Shared Value Initiative

Measuring Shared Value Innovation and Impact in Health

A Guide for Corporate Practitioners

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About Shared Value Initiative

The Shared Value Initiative is a global community of practice to drive adoption and implementation of shared value strategies among leading companies, civil society, and government organizations. The Shared Value Initiative works with partners to launch and curate SharedValue.org, develop toolkits to guide shared value implementation, convene practitioners to promote best practices, and expand the network of Affiliated Professional Services firms that aim to provide customized shared value strategy and support. Join us in the Shared Value initiative to shape this emerging field of practice, develop case studies onSharedvalue.org, access our global network of practitioners, and exchange ideas at events with Michael Porter, Mark Kramer and C-Suite executives. Learn more and join the community at www.sharedvalue.org.

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Overview

An increasing number of companies are turning their attention to the vast health needs of our global population, and finding business opportunities in saving and extending lives, creating **shared value** in the process. For example, Novo Nordisk has dramatically expanded the market for insulin in China, where the burden of diabetes is significant. Novartis has found a profitable model to deliver medicines to rural India, where access to existing health products is sporadic and of questionable quality. These are just two examples of large-scale shared value in health and demonstrate a larger trend of experimentation among pharmaceutical, medical device, and nutrition companies to address unmet health needs globally.

Measurement is a challenge for the companies that are testing these shared value approaches. Nearly all of the companies featured in "Competing by Saving Lives: How Pharmaceutical and Medical Device Companies Create Shared Value in Global Health," mentioned measurement as a key obstacle to investment in shared value.

Why is this the case? To date, companies have not customarily tied economic results to social outcomes. For companies in the health sector, shared value initiatives like those of Novo Nordisk and Nestle, are nascent so there are few learning examples to draw upon. Further, companies that address unmet needs in resource-constrained settings find gathering evaluative data to be challenging and expensive.

In conjunction with the Shared Value Initiative, over 20 corporate leaders and global health experts[1] came together to tackle the challenge of measurement.[2] This document summarizes the main conclusions from those consultations and provides a framework and practical advice **for shared value measurement of health solutions**. Building on this brief is a more detailed practitioner-oriented guide that outlines helpful tools and resources.

During three workshops over the course of a year, participants included two distinct groups:

- Corporate representatives from pharmaceutical, medical device, nutrition, technology and telecommunications sectors that are pursuing shared value initiatives at various stages of implementation. These companies see measurement as a critical barrier to fostering wider adoption and scale-up of shared value, but are still figuring out how to do it well.

- Global health experts including NGOs, academic institutions and government agencies, who bring the field's long experience in measuring health outcomes and recognize the vast potential of corporate innovation to address public health challenges.

Key insights include:

Measurement is needed to accelerate the pace, reduce the costs, and prove the value of shared value investments. To address unmet health needs, companies must innovate to topple barriers to health, such as low disease awareness, poor adherence, or untrained medical practitioners. These activities are often unproven, expensive, and require unusual partnerships. Evidence and feedback are needed for all stakeholders – marketing managers,

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[1] See Appendix for a full list of participating organizations.

[2] This document is focused on measuring the effects of **shared value initiatives that target health outcomes**. While companies offering health solutions can pursue other valuable social goals through their shared value initiatives (e.g., improving local livelihoods through workforce development), the focus on health outcomes is the common denominator for the companies included in our consultation group.

management, investors, and government – to demonstrate initiative success, return on investment, and resulting health outcomes. Understanding the social side strengthens the business side.

Shared value changes measurement needs, requiring attention to both the effectiveness of the intervention and the impact at the population level. We have discovered that there is more to measure, at greater depth, and for more audiences, including both government and other public health stakeholders.

While there is more to measure, companies can adopt tools and approaches from existing public health efforts. Companies have yet to capitalize on the multitude of data and evaluation approaches that already exist within the public health domain. Companies can better use this information and build partnerships for measurement and joint learning.

This guide is structured as follows:

- **What Is Shared Value in Health?** Overview of the concept for health organizations
- **Why Is Measurement Needed to Create Shared Value?** Meeting unmet needs requires evidence and faster learning
- **What is Shared Value Measurement?** Including the concepts of measuring innovations and impact
- **How to Measure Shared Value?** Advice to corporate practitioners and their partners
- **What Happens Next?** Suggested future areas of exploration for participating organizations

What is Shared Value in Health?

Creating shared value in health is about competing to meet unmet health needs in low-resource populations across all countries and regions of the world.[3]

Michael Porter and Mark Kramer define the idea of creating shared value as **"enhancing the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates".**

Shared value is inherent in health technology companies (e.g., pharmaceutical and medical device industry), which create both economic and societal value when they provide products and services that tackle important health problems. This concept is becoming gradually more relevant to companies in other industrial sectors (e.g., nutrition, technology and telecommunications), as firms seek to enhance their competitiveness by expanding their offering into health care.

Developed markets are becoming increasingly saturated, while also coming under pressure as traditional health systems scrutinize costs as never before. This is compelling companies to reconsider opportunities to meet the needs of underserved populations,[4] where they once saw little commercial interest. More and more corporations today realize the growth opportunity that exists in these populations, offering the potential for future market prospects.

Unmet health needs in a shared value context imply significant barriers at the customer level (e.g., low awareness of a condition or lack of acceptability of an intervention leading to poor adherence) and the inability of health care systems to deliver interventions in ways that customers can afford or accept (e.g., lack of financing mechanisms, inefficient supply chains). The shared value opportunity for companies lies in overcoming these barriers to meet unmet health needs profitably.

Creating shared value in health therefore requires more than delivering existing, proven medicines and other health products to national health systems. From a company's perspective, creating shared value in health includes three levels:

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[3] See "Competing by Saving Lives" at http://www.fsg.org/tabid/191/ArticleId/557/Default.aspx?srpush=true for more details. The term 'low-resourced populations' refers to people who, through poverty, poor health technology coverage, or weak health systems, lack access to health services that meet their needs. Beyond low-income countries, such populations also exist in many middle-income countries and can be found in more developed economies, too.

[4] While we believe the concept is uncontroversial, the term "underserved populations" has not been explicitly defined in the literature. We therefore use the following working definition: underserved populations are people who, through poverty, poor health technology coverage, or weak health systems, lack access to health services that meet their needs.

Figure 1: Creating Shared Value in Health

Reconceiving Products and Markets	Redefining Productivity in Value Chains	Enabling Local Cluster Development
• R&D for drugs, vaccines, and devices that **fill unmet health needs**	• **Collaborative and homegrown R&D** to reduce cost and risk	• **Behavior-change campaigns** to increase the **sophistication of demand** for health care
• Adaptation of **existing products** to **reduce complexity and cost**	• Efficient, **local supply chains and manufacturing** to reduce production costs	• **Health system strengthening** to enable delivery of needed products and services
• Tailored product offerings to meet **local market conditions**	• **Locally-adapted sales and distribution** to penetrate new markets and better meet patient needs	• **Advocacy and capacity building** to strengthen **policy** and the **regulatory environment**

A shared value initiative typically combines **innovations** across these three levels. For example, Novartis' Arogya Parivar initiative in rural India combines a portfolio of more affordable primary care medicines (reconceiving products and markets), with local sales team that know the culture and speak the dialect in villages (redefining productivity in the value chain), and frequent health camps with physicians brought into the remote areas (enabling local cluster development).

Shared value stretches companies into an unprecedented role within health systems. Whereas the last decades have been characterized by antagonism between companies and public health stakeholders, the new paradigm of shared value represents an opportunity (even a necessity) to collaborate with other stakeholders within health systems to develop solutions.

Why Is Measurement Needed to Create Shared Value?

Measurement is needed to accelerate the pace, reduce the costs, and prove the value of shared value investments.

Shared value initiatives are often still considered risky experiments, and evidence of social and business value creation is needed to convince corporate decision makers and their investors of their strategic and commercial relevance. Externally, as collaboration with public health stakeholders becomes a reality, more transparent measurement and reporting are needed. Measurement also provides evidence of a company's commitment to the underserved, an important ingredient in relationship-building with governments and civil society.

