Global Health Market Shaping Lookback

A 10-year retrospective review



Introduction

This review highlights tremendous advances over the last decade in market shaping engagement, capabilities, and impacts on global health. This progress is complicated by pressing obstacles, including inconsistent coordination between actors, opaque and insufficient data-sharing, and increasing market complexity.

The field of market shaping is at a critical juncture. Market shaping interventions over the past 10 years have had huge health impacts that have helped close gaps between commercial incentives and global health needs. As a global health market shaping community, our understanding of the field of practice has also evolved: we are savvier about which methods and best practices will help achieve sustainability and minimize unintended consequences.

Moving forward, success for market shaping will require novel ways of working and innovative approaches.

However, significant challenges remain, which slow progress and hamper success. We are hindered by inefficiencies in our operating environment and our typical ways of working. Missed opportunities for communication, coordination, and cross-learning limit our impact. The Covid-19 pandemic stimulated and accelerated major market trends—such as regional manufacturing, local production, and decentralized healthcare—creating new market paradigms to work in. Climate

change and other challenges demand our attention. Moving forward, success for market shaping will require novel ways of working and innovative approaches. We hope this 10-year market shaping lookback, along with its accompanying resources, will guide and inform the direction of this field by reviewing progress, taking stock of the current situation, and assessing enabling and inhibiting factors of the field.

This review was a collaborative effort on behalf of many members of the market shaping community as part of the Market Ecosystem Thought Leadership (META) initiative, which aims to strengthen the market shaping community of practice. Linksbridge and the Duke Global Health Innovation Center (GHIC) collaborated on this lookback's creation, with GHIC leading the data collection and analysis efforts. This review could not have been realized without the funding made available by the Bill & Melinda Gates Foundation and the invaluable contributions from 22 market shaping experts. We are grateful for the significant input, time, and expertise these organizations and people contributed to this important effort.

Data sources and limitations

Published information on market shaping represents a small, positivebiased fraction of all market shaping work. Publicly available data is challenging to compare due to a lack of shared definitions and impact measurement frameworks.

This document synthesizes findings from three data sources: 22 key informant interviews, a systematic literature review of articles evaluating market shaping impacts, and a purposive sample of publicly available data on 348 global health market shaping interventions.

The key informant interviews and literature review, both conducted by GHIC, focused on describing overall trends and patterns of market shaping for lowand middle-income countries (LMICs) in the past decade and analyzed market shaping impacts, key enabling factors, and progress barriers. The literature review included 83 publications out of 2,270 screened articles. Linksbridge curated the Market Shaping Interventions Dataset (MSID) by collecting publicly available information on key market shaping interventions of the last 10 years. The dataset includes announcements from about 20 prominent market shaping organizations, and its creation involved a combination of manual and machine learning techniques to identify market shaping announcements versus other media reports. Records were then classified further using the market shaping intervention types and definitions included in the CHAI Market Shaping Framework.1

Data Source



Key Informant Interviews

Description

GHIC conducted semistructured interviews on the evolution of the field with 22 market shaping experts between June and September 2023



Systematic Literature Review



Market Shaping Interventions Dataset (MSID)²

GHIC examined articles from academic and grey literature that review market shaping impacts between 2012-2022

Linksbridge collected and analyzed public records of market shaping activities announced between 2012-2023 by prominent market shaping organizations

¹CHAI Market Shaping Framework

² Access link to be provided. MSID was also validated against a Market Shaping Investor Analysis conducted by CHAI in 2023; 30 in-scope interventions from the analysis were included in MSID.

These data sources provided valuable insights and quantitative data to help identify market shaping trends over the last decade, but it is important to acknowledge their limitations. Comparatively little information on the organization and implementation of market shaping initiatives lives in the public domain. Journals have published studies on only a small fraction of activity. While market shaping organizations often release statements about agreements they have reached or negotiated, they inconsistently reveal related financial information, in many cases due to commercial confidentiality. Less than 35% of market shaping activities captured in the MSID included information on financial commitments, and as such. aggregate values presented in this review should be interpreted with appropriate caution. It is even more rare to find instances where intervention failures are made public, limiting the community's ability to learn from past errors.

