



# Assessing the Cost and Value of Radiotherapy: Globally, Regionally and in Member States.

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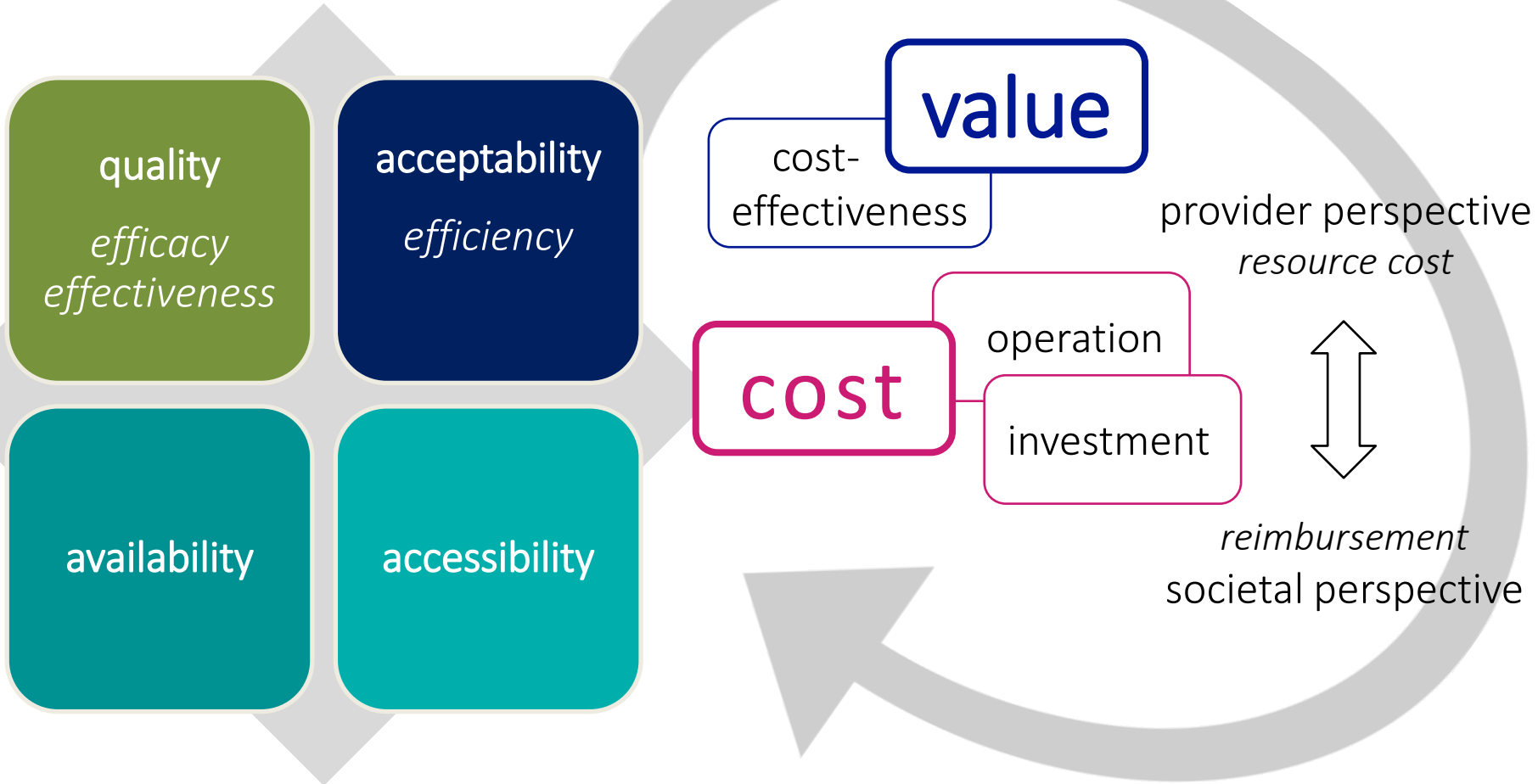


