Value-based healthcare

Is India ready for a paradigm shift?

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The Economic Times HSMS
HOSPITAL STRATEGIC MANAGEMENT SUMMIT 2019
2nd Edition

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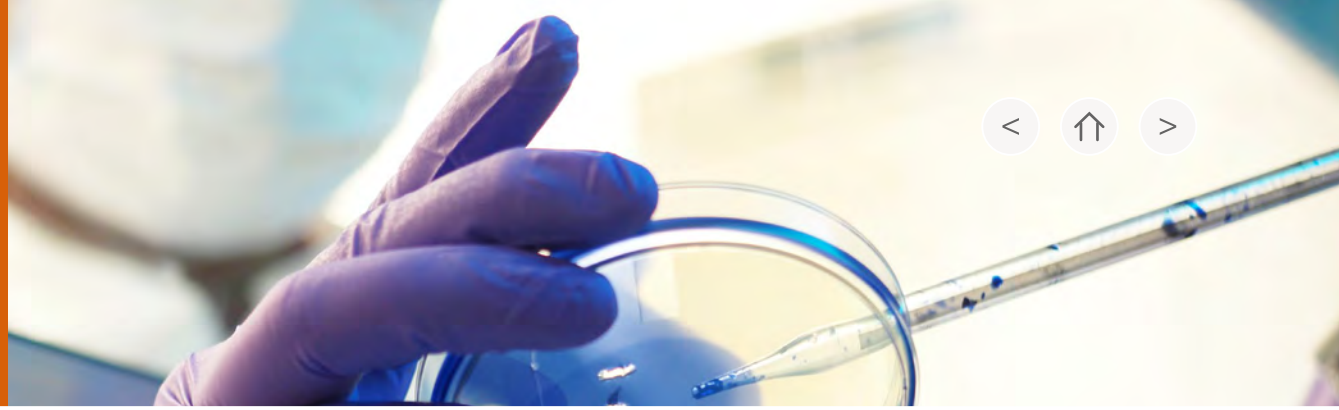
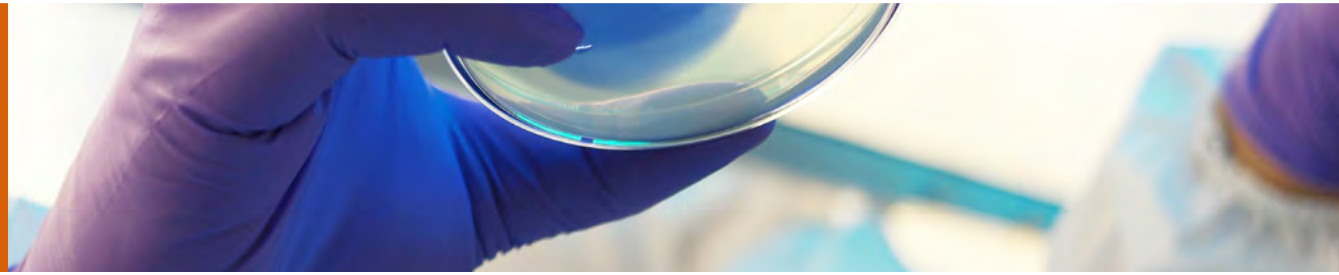


Executive summary



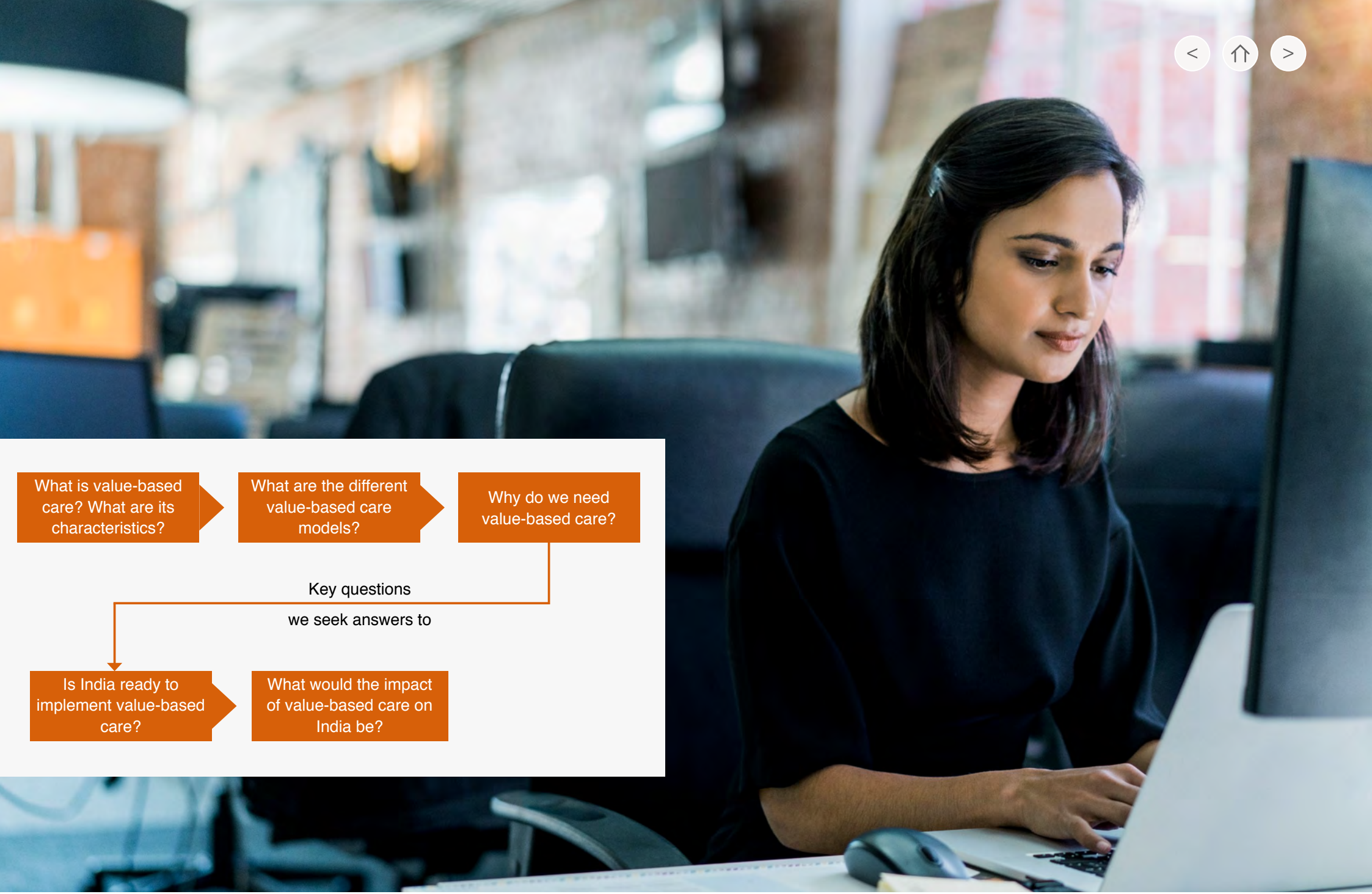
Traditionally, from the payment perspective, the healthcare model has been fee for service, where payment is made on the basis of the number of services provided. This model results in a definite conflict of interest from a patient's perspective as the focus is on quantity rather than quality of service. However, this model is slowly being replaced by value-based care, where payment is outcome based and providers are rewarded according to the quality of the treatment received.

