
Postgraduate Certificate in Health Financing and Budgeting

Economic Evaluation In Healthcare

Absorption Costing – a costing method that allocates all manufacturing costs, including fixed overhead, to each unit of output. Related terms: marginal costing, full costing. In health-service budgeting, absorption costing helps determine the total cost of delivering a clinical service by spreading overhead (e.g., facility depreciation) across all patient encounters. Practical application: a hospital uses absorption costing to price a surgical procedure, ensuring that building maintenance and administrative salaries are reflected in the price. Challenge: may obscure the impact of variable cost changes because fixed costs are averaged over all units, potentially leading to less responsive pricing decisions.

Activity-Based Costing (ABC) – a methodology that assigns costs to products or services based on the activities required to produce them. Related terms: cost drivers, process mapping. In healthcare, ABC identifies the specific resources consumed by a patient pathway (e.g., lab tests, nursing time). Example: an oncology department maps the chemotherapy delivery process, allocating costs to each step such as drug preparation, infusion, and monitoring. Practical use: supports more accurate cost-effectiveness analysis by revealing hidden cost drivers. Challenge: data collection can be intensive, requiring detailed time-motion studies and robust information systems.

Adverse Selection – a market failure where individuals with higher health risks are more likely to enroll in insurance, driving up premiums. Related terms: moral hazard, risk pooling. In health financing, adverse selection can threaten the sustainability of national health insurance schemes. Example: a voluntary health insurance program experiences rapid premium increases because only chronically ill patients join. Policy response: implement mandatory enrollment or risk-adjusted premium subsidies. Challenge: enforcing mandatory participation may be politically sensitive and administratively complex.

Age-Standardised Cost-Effectiveness Ratio (ASCEr) – a metric that adjusts cost-effectiveness results for the age distribution of the population, allowing comparison across jurisdictions with different demographic profiles. Related terms: incremental cost-effectiveness ratio, quality-adjusted life year. Example: two countries evaluate a vaccination program; Country A has a younger population, Country B an older one. ASCEr corrects for age-related differences in disease burden and health gains. Practical application: informs international agencies when allocating resources across regions. Challenge: requires reliable age-specific epidemiological and cost data, which may be lacking in low-resource settings.

Allocation Efficiency – the degree to which health resources are distributed to achieve the greatest possible health gain per unit of expenditure. Related terms: allocative efficiency, Pareto optimality. In budgeting, allocation efficiency is assessed by comparing the marginal cost of health gain across programs. Example: a ministry reallocates funds from a low-impact health education campaign to an antiretroviral therapy expansion, improving overall health outcomes. Practical use: guides priority-setting exercises such as health

technology assessment (HTA). Challenge: measuring marginal health gains accurately is difficult due to data limitations and the multidimensional nature of health.

Average Cost-Effectiveness Ratio (ACER) – the ratio of total costs to total health outcomes for a single intervention, without comparison to an alternative. Related terms: incremental cost-effectiveness ratio, cost-utility analysis. ACER is often a first step in screening interventions before conducting more rigorous incremental analyses. Example: a pilot program for hypertension screening shows an ACER of \$150 per quality-adjusted life year (QALY). Practical application: helps decision-makers identify interventions that exceed a pre-defined willingness-to-pay threshold. Challenge: ACER can be misleading if a cheaper, less effective alternative exists; it does not capture opportunity cost.

Benefit-Cost Analysis (BCA) – an economic evaluation that compares the monetary value of benefits generated by a health intervention with its costs. Related terms: net monetary benefit, discount rate. In BCA, health outcomes are converted into monetary terms using techniques such as willingness-to-pay or value of a statistical life. Example: a water-sanitation project yields an estimated benefit of \$12 million and costs \$8 million, resulting in a benefit-cost ratio of 1.5. Practical use: justifies public-sector investments where financial returns matter to policymakers. Challenge: assigning monetary values to health outcomes is ethically contentious and methodologically complex.