None of the current ways that companies measure commercial returns or health improvements is sufficient to create shared value:

- **Product efficacy:** The current drug and medical device product development approach centers on demonstrating efficacy and safety outcomes in strictly controlled conditions for registration and standardized cost effectiveness analyses supporting pricing and reimbursement.

- **Market share:** To assess the success of their commercial activities in well developed markets, companies typically rely on existing market intelligence systems (e.g., IMS, Nielsen) to track product prescription volumes, market share and sales but focus much less, or not at all, on customer-centered dimensions such as penetration of specific segments, particularly those most in need, or appropriate use.

- **Adverse effects:** In the post-marketing phase, companies monitor the occurrence of adverse effects (e.g., through pharmacovigilance) but seldom venture into measuring real-life effectiveness.

- **Corporate social responsibility:** When companies report on their social engagement activities, they often only share inputs or activities (for example, money spent on initiatives intended for reputation gain) for external stakeholders.

Our consultations revealed that few companies are looking beyond the approaches above to measure initiatives that attempt to meet unmet needs profitably, effectively moving from the current paradigm that focuses on efficacy[5] and reporting to one that embraces effectiveness[6] and systems efficiency[7] of social impact.

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[5] We define efficacy as the extent to which a specific intervention, procedure, or service produces the desired effect, under ideal conditions (controlled environment, lab circumstances).

[6] We define effectiveness as the extent to which planned outcomes, goals, or objectives are achieved as a result of an activity, strategy, intervention or initiative intended to achieve the desired effect, under ordinary circumstances (not controlled circumstances such as in laboratory).

[7] We define efficiency as the ratio of the output to the inputs of any system. An efficient system or person is one who achieves higher levels of performance (outcome, output) relative to the inputs (resources, time, money) consumed.

A few companies, such as Nestle and Novo Nordisk, are leading the way:

Using Measurement to Unlock Shared Value

Nutrition

Nestlé wants to increase access to and use of fortified packaged foods for children with micronutrient deficiencies in the Philippines. ***The shared value challenge***: decrease malnutrition among those most in need while increasing sales of its fortified packaged foods.

To address this challenge, Nestlé engaged public health stakeholders and employed new measurement techniques to learn about the key barriers to address, the cost-effectiveness of potential solutions, and the actual impact of implemented interventions in the field.

Pharmaceuticals

Novo Nordisk has set a target to provide diabetes treatment to 40 million patients by 2020 – twice as many as the 20 million it reached in 2011. ***The shared value challenge:*** expand commercial reach of its insulin in Indonesia, which is facing a fast-growing diabetes burden.

Novo Nordisk's market entry strategy involves collaborative efforts to understand barriers to diabetes treatment. A measurement approach is helping partners refine their interventions and demonstrate the value of investments in changing diabetes for all stakeholders involved.

What is Shared Value Measurement?

Shared value changes measurement needs, requiring attention to both the effectiveness of the intervention and the impact at the population level.

To create shared value, companies must understand innovation effectiveness in terms of the actual health outcomes achieved in their target populations. This shift creates unforeseen measurement challenges for companies:

- There is **more to measure, at greater depth**. Companies serving low-resourced populations cannot succeed by simply monitoring activities and/or outputs. They need to measure their contribution to improved health outcomes to establish the evidence base and position their product with individual or government buyers. As a result, companies need to understand whether investments in training, creating awareness, etc. are enabling greater access, coverage and appropriate use.

- There are **more audiences** for measurement. Internally, marketing and market access departments need the insights from measuring the innovation to inform their strategy. Externally, stakeholders seek to understand

what is preventing coverage and appropriate use and their "burden of proof" for impact is high, as partners, such as government, and beneficiaries want to see evidence of real-life effectiveness.

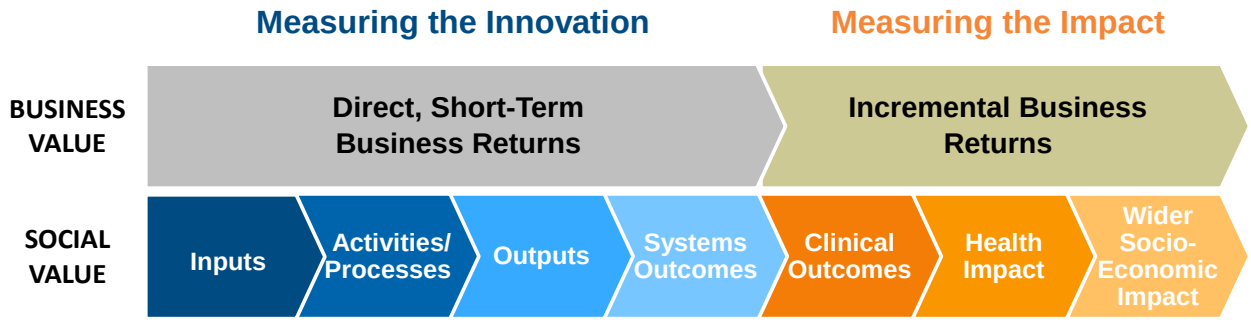
Based on our consultations, companies and their partners should make a clear distinction between two fundamental components of measurement, both of which are needed for shared value success:

1. **Measuring the Innovation.** Through new products, operations, and contributions to health systems, companies are improving coverage and ensuring appropriate use with new tiers of customers. Training health workers and increasing awareness for a disease, for example, are two common areas for innovation. In all cases, companies must understand whether their efforts are in fact **improving coverage and use**, and therefore increasing demand for the company's products and services.

2. **Measuring the Impact.** It is important to understand whether shared value investments actually result in **better health outcomes**, and whether these outcomes grow the business prospects, for example sales growth or product differentiation, over time.

The following graphic depicts these two levels of shared value measurement and how they unlock business value in different, but complementary, ways:

Figure 2: Components of Shared Value Measurement



Why are these levels of measurement so important from a business perspective? They highlight the intersection between health outcomes and business value, and unlock value.

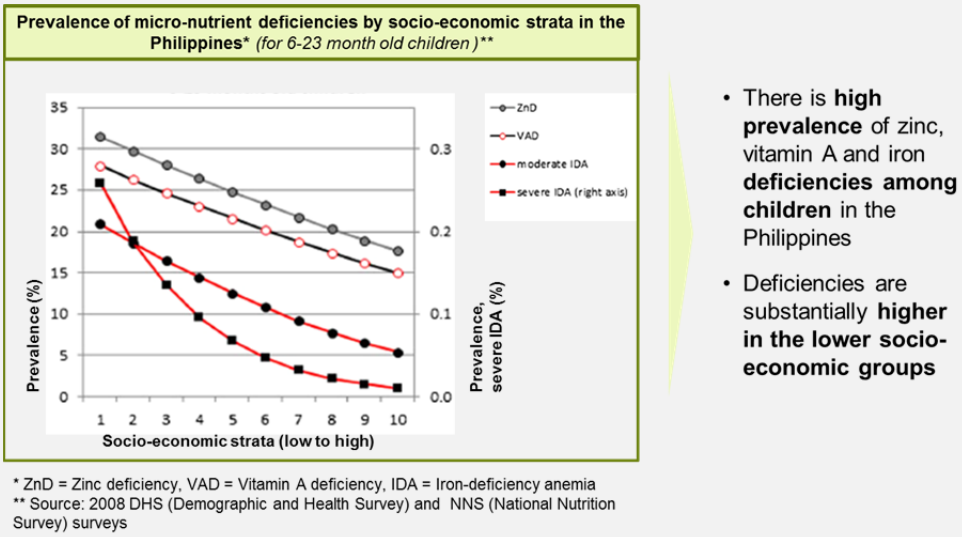
For example, understanding how shared value innovations can address health system barriers unlocks opportunities for increasing sales and/or decreasing costs. Likewise, estimating and/or measuring impact for individuals or populations unlocks opportunities for sales growth through product differentiation, stakeholder trust, and the opening of new markets.

The Shared Value Measurement Challenge

Nutrition

In seeking to increase overall market share, Nestlé evaluated health needs by socio-economic groups. Nestlé realized that the poorest households in the Philippines had the greatest levels of micronutrient deficiencies (see Figure 3 for prevalence data). Affordability issues were shown to significantly limit access to and appropriate use of fortified food products in those subpopulations.

