MEASURING COST-EFFECTIVENESS, ALONGSIDE EQUITY

What better cost-effectiveness measurement looks like



MSI REPRODUCTIVE CHOICES

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WHAT BETTER COST-EFFECTIVENESS MEASUREMENT LOOKS LIKE

A commitment to being cost-effective helps programme teams, funders and governments decide **how to use limited resources to achieve the greatest possible impact.** It shows the relationship between programme costs and results, helping teams understand what is working, where delivery can become more efficient and how performance can improve over time.

In family planning, the most widely used measure is cost per couple-year of protection (CYP): the cost of providing one year of contraceptive protection. Other measures capture outcomes such as the cost of averting an unintended pregnancy, an unsafe abortion, a maternal death or a disability-adjusted life year (DALY).

These measures are important, but no single ratio captures the full value of family planning. Access to contraception can help people avoid or delay pregnancy, reducing associated health risks while supporting wider opportunities such as education, employment, financial security and the ability to plan for the future. These benefits are difficult to reflect fully in a conventional cost-effectiveness calculation. The lasting impact is bigger than the sum of its parts.

For MSI, value for money is about more than achieving the lowest cost per CYP or DALY averted. It means delivering impact efficiently while ensuring that services protect quality, choice and autonomy, and reach people facing the greatest barriers to accessing reproductive healthcare.

MSI considers not only how many people we reach, but also who we reach. We collect client data on poverty, age, previous contraceptive use, and whether clients know of another place where they could receive the healthcare we offer.

These insights help us assess whether services are reaching people who need it most and those with the fewest realistic alternatives. **In 2025, MSI reached 27.8 million people including adolescents, people living in poverty, first-time contraceptive users and clients who did not know of another source of reproductive healthcare.**

The impact of a reproductive healthcare service will vary depending on a client's circumstance. For a person living in poverty, an adolescent facing stigma, or someone with no alternative safe and affordable health provider to turn to, access to contraception may generate significant health, social and economic benefits. We refer to these groups as 'Equity Impact Clients': people facing greater barriers, higher risks and fewer alternatives, for whom access to family planning can be especially consequential.

This brief sets out MSI's evolving approach to equity-adjusted value for money. It does not replace conventional cost-effectiveness measures but provides a fuller account of value by considering who was reached, whether care protected quality, choice and autonomy, and whether investment generated impact where access gaps were greatest.

MSI'S 2025 IMPACT AT A GLANCE

27.8M
people accessed MSI sexual and reproductive healthcare

42.7M
contraceptive CYPs delivered

18.6M
unintended pregnancies prevented

9.7M
unsafe abortions prevented

42,000
women's and girls' lives saved

28.2M
DALYs averted

Source note: Impact figures are modelled estimates using MSI's Impact 2 version 6.



01 THE LIMITS OF A SINGLE NUMBER

Cost-effectiveness matters to MSI, but a single ratio can hide as much as it reveals. A programme may look inexpensive because it serves people who are easier to reach, while missing communities facing greater barriers, higher risks or fewer safe alternatives are being left behind. In isolation, a 'low cost per CYP' can reward ease of delivery rather than the impact created.

A STRONGER INTERPRETATION OF COST-EFFECTIVENESS ASKS FOUR CONNECTED QUESTIONS:

WHO WAS REACHED?

Bring equity into focus. Apply a transparent adjustment when a service delivers greater impact by reaching individuals with higher need, elevated risk or fewer alternatives.

DID OUR SERVICES PROTECT QUALITY, CHOICE AND AUTONOMY?

Evaluate quality, choice and autonomy. Low costs mean nothing if care compromises client rights or safety.

WOULD IT HAVE HAPPENED ANYWAY?

Account for additionality by adjusting impact estimates where another provider or funder would have achieved the same result. This principle is touched on here, but MSI's full framework will be explored in a separate brief.

WHAT DID IT COST?

Use fully loaded costs, including direct delivery and the essential support systems required for safe, consistent healthcare.

This brief focuses on three of these questions: **the cost base, the measurement of impact, and the equity and quality conditions needed to interpret true value.** Additionality is acknowledged as relevant, but it is not considered in depth here as it is more complex and requires its own brief.