Budget Impact Analysis (BIA) – an assessment of the financial consequences of adopting a new health technology within a specific budget context over a short- to medium-term horizon. Related terms: cost-effectiveness analysis, payer perspective. BIA complements cost-effectiveness analysis by answering the question: “Can the health system afford this intervention?” Example: a national insurer evaluates the budget impact of introducing a novel diabetes drug, projecting an additional \$45 million in drug expenditures over five years. Practical application: informs formulary decisions and reimbursement negotiations. Challenge: requires accurate forecasts of uptake, adherence, and price dynamics, which are often uncertain.

Cost-Effectiveness Threshold (CET) – the maximum amount a decision-maker is willing to pay for one additional unit of health gain (e.g., per QALY). Related terms: willingness-to-pay, incremental cost-effectiveness ratio. The CET reflects societal preferences, fiscal capacity, and alternative uses of resources. Example: a low-income country adopts a CET of \$500 per DALY averted, based on a multiple of per-capita gross domestic product. Practical use: determines whether an intervention is deemed “cost-effective.” Challenge: setting an appropriate CET is controversial; overly high thresholds may waste scarce resources, while too low thresholds may deny beneficial technologies.

Cost-Effectiveness Plane – a graphical representation with four quadrants that plots incremental costs against incremental effects of an intervention relative to a comparator. Related terms: incremental cost-effectiveness ratio, dominance. The plane helps visualise whether an intervention is dominant (more effective, less costly), dominated (less effective, more costly), or falls into the northeast (more effective, more costly) or southwest (less effective, less costly) quadrants. Example: a new vaccine lies in the northeast

quadrant, prompting a calculation of its incremental cost-effectiveness ratio. Practical application: aids stakeholder communication during HTA deliberations. Challenge: point estimates may mask uncertainty; confidence ellipses are needed to convey statistical variability.

Cost-Effectiveness Analysis (CEA) – a comparative evaluation of two or more interventions that measures costs in monetary units and outcomes in natural health units (e.g., life-years saved, cases averted). Related terms: incremental cost-effectiveness ratio, health technology assessment. CEA answers “Which intervention provides the most health for the money?” Example: comparing two antimalarial regimens, CEA finds regimen A costs \$30 per life-year saved versus \$45 for regimen B. Practical use: guides resource allocation in national health plans. Challenge: selecting appropriate outcome measures and ensuring comparability across diverse health programs.

Cost-Utility Analysis (CUA) – a form of CEA that incorporates patient preferences by using utility-based measures such as QALYs or disability-adjusted life years (DALYs). Related terms: quality-adjusted life year, utility weights. CUA enables comparison across disease areas by translating health gains into a common metric. Example: a CUA of a hip-replacement surgery yields 0.8 QALYs per patient at a cost of \$12 000, resulting in \$15 000 per QALY. Practical application: informs coverage decisions for technologies with broad impact on quality of life. Challenge: deriving reliable utility weights requires population-specific preference studies, which may be unavailable.

Cost-Benefit Ratio (CBR) – the ratio of total benefits to total costs in a benefit-cost analysis. Related terms: net present value, internal rate of return. A CBR greater than 1 indicates that benefits exceed costs. Example: a tobacco-control program generates \$25 million in health savings against \$10 million in implementation costs, yielding a CBR of 2.5. Practical use: succinctly communicates the economic attractiveness of public-health interventions. Challenge: aggregation of diverse benefits into a single monetary figure can obscure distributional effects and equity concerns.

Cost-Minimisation Analysis (CMA) – an economic evaluation applied when two or more interventions have proven equivalence in outcomes, focusing solely on identifying the least costly option. Related terms: therapeutic equivalence, price comparison. Example: two generic antihypertensive drugs demonstrate identical blood-pressure control; CMA determines which has the lower acquisition cost. Practical application: streamlines procurement decisions for interchangeable products. Challenge: establishing true equivalence requires rigorous clinical evidence; otherwise, the analysis may be invalid.

Cost-Sharing – a financing arrangement where patients contribute a portion of health-service costs through co-payments, deductibles, or user fees. Related terms: out-of-pocket expenditure, financial protection. Cost-sharing can moderate demand (moral hazard) but may also create barriers to access. Example: a national health insurance scheme introduces a \$5 co-payment for primary-care visits, aiming to reduce unnecessary consultations. Practical use: balances fiscal sustainability with service utilisation. Challenge: determining the optimal level that deters over-use without compromising equity.