Figure 3: Nestlé Assessed the Burden of Micronutrient Deficiencies in the Philippines[8]



* ZnD = Zinc deficiency, VAD = Vitamin A deficiency, IDA = Iron-deficiency anemia
** Source: 2008 DHS (Demographic and Health Survey) and NNS (National Nutrition Survey) surveys

Measuring the innovation challenge: Nestlé needed to assess the effectiveness and commercial viability of a lower priced fortified food product aimed at increasing penetration in lower socio-economic groups.

Measuring the impact challenge: recognizing its long term interests in fortified food and position in the Philippines as well as the scrutiny of global and national public health stakeholders, the company also needed to demonstrate the health impact and cost-effectiveness of specific product lines in low-resource populations.

[8] Source: *Burden of Micronutrient Deficiencies by Socio-Economic Strata in Children Aged 6 Months to 5 Years in the Philippines,* Wieser et al., BMC Public Health 2013.

Figure 4: Nestlé Defined a Mixed Methods Measurement Strategy

Learning Questions	Approach to Measurement
Making the Case	
1. Is food fortification effective?*	✓ **Systematic review** of food fortification literature
2. What are the health and economic consequences of deficiencies?	✓ **Health economic model** simulating the consequences of MNDs in childhood
Measuring the Innovation	
3. What are the patterns of awareness and demand among Filipino households?	✓ **Household survey** of 1800 households, across socio-economic groups
4. What is their sensitivity to price?	✓ **Hypothetical marketing experiment** to assess reactions to price discounts
5. How cost-effective are price-based interventions?	✓ **Cost-effectiveness estimations** of tiered pricing schemes
Measuring the Impact	
6. Do the predicted health and economic benefits happen?	❑ **Field study** on real-life impact on anemia, morbidity and finances

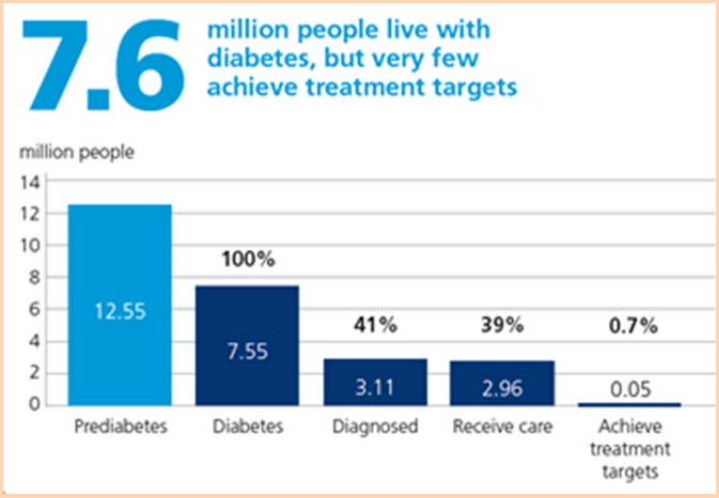
* Nestlé fully understands that food fortification is one of several ways to address micronutrient deficiencies, with a varied diet being the most highly recommended approach

Figure 4 illustrates how Nestlé defined a mixed methods measurement strategy to measure both the innovation and the impact, defining high level learning questions and identifying appropriate measurement approaches for each level of shared value measurement.

Pharmaceuticals

In Indonesia, less than 1% of people living with diabetes manages their disease successfully, and only one in eight patients who need insulin treatment receives appropriate care (see Figure 5). Novo Nordisk and its local partners explored the barriers hampering diabetes case management and focused on the lack of awareness about diabetes among health care professionals through a dedicated medical training program.

Figure 5: Prediabetes and the Diabetes Rule of Halves in Indonesia[9]



Measuring the innovation challenge: to prioritize further investments and implementation efforts, Novo Nordisk needed to assess the effectiveness and efficiency of their training innovation targeting different health care professionals in achieving the intended patient outcomes.

Measuring the impact challenge: Novo Nordisk needed to demonstrate the long-term health and wider socio-economic impact potential of diabetes control initiatives to key local stakeholders to unlock further partnership opportunities.

[9] Source: *Where economics and health meet: Changing diabetes in Indonesia*, Blueprint for Change Programme, Novo Nordisk 2013.

How to Measure Shared Value?

While the scope of measurement will undeniably increase, the resource intensity can be mitigated by a fit-for-purpose and partner-focused approach in order not to undermine often fragile business models:

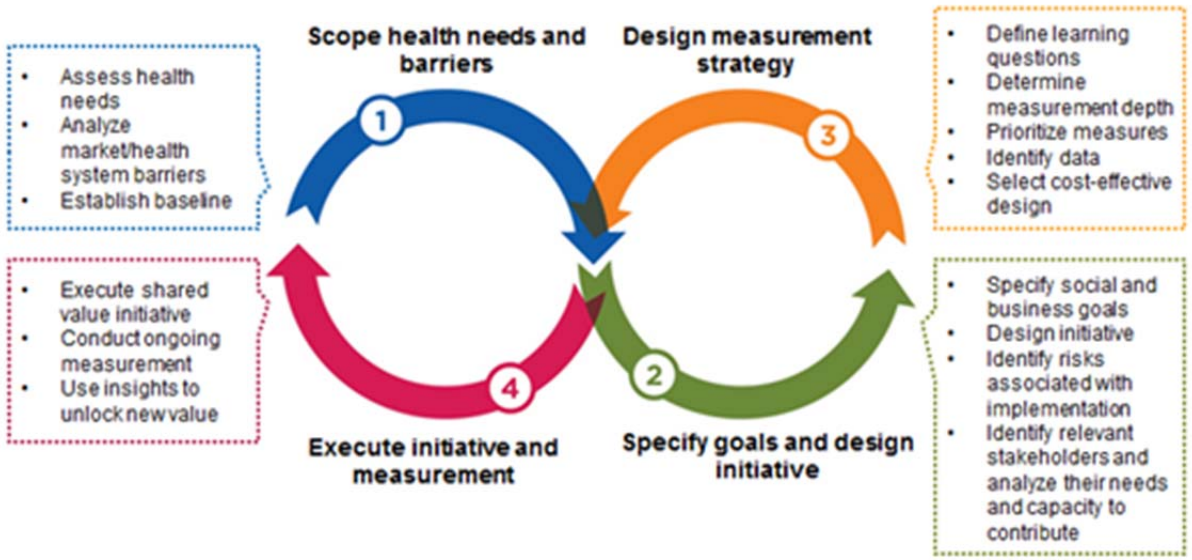
- Companies need to understand the difference in what is needed to truly drive initiative improvement and the needs of external stakeholders that are not invested in the effort to scope their measurement work. A key criterion to guide corporate decision making is the extent to which the insights generated through measurement will help create incremental social and business benefits.

- In addition, a multitude of useful data and measurement approaches exists within the public health domain (e.g., public health data, nutritional data, and economic/household expenditure data). To date, corporations in the health field have not routinely relied on this information or potential partnerships to support their learning processes. Therefore, another key parameter is the opportunity to engage with external stakeholders, for example through measurement partnerships and/or co-funding.

I. Anchor measurement in a rigorous shared value strategic planning process.

Many companies think about measuring shared value when they are already a few years into the journey. At this point, defining a cost-effective measurement approach that yields valuable insights can be a struggle (particularly without baseline information). Starting measurement during the initiative design process as shown below can save time and money.