The major aims of value-based care are implementing continuum of care, enhancing patient experience, standardising outcome and cost of care, and treatment delivery through a collaborative chain of activities with measurable outcomes. The different value-based models range from bundled payment to shared risk and shared savings models, depending on the focus of care and financial flexibility.

The need for value-based care is realised because of increasing healthcare expenditure, excess healthcare costs attributed to unnecessary and inefficient services along with uncoordinated care. All these factors coupled with increased patient expectations have set the stage for the adoption of value-based healthcare, where the payment for care is tied to clinical outcomes and service quality.

Implementation of value-based care would require the building blocks of public financing, resource availability, utilisation of technology and a collaborative ecosystem. In the context of the Indian healthcare system, which largely operates on the fee for service model and has high out-of-pocket expenditure, inadequate infrastructure and technology support, implementing value-based care would require in-depth strategic and financial planning along with transformation of the delivery model. The Government is also expected to play a significant role by implementing enabling policies. Going forward, Ayushman Bharat, with its focus on Government funding and preventive as well as curative care, will lay the foundation for value-based care implementation in India.

Once implemented, value-based care will likely result in today's fragmented care delivery evolving into tomorrow's circle of care. If implemented as envisaged, in five years, we could look at saving almost 9 lakh lives and reducing healthcare cost by around INR 4,000 billion.


What is value-based care? What are its characteristics?
What are the different value-based care models?
Why do we need value-based care?
Key questions
we seek answers to
Is India ready to implement value-based care?
What would the impact of value-based care on India be?

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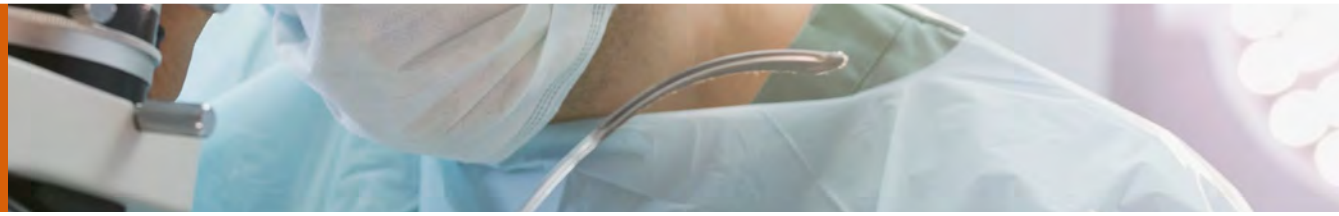
What is value-based care?



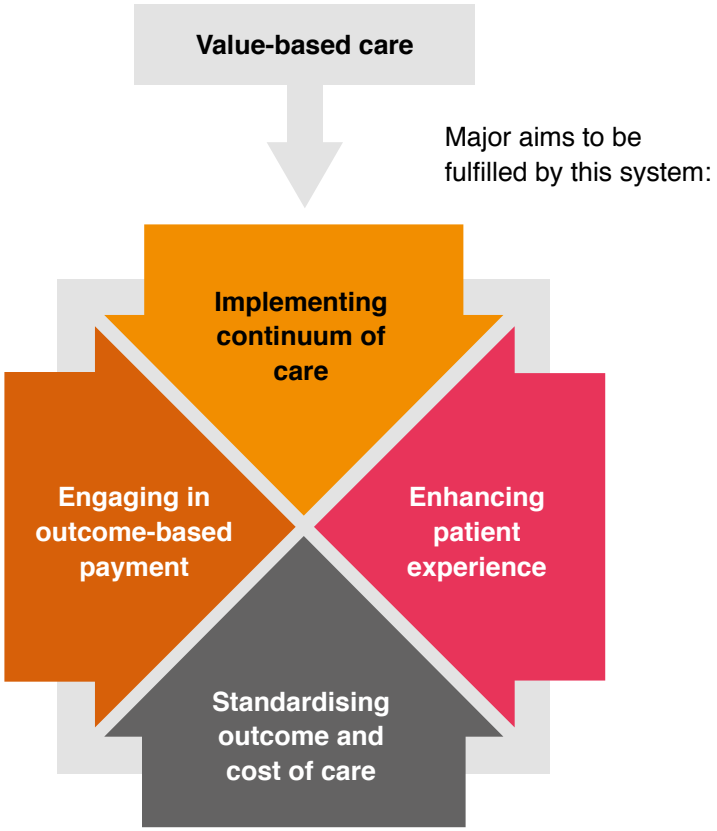
There are two major kinds of healthcare models (from a payment perspective): The traditional fee-for-service and the upcoming value-based care model.