Cost-Effectiveness Frontier – the set of interventions that are non-dominated and provide the maximum health gain for a given level of cost. Related terms: efficient frontier, Pareto optimal set. Plotting multiple technologies on the cost-effectiveness plane reveals the frontier; interventions below the frontier are sub-optimal. Example: a country's immunisation portfolio includes five vaccines; three lie on the frontier, indicating they offer the best value for money. Practical application: aids policymakers in selecting a mix of technologies that collectively maximise health outcomes within budget constraints. Challenge: the frontier may shift as new evidence emerges or prices change.

Cost-Effectiveness Acceptability Curve (CEAC) – a graphical tool that displays the probability that an intervention is cost-effective across a range of willingness-to-pay thresholds, based on probabilistic sensitivity analysis. Related terms: Monte Carlo simulation, uncertainty analysis. CEAC helps decision-makers understand the robustness of conclusions under uncertainty. Example: a CEAC for a new cancer drug shows a 70% probability of being cost-effective at a \$50 000 per QALY threshold. Practical use: supports transparent deliberation in HTA committees. Challenge: requires extensive simulation runs and clear communication of probabilistic results to non-technical stakeholders.

Cost-Effectiveness Ratio (CER) – a generic term for any ratio of costs to health outcomes, often used interchangeably with ACER or ICER depending on context. Related terms: incremental cost-effectiveness ratio, average cost-effectiveness ratio. Example: a smoking-cessation program reports a CER of \$2 000 per life-year saved. Practical application: provides a quick snapshot of value. Challenge: without specifying whether the ratio is incremental or average, the metric can be ambiguous.

Cost-Effectiveness Threshold (CET) – Country-Specific – an adaptation of the generic CET that reflects a particular country's economic conditions, health-system capacity, and societal preferences. Related terms: GDP per capita, willingness-to-pay. Example: a middle-income country sets its CET at three times per-capita GDP (\$6 000 per DALY), aligning with WHO recommendations. Practical use: guides national reimbursement lists. Challenge: reliance on GDP may not capture budgetary constraints or equity priorities; periodic re-evaluation is necessary.

Cost-Effectiveness Threshold (CET) – Opportunity Cost – a perspective that defines the threshold based on the health outcomes forgone when resources are reallocated from existing services. Related terms: marginal productivity of health system, health opportunity cost. Example: research estimates that each \$1 000 spent in the current health system yields 0.05 QALYs; thus, the CET is \$20 000 per QALY (inverse of marginal productivity). Practical application: ensures new interventions do not displace more efficient services. Challenge: estimating health system marginal productivity is data-intensive and methodologically debated.

Cost-Effectiveness Threshold (CET) – Willingness-to-Pay (WTP) – a threshold derived from surveys that elicit how much individuals or societies are prepared to pay for a unit of health gain. Related terms: contingent valuation, discrete choice experiment. Example: a contingent valuation study in a rural region finds a mean WTP of \$300 per QALY. Practical use: informs locally relevant thresholds. Challenge: eliciting reliable WTP values can be affected by income, cultural factors, and framing effects.

Cost-Effectiveness Threshold (CET) – Social Value of Health – an approach that incorporates broader societal benefits such as productivity gains, caregiver burden reduction, and equity considerations into the threshold. Related terms: societal perspective, externalities. Example: a health-economic model adds \$1 200 in productivity gains per QALY, effectively raising the socially acceptable threshold. Practical application: aligns health investment with broader development goals. Challenge: quantifying non-health benefits accurately and avoiding double-counting.

Cost-Effectiveness Threshold (CET) – Dynamic – a threshold that changes over time in response to economic growth, health-system reforms, and shifting societal preferences. Related terms: inflation adjustment, periodic review. Example: a country revises its CET biennially, moving from \$800 to \$950 per DALY as GDP per capita rises. Practical use: maintains relevance of HTA decisions. Challenge: frequent updates require robust monitoring mechanisms and can create uncertainty for manufacturers.