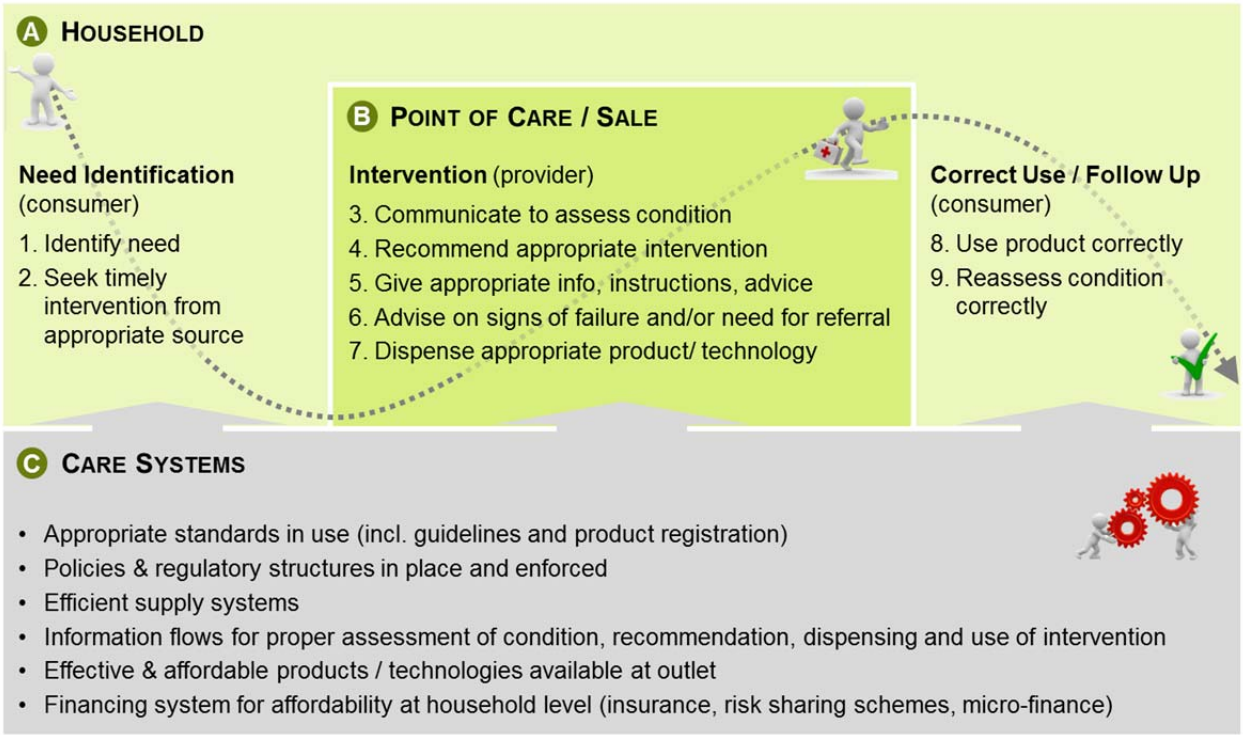
Figure 6: Shared Value Strategic Planning Process



1 Scoping health needs and barriers

Measurement should be anchored in a robust initial analysis of unmet health needs and the behavioral and systems barriers requiring investments and innovations. Rigorous forecasting and predictive modeling allows companies to design smarter initiatives. An upfront assessment will also provide the opportunity to establish a baseline for future comparison. A universal care pathway framework (see Figure 7) provides a useful and comprehensive way for companies to perform the initial analysis. The general process for identifying and addressing a health condition involves several linked steps at the household level (patient and/or caregiver) prior to and after the intervention and at the point of care or sale level (interaction with a provider). This basic process relies on the preparedness of the underlying health care system, encompassing important dimensions such as the definition and use of standards, the availability of efficient and affordable products, the enactment and enforcement of strong, enabling policies and regulations, the setup and maintenance of efficient supply systems, adequate information flows as well as financing mechanisms to ensure affordability at the end-user level.

Figure 7: Framework for Assessing Systems-Based Barriers to Access and Driving Systems Outcomes[10]



[10] Source: Adapted from Ross-Degnan, D., Vialle-Valentin, C., and Briggs, J. 2013. *Improving Medicines Access and Use for Child Health: A Guide to Developing Interventions*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

2 Specifying goals and design initiative

When designing a shared value initiative, corporations need to set explicit targets and articulate a clear pathway to social and business value creation. The pathway outlined in Figure 8 and the high level guiding questions below provide a framework for companies to consider the chronological stages of social and business value creation (also see Figure 9) for an example of how the pathway can be applied to a specific intervention). Anticipating social and business value creation in a systematic way will allow for measurement to capture the linkages. **Error! Reference source not found.** 1 is an additional resource for practitioners, giving an overview of potential options for social and business value creation along the pathway.

Key Guiding Questions:

1. What **interventions/investments** are needed to overcome market/health system barriers and meet unmet needs?
2. How are these investments **linked to business success** so as to generate a positive net present value (NPV) for the initiative?
3. What **stakeholders** should we involve and collaborate with?
4. What are **possible unintended effects** from our intervention and how can we mitigate these?