2022



**value** = 
$$\frac{\text{health outcomes that matter to patients}}{\text{costs of delivering these outcomes}}$$

*“The right to the highest attainable standard of health includes availability, accessibility, acceptability & quality.”*

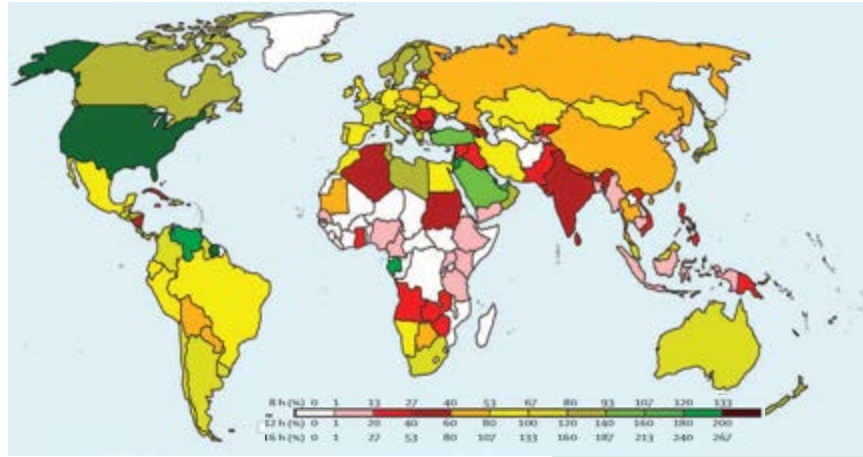


**cost**

*Time-Driven  
Activity-Based Costing*



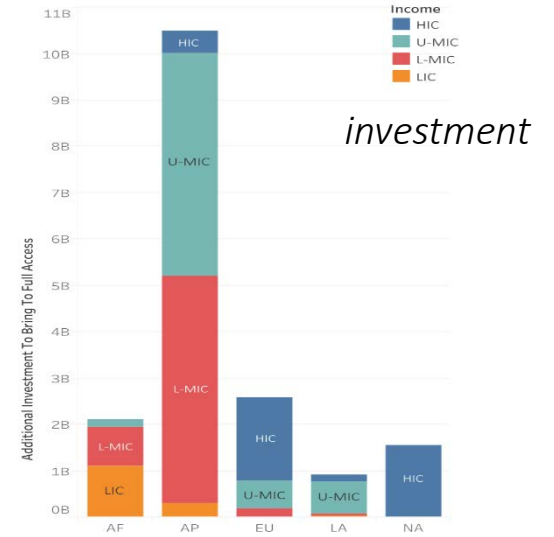
provider resource costs:  
*globally and regionally*



*availability & accessibility*



**IAEA**  
International Atomic Energy Agency



	High-income countries	Upper-middle-income countries	Lower-middle-income countries	Low-income countries
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*operation*

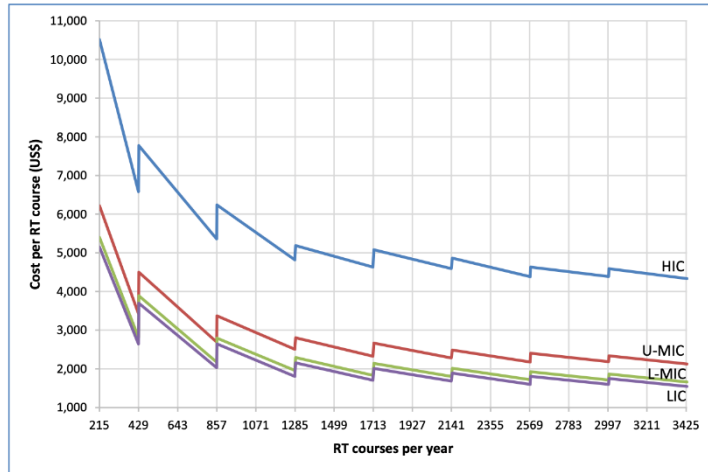
Operating cost per fraction	235	86	65	60
Upfront cost per fraction	803	357	349	352