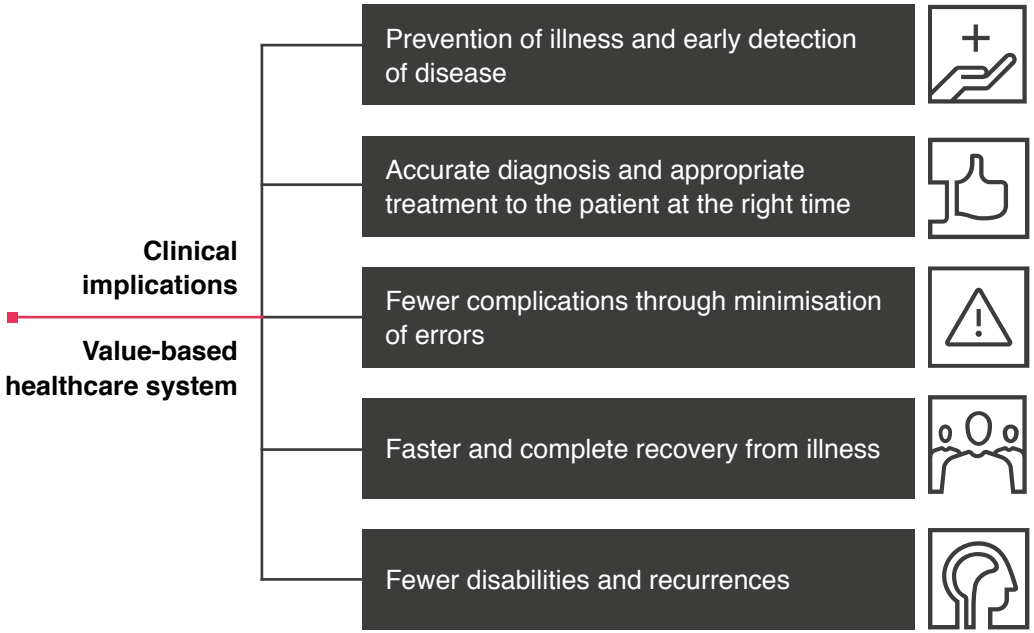
Parameters	Fee for service (FFS)	Value-based care
Relevance	**Traditional** healthcare model	**New age** healthcare model
Reward	**Quantity-based** system in which **fees are paid** for **every service** provided	Quality-based system in which fees are paid based on the **outcome of the treatment**
Patient centricity	**Creates a conflict of interest** as it provides incentives to caregivers based on a higher number of visits, procedures, tests, treatment, etc., which may **not be in line with patient health** and wellness.	Patients are at the centre of care; providers are incentivised to **provide appropriate care** and treatment designed to promote health and wellness rather than excessive treatment and profit.
Outcome measurement	Not done on a regular basis. Also, there are no defined metrics.	Reimbursements are usually linked to meeting **particular performance criteria**.

Source: Fakkert, M, Eenennaam, F. V., & Wiersma, V. (2017). Five reasons why value-based healthcare is beneficial. HealthManagement.org, 17(1). Retrieved from https://healthmanagement.org/c/healthmanagement/issuearticle/five-reasons-why-value-based-healthcare-is-beneficial

Industry discussions and PwC analysis

Value-based healthcare is a payment system that compensates healthcare providers in accordance with the quality of care provided to their patients.





- A value-based healthcare model prioritises patient-centric care.
- It incentivises healthcare providers to keep their patients healthy, which can lower healthcare costs.
- Healthcare providers are pushed to provide quality care that improves patient outcomes.

Source: Fakkert, M., Eenennaam, F. V., & Wiersma, V. (2017). Five reasons why value-based healthcare is beneficial. HealthManagement.org, 17(1). Retrieved from https://healthmanagement.org/c/healthmanagement/issuearticle/five-reasons-why-value-based-healthcare-is-beneficial

Industry discussions and PwC analysis

Value-based care aims to improve patient experience and reduce the cost of care.

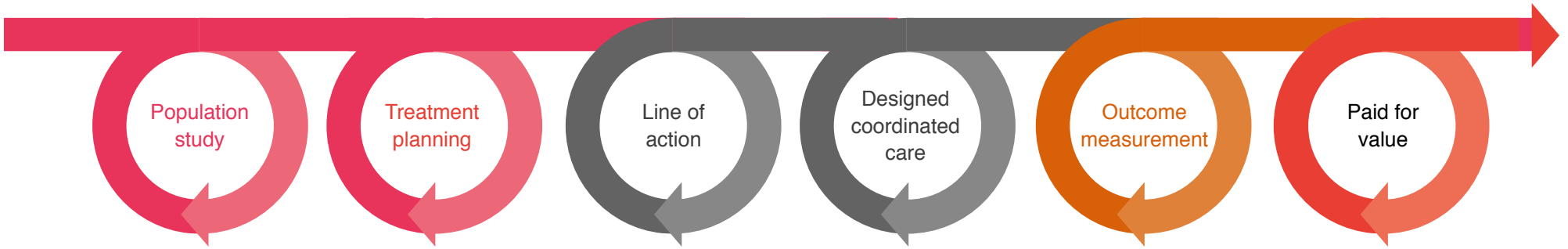
Aims of value-based care

Implementing continuum of care	Integrates various aspects of care so that a patient can avail all necessary medical services via appropriate consultation and advice. This will help leverage the best possible treatment options for patients.
Enhancing patient experience	Treatment is provided in a transparent and cost-efficient manner in order to improve patient experience and increase reimbursement rates.
Standardising outcome and cost of care	Outcome measurement with the aim of providing quality and patient-centric care at a lower cost leads to higher patient engagement and satisfaction.
Engaging in outcome-based payment	Shift to outcome-based payment improves the service quality, ensuring optimum resource utilisation.

Technology-enabled systems will ensure appropriate data availability and analysis to guide improvement measures.

Source: PwC analysis

Value-based healthcare planning is delivered through a collaborative chain of activities with measurable outcomes.