Figure 8: Social and Business Value Creation Pathway

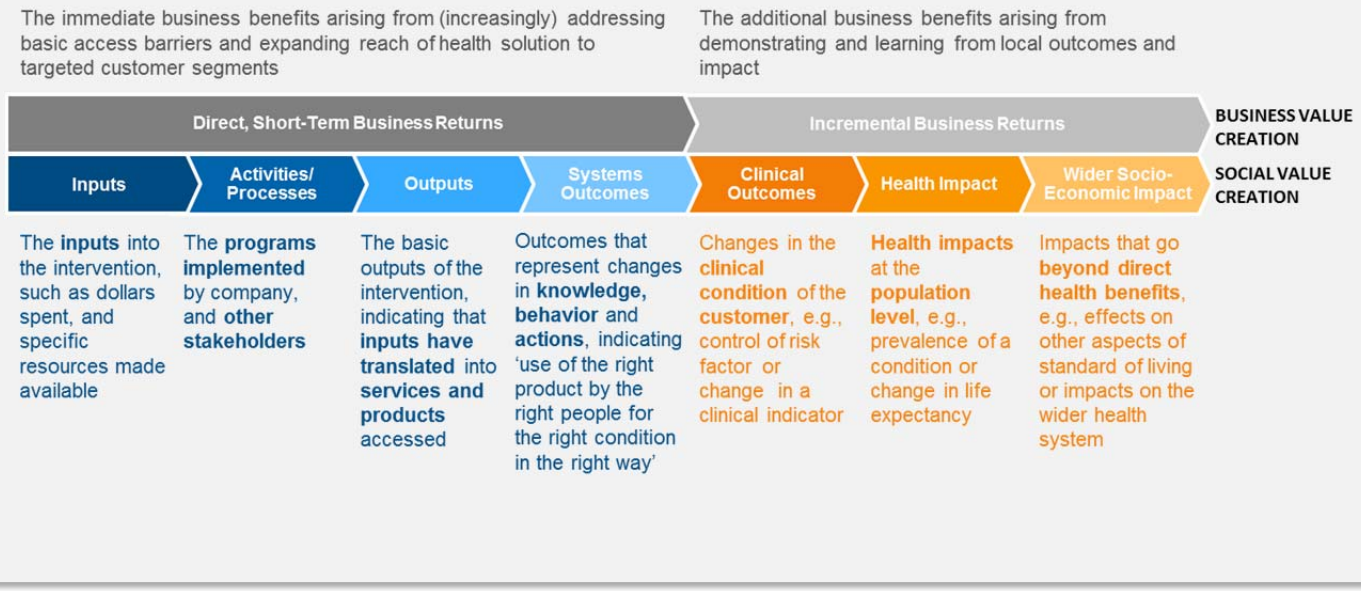


Figure 9: Specify Goals and Design Initiative – Diabetes Example

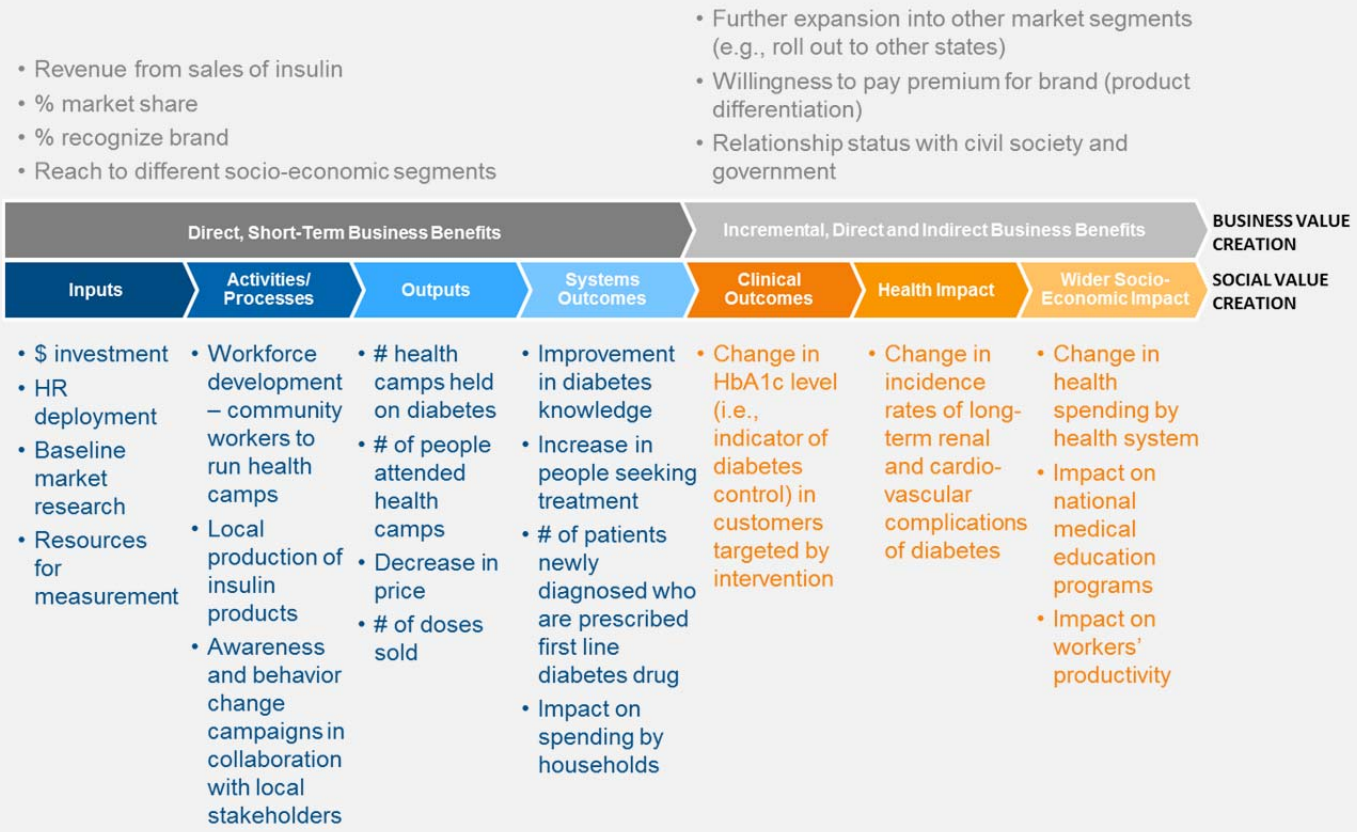


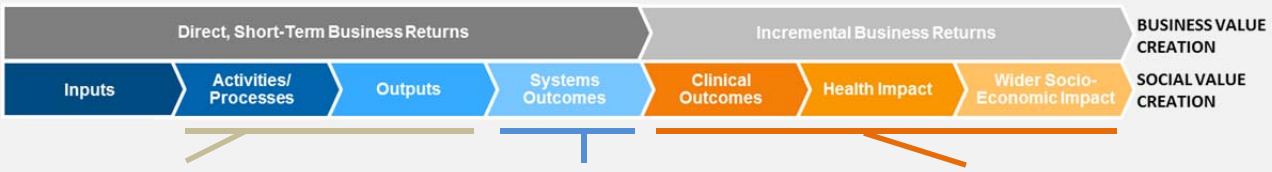
Table 1: Potential Social and Business Value Creation Options

	Measuring the Innovation	Measuring the Impact
Business Value Creation:		
Direct P&L Impact	• Higher sales and/or market share *(e.g., removing access barriers to expand reach to additional market segments, including repeat use)* • Lower costs of implementation *(e.g., removing ineffective components of the intervention, testing and scaling up new options to reach customers or distribute products)*	• Product differentiation vs. alternatives *(e.g., increased customers' willingness to pay resulting from clearly demonstrated clinical outcomes compared to alternative options)*
Trust of Stakeholders	• Risk mitigation/preservation of reputation *(e.g., identifying and mitigating unintended, potentially undesired effects arising from intervention)*	• Relationship with government, NGOs, investors and/or civil society *(e.g., by proactively demonstrating that product delivers claimed health benefits and does not result in major negative socio-economic or systems effects)*
New Shared Value Opportunities	–	• Opening of new market segments *(e.g., unlocking internal funds or additional R&D, obtaining reimbursement from national health system/private insurance stakeholder, co-investing with international organizations and local bodies)*
Social Value Creation:		
Increased Reach	• To initially targeted population groups *(e.g., increasing affordability, health seeking behavior and product availability at point of care/sale)*	• Beyond initially targeted population groups *(e.g., designing new intervention based on learnings about local market such as the introduction of a new financing scheme, rolling out intervention to other geographic areas)*
Improved Effectiveness	• Better prescribing, dispensing and adherence *(e.g., improving HCP education, national guidelines, communication/information at point of care/sale or changing perception of intervention among customers)*	• Better case management (prevention, diagnosis and treatment) *(e.g., through better understanding of condition and response to treatment of different population subgroups, optimizing and/or complementing components of intervention)*
Mitigation of Negative Effects	• Corrective actions on relevant systems components *(e.g., reducing displacement of alternatives for lower socio-economic groups with limited access to new intervention, reducing unnecessary consumption to optimize mix of household expenditures)*	–

3 Designing the measurement strategy

The formulation of overarching learning questions (see Figure 10) is an important first step as companies move from defining the logic of an intervention to designing a measurement strategy. Going further along the value creation pathway and going deeper at each measurement level (i.e., adopting both customer-focused and systems-orientated approaches) leads to greater insights, and additional social and business value creation.

Figure 10: Overarching Learning Questions



Basic Monitoring

Did what the SV initiative set out to do actually happen?

- *At the company level*
- *At the patient level*
- *At the provider level*
- *At the system level*

Measuring the Innovation

Did what happened change knowledge, behaviors, and actions?

- *Of patients*
- *Of providers*
- *Of the system*

Measuring the Impact

Did knowledge, behavior, and action changes result in health, social, and business outcome changes?

- *For patients (health status, satisfaction with care, affordability)*
- *For providers (satisfaction with system, economic status)*
- *For system (equity in access, equity in financing, quality of care)*
- *For company (return on investment)*

Starting with these high-level learning questions, corporations can follow a multi-step process to design their measurement strategy involving: i) defining more specific learning questions, ii) determining the appropriate scope of measurement based on the anticipated value of insights, iii) prioritizing measures, iv) identifying available data, and v) choosing a cost-effective measurement design. This guide deals with these steps in the next two sections, separately for the two levels of shared value measurement – measuring the innovation and measuring the impact:

Measuring the Innovation

The next section provides illustrative exploratory questions to explore the different components of health systems as well as measures that can be used to assess progress against behavioral or systems barriers. It also reviews different data sources and data collection methodologies that corporations can use for this purpose.

