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Evaluating the Costs and Benefits of Innovative Pricing and Payment Models in Europe

GRANT RESEARCH

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Background

- Across the EU, policymakers and health stakeholders face the challenge of **sustaining healthcare systems** while **fostering innovation**.
- Financial pressures have driven **cost-containment** and the search for models **enhancing efficiency** and access.
- Innovative Pricing and Payment Models (IPMs) align **affordability, access, and incentives** for high-value innovation, prompting growing stakeholders' interest in their design and implementation.[1-4]
- Evidence shows that **IPMs improve access** where **conventional pricing** models **fall short**, though their complexity and administrative burden remain.[5-9]

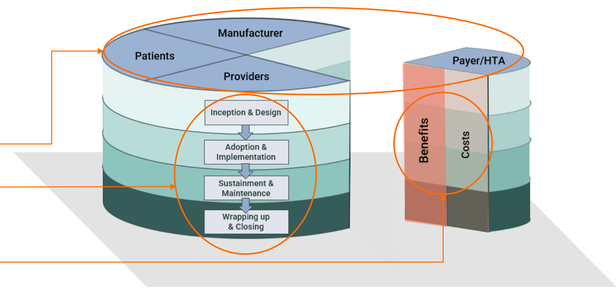
Aims

1. To document and assess the tangible and intangible costs and benefits of implementing IPMs across different model types, countries, and stakeholders.
2. To apply a structured framework and case studies to capture these costs and benefits comprehensively and inform future IPM implementation.

Methods

Assessment framework:

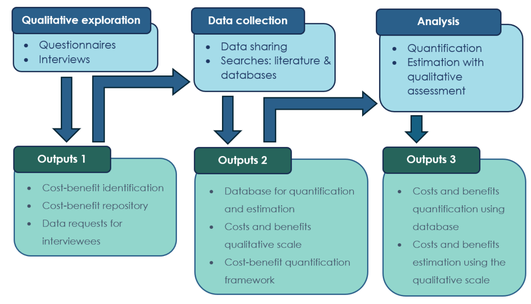
- Based on implementation science[10-13]
- Four stakeholders
- Four implementation phases
- Stakeholder and phases cross-cutting costs and benefits



FOUR CASE STUDIES BY IPM-TYPE	CASE STUDY DESCRIPTION
Outcome-Based Agreement (OBA)	A patient-level outcomes-based payment model for a gene therapy for haemophilia A in Germany.
Financial-Based Risk Sharing Agreement (FBRSA)	Population-level partially delinked revenue guarantee model for access to antibiotics. Implemented in Sweden.[7]
Portfolio or Bundling Agreement (PoBA)	Defined patient population level bundling of two medicines for multiple myeloma in Lithuania.
Instalment and Amortisation Payments (IaAP)	A patient-level outcomes-based staged payment model implemented in Italy and Spain to introduce two CAR-T therapies.[3]

Process for evidence collection and analysis:

1. **Qualitative exploration**: 24 interviews
2. **Data collection**: databases and literature searches
3. **Analysis**: quantifications and qualitative assessments



Results: cost and benefits

1. The cost-benefit inventory

COSTS	PAYERS	MANUFACTURERS	PROVIDERS	PATIENTS
Human Resources costs	• Negotiation • Set-up of scheme • Maintenance • Payment processing (e.g. re. IPM risk-sharing nature) • Wrap-up • Opportunity costs			
Transaction costs (excluding HR)	• Clinical monitoring • Infrastructure for IPM implementation • Supply chain, logistics, and storage • Legal costs • IT costs • Finance costs			
Medicine-related costs	• Price	• Adoption		• Out of pocket costs
Health-related costs				• Unexpected serious adverse events
Other costs				• Hospitalisations • Travel • Lack of information and training

BENEFITS	PAYERS	MANUFACTURERS	PROVIDERS	PATIENTS
Health-related benefits	• Efficacy/Safety • QoL		• Efficacy/Safety • QoL	• Efficacy/Safety • QoL
Revenue		• Anticipated Revenue and return on investment		
Cost savings	• Risk-sharing with reduced costs to asset • Cost-offset		• Cost-offset	
Early access	• Early access	• Earlier market launch	• Early access	• Early access
Spillovers and other positive externalities	• Knowledge spillover to other schemes • Infrastructure spillovers • Innovativeness and preparedness to absorb	• Knowledge spillover to other schemes or countries • Knowledge spillover to better product value understanding	• Scientific spillover • Infrastructure spillover • Upskilling HR • Innovation environment e.g. Clinical trials • Provider accreditation	
Other benefits	• Political win	• Risk sharing and generation of RWE • Predictability of revenue		• Quicker and more optimal adoption

