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Patient Journey Driven, Macro, Micro, Meso Impact Framework to Illustrate the Value Creation of Health Interventions. The Triple M Impact Framework.

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KEY FINDINGS & CONCLUSIONS

- With this poster, we introduce the Triple M Impact framework. It illustrates the value creation of any health intervention and connects any relevant actors in the health ecosystem. It uses impact as a common performance metric.
- The Triple M Impact Framework identifies where impact is or may be created along an extended patient journey and across three socio-economic levels (Macro, Meso, and Micro).
- The Triple M Impact Framework has the potential to provide a joint perspective, helping to align priorities and decision making across the health ecosystem.

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INTRODUCTION

The global healthcare landscape is intricate and diverse, with a multitude of actors, institutions, and individuals that are part of a dynamic ecosystem of interrelations and dependencies. The variety of health-related risk factors, conditions, diseases, treatment options, and individual responses further complicates efforts to understand and enhance these systems. The inherent complexity of health systems is exacerbated by the often differing aims and priorities of the entities involved. Consequently, determining the appropriate priorities and measures is not always straightforward for any of the entities.

AIMS

This study aimed to conceptualize a framework that provides a unifying and consistent perspective across actors and economic levels. The framework was designed to illustrate impact in a way that enables joint insights and supports the identification of actionable levers to improve health outcomes. A further aim was to invite application of this concept across the extended patient journey, capturing impacts at different stages to build a more complete view of value in health systems.

FRAMEWORK ELEMENTS

The elements of the Micro, Meso, Macro (Triple M) Impact Framework are:

- **Extended Patient Journey**: the dynamic structure of stages along a person's full trajectory of health (including prevention).
- **Behavioural Insights[1]**: the behaviours that drive decisions shaping the trajectory of health along the extended patient journey.
- **Non-Linear Economic Analysis[2]:** the acknowledgement of the non-linear interplay of Micro[3], Meso[4], and Macro[5] levels across the health ecosystem, using a demand-supply lens where beneficial to advance the analysis.
- **Impact Measurement[6]:** the consistent tracing of the impacts of interventions, along the extended patient journey and across the entire scope of health ecosystems.

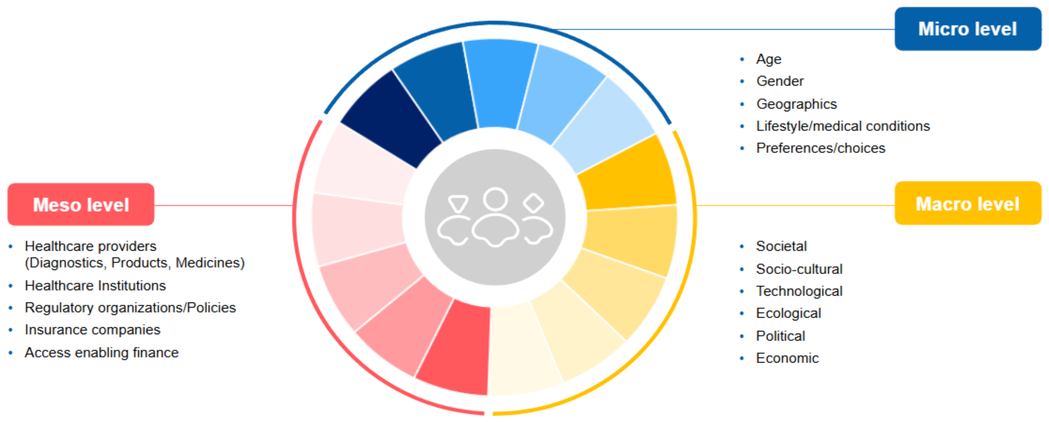


Figure 1: Representation of Non-linear Economic Analysis in the Triple M Impact Framework

- **Intervention[7]**: a treatment, procedure, or other action taken to prevent or treat disease, or improve health in other ways.
- **Macro level**: also referred to as the contextual level, forms the broadest layer of analysis, encompassing political, economic, social, and legal systems. Drivers include societal norms, cultural influences, technological advancements, environmental factors, political landscapes, and economic conditions.
- **Meso level:** also referred to as the transactional level, forms the connecting layer between the micro level and the macro level, encompassing the many facets of healthcare delivery. This includes healthcare providers as organizational units directly involved in the provision of preventative measures, diagnostics, creating products, and dispensing medicines, as well as insurance companies, and financial services that enable access to care.
- **Micro level:** also referred to as the individual level, focuses on the individuals involved in the provision and consumption of the various healthcare products and services. Drivers for provision and consumption are, among others: lifestyle preferences, personal choices as well as the availability of opportunities to access those products and services.