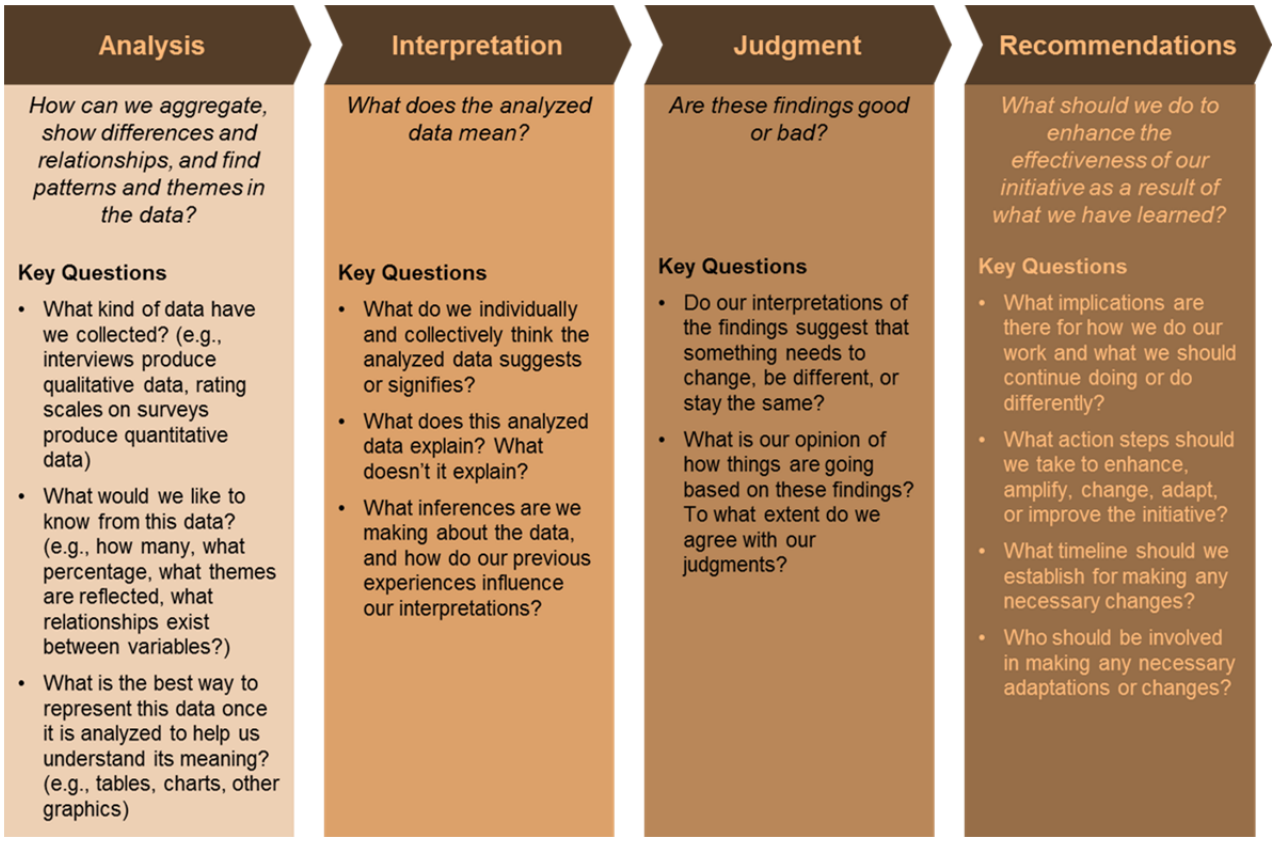
Measuring the Impact

The impact created through a shared value initiative is heavily dependent on the specific context of this initiative (e.g., geography, therapeutic area). Rather than focusing on specific measures, then, the guide describes different measurement methodologies available to companies and suggests a set of decision criteria to navigate the scope of impact measurement in a cost-effective way.

4 Executing the initiative and measurement

Lastly, making sense of measurement results involves reflecting on measurement data with internal and external audiences and making decisions for initiative improvement. Companies can follow the system outlined in Figure 11 to turn measurement into real decision making.

Figure 11: Process for Turning Measurement into Decision Making



How to Measure Shared Value?

II. Measure the innovation using core metrics and existing public health data.

The new measurement approach involves careful consideration of behavioral and systemic components that could influence the delivery and appropriate use of products and services associated with companies' shared value initiatives. For example, Novartis developed Arogya Parivar, a sustainable, scalable business to reach low-resourced patients in rural India. Among other barriers, it was critical to the success of the initiative to tackle the chronic lack of health-seeking behavior, and to reduce mistrust among targeted customers. Novartis also had to figure out a cost-effective way to bridge the significant infrastructure gap in the short term, and to address affordability issues, since more than two-thirds of health spending in India is out-of-pocket. Measurement should target the key barriers associated with these components and assess progress over time.

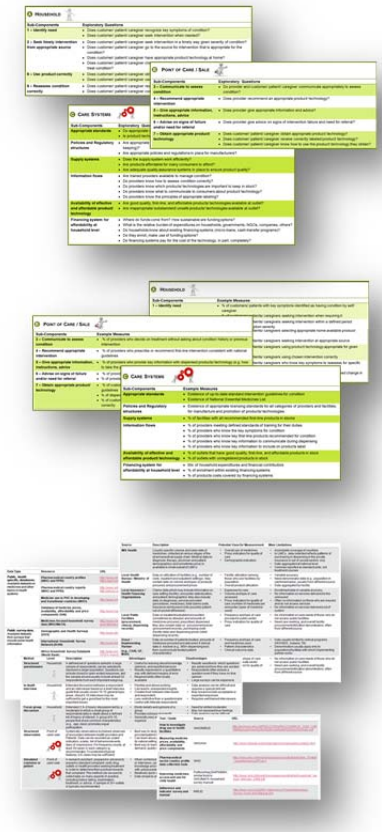
To facilitate the analysis of systemic components, companies are encouraged to build on three core sets of resources developed during this consultation work, tailoring them to their specific shared value context:

Exploratory questions to help identify and prioritize behavioral and systems barrier. A list of questions to thoroughly assess potential barriers at the household, point of care/purchase and health system levels based on the care pathway framework outlined in Figure 7 (see Figure 13).

Frequently used and commonly accepted standard measures to assess these barriers. A finite set of behavioral and systemic categories with corresponding illustrative measures that are being used in the global health field, such as indicators of customer coverage and affordability[11] (see Figure 14), plus other additional, systems-orientated measures as needed for specific initiatives (see Figure 15).

Existing data sources, collection systems and tools.
The resource intensity of data collection for the assessment of systems components is dependent on the approach as illustrated in Figure 12 below. This guide contains resources for data collection at various points along this continuum:

- Sources of **available data** for health solutions (see Table 2 and Table 3)[12]
- **Methods of data collection** at the household level and the point of care/sales level (see **Error! Reference source not found.** 4)
- Existing **standard tools and guides** (see Table 5)



[11] Resources available to access additional widely used and accepted systems outcome indicators include: Well-established indicators for measuring the performance of the different components of a pharmaceutical supply system (http://apps.who.int/medicinedocs/documents/s14877e/s14877e.pdf); indicators for monitoring national drug policies (http://whqlibdoc.who.int/hq/1999/WHO_EDM_PAR_99.3_pp1-114.pdf); and household indicators focused on child health (http://erc.msh.org/toolkit/toolkitfiles/file/C-DMCI%20Assessment%20Manual%20English.pdf).

[12] Sources of available data for health solutions which fall into three categories: public, health-specific, databases on medicines and other topics in health systems; publicly available survey datasets that include some health information; and proprietary data owned by specific organizations on utilization of and expenditures for care.

Figure 12: Resource Intensity of Approaches for the Assessment of Systems Components