Cost-Effectiveness Threshold (CET) – Multi-Criteria – a threshold that integrates additional decision criteria (e.g., equity, disease severity) alongside pure cost-effectiveness. Related terms: multi-criteria decision analysis, weighted scoring. Example: a health ministry uses a CET of \$5 000 per QALY but applies a 1.5 multiplier for interventions targeting rare diseases. Practical application: balances efficiency with fairness. Challenge: assigning appropriate weights and ensuring transparency.

Cost-Effectiveness Threshold (CET) – Reference Case – a standardised set of assumptions (e.g., discount rates, perspective) used when applying a threshold, ensuring comparability across studies. Related terms: methodological guidelines, standardisation. Example: the WHO reference case recommends a 3 % discount rate for both costs and outcomes; thresholds are applied consistently under this framework. Practical use: facilitates cross-country benchmarking. Challenge: strict adherence may limit flexibility for context-specific adaptations.

Cost-Effectiveness Threshold (CET) – Ethical Considerations – a discussion of the moral implications of setting a monetary value on health gains, especially for vulnerable populations. Related terms: equity, distributive justice. Example: critics argue that a low CET may exclude life-saving treatments for low-income groups, violating principles of fairness. Practical application: incorporates ethical review panels into HTA processes. Challenge: reconciling quantitative thresholds with qualitative ethical judgments.

Cost-Effectiveness Threshold (CET) – Sensitivity Analysis – the practice of testing how changes in the threshold affect the decision outcome (e.g., which interventions remain cost-effective). Related terms: threshold analysis, scenario testing. Example: a sensitivity analysis shows that an intervention is cost-effective at \$30 000 per QALY but not at \$20 000, highlighting the importance of threshold selection. Practical use: informs risk-adjusted budgeting. Challenge: stakeholders may disagree on the most plausible threshold range.

Cost-Effectiveness Threshold (CET) – Transparency – the principle that the process for determining and applying a threshold should be openly documented and justified. Related terms: governance, stakeholder

engagement. Example: a health ministry publishes the methodology, data sources, and stakeholder inputs used to set its CET. Practical application: builds trust and legitimacy in HTA outcomes. Challenge: balancing technical detail with accessibility for non-technical audiences.

Cost-Effectiveness Threshold (CET) – Implementation – the operational steps required to apply a threshold in reimbursement decisions, pricing negotiations, and budgeting. Related terms: price-setting, formulary inclusion. Example: a national insurance agency uses the CET to negotiate drug prices, demanding a price that yields an ICER below \$50 000 per QALY. Practical use: aligns market incentives with health-system objectives. Challenge: manufacturers may contest threshold-based pricing, leading to negotiations or delayed market entry.

Cost-Effectiveness Threshold (CET) – Review Cycle – the frequency with which the threshold is re-evaluated to reflect changing economic and health-system conditions. Related terms: periodic updating, policy revision. Example: a country adopts a five-year review cycle for its CET, incorporating new evidence on health-system productivity. Practical application: ensures the threshold remains relevant over time. Challenge: data gaps and resource constraints can hinder timely reviews.

Cost-Effectiveness Threshold (CET) – Stakeholder Consensus – the process of achieving agreement among policymakers, clinicians, patients, and industry on an appropriate threshold level. Related terms: deliberative process, consensus building. Example: a multi-stakeholder workshop produces a consensus CET of \$25 000 per DALY for the national health plan. Practical use: facilitates smoother implementation of HTA recommendations. Challenge: divergent interests may impede consensus, requiring mediation.

Cost-Effectiveness Threshold (CET) – Global Benchmarks – reference values derived from international bodies (e.g., WHO, World Bank) used as starting points for national thresholds. Related terms: WHO-CHOICE, comparative analysis. Example: WHO's recommendation of 1–3 times GDP per capita is considered, but the country adjusts it downward to reflect fiscal constraints. Practical application: provides a comparative framework for emerging economies. Challenge: global benchmarks may not capture local affordability or equity priorities.