A lack of shared definitions and impact metrics also makes it challenging to compare, draw insights, or track progress across organizations, interventions, and products. Quantitative evidence on the impact of market shaping interventions is limited and often unbalanced across product sectors, interventions, and diseases. Information on the impacts of interventions on diagnostics and devices is rarely available, and studies addressing impacts on vaccines and drugs sectors are often published by authors from high-income countries. In part due to a lack of standardized guidelines or metrics for evaluation, market shaping impact assessments are also often biased towards those that are easier to measure—such as availability and

affordability—and away from those that are more challenging, including health outcomes, awareness, uptake, and quality.

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Careful consideration has been given to these limitations and how they affect the interpretability of data used in this analysis. Given the limitations of public information-based data sources, key informant interviews formed the most critical evidence base of this review's major takeaways and themes. The MSID and systematic literature review provided valuable quantitative and detailed evidence to support these insights. The feasibility, accuracy, and strength of future analyses on market shaping impacts hinges on addressing the data availability limitations highlighted above, including by improving information sharing mechanisms and developing shared impact metrics.

Snapshot of global health market shaping

Market shaping for global health is a growing field that has become a critical component of access to medicines in low- and middle-income countries (LMICs).

Market shaping organizational capacity and professionalization, as well as awareness of and interest in the field itself, have significantly increased over the last decade. As of late 2023, there are more than 30 organizations with dedicated market shaping teams across vaccines, drugs, devices, and diagnostics sectors. Despite the proliferation of actors, a subset—including the Bill & Melinda Gates Foundation, CHAI, FIND, Gavi, Global Fund, MedAccess, PAHO, PATH, UNICEF, Unitaid, USAID, and WHO—continue to play the most active roles shaping global health markets.

The last 10 years have seen significant market shaping financial commitments. The MSID revealed that organizations have pledged more than \$9 billion toward market shaping interventions over the last decade. This trend is largely due to the global mobilization of resources to combat the Covid-19 pandemic—well over \$7 billion has been pumped into shaping markets for Covid-19 products. The vaccines sector has seen the bulk of market shaping activity over the last decade, both in terms of the number of interventions and money committed to support these activities (Figure 1).

Number of market shaping interventions and financial commitments made across product sectors, 2012-2022

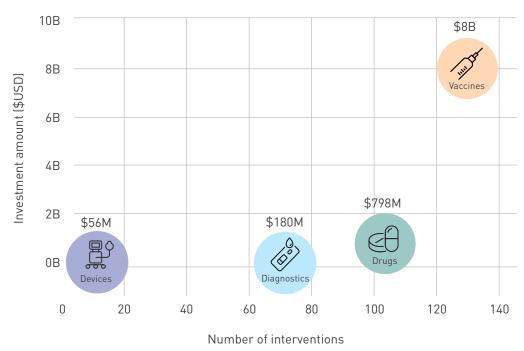
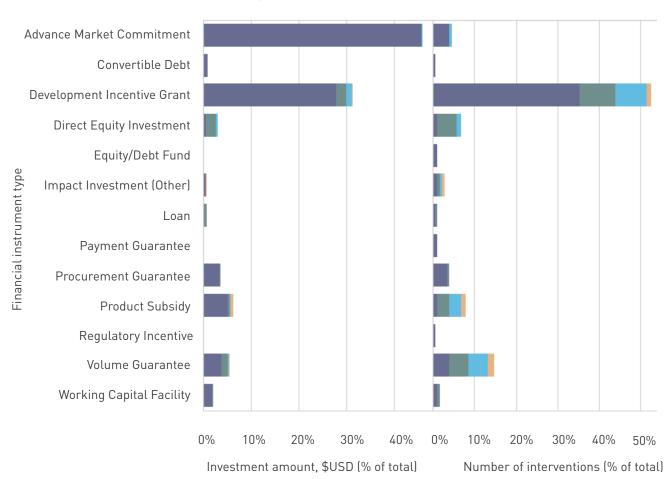


Figure 1: The number of market shaping interventions and financial commitments over the last 10 years across product sectors (including Covid-related interventions).

The most commonly used market shaping financial instruments included development incentive grants and volume guarantees. Advance market commitments for vaccines accounted for nearly half of the money committed across various types of financial tools over the last decade (Figure 2).

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Quantity and size of market shaping financial instruments across product sectors, 2012-2022



Product Sector



Figure 2: Investment size and number of publicly disclosed financial market shaping interventions over the last 10 years across product sectors. Advance market commitments for vaccines accounted for the bulk of money pledged through a financial instrument, while development incentive grants saw the greatest number of individual interventions. Financial instruments were less commonly used to shape devices markets.