*investment*

**cost**

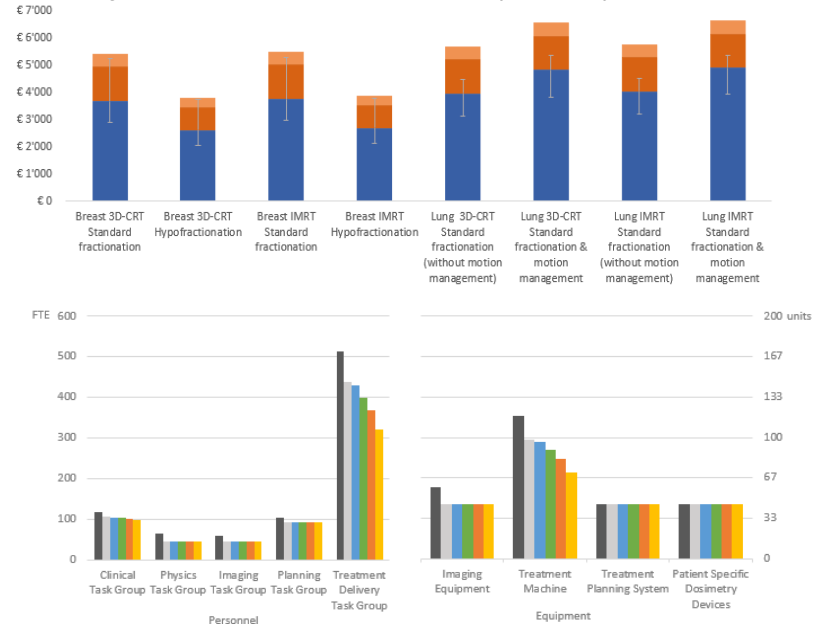
provider resource costs:  
*at national and department level*