Cost-Effectiveness Threshold (CET) – Variability Across Disease Areas – the concept that different health domains (e.g., oncology, infectious disease) may warrant distinct thresholds due to varying societal values or budget impacts. Related terms: disease-specific weighting, priority setting. Example: a health system adopts a higher CET for rare cancers to reflect severity and unmet need. Practical use: tailors resource allocation to disease burden. Challenge: risk of inconsistency and perceived unfairness across patient groups.

Cost-Effectiveness Threshold (CET) – Integration with Budget Impact – aligning the CET with projected budgetary implications to ensure that cost-effective interventions are also fiscally feasible. Related terms: affordability, financial planning. Example: an intervention meets the CET but would require a budget increase beyond the allowable ceiling; decision-makers may negotiate price reductions or phased

implementation. Practical application: balances efficiency with fiscal reality. Challenge: coordinating HTA and budgeting cycles.

Cost-Effectiveness Threshold (CET) – Role of International Donors – how external funding agencies influence threshold setting, often by providing technical assistance or aligning with donor-specified criteria. Related terms: aid conditionality, capacity building. Example: a donor funds a HTA unit that adopts a CET consistent with the donor's health-system strengthening agenda. Practical use: leverages expertise and resources. Challenge: donor preferences may conflict with national priorities or sovereignty concerns.

Cost-Effectiveness Threshold (CET) – Calibration with Real-World Data – adjusting the threshold based on observed outcomes and expenditures after implementation of interventions. Related terms: post-implementation review, learning health system. Example: after introducing a new vaccine, real-world data reveal lower-than-expected costs, prompting a recalibration of the CET upward for similar interventions. Practical application: creates a feedback loop for continuous improvement. Challenge: data quality and timeliness are critical for accurate calibration.

Cost-Effectiveness Threshold (CET) – Impact on Innovation – the effect of a set threshold on pharmaceutical and device innovation, influencing R&D investment decisions. Related terms: market signals, price incentives. Example: a low CET may discourage companies from developing high-cost therapies for small markets, potentially limiting therapeutic options. Practical use: policymakers may incorporate incentives (e.g., market-access premiums) to mitigate negative effects. Challenge: balancing cost-control with fostering innovation.

Cost-Effectiveness Threshold (CET) – Ethical Trade-offs – the moral dilemmas inherent in using a single monetary value to adjudicate between interventions that affect different population groups. Related terms: distributive justice, health equity. Example: an intervention for a prevalent disease is cost-effective at the current CET, but a rare disease therapy is not; decision-makers must weigh equity against efficiency. Practical application: may lead to exception mechanisms or higher thresholds for certain conditions. Challenge: ensuring transparent, justifiable criteria for exceptions.

Cost-Effectiveness Threshold (CET) – Public Perception – how the public understands and reacts to the use of thresholds in health-policy decisions. Related terms: communication strategy, stakeholder engagement. Example: media coverage of a rejected drug due to failing the CET sparks public debate, prompting the ministry to launch an awareness campaign. Practical use: improves legitimacy of HTA processes. Challenge: complex economic concepts can be misinterpreted, leading to mistrust.

Cost-Effectiveness Threshold (CET) – Legal Framework – statutes or regulations that mandate the use of thresholds in health-technology reimbursement. Related terms: health-law, policy directive. Example: a national health act requires that all new medicines be evaluated against a defined CET before inclusion in the benefits package. Practical application: provides a legal basis for consistent decision-making. Challenge: legal rigidity may limit flexibility in exceptional cases.

Cost-Effectiveness Threshold (CET) – Regional Variations – differences in thresholds applied across sub-national jurisdictions within a country due to varying fiscal capacity or health-needs. Related terms: decentralized budgeting, local autonomy. Example: a federal system allows each state to set its own CET, resulting in a range from \$10 000 to \$30 000 per QALY. Practical use: reflects local priorities. Challenge: may create inequities and complicate national procurement strategies.

Cost-Effectiveness Threshold (CET) – Complementarity with Other Evaluation Tools – integrating CET with methods such as multi-criteria decision analysis (MCDA) or equity-adjusted cost-effectiveness analysis. Related terms: decision-support frameworks, composite indices. Example: a health authority uses the CET as a baseline filter, then applies MCDA to weigh additional criteria like disease severity. Practical application: produces more nuanced recommendations. Challenge: methodological complexity and need for stakeholder consensus on weighting.