Excluding Covid-19 investments, the MSID shows upwards of \$1.3 billion committed to vaccines market shaping, about \$585 million toward drugs interventions, and only \$173 million to diagnostics. None of the organizations considered in the MSID had publicly announced how much money had been invested in non-Covid devices market shaping (Figure 3). Financial commitments and the number of market shaping interventions were concentrated

heavily on upstream investments in new product development and on clinical studies—a trend particularly apparent in vaccines. While these data help shed light on the current state of the field, it is important to note that exact dollar amounts are likely underestimated, as the MSID represents only a portion of all market shaping activities over the last decade and a subset of all organizations that participate in market shaping.

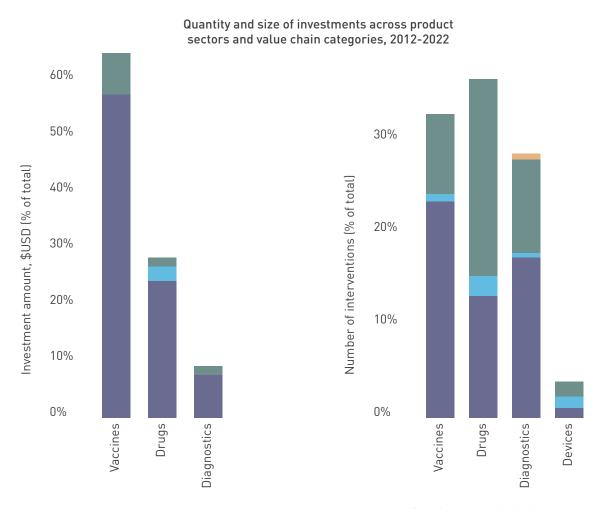


Figure 3: Relative contributions across product sectors and value chain category, by investment size and quantity, excluding those related to Covid-19. Financial commitments and the number of interventions were concentrated on upstream investments. A small proportion of the total number of market shaping activities were directed toward devices markets, and there were no data available on the investment amounts of devices-focused interventions.



Over the last decade, market shaping efforts have also focused on tuberculosis, malaria, and HIV. More than \$700 million has been invested in tuberculosis drugs, vaccines, and diagnostics interventions—driven primarily by investments made by FIND and USAID. Malaria and HIV market shaping efforts, combined, have reached nearly \$600 million (Figure 4).

This snapshot represents a best effort to understand trends in market shaping investments over the last decade. Improving data sharing on market shaping interventions is crucial to help understand historical drivers of progress, take stock of the current situation, and guide future direction.

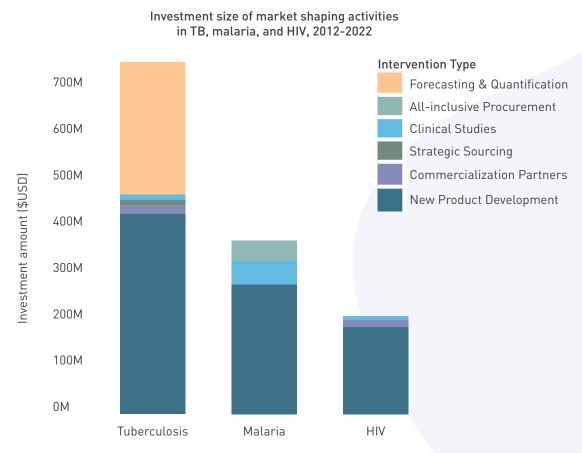


Figure 4: Money invested in market shaping for tuberculosis, malaria, and HIV products. New product development interventions saw the largest financial commitments for all three disease areas, while forecasting and quantification investments accounted for about half of the financial commitments for tuberculosis.

Key impacts

Across all product sectors, market shaping has accelerated access to innovative products, improved product availability, and reduced commodity costs. But some wins have come with unintended consequences.

Global health markets have experienced significant growth over the last decade, especially in drugs and vaccines.

- Pooled procurement of antiretroviral drugs (ARVs), rapid transition to artemisinin-based combination therapies, and vaccine-related push and pull investments are widely viewed as key market shaping successes driving increased access and price reductions
- Product development partnerships and public-private partnerships have successfully ensured new products are registered, distributed, and adopted into national treatment policies

The Covid-19 pandemic highlighted both the tremendous impact market shaping can have and the challenges faced by market shaping practitioners in meeting global health goals.