2. Implementation costs and benefits: all case studies combined

Cost & benefits: all case-studies combined		Inception & design				Adoption & implementation				Sustainment & maintenance				Wrap-up & closing			
		Pay	Man	Prov	Pat	Pay	Man	Prov	Pat	Pay	Man	Prov	Pat	Pay	Man	Prov	Pat
Costs	Human Resource cost	2	2-3	1-2		2-3	2	1-2		2-3	2	1-2		1-2	1-2		
	Transaction cost	0-1	2			0-1	2	1-1		0-1	2	1					
	Health-related costs								3				3				3
	Medicine-related cost			1		3		1		3		1		3		1	
	Other costs	0-1									0-1		1		0-1		1
Benefits	Health related benefits											3	2			2-3	2-3
	Revenue										2-3				0-1		
	Cost savings									2-3		2		2		1	
	Early access									2	2	1-2	1-2	2	2	1-2	1-2
	Spillovers/ pos. externalities	1	0-1			1-2	1			1-2	1	1-2		1	1	1-2	
	Other benefits	0-1	1			0-1	0-1				0-1			1-2	2		

Abbreviations: Pay = Payer/HTA; Man = Manufacturer; Prov = Provider; Pat = Patient / Scores: 3= Significant; 2= Moderate; 1= Minor

Costs:

- ✓ Significant HR and transaction costs for payers/HTA, manufacturers and providers throughout the implementation
- ✓ Health-related costs to patients in terms of unrelated adverse events
- ✓ Medicine-related costs to payers/HTA or providers

Benefits:

- ✓ Broad stakeholder consensus on the high value of early access
- ✓ Significant health gains for patients and providers; strong ROI for manufacturers
- ✓ High savings potential for payers/HTA and providers through cost sharing or offsets

Results: temporal considerations

Cost & benefits: all case-studies combined		Inception & design				Adoption & implementation				Sustainment & maintenance				Wrap-up & closing			
		Pay	Man	Prov	Pat	Pay	Man	Prov	Pat	Pay	Man	Prov	Pat	Pay	Man	Prov	Pat
Costs	Human Resource cost	2	2-3	1-2		2-3	2	1-2		2-3	2	1-2		1-2	1-2		
	Transaction cost	0-1	2			0-1	2	1-1		0-1	2	1					
	Health-related costs								3				3				3
	Medicine-related cost			1		3		1		3		1		3		1	
	Other costs	0-1									0-1		1		0-1		1
Benefits	Health related benefits											3	2			2-3	2-3
	Revenue										2-3				0-1		
	Cost savings									2-3		2		2		1	
	Early access									2	2	1-2	1-2	2	2	1-2	1-2
	Spillovers/ pos. externalities	1	0-1			1-2	1			1-2	1	1-2		1	1	1-2	
	Other benefits	0-1	1			0-1	0-1				0-1			1-2	2		

- ✓ Trade-off: IPMs balance long-term or later-stage benefits against significant costs across all phases; decision-makers may aim to optimise this balance.
- ✓ Temporary IPMs: Some IPMs are beneficial only until the motivating issue (e.g., long-term uncertainty) is resolved (e.g., through data collection).

Discussion & conclusion

- ➢ We developed and applied a new evaluation framework to systematically capture IPM implementation costs and benefits across types, phases, and stakeholder perspectives.
- ➢ All IPMs introduced added complexity and higher HR, administrative, and transaction costs across stakeholders and phases, particularly for outcome-based agreements.
- ➢ Negotiating outcomes, measurement methods, and data systems (e.g., OBAs, IaAPs) imposed greater burdens on payers/HTA, providers, and manufacturers compared to simpler IPM types (e.g., FBRSAs).
- ➢ Despite these costs, IPMs enabled earlier access to innovation, improved outcomes, and moderate cost savings through risk-sharing and bundled payments.
- ➢ Broader benefits included knowledge spillovers, upskilling, real-world evidence generation, and reputational or policy gains.
- ➢ Given their temporal nature, stakeholders should optimise investment—return balance by reducing implementation costs or improving design.
- ➢ Overall, IPMs offer flexible means to align affordability, access, and innovation incentives, but require streamlined, time-limited implementation.

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