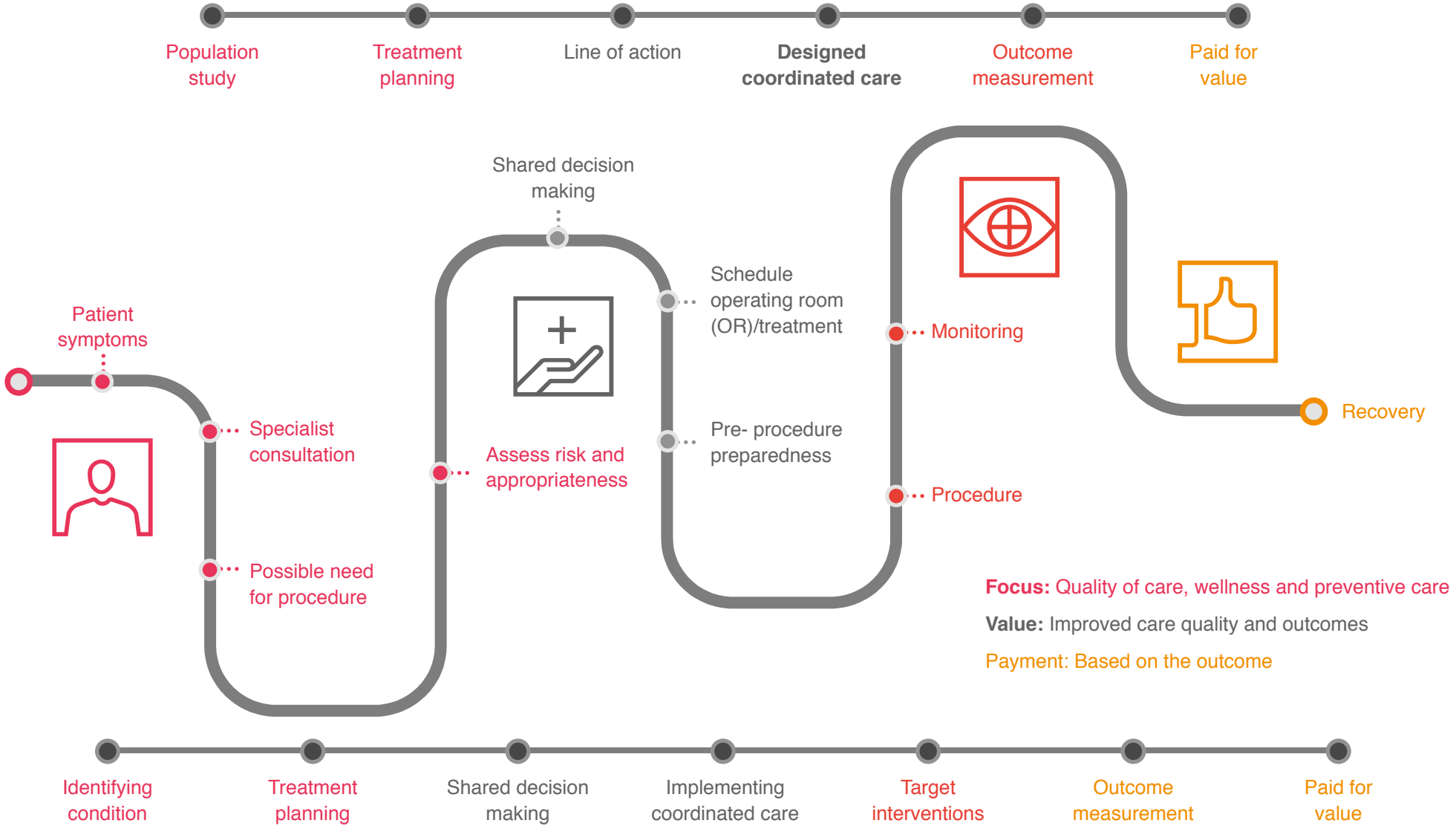


Collaborative activities to deliver value-based healthcare				
Stakeholders	Central authority/Government	Central authority/Government and healthcare providers	Central authority/Government and healthcare providers	Central authority/Government
People	Planning managers	Care team	Clinical analyst	Executive managers
Action	Planning and model creation	Discussion and data analysis	Research on outcome	Payment monitoring
Activities involved	Population study (risk, appropriateness, need)	Task allocation and scheduling	Outcome analysis	Payment calculation
	Programme targeting	Workflow and reporting (shared decision)	Record intervention	Programme reporting
	Effective manpower planning (specialist and paramedics)	Prioritisation and preparedness	Set monitoring/intervention rules	Programme optimisation

Source: Kaplan, B., & Bower, M. (March 2018). Value-based health care. Harvard Business School.

PwC analysis

At the healthcare-provider level, care delivery must lay emphasis on integrated, evidence-based care through shared decision making.



The process of care followed at the provider level would promote the aspect of shared decision making which would enhance the line of treatment and also ensure the best possible treatment is provided to the patient at a lower cost.

Source: Walsteijn, M. (9 April 2015). Enabling Value Based Health Care. Pathways to Partnerships and Edifecs.

PwC analysis

3

What are the different value-based payment models?

Models	Principle	Description/details/examples	Financial risk to provider
Bundled payment	• Single **collaborated payment for all services** in a particular condition such as pregnancy along with childbirth. • Payer **knows the payment amount upfron**t instead of getting the final bill at the end of a treatment course.	• Provider benefits from the savings generated by **efficiencies within the bundle** and the payer would spend less. • Provider faces the potential risk of losing out on cost saving – e.g. if there is any complication. The following bundles were considered in one of the pilot projects in the USA: • **Replacement procedures:** Knee/hip • **Chronic conditions:** Diabetes, hypertension and coronary artery disease	Medium to high risk
Capitation models	• In this model, a provider or a group of organisations collects a **set payment per patient** for specified medical services from the payer. • These payments are usually in the form of a **monthly per patient fee**.	• **Single and comprehensive** payment for the patient • When the cost of the service provided is below the capped rate, providers would be rewarded. However, providers would be at high risk in case the cost exceeds the capped rate, and this extra cost would have to be borne by them. This could be the case with high-risk and chronic patients.	High risk

Source: Various publications from Center for Healthcare Quality and Payment Reform
Miller, H. D. (2009). From volume to value: Better ways to pay for health care. HealthAffairs, 28(5). Retrieved from https://www.healthaffairs.org/doi/10.1377/hlthaff.28.5.1418
Valence Health. (2013). Models of value-based reimbursement: A Valence Health primer. Retrieved from https://docplayer.net/16514376-Models-of-value-based-reimbursement-a-valence-health-primer.html,
Industry discussions and PwC analysis

Models	Principle	Description/details/examples	Financial risk to provider
Pay for performance	• Financial **incentives/disincentives are linked to performance**, and a bonus is awarded for exceeding a specific metric or a penalty is imposed for falling short of the threshold.	• An example of an incentive linked to achieving the set goal: • A vaccination programme has a goal to vaccinate 70% of its patients by the age of 18 months in accordance with the national guidelines. • If any **provider exceeds that goal** and vaccinates 80% of the children, it would **receive a bonus in addition to the FFS rates**.	Low to moderate risk
Patient-centred medical home	• Driven by primary care focusing on **building a team of professionals** – specialist doctors, medical assistants, technicians, pharmacists (people responsible for coordinating patient care)	• Mostly for patients with **chronic conditions** in order to **reduce readmissions** and **emergency** department **visits** • Providers can negotiate a fee for service rate increase or **per member per month** over and above the standard FFS payment.	Moderate risk

Source: Various publications from Center for Healthcare Quality and Payment Reform

Miller, H. D. (2009). From volume to value: Better ways to pay for health care. HealthAffairs, 28(5). Retrieved from https://www.healthaffairs.org/doi/10.1377/hlthaff.28.5.1418

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Industry discussions and PwC analysis

Models	Principle	Description/details/examples	Financial risk to provider
Shared risk	• In this model, providers **have the incentive of sharing cost savings and the disincentive of sharing the excess costs** of care delivery.	• This system is based on a **pre-decided budget with a payer,** and calls for the provider to cover a portion of costs if savings targets are not achieved. • In this model, the payer needs to prepare a shared risk structure that the provider would be inclined to accept. • The provider can limit its risk by appointing a third-party insurer and paying them a fixed fee for accepting all financial risk beyond a certain point.	High risk
Shared savings	• The **payer and provider** enter into **an agreement** that includes patient attribution, service provision and estimated medical costs. • Providers would submit bills and claims as in the routine FFS model.	• Bills are submitted as under the FFS model, post which analysis and review would be done by the payer and provider to identify the savings generated, if any. If the bills are below the target set by the payer, the provider is eligible for a certain share of the savings. • In case the bill is above the set target, no penalty is levied on the provider. • One downside is that providers that already work in a cost-effective manner would be less inclined towards adopting this model.	Moderate risk