02 GETTING THE COSTS RIGHT

A cost-effectiveness analysis is only as credible as the cost data behind it. Costs need to be recorded consistently, clearly linked to the right activities, and reported on a comparable basis so results can be trusted and meaningfully compared. MSI treats transparent, reliable cost data as essential. By standardising how costs are recorded and reported across locations, we can produce comparable figures that most accurately reflect the true cost of delivering safe, high-quality care at scale. The five components below provide the foundation for reliably reporting the cost of delivering services and reaching clients.



MAIN FEATURES OF OUR FINANCIAL SYSTEMS

ONE ACCOUNTING SYSTEM

A single finance system across the global partnership, so a cost means the same thing in every country.

SHARED DATA DEFINITIONS

Common definitions of what each cost category includes, recorded consistently everywhere.

UNIQUE COST CENTRE PER TEAM

Each delivery unit, including outreach teams, MSI Ladies and centres, has its own code, so costs can be traced to their source.

ROUTINE DATA QUALITY CHECKS

Checks at collection, upload and use, so the numbers feeding the analysis can be trusted.

CENTRALISED, ACCESSIBLE DATA

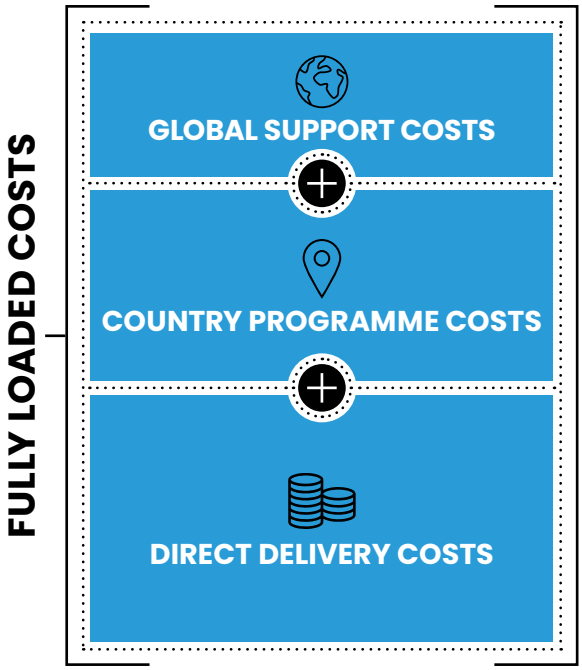
Centralised data that is accessible across the global partnership helps teams understand and use the information consistently, supports better decision-making and makes discussions about performance and value more transparent.



Reporting the full cost, accounting for all the effort required to deliver impact

The cost of a service should include all the functions needed to deliver it safely, consistently and at scale. That means direct delivery costs, such as providers, commodities, travel and clinical supplies. It also means the relevant share of country and global support costs, including planning, finance, safeguarding, operations, clinical governance, data systems, monitoring, technical support and organisational oversight.

At MSI, we call this a fully loaded cost. When MSI says it delivered a couple-year of protection for approximately US$5, that figure is not limited to what happens at the point of care. It also reflects the wider infrastructure that makes safe, high-quality delivery possible.



The indirect costs that support MSI country programmes to function are allocated to each service delivery channel according to their share of direct delivery costs. MSI tested a more detailed approach based on support-function teams estimating their time by channel, but results were broadly similar and harder to collect consistently. Using direct delivery cost as the allocation basis is therefore clearer, more practical across countries, and easier to explain.

The boundary is different when MSI supports third-party delivery, such as public-sector facilities or other partner providers. In these cases, MSI includes the costs it incurs directly, such as training, quality assurance, data monitoring, supervision and technical support. It does not usually include the wider costs of government or partner platforms, because these are often unavailable, outside MSI's accounting systems or difficult to collect in a consistent way across countries. MSI therefore recognises these contributions in the narrative while keeping the reported cost figure transparent and comparable.

The same principle applies to donated commodities. For direct service delivery, MSI accounts for their value because they are part of the real resources used to deliver impact. This gives a fuller view of what it costs to run a channel such as outreach, while still allowing costs to be broken down into direct delivery, country support, global support and commodities.

03 MEASURING IMPACT WITH THE SAME RULER

MSI starts with routine service delivery data, translates those services into estimated health outcomes, brings in clients' own experiences of care, and tests programme performance through research and evaluation.