IMPACT MEASUREMENT

According to the definition of impact, it reflects changes in the well-being of individuals across multiple dimensions. Measuring impact involves capturing the long-term effects of a variety of actors affected by an intervention or activity. Such effects can be intended or unintended.
The approach is rooted in the “theory of change”[8] and uses metrics distinct from conventional inputs and output metrics typically used in business and decision making.[9] To arrive at impacts, a variety of approaches are used, such as causal relationships, correlations, extrapolations and aggregations. Impact assessments systematically evaluate the effects of projects, programs, or policies and has been utilized by institutions and businesses. Applied in the Triple M Impact framework it delivers a comparative analysis of existing and potential interventions. The impact measurement of innovative medicines has been published addressing one aspect of this framework.[10]

SCOPING REVIEW OF LITERATURE

We are conducting an ongoing scoping review to explore how health interventions are assessed across Micro, Meso and Macro levels of the health ecosystem. Using Arksey & O’Malley and Levac’s frameworks. We conducted advanced searches in PubMed, covering the period 2020–2025. Searches combined predefined MeSH terms and keywords grouped into thematic blocks: Patient Journey, Health System Strengthening, Microeconomic, Mesoeconomic, Macroeconomic, Intervention, and additional relevant terms. Filters were set to English-language studies and human subjects. The search strategy yielded 422 eligible articles, all of which were reviewed in the initial screening phase.

Cross-level Integration: preliminary findings indicate that the majority of studies evaluate Micro (patients, households) and Meso (institutions) together, as reflected by the largest evidence cluster. Fewer studies extend this to include the macro (societal/national) level, and analyses of Macro in isolation remain scarce. This imbalance highlights fragmented insights, limiting the ability to trace the cascade from individual benefits to systemic sustainability. (Figure 2)

Extended Patient Journey Coverage: the extended patient journey was operationalized into five stages: prevention, diagnosis, treatment, follow-up, and long-term outcomes. Preliminary results show a strong concentration of evidence in the middle stages - diagnosis, treatment, and follow-up - while prevention and long-term outcomes are comparatively underrepresented. Notably, only 11 studies have addressed the entire extended patient journey. These preliminary findings reveal important gaps in the literature and emphasize the potential value of the Triple M Impact Framework in providing a consistent approach to capture health impact across all stages of care. For clarity, the figure presents only stage combinations with ≥10 articles (Figure 3).

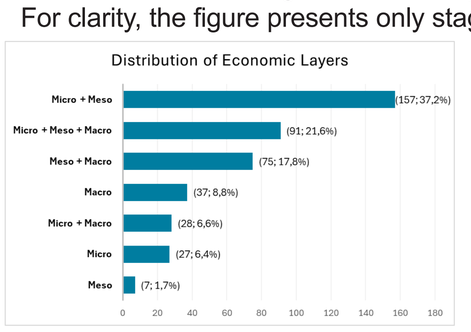


Figure 2: Distribution of Economic Layers

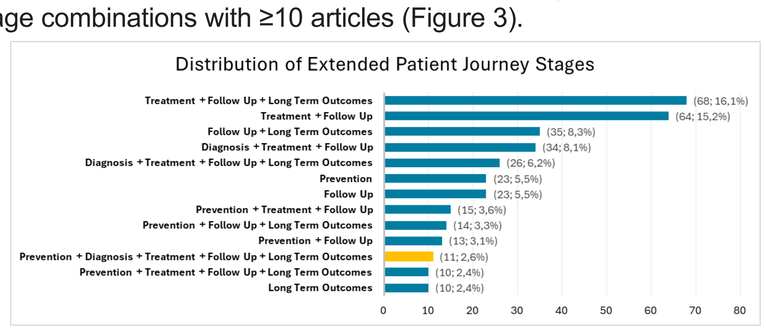
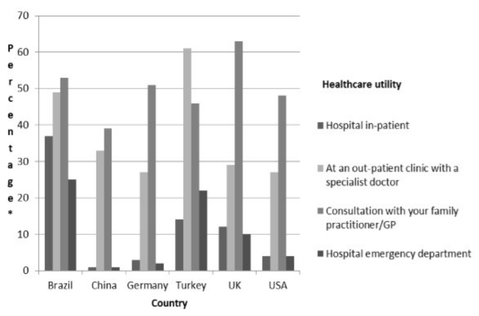


Figure 3: Distribution of Extended Patient Journey Stages

EXAMPLE FROM THE LITERATURE

To demonstrate the relevance of the Triple M Impact Framework, we assessed publications for its elements. For example, the COPD Uncovered study[11] analyses how the disease impacts productivity. In 2011, the estimated annual healthcare costs per individual (excluding treatment and diagnostics) amounted to $2,364 (£1,500). Among those still employed (n=677), average annual work loss was $880 (£556) per person, with lifetime losses totaling $7,365 (£4,661) individually and $596,000 (£377,000) collectively. Additionally, 447 individuals (~40%) had retired early due to COPD, incurring estimated individual lifetime income losses of $316,000 (£200,000), or a combined $141 million (£89.6 million).



The research focuses on Macro effects. However, it was not designed to capture the impact at the Meso and Micro level. Analyzing the drivers of lifestyle choices of individuals with COPD as well as the incurred consequences from the hospital and physicians' perspective would provide additional insights. This in turn could help inform discussions about healthcare intervention decisions such as prevention, screening, and treatment.
The Triple M Impact Framework aims at closing this gap and at delivering these pivotal insights.

CONCLUSION

The current health ecosystem is complex, with many actors facing differing priorities. To gain a consensus on how to improve health in a resource challenged environment we need a framework that connects such groups using a common agreed perspective, and ultimately, a performance metric. The Triple M (Macro, Meso & Micro) Impact framework provides a more complete view of where value is created and where gaps are today, supporting collaboration and joint decision-making. The addition of behavioural science will enable interventions that support patient outcomes from a phenomenological basis.

Acknowledgements

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