However, in some cases, market shaping interventions have also resulted in unintended consequences, including:

- Manufacturer exits and higher barriers to entry for new manufacturers due to lowered product prices
- Eventual higher prices due to limited competition
- Long-term dependency on market shaping interventions—no "exit plan"
- Mismatches between consumer demand/preferences and supply choices

The Covid-19 pandemic highlighted both the tremendous impact market shaping can have and the challenges faced by market shaping practitioners in meeting global health goals. Ensuring future success and avoiding potential unintended consequences relies on strengthening the market shaping community of practice.

Product sector differences

There are significant differences in the characteristics, successes, and challenges of market shaping interventions in the vaccines, drugs, diagnostics, and devices product sectors.

Several market characteristics help define market shaping strategies and their ease of implementation:

- The extent of market or product fragmentation
- The degree of funding and procurement centralization
- The clarity of policy and regulatory pathways
- The drivers of product preferences (for providers or consumers)

Given significant differences in market characteristics between vaccines, drugs, diagnostics, and devices, the evolution and impact of market shaping has also varied across sectors.

Vaccines



The key enablers for the market shaping ecosystem in the vaccines sector include Gavi as a monopsony buyer, centralized procurement, and a robust regulatory system.

Effective organization and cooperation among key market shaping players has contributed to vaccine market shaping successes:

- The vaccine market roadmap process effectively identifies market gaps, ensures that product development funding addresses these gaps and market shortcomings, and aligns actors' efforts across the value chain.
- Deal mechanisms generate value for money, align with industry incentives, and produce effective global access agreements.
- Advances in global vaccine market data and intelligence platforms enable data-driven decision-making and partner alignment.

However, coordination and alignment have become more challenging due to recent trends in market fragmentation, the proliferation of new market shaping actors, and the diversity of product choices. Furthermore, demand forecasting and materialization have become less predictable and opportunities to capitalize on industry incentives less successful. Gains have slowed in recent years and are at risk of stagnation unless new paradigms and approaches are adopted.



Notable market shaping successes:

- Through mechanisms including strategic sourcing, volume guarantees, and advanced market commitments, the cost of pentavalent, pneumococcal, and rotavirus vaccines dropped from \$21.50 in 2013-2014 to \$14.70 in 2022.3
- COVAX delivered more than 1 billion doses of Covid-19 vaccines to LMICs.
- Increased availability of innovative products like HPV, malaria, and hexavalent vaccines via market shaping interventions including procurement guarantees and licensing agreements.
- The stable supply of affordable health commodities, which helped Gavi achieve its immunization targets (more than 1 billion children vaccinated in routine programs and 17.9 million deaths averted in Gavisupported countries as of 2022).⁴

³ Global Vaccine Market Model

⁴ Gavi Annual Progress Report 2022

Drugs



Market shaping for drugs benefits from centralized financing and procurement as well as generic manufacturing.

Similar to vaccines market shaping, effective organization and cooperation among key market shaping players, strong deal mechanisms, and robust market intelligence systems have been hallmarks of successful drugs market shaping efforts, particularly for ARV HIV therapies.

The drugs sector faces unique challenges, including its sheer size (more than 30 times bigger than the vaccines sector⁵), a large number of products, a strong private markets component, and the dominating profit potential of innovator therapies. Addressing these challenges will require continued progress in effective organization, market data, and intervention planning and execution. There are also opportunities to increase the efficiency and impact of drugs market shaping by working across silos to align on objectives, strategies, and roles and responsibilities.



Notable market shaping successes:

- Increased access to cost-effective tuberculosis drugs in 138 LMICs through price-ceiling agreements, capacity expansion, and introduction support.⁶
- Greater access to ARV therapies, with some generics manufacturers now offering certain regimens for below \$45 per person per year—a reduction from a previously negotiated ceiling cost of \$75 per person per year.⁷ Other pediatric ARV combinations are available for below \$1 per day.⁸

⁵ WHO Global Vaccine Market Report 2022; Statista

⁶ MedAccess press release

⁷ <u>Global Fund press release</u>

⁸ Drugs for Neglected Diseases Initiative press release

Diagnostics and devices



For diagnostics and devices, market shaping has required a holistic, broad lens and strong partnerships across manufacturers, suppliers, buyers, and end users to develop effective solutions to complex market challenges.