Source: Various publications from Center for Healthcare Quality and Payment Reform
Miller, H. D. (2009). From volume to value: Better ways to pay for health care. HealthAffairs, 28(5). Retrieved from https://www.healthaffairs.org/doi/10.1377/hlthaff.28.5.1418
Valence Health. (2013). Models of value-based reimbursement: A Valence Health primer. Retrieved from https://docplayer.net/16514376-Models-of-value-based-reimbursement-a-valence-health-primer.html,
Industry discussions and PwC analysis

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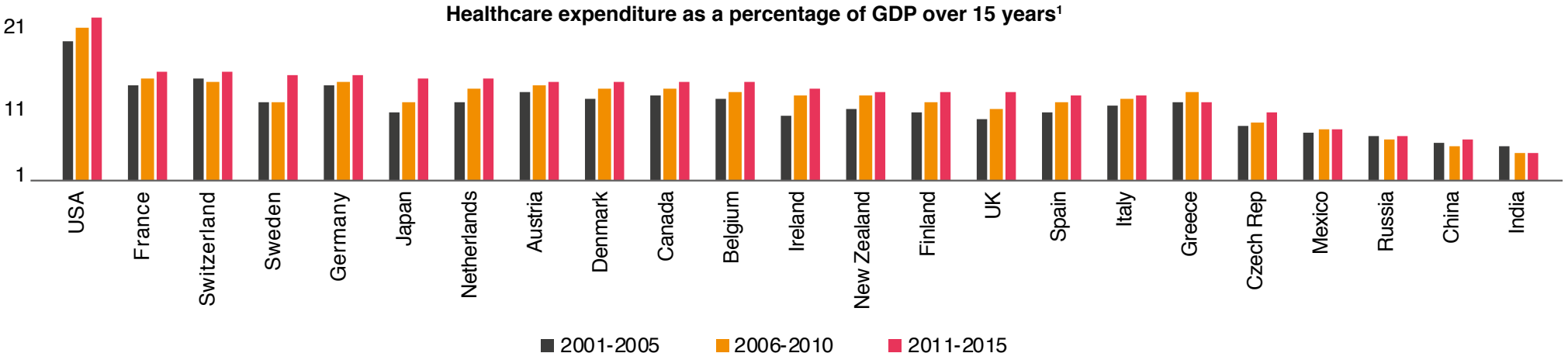
Why do we need value-based care?

Healthcare expenditure as a percentage of GDP has seen a steady rise, putting pressure on health systems.

Even as healthcare expenditure is on the rise, healthcare delivery costs remain a major concern. Around 17 countries in the graph below are spending close to 10% or more on healthcare only.

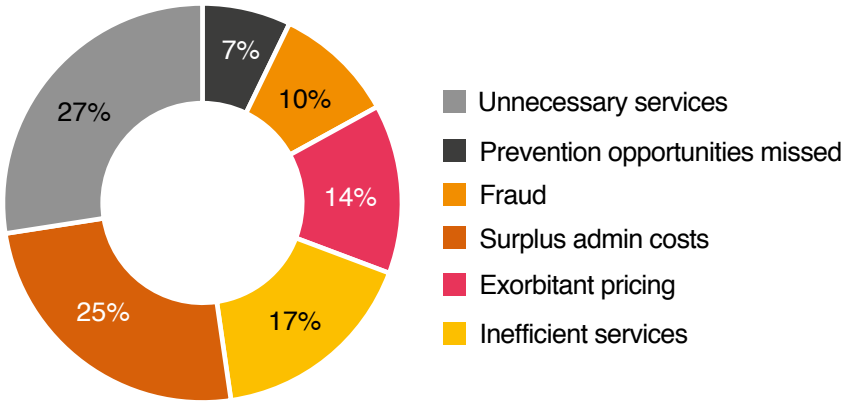
Increase in expenditure



1 OECD data on healthcare spending

Excess healthcare cost

Source of excess healthcare costs in USD billion in 2009[2]

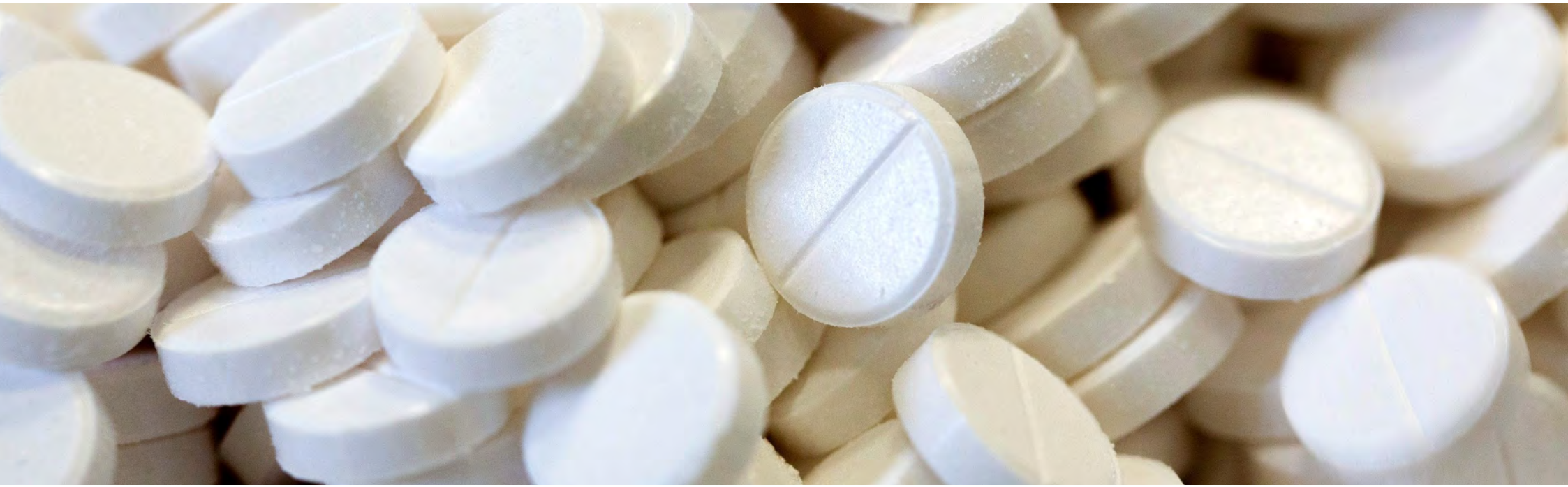


In 2009, the total amount of unnecessary healthcare costs in the USA was estimated to be

USD 750–765 billion –

that is, around one-third of the total healthcare spend.