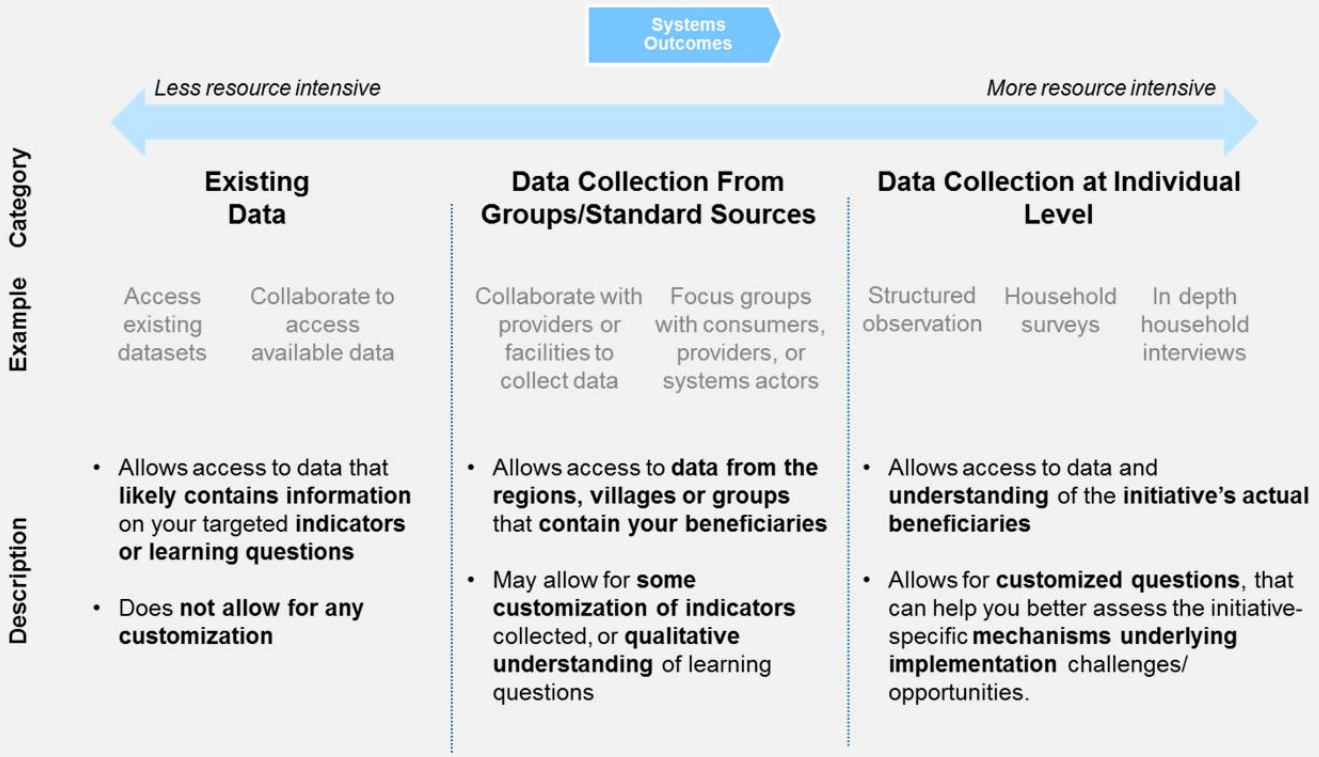


Figure 13: Exploratory Questions to Identify and Prioritize Behavioral and Systems Barriers

A HOUSEHOLD

Sub-Components	Exploratory Questions
1 – Identify need	• Does customer/ patient/ caregiver recognize key symptoms of condition? • Does customer/ patient/ caregiver seek intervention when needed?
2 – Seek timely intervention from appropriate source	• Does customer/ patient/ caregiver seek intervention in a timely way given severity of condition? • Does customer/ patient/ caregiver go to the source for intervention that is appropriate for the condition? • Does customer/ patient/ caregiver have appropriate product/ technology at home? • Does customer/ patient/ caregiver choose the right product/ intervention available at home to treat condition?
8 – Use product correctly	• Does customer/ patient/ caregiver obtain an appropriate product/ technology? • Does customer/ patient/ caregiver use product/ technology correctly?
9 – Reassess condition correctly	• Does customer/ patient/ caregiver reassess condition correctly after product/ technology use? • Does customer/ patient/ caregiver correctly interpret changes in condition?

B POINT OF CARE / SALE

Sub-Components	Exploratory Questions
3 – Communicate to assess condition	• Do provider and customer/ patient/ caregiver communicate appropriately to assess condition?
4 – Recommend appropriate intervention	• Does provider recommend an appropriate product/ technology?
5 – Give appropriate information, instructions, advice	• Does provider give appropriate information and advice?
6 – Advise on signs of failure and/or need for referral	• Does provider give advice on signs of intervention failure and need for referral?
7 – Obtain appropriate product/ technology	• Does customer/ patient/ caregiver obtain appropriate product/ technology? • Does customer/ patient/ caregiver receive correctly labeled product/ technology? • Does customer/ patient/ caregiver know how to use the product/ technology they obtain?

C CARE SYSTEMS

Sub-Components	Exploratory Questions
Appropriate standards	• Do appropriate standards exist to define best practice in managing condition? • Is product/ technology registered for use in condition?
Policies and Regulatory structures	• Are appropriate policies and regulations in place for providers (e.g., for prescribing, dispensing, stock keeping)? • Are appropriate policies and regulations in place for manufacturers?
Supply systems	• Does the supply system work efficiently? • Are products affordable for many consumers to afford? • Are adequate quality assurance systems in place to ensure product quality?
Information flows	• Are trained providers available to manage condition? • Do providers know how to assess condition correctly? • Do providers know which products/ technologies are important to keep in stock? • Do providers know what to communicate to consumers about product/ technology? • Do providers know the principles of appropriate labeling?
Availability of effective and affordable product/ technology	• Are good quality, first-line, and affordable products/ technologies available at outlet? • Are inappropriate/ substandard/ unsafe products/ technologies available at outlet?
Financing system for affordability at household level	• Where do funds come from? How sustainable are funding options? • What is the relative burden of expenditures on households, governments, NGOs, companies, others? • Do households know about existing financing systems (micro-loans, cash-transfer programs)? • Do they enroll, make use of funding options? • Do financing systems pay for the cost of the technology, in part, completely?

Figure 14: Illustrative Measures to Assess these Barriers

Systems Component		'Best Practice' Measures
Individual/ Household	**Care Seeking**	• % of targeted consumers aware of/ knowledgeable about condition • % of targeted consumers seeking intervention
	Product Use & Adherence	• % of consumers who understand how to use intervention dispensed • % of consumers who use product according to national guidelines • % of consumers who complete course of intervention (acute) or adhere to required level of intervention (chronic condition)
	Expenditures	• Cost of course of standard intervention for acute condition, or one month of intervention for chronic condition vs. 1-day wages of lowest paid government worker • % of household income spent on intervention
	Access and Penetration *(italics – requires measure at individual level)*	• Sales volume in target population – *± % by relevant pop. strata* • % repeat purchases in target population (chronic condition) – *± % by relevant pop. strata* • *% of targeted consumers actually using intervention – ± % by relevant pop. strata*
Point of Care/ Point of Sale	**Prescribing & Dispensing Pattern/ Information Flows**	• % of providers who perform physical examination (for drugs/ medical devices) • % of providers who recommend intervention consistent with national guidelines • % of providers who provide the correct advice on how to use intervention • % of consumers who receive the appropriate product at point of care/ sale
Care Systems	**Standards of Care**	• Presence at facility level of intervention guidelines endorsed by national health authority
	Policy & Regulatory	• % of unregistered products for intervention at facility level • % of expired products for intervention at facility level
	Supply System	• % availability at facility level of recommended (on national intervention guidelines), assured quality and affordable products

Figure 15: Other Systems-Orientated Measures for Specific Initiatives

A HOUSEHOLD

Sub-Components	Example Measures
1 – Identify need	• % of customers/ patients with key symptoms identified as having condition by self/ caregiver • % of customers/ patients/ caregivers seeking intervention when requiring it
2 – Seek timely intervention from appropriate source	• % of customers/ patients/ caregivers seeking intervention within a defined period appropriate for symptom severity • % of customers/ patients/ caregivers selecting appropriate home-available product/ technology • % of customers/ patients/ caregivers seeking intervention at appropriate source
8 – Use product correctly	• % of customers/ patients/ caregivers using product/ technology appropriate for given condition • % of customers/ patients/ caregivers using chosen intervention correctly
9 – Reassess condition correctly	• % of customers/ patients/ caregivers who know key symptoms to reassess for specific condition • % of customers/ patients/ caregivers who correctly understand that a defined change in symptoms indicated worsening of condition

B POINT OF CARE / SALE

Sub-Components	Example Measures
3 – Communicate to assess condition	• % of providers who decide on treatment without asking about condition history or previous intervention
4 – Recommend appropriate intervention	• % of providers who prescribe or recommend first-line intervention consistent with national guidelines
5 – Give appropriate information, instructions, advice	• % of providers who provide key information with dispensed products/ technology (e.g. how to take the product, for how long, possible side effects)
6 – Advise on signs of failure and/or need for referral	• % of providers who inform customer/ patient/ caregiver of key signs of treatment failure • % of providers who recommend referral if customer/ patient/ caregiver fails to improve
7 – Obtain appropriate product/ technology	• % of customers/ patients/ caregivers who receive products consistent with national guidelines • % of dispensed products that are correctly labeled • % of customers/ patients/ caregivers who understand how to use products dispenses correctly