Starting with direct service delivery data

The starting point is the information recorded when care is delivered. Each year, MSI's systems capture **more than one billion routine data points, including clients' age and location, the services and contraceptive methods they receive, and the channels through which care is provided.** This allows MSI to track who is being reached, what services are delivered, and how delivery varies across countries and approaches.

To compare contraceptive services consistently, MSI converts the number and type of methods provided into Couple Years of Protection (CYPs). Each method is assigned an internationally agreed conversion factor reflecting its expected duration and use. Applying these standardised factors produces an estimate of the total contraceptive protection provided for one year. CYPs therefore offer a common measure for comparing results across different methods, programmes, and countries.



Translating services into health outcomes

MSI uses Impact 2, its peer-reviewed health impact model, to estimate the wider outcomes associated with the services delivered. The model takes a bottom-up approach: it begins with actual service data and CYPs, then combines them with country-specific demographic and health information.

This enables MSI to estimate outcomes such as:

- Unintended pregnancies prevented
- Unsafe abortions averted
- Maternal deaths avoided
- Cost savings to the government

MSI is now introducing Impact 3, an updated tool which incorporates new demographic data, refined methodologies to improve estimates, and a more streamlined interface. The model provides a consistent and transparent way to translate routine service results into comparable estimates of health impact. It also enables stakeholders to produce bottom-up impact estimates based on actual service delivery data, rather than relying only on top-down assumptions.

The table below illustrates the impact and cost-effectiveness of MSI's mobile outreach teams in 2025. The cost figures include MSI's fully loaded delivery costs and the value of donated commodities used to provide services, giving a more complete view of the resources required to deliver care. They do not include leveraged costs outside MSI's control or accounting systems, such as government-led community mobilisation, public facilities used for service delivery, or other partner contributions that are not consistently costed.

Capturing clients' experience of quality, choice and autonomy

Routine service data show what was delivered, but they cannot fully explain the quality of the interaction or whether clients experienced care as informed, respectful and their choice. MSI therefore conducts structured Client Exit Interviews on an annual or biennial basis. These interviews help fill that gap by asking whether clients received clear counselling, understood their options and possible side effects, were offered a meaningful choice of methods, felt respected, made their decisions freely, and knew where else they could seek care. This gives MSI a direct client-reported measure of the conditions that must sit alongside cost-effectiveness: quality, choice and autonomy.

Over the past 15 years, MSI has gathered feedback from more than 250,000 clients. These insights help assess whether services are not only reaching people, but also supporting clients to receive quality care, make informed choices and exercise autonomy.

Testing and independently verifying effectiveness

MSI complements routine monitoring and impact modelling with ongoing internal assessments and independent external evaluations. Working with independent researchers allows MSI to understand whether programmes are producing their intended results, examine why particular approaches work, and identify where delivery models need to improve. Together, these layers of evidence provide a more complete picture of effectiveness. Routine data establish what was delivered and to whom; Client Exit Interviews capture quality and client experience; impact models estimate longer-term health outcomes; and independent evaluations test whether programmes are achieving their intended effects.

OUTREACH IMPACT IN 2025

Cost-effectiveness metrics



5.2M

people accessed MSI sexual and reproductive healthcare

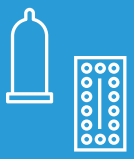
US$14 per client reached



17.5M

contraceptive CYPs delivered

US$5 per CYP



7.1M

unintended pregnancies prevented

US$8 per unintended pregnancy averted



2.3M

unsafe abortions prevented

US$25 per unsafe abortion averted



12,000

women's and girls' lives saved

US$5,000 per maternal death averted



11.5M

DALYs averted

US$5 per DALY averted

Source note: Impact figures are modelled estimates using MSI's Impact 2 version 6. Cost-effectiveness figures are fully loaded, global, and use service lifespan impact estimates where applicable.

