Tender award:** Medtronic awarded the tender lot on cryoablation
- **Tender contract and execution:** Risk-sharing clause was added to the contract for the cryoablation kit delivery, and the contract was integrated accordingly, with no additional costs, and in compliance with the rules and principles governing public procurement in Italy (i.e. code for tenders).
- **Outcomes measurement:** The established outcome to define the success of the procedure has been monitored through a regional form and other digital tools adopted by hospitals.
- **Outcomes focus:** AF recurrence that required a repeat ablation.
- **Cost of care focus:** Reduction of hospital readmissions due to recurrence of AF that leads to a patient re-ablation.



Medtronic, Italy

Context

- **Goal:** To establish the first outcome-based contract in the public environment in Italy defining the legal and administrative framework in the current Italian procurement code.
- **Involved stakeholders:**
 - Hospital level (physicians, pharmacists, and director-generals of the five hospitals currently using the technology)
 - Regional level (director-generals and technical commission of the regional purchasing body of Tuscany region, ESTAR)
 - Medtronic
- **Funder:** Tuscany region
- **Coverage:** Hospitals diagnosis related group payments for the cardiovascular procedures
- **Payment type:** Payback in case of therapeutical failure

Impact generated and value created

Value for organizations:

- Testing new business models to understand their feasibility in the current market space

Quantitative (clinical and economic)

- Reinforce the regional capability to measure clinical outcomes for AF disease
- Reduce the REDO (repeat ablation) up to 15% in the indicated population

Qualitative

- To confirm the clinical and economic value of cryoablation in the clinical practice
- To reinforce Medtronic's leadership in the value-based healthcare space, acting as the first mover in the Italian environment

Value for patients:

- To improve patient management and clinical outcome in the treatment of AF disease

Societal impact:

- To move towards a patient-centric approach
- To contribute to the healthcare system's sustainability
- To support the innovative technology introduced through real-world data generation

Background and starting point

Organization at a glance: Holston Valley Medical Center is a hospital in Kingsport, Tennessee, now affiliated with Ballad Health and renowned for its expertise in cardiovascular care.

- **Problem/challenge statement:** Even though studies have shown instantaneous wave-free ratio (iFR) and intravascular ultrasound (IVUS) are beneficial in the percutaneous coronary intervention (PCI) setting, the overall adoption rate remains low with use of less than

20%. Can facilitate more appropriate, evidence-based use of iFR & IVUS in non-myocardial infarction (MI) PCI and improve clinical outcomes at a lower total cost.

- **Pathway scope:** Use of iFR and IVUS in non-MI PCI
- **Product or service focus:** Use of iFR and IVUS
- **Population segment:** Non-MI patients requiring inpatient or elective PCI

Contracting/model/solution life cycle approach

Outcomes focus:

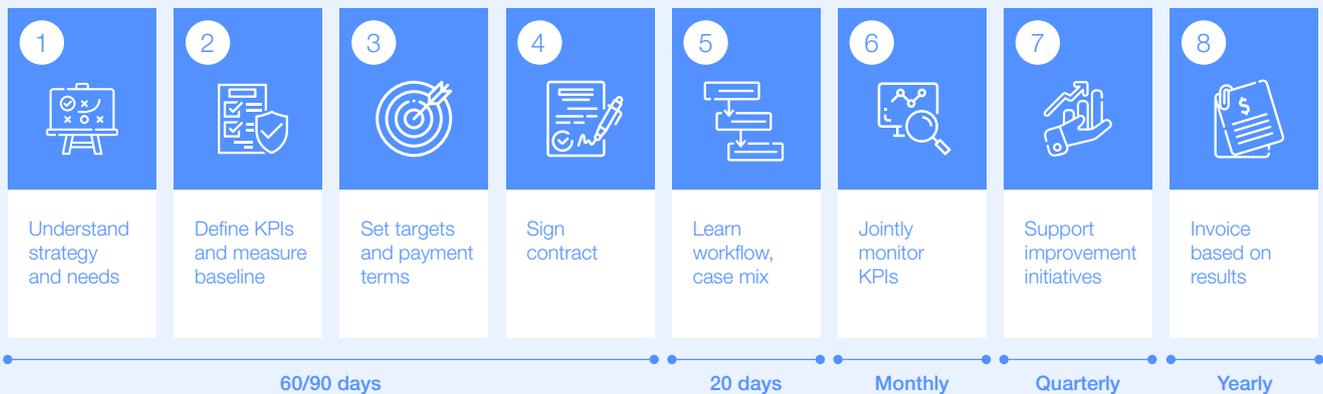
- Reduce 30-day re-admits for target vessel revascularization/target vessel revascularization
- Improved rates of same-day discharge (SDD)

- Reduced incidence PCI related acute kidney injury (AKI1)
- Reduced variable cost per case

Understand value, define KPIs, baseline

Deliver added-value and monitor

Review value and reconcile



Philips, USA

Context

- **Goal:** Improve health outcomes while lowering costs for Holsten Valley by increasing the iFR/IVUS use.
- **Involved stakeholders:** C-level executives, cardiovascular service line, Philips value-based care programme team, Philips Care Transformation Office
- **Funder:** Philips Care Transformation Office
- **Coverage:** No change to payment
- **Payment type:** Diagnosis-related groups (DRG)/ ambulatory payment classifications (APC) and current procedural terminology (CPT) coding

Impact generated and value created

Value for organization:

Quantitative (clinical and economic) after 12 months

- Zero 30-day readmissions with iFR/IVUS patients
- Reduced procedure costs by \$99,939 (reduced stents per case, no hyperemic agent used)
- Increased same-day discharge by 12.5%
- Lowered acute kidney injury rate from 9.1% to 7.9%

Qualitative (brand reputation)

- The programme facilitates a deeper customer relationship through the partnership to improve health outcomes.

The value-based healthcare programme provided Philips with the opportunity to build a real-world evidence story that shows a clinical and financial benefit over a time horizon that is meaningful to both payers and providers.

Value for patients:

- Better health outcomes and increased patient satisfaction

Societal impact:

- Better health outcomes at a lower cost



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