2 Institute of Medicine. 2013. Best Care at Lower Cost: The Path to Continuously Learning Health Care in America. Washington, DC: The National Academies Press. https://doi.org/10.17226/13444



Integration of coordinated care with a focus on patient centricity would enable an integrated healthcare set-up that leverages value-based care delivery.

Making the shift from the current system of fragmented provider-based care to coordinated team-based care poses a challenge to the adoption of value-based healthcare.

Uncoordinated care

Between 2011 and 2014, US citizens had a **17%** readmission rate for pneumonia and heart attacks.[3]

Medical errors are the third leading cause of death in the USA after heart disease and cancer, with around **250,000** deaths in 2018.[4]

There is substantial evidence that a major percentage of healthcare spending is squandered on avoidable medical complications or redundant treatments.

Lack of health coverage

Developing countries face a lack of health coverage, which is directly impacting the accessibility of healthcare services to the population. As per the IRDAI, only 24% of the Indian population is covered under public or private health coverage.[5] Value-based care would be an enabler for improving the current scenario.

Need for patient centricity

Value-based healthcare has proved to be a cost-effective as well as patient-centric delivery system where payment is based on outcome and quality.

3. CMS research

4. Sipherd, R. (22 Feb 218). The third-leading cause of death in US most doctors don't want you to know about. Retrieved from https://www.cnbc.com/2018/02/22/medical-errors-third-leading-cause-of-death-in-america.html

5. National Health Profile 2017, PwC analysis

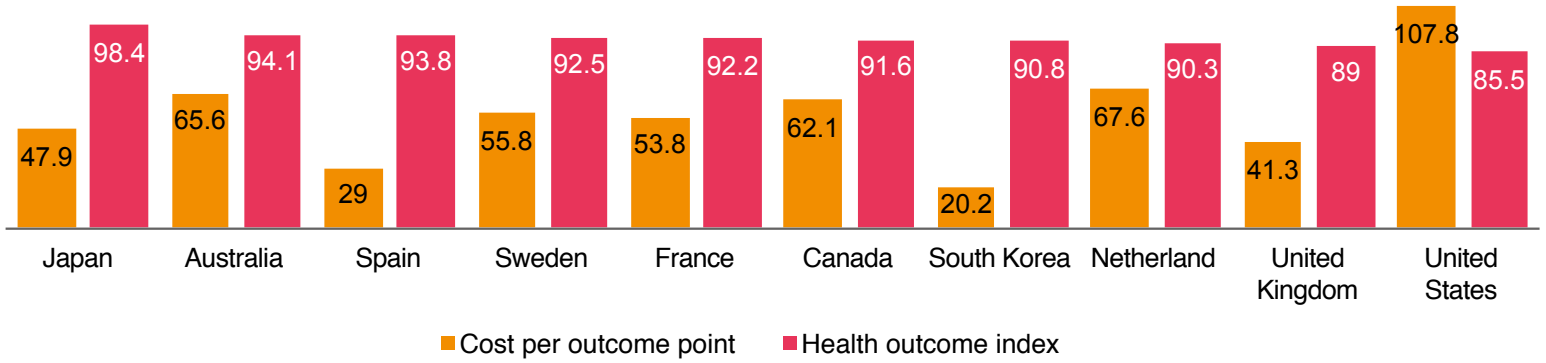
Increasing pressures of healthcare spending, care costs and patient expectations have set the stage for the adoption of value-based healthcare where the payment for care is tied to clinical outcomes and service quality.

Healthcare outcome

Healthcare spending is not always proportional to health outcomes. The cost per outcome point may vary based on the efficient allocation and utilisation of resources in delivering optimum healthcare services.

Cost per outcome point = Health outcome index/ Total healthcare spending	Health outcome index – composite outcome of disability-adjusted life years (DALYs), health-adjusted life expectancy (HALE), average life expectancy at age 60 and adult mortality rates

Healthcare spending vs cost per outcome[6]



Spending is not always proportional to the care delivered. It can be observed that even though the USA has the highest cost per outcome point, it has a lower health outcome index compared to its peers.

- In the case of the above countries, 90–100% of their population is covered under public or private insurance.
- The cost per outcome point value shows the actual expenditure per population:
  - For example, the USA spends USD 107.8 per head, while 90% of the population is covered under insurance.
  - At the same time, South Korea spends only USD 20.2 USD per head, while 100% of the population has insurance cover.
- It is evident that greater health coverage can be achieved even at a lower cost. Value-based healthcare can lower healthcare spending.

6. The Economist Intelligence Unit. (2014). Health outcomes and cost: A 166-country comparison. Retrieved from https://www.eiu.com/public/topical_report.aspx?campaignid=Healthoutcome2014

5

Is India ready to implement value-based healthcare?

The major building blocks for implementing value-based care include public financing, resource availability, utilisation of technology and a collaborative ecosystem.

- Willingness to align with a new age system
- Increased healthcare financing from the Government
- Availability of adequate infrastructure and resources
- Cooperation and shared responsibility
- Technology and data-driven performance

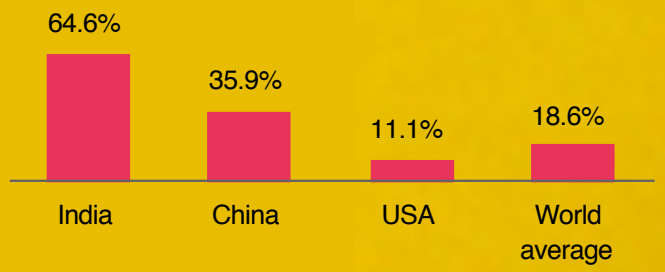
Building blocks for value-based care

The Indian healthcare system, which largely operates on the FFS model, has high OOPE expenditure and inadequate infrastructure and technology support.

1 The FFS payment system rewards doctors based on the number of procedures performed, without much focus on the clinical outcome.

2 Out-of-pocket expenditure (OOPE) as a percentage of overall health expenses in India is significantly higher compared to the global average.

OOPE as percentage of overall healthcare expenditure in 2016



3 Absence of essential healthcare infrastructure and inadequate resources are some of the major challenges in the overall healthcare scenario.