Cost-Effectiveness Threshold (CET) – Sensitivity to Discount Rate – the influence of the chosen discount rate on the calculated ICER and thus on whether an intervention meets the threshold. Related terms: time preference, present value. Example: using a 3 % discount rate yields an ICER of \$28 000 per QALY, while a 0 % rate reduces it to \$22 000, affecting the decision under a \$25 000 threshold. Practical use: informs selection of appropriate discount rates in line with guidelines. Challenge: discount rate choices can be contentious and materially affect outcomes.

Cost-Effectiveness Threshold (CET) – Impact of Inflation – adjusting thresholds over time to maintain real purchasing power in the face of inflation. Related terms: price index, real vs nominal values. Example: a CET set at \$30 000 in 2015 is indexed to the consumer price index, reaching \$35 000 in 2022. Practical application: preserves the threshold's relevance for long-term planning. Challenge: accurate inflation measurement for health-specific goods may differ from general CPI.

Cost-Effectiveness Threshold (CET) – Role of Health-System Efficiency Estimates – using empirical estimates of the health system's marginal productivity to derive a more evidence-based threshold. Related terms: production function, frontier analysis. Example: a study estimates that each \$1 000 of additional health spending produces 0.02 QALYs, implying a CET of \$50 000 per QALY. Practical use: grounds thresholds in observed system performance. Challenge: data requirements are high, and estimates may vary across settings.

Cost-Effectiveness Threshold (CET) – Transparency in Price Negotiations – disclosing how the threshold informs price-setting discussions with manufacturers. Related terms: confidential pricing, value-based pricing. Example: a procurement agency shares the threshold-derived target price with a drug company, facilitating a mutually acceptable agreement. Practical application: aligns market prices with health-system willingness to pay. Challenge: balancing transparency with commercial confidentiality.

Cost-Effectiveness Threshold (CET) – Alignment with Sustainable Development Goals (SDGs) – ensuring that threshold decisions support broader development objectives, such as universal health coverage (SDG 3).

Related terms: health equity, cross-sectoral policy. Example: a country adopts a lower CET for interventions that address maternal health, reflecting SDG priorities. Practical use: integrates health-economic analysis with development planning. Challenge: reconciling cost-effectiveness with non-economic SDG targets.

Cost-Effectiveness Threshold (CET) – Interaction with Fiscal Space – the relationship between the threshold and the government’s capacity to allocate additional resources to health. Related terms: macro-fiscal analysis, public finance. Example: a low fiscal space may necessitate a more stringent CET, limiting adoption of high-cost technologies. Practical application: informs realistic budgeting scenarios. Challenge: dynamic fiscal conditions require periodic re-assessment of the threshold.

Cost-Effectiveness Threshold (CET) – Methodological Consistency – applying uniform methods (e.g., perspective, time horizon) when calculating ICERs to ensure comparability against the threshold. Related terms: reference case, methodological guidelines. Example: all HTA submissions must use a 3 % discount rate and a health-system perspective, aligning with the threshold’s assumptions. Practical use: reduces variability and enhances decision confidence. Challenge: strict consistency may limit flexibility for disease-specific nuances.

Cost-Effectiveness Threshold (CET) – Role of International Health-Economic Guidelines – adopting standards from bodies such as the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) to shape threshold use. Related terms: best practice, guideline adaptation. Example: a national HTA agency follows ISPOR recommendations on threshold derivation, enhancing credibility. Practical application: fosters alignment with global best practice. Challenge: guidelines may need contextual adaptation to local realities.

Cost-Effectiveness Threshold (CET) – Integration with Health-Technology Reassessment (HTR) – re-evaluating existing technologies as new evidence emerges, using the threshold to decide on continued funding. Related terms: lifecycle management, de-listing. Example: a drug previously deemed cost-effective is reassessed after price reductions of a competitor, leading to a decision to delist the original product. Practical use: ensures the benefits package remains value-oriented. Challenge: resource-intensive process requiring ongoing data collection.