ADDITIONALITY: MSI'S DIRECT CONTRIBUTION

Additionality is an important component of cost-effectiveness analysis because it seeks to isolate MSI's contribution: what happened directly because of our work, compared with what might have happened without us. MSI recognises that this is both critical and complex, requiring a dedicated methodology and robust counterfactual analysis; it will therefore be explored and explained separately in its own brief. In the meantime, MSI uses a Client Exit Interview question as a useful proxy: whether clients knew of another provider where they could have obtained their preferred contraceptive method. **Recent data show that more than half of clients did not know of an alternative provider.**

04 WHY EQUITY CHANGES THE ANSWER

An unadjusted cost-per-service figure treats a year of contraceptive protection as the same, regardless of who receives it. In practice, averting an unintended pregnancy can be especially valuable for clients who face higher health risks, fewer alternatives and fewer resources to manage the health, social and economic consequences.

This is not a new idea in health economics. Distributional cost-effectiveness analysis, described by Asaria, Griffin and Cookson, offers a formal way to examine how health benefits and costs are distributed across social groups and how decision-makers might balance total health gain against reducing unfair inequalities. Extended cost-effectiveness analysis, developed by Verguet, Kim and Jamison, expands the lens further by considering health gains, financial risk protection, costs to policy makers and distributional effects. What is less developed is the routine use of these approaches in family planning and wider development practice, where decisions often still rely on a single average cost-effectiveness figure. At MSI, we aim to translate that equity lens into a simpler operational approach that can work with routine family planning data across many countries.

A SIMPLE ILLUSTRATION OF EQUITY-ADJUSTED IMPACT

NOT LIVING IN POVERTY

x1.0

Baseline weight

LIVING IN POVERTY

x2.0

Higher expected harm from an unintended pregnancy and lower ability to absorb shocks.

Equity-adjusted impact = standard impact, such as one CYP, multiplied by an equity weight.

These weights are illustrative. They show a proposed structure, not a final calibration. They should be tested using evidence on how risk and downstream harm vary by poverty status, and sensitivity analysis should show how results change under different weights.

Poverty is the strongest starting point for an equity adjustment because it is most closely linked to poorer reproductive health outcomes, weaker financial resilience and fewer realistic choices when facing an unintended pregnancy. The global pattern is stark. WHO estimates that in 2023 the maternal mortality ratio was 346 deaths per 100,000 live births in low-income countries, compared with 10 in high-income countries. For a 15-year-old girl, the lifetime risk of dying from maternal causes was 1 in 66 in low-income countries, compared with 1 in 7,933 in high-income countries.

The same pattern is visible within countries. In Nigeria, model-based analysis of Demographic and Health Survey data estimates the maternal mortality ratio at 901 deaths per 100,000 live births in the North-East, compared with 392 in the South-West in 2018. This means women in the North-East faced 2.3 times the maternal mortality risk as those in the South-West. If a contraceptive service averts an unintended pregnancy in a setting where pregnancy is more likely to result in maternal death, the maternal mortality benefit of that same service is also likely to be higher. This shows why the “same” CYP may not have the same expected downstream impact everywhere, and why an equity weight can in principle be calibrated using observable differences in risk.

While poverty is our starting point, we know that disadvantage rarely exists in isolation. Factors like age, living with a disability, geographic isolation, and surviving in fragile or conflict-affected regions create deep, compounding barriers to care. As our measurement approaches evolve, we aim to account for these dimensions more explicitly. However, focusing on poverty gives us a practical, evidence-based place to start today: it is reliably measurable, directly tied to health risk, and already deeply embedded in how MSI tracks equity across the globe.



A worked example

The calculation is easiest to see with two simple programmes. Both cost US$100,000 and both deliver 20,000 CYPs, so the unadjusted result is the same: US$5 per CYP. The question is whether those CYPs reached clients facing the same level of risk and constraint.

The example below uses poverty as the first operational weight. Programme B reaches a higher share of clients living in severe poverty, so its equity-adjusted CYPs increase under the illustrative weighting. This assumes that method uptake is similar across groups, so the difference in the adjusted result is driven by who is reached, not by differences in method mix.

Programme A's 20,000 CYPs remain 20,000 equity-weighted CYPs because its clients are not living in poverty. Programme B's CYPs increase to 34,000 because 14,000 CYPs for clients in severe poverty are counted at 2.0, while the remaining 6,000 are counted at 1.0. Reporting both figures makes the judgement visible and helps readers interpret value.