*Time-Driven  
Activity-Based Costing*



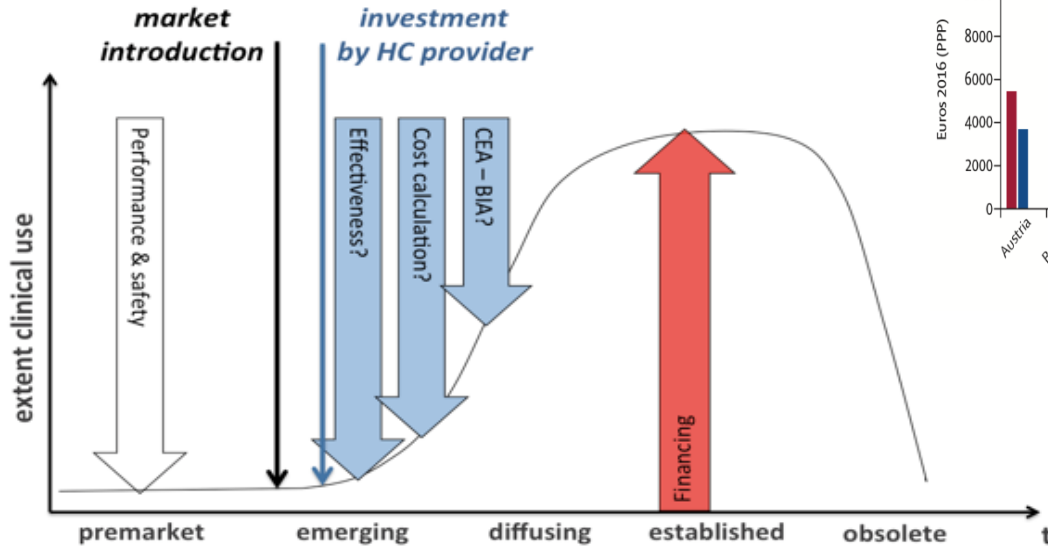
*department size*

*fractionation & complexity*

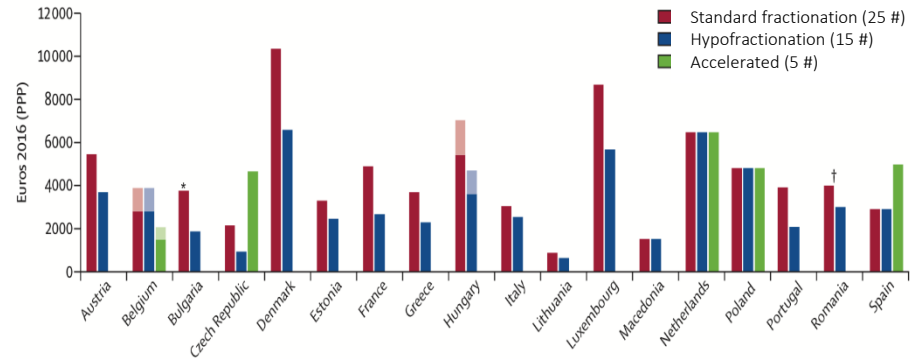


value

provider vs. societal costs:  
*effectiveness, efficiency*



*reimbursement, fractionation breast*



radiotherapy budget consumes  
**7,8%** of total cancer care costs  
**0,4%** of total health care costs

value

*emerging innovation*  
provisional reimbursement  
coverage with evidence development

support  
of investment  
or operation

standard-of-care

*proven innovation*  
episode-based reimbursement  
based on resource use & complexity

capital  
investment  
funding

additional  
payments

episode-  
based  
payment

+ support for  
data collection,  
quality  
management,...

ESTRO

esso

clinical research  
comparative effectiveness  
cost-accounting, economic &  
Health Technology Assessment

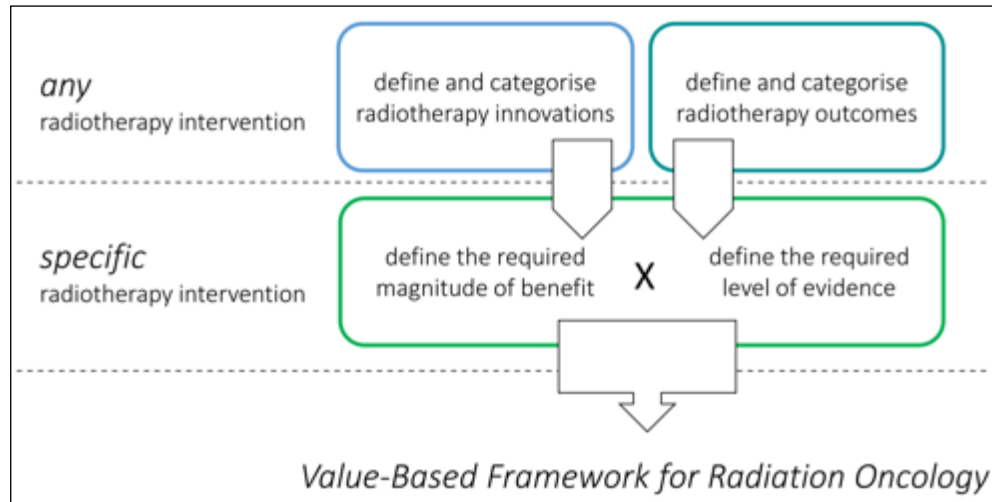
clinical guidelines & pathways

quality indicators - structure, process & outcome

real-world data collection - clinical, resource use and cost

value

$$\text{value} = \frac{\text{health outcomes that matter to patients}}{\text{costs of delivering these outcomes}}$$



**HERO VBHC**



**ESTRO**

**HERO**



**IAEA**  
International Atomic Energy Agency



thank you for your attention!