Cost-Effectiveness Threshold (CET) – Influence on Pricing Strategies – how manufacturers may set launch prices to align with expected thresholds in target markets. Related terms: price-setting, market access. Example: a pharmaceutical firm conducts a threshold analysis for a middle-income country and prices its drug at \$18 000 per treatment course to meet the \$20 000 per QALY threshold. Practical application: facilitates smoother market entry. Challenge: inaccurate threshold estimates can lead to pricing misalignments.

Cost-Effectiveness Threshold (CET) – Ethical Use of GDP-Based Benchmarks – the debate over the appropriateness of using multiples of GDP per capita as a proxy for willingness-to-pay. Related terms: economic growth, affordability. Example: critics argue that a 3 × GDP per capita threshold may be too high for low-income countries, leading to unsustainable spending. Practical use: prompts exploration of

alternative, context-specific thresholds. Challenge: balancing simplicity of GDP-based thresholds with nuanced equity considerations.

Cost-Effectiveness Threshold (CET) – Role in Health-System Reform – using thresholds as a lever to drive efficiency improvements and rationalisation of service delivery. Related terms: performance incentives, provider payment reforms. Example: a bundled-payment scheme incorporates the CET to reward providers for delivering cost-effective care. Practical application: aligns provider incentives with system-wide value goals. Challenge: designing contracts that accurately reflect threshold-based value.

Cost-Effectiveness Threshold (CET) – Impact on Health-Insurance Premiums – how thresholds influence the cost of benefit packages, thereby affecting premium levels for contributory schemes. Related terms: actuarial valuation, risk pooling. Example: a social health insurance fund adopts a CET of \$30 000 per QALY, limiting inclusion of expensive therapies and stabilising premium growth. Practical use: maintains financial sustainability. Challenge: managing member expectations when high-cost innovations are excluded.

Cost-Effectiveness Threshold (CET) – Relationship with Cost-Containment Policies – thresholds as part of broader strategies to control health-care expenditure growth. Related terms: price caps, utilization management. Example: a government couples a strict CET with reference pricing, encouraging generic substitution. Practical application: reduces overall spending while preserving value. Challenge: ensuring that cost-containment does not compromise access to necessary care.

Cost-Effectiveness Threshold (CET) – Role in Cross-Border Health-Care – using thresholds to assess the value of patients seeking treatment in neighboring countries. Related terms: medical tourism, reimbursement agreements. Example: an insurance scheme evaluates whether covering treatment abroad meets the domestic CET, influencing referral policies. Practical use: informs decisions on cross-border collaborations. Challenge: variations in cost structures and outcome measurement across countries.

Cost-Effectiveness Threshold (CET) – Influence on Clinical Guidelines – integrating threshold criteria into guideline development to recommend interventions that are both clinically effective and cost-effective. Related terms: evidence-based medicine, guideline adaptation. Example: a national guideline committee includes a cost-effectiveness filter based on the CET when drafting recommendations for chronic disease management. Practical application: ensures that guideline advice aligns with resource constraints. Challenge: guideline developers need health-economic expertise.

Cost-Effectiveness Threshold (CET) – Alignment with Value-Based Insurance Design (VBID) – using thresholds to structure patient cost-sharing based on the value of services. Related terms: differential copayment, incentive alignment. Example: a VBID plan reduces copayments for services with ICERs below the CET, encouraging high-value care. Practical use: promotes patient adherence to cost-effective treatments. Challenge: operationalizing VBID requires robust data on ICERs for many services.

Cost-Effectiveness Threshold (CET) – Interaction with Health-Equity Impact Assessment – evaluating how threshold-driven decisions affect health disparities across population groups. Related terms: equity

weighting, distributional analysis. Example: applying a uniform CET may disadvantage interventions targeting marginalized groups; an equity-adjusted threshold is introduced to address this. Practical application: balances efficiency with fairness. Challenge: quantifying equity impacts and integrating them into threshold calculations.