	PROGRAMME A	PROGRAMME B
Total cost	$100,000	$100,000
CYPs delivered	20,000	20,000
Client mix	100% not in poverty	70% in severe poverty, 30% not in poverty
Unweighted cost per CYP	$5.00	$5.00
Equity-weighted CYPs	20,000 x 1.0 = 20,000	(14,000 x 2.0) + (6,000 x 1.0) = 34,000
Equity-adjusted cost per CYP	$5.00	$2.94

This example shows that even when programmes have similar costs and reach, accounting for the equity component (who is being reached by these services) can make the equity-adjusted cost metric appear (in this specific example) to be 40% more cost-effective.

05 QUALITY, CHOICE AND AUTONOMY ARE PREREQUISITES FOR VALUE

Service data, CYPs and impact models help MSI estimate what its programmes deliver and the health outcomes they may generate. But these measures cannot show whether the services behind them were safe, or whether clients were free to choose. A low cost-per-service, CYP or modelled outcome is not good value if it conceals poor clinical practice, restricted method availability, inadequate counselling, provider bias or pressure on clients.

MSI treats quality and autonomy as two distinct conditions for value. They are prerequisites for our cost effectiveness. Quality is about whether the care clients received was clinically safe and competent. Autonomy is about whether clients themselves made the decision, with the information, options and freedom to choose in line with their own preferences and circumstances, rather than a decision shaped by what was available, convenient for the provider, or pushed on them. A programme can fail on either front independently, so MSI tracks them separately, through three client care standards: one for clinical quality, and two covering choice and decision-making that together define autonomy.

1. Clinical quality

Providing safe, competent and consistent care, supported by effective clinical governance and infection prevention and control across all service delivery channels. Behind every appointment is a robust clinical governance framework designed to protect clients and healthcare providers. **In 2025 alone, MSI carried out 116,000 competency assessments across nearly 16,000 clinicians, completed almost 9,000 local clinical quality audits, and thoroughly reviewed 3,465 clinical incidents.** These numbers reflect a living culture of safety, openness and continuous learning. By identifying vulnerabilities, guiding corrective action and sharing lessons across the global partnership, MSI works to ensure every clinical team is equipped to deliver safe, compassionate care.

Autonomy: Choice and decision-making

Safe care on its own doesn't guarantee autonomous care. Autonomy rests on two further conditions working together. Clients need a range of methods to choose from, and they need the freedom and information to choose their healthcare without pressure.

2. Meaningful choice

This means ensuring that clients have access to a broad mix of contraceptive methods wherever feasible. This depends on reliable supply chains, fewer stockouts, reduced cost and distance barriers, and action to prevent provider bias toward particular methods. **Our client exit interview data suggest many clients arrive with clear preferences already: in 2025, 89% came to MSI with a specific method in mind, and 97% of those clients received the method they wanted. More than half of family planning clients chose a long-acting method of contraception.** MSI's role here is to make sure a range of options is available, so a client's decision is a choice among alternatives, not an acceptance of whatever happens to be in stock.

IN 2025...

116k
competency assessments across nearly 16,000 clinicians

9k
local clinical quality audits

89%
of clients came with a specific method of contraception in mind

97%
of those clients received the method they wanted

>50%
of family planning clients chose a long-acting method of contraception



3. Informed and voluntary decision-making

This standard covers the act of choosing itself, and whether it was made freely and with all the information. It includes respectful, person-centred counselling: clear information about methods, side effects, side-effect management, alternative options, and the right to change your mind. **In 2025, MSI's Method Information Index Plus score was 75%, while our client exit interview data show that 90% of clients reported feeling respected, informed, understood and free from judgment.** These results are encouraging, and they also point to areas needing improvement, particularly consistent counselling on side effects, method switching and follow-up support.

Because we measure quality and autonomy, we can say that a recorded outcome – a CYP or a service delivered – reflects care that was safe and respectful of the client's own decision. MSI is working to measure autonomy more consistently, by defining its key dimensions, selecting reliable indicators, and filling existing data gaps to build an autonomy index. Once built, this index will do more than track overall progress: it will guide programme evaluation and inform how services are adapted on the ground.