4 Lack of IT integration and limited accessibility of electronic medical records (EMRs). The central data repository for predictive analytics and treatment planning has a long way to go.

5 Different stakeholders are working in silos with minimal coordination.

Healthcare workforce per 1,000 population

0.7 doctors | 1.3 nurses

Source: World Bank data (2016), industry discussions, PwC analysis

Alignment with value-based care would require strategic and financial planning along with transformation of the delivery model; the Government also plays a significant role in implementing enabling policies.

1 **Strategic vision**

The volume to value shift requires strategic alignment with new economic and business relationships on the horizon.

2 **Financial preparation**

Today's FFS payment model would soon be converted to an outcome-based payment model, but the transition would be gradual and providers need to have a plan in place.

3 **Delivery model transformation**

Integrated care is the way forward and collaboration among stakeholders is a prerequisite. Development of the right mindset, utilisation of the necessary tools and capability development are required.

4 **Resource optimisation**

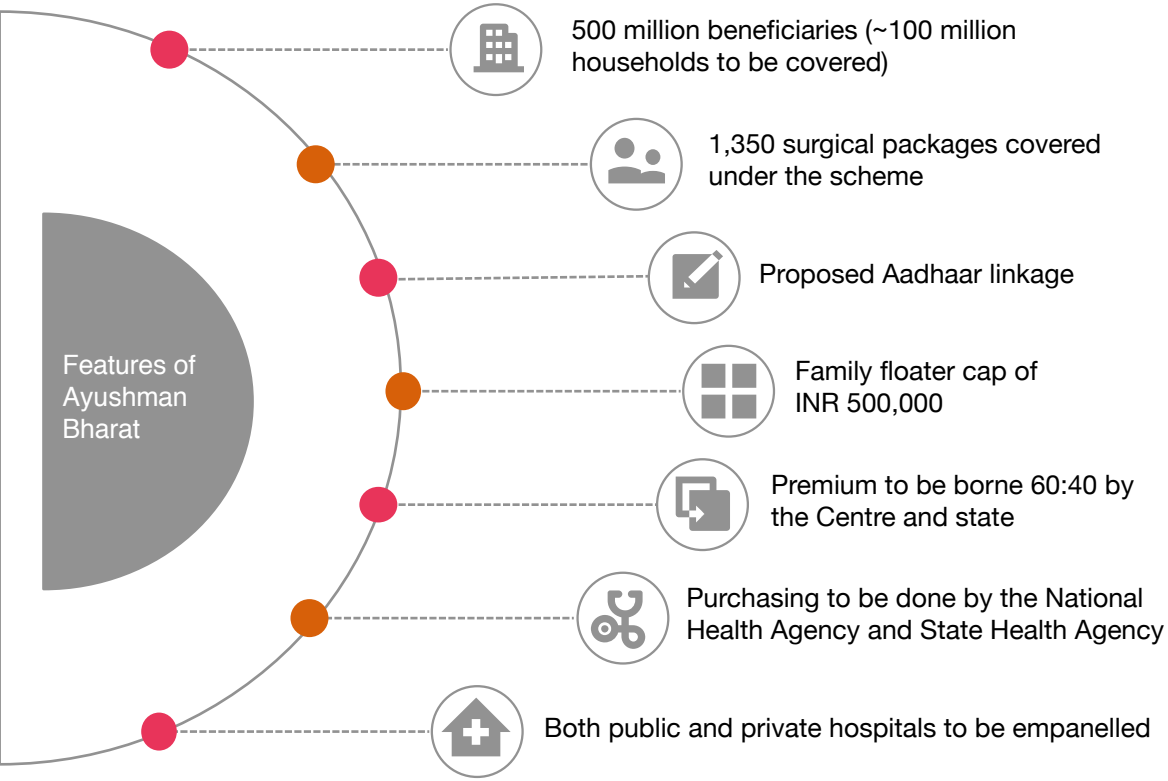
An optimum blend of skill, talent and people would facilitate the shift towards value-based care. Engagement with clinicians, who are going to be co-owners of outcome-based treatment, is a critical cornerstone.

5 **Enabling policies**

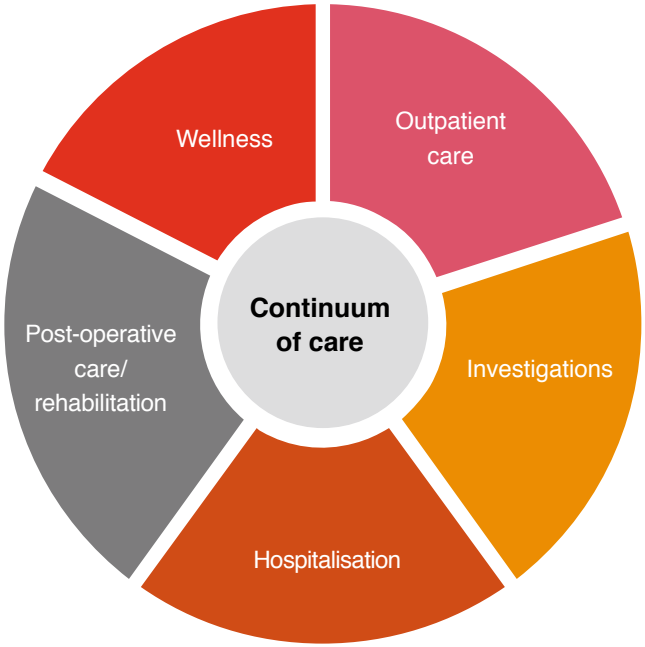
Nations moving towards value-based care require an ecosystem of enabling policies and supportive institutions that will help align all the stakeholders from provider to patient. The Government needs to play a major role in establishing the policy agenda.

Source: Industry discussions, PwC analysis

Ayushman Bharat, with its focus on Government funding and preventive as well as curative care, will lay the foundation for value-based care implementation in India.



The payment mechanism of Ayushman Bharat needs to be adapted in accordance with the gradual shift from volume- to value-based care.



1	2	3	4	5
Wellness	**Outpatient care**	**Investigations**	**Hospitalisation**	**Post-operative care/ rehabilitation**
Preventive care, primary care, immediate care	Specialist care, emergency care, ancillary care	Diagnostics	Inpatient care	Long-term care, skilled nursing, end-of-life care

Source: India Today Web Desk. (25 Sept 2018). All about PMJAY-Ayushman Bharat, the national health mission. Retrieved from https://www.indiatoday.in/india/story/all-about-pmjay-ayushman-bharat-the-national-health-mission-1348387-2018-09-25

ET Online. (31 Dec 2018). Ayushman Bharat health insurance: Who all it covers. Retrieved from https://economictimes.indiatimes.com/wealth/insure/ayushman-bharat-how-to-check-entitlement-and-eligibility/articleshow/65422257.cms?from=mdr,

Industry discussions and PwC analysis

6

What would the impact of value-based healthcare on India be?