Cost-Effectiveness Threshold (CET) – Role in Pandemic Preparedness – establishing thresholds for rapid evaluation of emergency interventions (e.g., vaccines, antivirals). Related terms: emergency use authorization, health-security budgeting. Example: a pre-agreed CET of \$10 000 per DALY is used to expedite funding decisions for a novel influenza vaccine during an outbreak. Practical use: speeds up resource allocation in crises. Challenge: data scarcity and high uncertainty during emergencies complicate threshold application.

Cost-Effectiveness Threshold (CET) – Integration with Real-World Evidence (RWE) – updating threshold assessments based on post-marketing effectiveness and utilization data. Related terms: pragmatic trials, observational studies. Example: after a year of use, real-world data show lower effectiveness for a drug, raising its ICER above the CET and prompting renegotiation. Practical application: ensures decisions remain evidence-based over time. Challenge: establishing reliable RWE infrastructure.

Cost-Effectiveness Threshold (CET) – Impact on Health-Workforce Planning – using thresholds to evaluate the cost-effectiveness of training programs, task-shifting, and workforce expansion. Related terms: human resources for health, capacity building. Example: a training program for community health workers yields an ICER of \$8 000 per QALY, below the CET, supporting its scaling. Practical use: aligns workforce investments with value criteria. Challenge: measuring health outcomes attributable to workforce interventions can be indirect.

Cost-Effectiveness Threshold (CET) – Role in Health-Information Systems – ensuring that data systems capture the variables needed for threshold-based analyses (costs, outcomes, utilization). Related terms: electronic health records, health-accounting. Example: a national health information platform integrates cost data with clinical outcomes, facilitating routine calculation of ICERs against the CET. Practical application: streamlines HTA processes. Challenge: data interoperability and privacy concerns.

Cost-Effectiveness Threshold (CET) – Interaction with Price-Volume Agreements – negotiating contracts where price is linked to volume and threshold compliance. Related terms: risk-sharing contracts, outcome-based agreements. Example: a manufacturer agrees to a rebate if the drug's real-world ICER exceeds the CET. Practical use: shares financial risk and aligns incentives. Challenge: monitoring outcomes and defining trigger conditions.

Cost-Effectiveness Threshold (CET) – Influence on Health-Policy Advocacy – how NGOs and patient groups use threshold arguments to lobby for or against specific interventions. Related terms: policy brief, stakeholder mobilisation. Example: an advocacy group cites a CET breach to argue for price reductions of an orphan drug. Practical application: informs public debate with economic evidence. Challenge:

communicating complex threshold concepts to lay audiences.

Cost-Effectiveness Threshold (CET) – Role in Cross-Sectoral Budgeting – applying health-economic thresholds when allocating resources across sectors such as education, transportation, and health. Related terms: inter-ministerial coordination, cost-benefit alignment. Example: a government compares the health CET with education's return-on-investment metrics to prioritize spending. Practical use: supports whole-of-government resource optimisation. Challenge: differing measurement units hinder direct comparison.

Cost-Effectiveness Threshold (CET) – Impact on Pharmaceutical R&D Prioritisation – guiding research pipelines toward areas likely to meet the threshold in target markets. Related terms: portfolio management, market access forecasting. Example: a biotech firm focuses on indications where the projected ICER is below the CET of major purchasers. Practical application: de-risks development investments. Challenge: forecasting future thresholds and market dynamics is uncertain.

Cost-Effectiveness Threshold (CET) – Interaction with Health-Insurance Benefit Design – shaping covered services based on threshold outcomes. Related terms: formulary tiering, benefit exclusion. Example: a private insurer excludes treatments whose ICERs exceed the CET from the preferred tier, assigning higher cost-sharing. Practical use: incentivises cost-effective care. Challenge: managing member dissatisfaction and possible legal challenges.

Cost-Effectiveness Threshold (CET) – Role in International Aid Allocation – donors using recipient-country thresholds to decide where to channel funds. Related terms: aid effectiveness, results-based financing. Example: a development agency funds a vaccination program only if its ICER is below the recipient's CET. Practical application: aligns aid with recipient priorities. Challenge: donor preferences may differ from local thresholds.

Cost-Effectiveness Threshold (CET) – Influence on Health-