Diagnostics and devices face particularly challenging market features, including:

- Limited consolidation across financing, procurement, and supply
- Less clear regulatory and policy pathways
- More complex provider and consumer preferences
- High upfront costs
- Poor market surveillance
- Fixed laboratory and maintenance costs
- Complex distribution and supply chain systems

For the diagnostics sector specifically, there is also a dependency on treatment availability to ensure that diagnostics can play their role. Markets that need mixedmethod options, such as medical oxygen, are especially challenging because efforts must ensure access to a wide portfolio of products to meet end-user needs. Achieving greater market shaping impacts in these sectors will depend on employing innovative approaches to shift or adapt to market characteristics.



Notable market shaping successes:

- ond diagnostics for HIV self-tests and diagnostics for tuberculosis and malaria—progress made possible by deploying a range of complementary market shaping interventions over time. The cost of tuberculosis tests was reduced to just under \$8, and an estimated 8.1 million additional people were expected to have access to HIV testing after the cost of self-tests dropped to \$1.9,10
- Volume guarantees, price reductions, and scale-up of cross-antigen viral load testing saved procurers an estimated \$45 million by the end of 2022 and expanded access to HIV viral load testing for millions of people.¹¹
- Increased access to dual-ingredient bed nets made possible through innovative financing mechanisms, price reductions averaging 40%¹², and increased production.
- Ambitious undertakings in oxygen products, such as the Global Oxygen Alliance¹³, have tackled infrastructurewide change and helped de-risk decision-making to improve access and market health for oxygen.

⁹ Global Fund press release

¹⁰ MedAccess press release

¹¹ MedAccess: Viral load testing

¹² MedAccess: Next-generation mosquito nets

¹³ Global Fund press release

Looking ahead

Across sectors, market shapers face increasing market complexity stemming from trends including growing market fragmentation, burgeoning healthcare decentralization, compounding impacts of climate change, and the possibility of future pandemics.

Tackling these challenges demands novel approaches and interventions, as described below.



Developing new ways to navigate complex demand-side dynamics in end-to-end market shaping strategies

As market complexity and fragmentation increases with more buyers, suppliers, and service delivery channels, developing a full, clear understanding of demand becomes more challenging and important. It will be paramount to prioritize demand generation activities, align demand and supply systems, discern country and end-user preferences, understand private sector market segments, and explore coordinated procurement opportunities.



Cultivating stronger, responsive relationships with national stakeholders

Deeper engagement of national and local stakeholders in the market shaping community will be critical as countries look to increasingly self-finance health programs and take greater ownership of health technology production and delivery. Actors at all geographic levels—from global to subnational—will need novel approaches, resources, and tools to improve coordination around identifying market issues and setting market shaping priorities. Working together to address gaps along the entire market value chain will help ensure that essential health products make it to end users to achieve impact.



Identifying opportunities to optimize limited donor funding, such as addressing overlapping routine health and pandemic preparedness needs

The compounding impacts of climate change and preparing for future pandemics risk further overwhelming national agendas and destabilizing markets. Identifying the dual benefits of pandemic preparedness and regional manufacturing investments represents one opportunity among many to streamline funding in a resource-constrained environment.



Further developing the market shaping discipline and facilitating cross-sector learning

- Coordinating better between partners to align on priorities, measure progress, and increase information sharing on interventions to improve collective insights and visibility.
- Developing common impact measurement frameworks, which starts with building a shared understanding of fundamental market shaping concepts and best practices.
- Prioritizing and investing in resources, fora, and tools that facilitate shared learning across product sectors.
- Ensuring regular evaluation of the outcomes of market shaping interventions across product sectors to track progress, successes, and shortcomings.

The last decade has seen significant advancements toward healthier markets, bringing us closer to market shaping's end goal: improving people's health by increasing equitable access to critical health products. While the data collected for this review have important limitations, this analysis and its underlying data can help build a foundation for future analyses and provide useful insights to guide the community's efforts. As practitioners look to adopt novel ways to intervene in increasingly complex markets, we hope this review will help catalyze the field's dedication to data-sharing, intervention impact tracking, and partner coordination—making market shaping more effective and sustainable.







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