Once implemented, value-based care will likely result in today's fragmented care delivery evolving into tomorrow's circle of care.

Today		Indian healthcare		Future
Quantity	←	Reward	→	Quality
Fragmented (in silos)	←	Care offered	→	Cycle of care
Subject of care	←	Patient	→	Leads care provision
Less transparent	←	Transparency	→	Transparency
Vendors	←	Stakeholder	→	Partners
Revenue generation	←	Business aim	→	Expense management
Provider dependant	←	Treatment	→	Evidence based

The Future: Circle of value-based healthcare

- Virtual health
- Diagnostics
- Pharmacy
- Home healthcare
- Payer
- Hospital

The current system of healthcare is in 'silos', which makes it difficult to provide the best possible outcome at the lowest possible cost. The fragmented system causes duplication of work and increases the cost while also reducing patient satisfaction.

Value-based healthcare will bring together all modalities of care delivery to create a well-coordinated 'continuum of care'.

Source: ECG Management Consultants. (Feb 2019). Transformational drivers in the health system of the future. Retrieved from https://www.ecgmc.com/thought-leadership/whitepapers/transformational-drivers-in-the-health-system-of-the-future

Industry discussions and PwC analysis

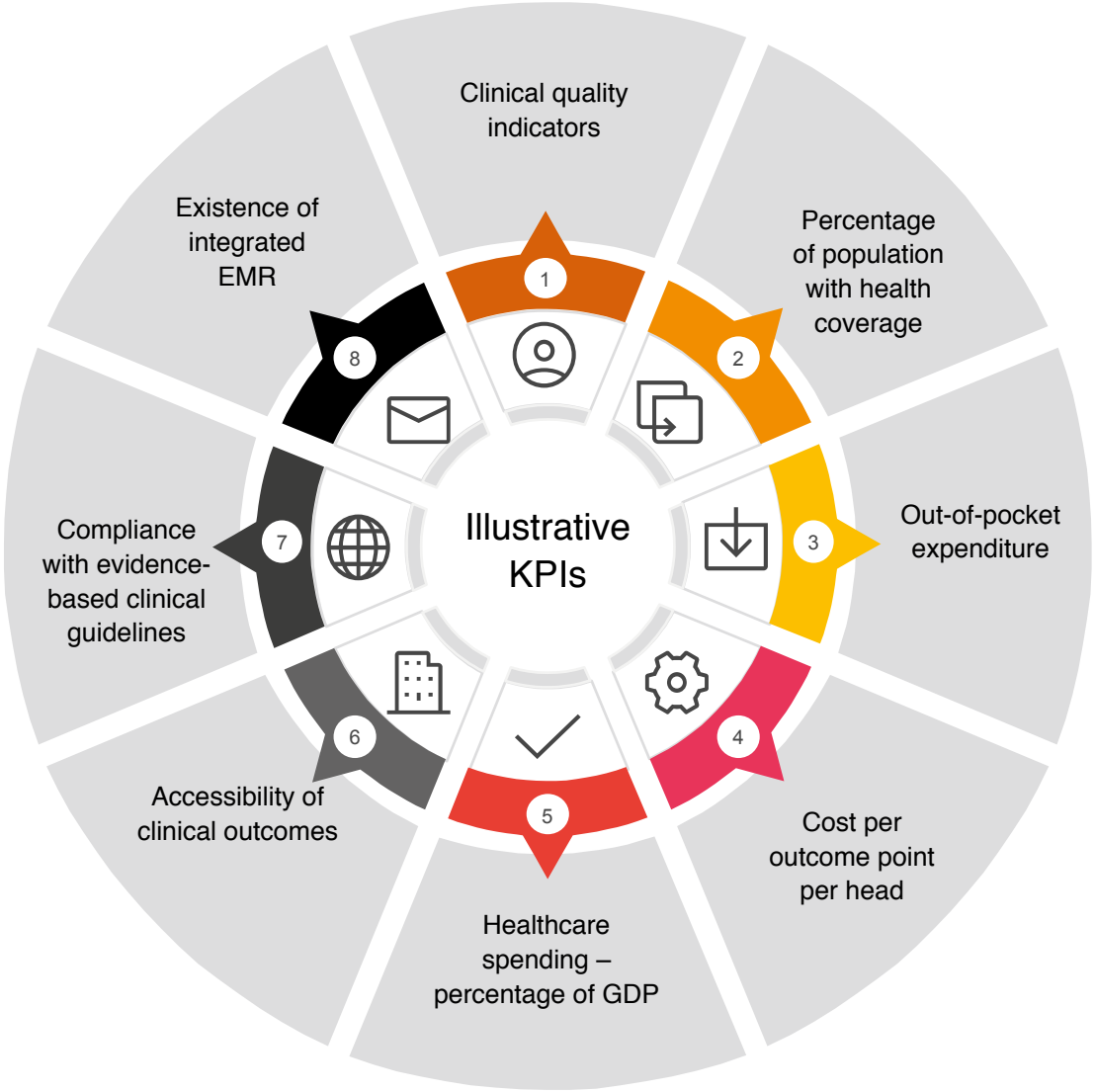
With the right implementation, value-based care could significantly reduce healthcare cost and improve clinical outcomes in India.

	2019		2024
Healthcare cost saving	INR 2,272 billion (USD 32 billion)	→	INR 4,004 billion (USD 57 billion)
Lives saved	8.7 lakhs	→	9.1 lakhs

Source: Industry discussions, PwC analysis

The success of value-based healthcare can be evaluated at all levels using measurable indicators for assessing quality of care outcomes and cost parameters.

Monitoring the KPIs below would help in analysing the adoption rate by healthcare providers.



About PwC's Healthcare practice

PwC India's Healthcare team offers advisory services in the healthcare sector covering multiple domains such as strategy, business planning, market scan, commercial due diligence, feasibility study, operations improvement, cost reduction, health IT, digital and technology, internal audit and PPPs.

The Healthcare Advisory team of 25 members combines over 40 years of operational experience in setting up and managing hospitals, and over 60 years of healthcare consulting experience. This enables the team to deliver granular strategy and market and operational insights of the highest quality. The team works with leading healthcare providers, medical technology companies, central and state governments, diagnostic players, insurance companies and private equity players on projects both in India and overseas.

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