Autonomy and clinical quality give cost-effectiveness a greater meaning. MSI's current view is that they should not be folded into a single combined metric. Merging them would overcomplicate the measure, dilute the primary numbers, and make results harder to interpret. Autonomy will instead be assessed alongside cost-effectiveness, as a distinct measure read in tandem with it, not absorbed into it. This keeps each measure legible on its own terms while still allowing them to inform the same decisions. As this work develops, MSI will continue to test what is practical and useful, and will refine the approach accordingly.

IN 2025...

75%

MSI's Method Information Index Plus score

97%

of people who come with a contraceptive method in mind, receive their preferred method

90%

of clients reported feeling respected, informed, understood and free from judgment



06 NEXT STEPS FOR EQUITY-ADJUSTED COST-EFFECTIVENESS

MSI is committed to making better use of equity-adjusted cost-effectiveness, particularly for cost-per-CYP, as part of a broader approach to value for money. In practice, this means continuing to report unadjusted results as the baseline, while also publishing equity-adjusted estimates alongside them and testing whether our conclusions hold up under different assumptions. It also means connecting MSI's evidence sources – routine data, client exit interviews, impact modelling, costing work and evaluations – rather than treating them separately, so we can answer the questions that matter most: **What did it cost? What did it achieve? Who benefitted? Would this have happened anyway? And did the investment lead to change that goes further and lasts longer?**

We will refine and test this approach using existing data on poverty, access barriers, knowledge of alternative providers, care experience and modelled impact. One possible direction is a composite index that goes beyond poverty alone, bringing together several dimensions of vulnerability to capture where family planning is likely to generate the greatest additional impact. Cost-effectiveness will remain central to the analysis, but the aim is to interpret it alongside equity, additionality, longer-term benefits and sustainability – so decisions are better informed about the real value that our interventions generate.

REFERENCES

MSI Reproductive Choices. 2025 Annual Review. London: MSI Reproductive Choices, 2026.

MSI Reproductive Choices. Impact 2 version 6 methodology and impact model. MSI Reproductive Choices.

WHO, UNICEF, UNFPA, World Bank Group and UNDESA Population Division. Trends in maternal mortality 2000 to 2023. Geneva: World Health Organization, 2025.

Asaria M, Griffin S, Cookson R. Distributional Cost-Effectiveness Analysis: A Tutorial. Medical Decision Making. 2016;36(1):8-19. doi:10.1177/0272989X15583266.

Cookson R, Griffin S, Norheim OF, Culyer AJ, editors. Distributional Cost-Effectiveness Analysis: Quantifying Health Equity Impacts and Trade-Offs. Oxford University Press, 2020.

Verguet S, Kim JJ, Jamison DT. Extended Cost-Effectiveness Analysis for Health Policy Assessment: A Tutorial. PharmacoEconomics. 2016;34(9):913-923. doi:10.1007/s40273-016-0414-z.

Ahmed S, Creanga AA, Gillespie DG, Tsui AO. Economic Status, Education and Empowerment: Implications for Maternal Health Service Utilization in Developing Countries. PLOS ONE. 2010;5(6):e11190.

Palamuleni ME. Differential effect of wealth quintile on modern contraceptive use and fertility: evidence from Malawian women. BMC Women's Health. 2014;14:40.

GiveWell. GiveWell's Cost-Effectiveness Analyses, updated May 2026, and GiveWell materials on moral weights and cost-effectiveness assumptions.

Steiner MJ, Sonneveldt E, Lebetkin E, Jallow F. Updated Couple Years of Protection: Literature Review, Guidance for Updating Existing Methods, and Adding New Methods. Durham, NC: FHI 360; 2022. Prepared for USAID with Avenir Health.

Data for Impact. Couple-years of protection (CYP). Family Planning and Reproductive Health Indicators Database. Chapel Hill, NC: University of North Carolina at Chapel Hill; accessed 2026. Available at: https://www.data4impactproject.org/prh/family-planning/fp/couple-years-of-protection-cyp/.

CYP means couple-year of protection. MSI calculates CYPs using harmonised sector conversion factors for contraceptive methods, consistent with the Data for Impact indicator definition and the 2022 update by FHI 360, Avenir Health and USAID. Impact figures are estimated using MSI Impact 2 version 6. These are modelled estimates, not direct measurement, and are not yet fully adjusted for additionality.



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