C CARE SYSTEMS

Sub-Components	Example Measures
Appropriate standards	• Existence of up-to-date standard intervention guidelines for condition • Existence of National Essential Medicines List
Policies and Regulatory structures	• Existence of appropriate licensing standards for all categories of providers and facilities; for manufacture and promotion of products/ technologies
Supply systems	• % of facilities with all recommended first-line products in stocks
Information flows	• % of providers meeting defined standards of training for their duties • % of providers who know the key symptoms for condition • % of providers who know key first-line products recommended for condition • % of providers who know key information to communicate during dispensing • % of providers who know key information to include on products label
Availability of effective and affordable product/ technology	• % of outlets that have good quality, first-line, and affordable products in stock • % of outlets with unregistered products in stock
Financing system for affordability at household level	• Mix of household expenditures and financial contributors • % of enrolment within existing financing systems • % of products costs covered by financing systems

Table 2: Overview of Key Public Databases and Survey Data

Data Type	Resource	URL
Public, health specific, databases. Available datasets on medicines and other topics in health systems	Pharmaceutical country profiles (WHO and PPRI)	http://www.who.int/medicines/areas/coordination/coordination_assessment/en/ https://ppri.goeg.at/Downloads/Publications/PPRI_Report_final.pdf
	Pharmaceutical country reports (WHO and PPRI)	http://www.who.int/medicines/areas/coordination/coordination_assessment/en/index1.html http://whocc.goeg.at/Publications/CountryReports
	Medicine use in PHC in developing and transitional countries (WHO)	http://apps.who.int/medicinedocs/en/m/abstract/Js16073e/
	Database of medicine prices, availability, affordability and price components (HAI)	http://www.who.int/medicines/areas/access/Medicine_Prices_and_Availability/en/
	Medicines-focused household survey data (WHO/MeTA)	http://www.medicinestransparency.org/meta-toolbox/household-facility-surveys-on-access-to-and-rational-use-of-medicines-in-countries/
Public survey data. Available datasets from surveys that include some health information	Demographic and Health Surveys (DHS)	http://www.dhsprogram.com/
	International Household Survey Network (IHSN)	http://www.ihsn.org/home/
	Africa Household Survey Databank (World Bank)	http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:20234524~menuPK:485249~pagePK:146736~piPK:226340~theSitePK:258644,00.html
	Family Life Surveys (RAND)	http://www.rand.org/labor/FLS.html
	Living Standards Measurement Study Household Surveys (World Bank)	http://iresearch.worldbank.org/lsms/lsmssurveyFinder.htm
	Multi Indicator Cluster Surveys (UNICEF)	http://www.unicef.org/statistics/index_24302.html
	Global Health Expenditure database (WHO)	http://apps.who.int/nha/database

Table 3: Overview of Key Proprietary Data Sources[13]

Source	Description	Potential Uses for Measurement	Main Limitations
IMS Health	Country specific volume and sales data of medicines, collected at various stages of the pharmaceutical supply chain. Medical data on diagnosis, therapy, physician and patient demographics (and sometimes price) is available in small subset of LMICs	• Overall use of medicines • Proxy indicators for quality of care • Demographic indicators	• Incomplete coverage of countries • In LMICs, data collected reflects patterns of purchasing or dispensing in the private insurance or out of pocket sectors only • Data aggregated at national level • Volumes reported as standard units, not treatment courses
Local Health Bureau / Ministry of Health	Data on utilization of facilities (e.g., number of visits, inpatient and outpatient settings). May contain data on volume and types of products procured, and procurement prices	• Facility utilization (among those who use facilities) by population • Overall product utilization	• Variable accuracy • Need denominator data (e.g., population in catchment area), usually from different source • Data aggregated by facility
Local Insurance / Health Financing Organizations	Claims data which may include information on care setting (facility), encounter date/duration, and patient demographics. May also include data on diagnoses, services provided (procedures, medicines), total claims costs, insurance reimbursed costs (possibly patient out-of-pocket difference)	• Expenses for care • Volume and type of care accessed • Proxy indicators for quality of care (number of medicines per encounter; types of medicine used)	• Enrollment data of variable accuracy • No information on services delivered to the uninsured • Often no information on those who are insured and do not access services • No information on services delivered out of system
Local Public Facilities (procurement, clinical, dispensing records)	Data on inpatient/outpatient encounters (sometimes by disease) and amounts of medicines procured, prescribed, dispensed. May also contain data on procurement prices (procurement records), purchasing costs (facility data) and dispensing prices (retail dispensing records)	• Frequency and type of care provided in public sector • Proxy indicators for quality of care	• No information on care needs of those who do not access public facilities • Need care seeking, and overall facility procurement/utilization denominators, often from different source
Donor / Implementing Partner (e.g., CHAI, GF, MSH)	Data on number of patients treated; amounts of medicines procured and delivered. If clinical data is tracked (e.g., MSH dispensing tool) then could include treated patient characteristics	• Frequency and type of care and medicines used • Patient characteristics • Clinical outcome data	• Data usually limited to vertical programs (HIV/AIDS, malaria, TB) • Denominators usually apply only to populations/facilities with which implementing partner works
Private Sector (e.g., employer health system data, private hospital systems, missions)	Data on inpatient/outpatient encounters (sometimes by disease) and amounts of medicines procured, prescribed, dispensed. May also contain data on procurement prices (procurement records), purchasing costs (facility data) and dispensing prices (retail dispensing records)	• Frequency and type of care provided in private sector • Proxy indicators for quality of care	• No information on care needs of those who do not access public facilities • Need care seeking, and overall facility procurement/utilization denominators, often from different source

[13] Source: Anita Wagner and Dennis Ross-Degnan, Department of Population Medicine, Harvard Medical School & Harvard Pilgrim Health Care Institute.

Table 4: Example Methods for Data Collection at the Household and Point of Care/Sale Level[14]

Method	Level	Description	Advantages	Disadvantages
Structured questionnaire	Household 	A defined set of questions asked to a large sample of respondents; can be selected to represent a larger population. Questions can include closed or open-ended responses, and the sample should usually include at least 30 respondents from each important subgroup.	• Useful for learning about knowledge, opinions, and reported behavior • Results expressed in a quantitative way with defined margins of error • Required skills often locally available	• Results sensitive to which questions are asked and how they are worded • Respondents often answer a question even if they have no true opinion • Large surveys can be expensive
In-depth interview	Household 	Extended discussion between a respondent and an interviewer based on a brief interview guide that usually covers 10-15 general topic areas. About 5-10 interviews may be sufficient to get a good feel for the most important issues.	• Flexible and allows probing • Can lead to unexpected insights • Creates trust between interviewer and respondent • Less restrictive than a questionnaire • Useful with illiterate respondents	• Data analysis can be difficult and requires a special skill set • Bias toward socially acceptable or expected responses • Requires well trained interviewers
Focus group discussion	Household 	Extended (1.5–2 hours) discussion led by a moderator in which a small group of respondents talks in depth about a defined list of topics of interest. A group of 6-10 people that share common characteristics (e.g., age, class) promotes equal participation.	• Elicits beliefs and opinions of a group • Provides richness and depth • Generally easy and inexpensive to organize	• Need for skilled moderator • May not represent true feelings • Data analysis can be difficult • Potential for bias in analysis
Structured observation	Point of care/sale 	Systematic observations by trained observers of encounters between health providers and patients. Data can be recorded as coded indicators, scales, list of behaviors/events, diary of impressions. For frequency counts, at least 30 cases in each category is recommended. To understand typical features, 5-6 cases may be sufficient.	• Best way to study complex provider/patient interactions • Can learn about provider behavior in its natural setting • Best way to learn about patient demand, quality of communication	• Behavior may not be natural because of observer's presence • Requires skilled, patient observers • Not useful for infrequent behaviors
Simulated customer or patient	Point of care/sale 	A research assistant, prepared in advance to present a standard complaint, visits drug outlets or health providers seeking treatment in order to determine their practices towards that complaint. This method can be used to collect data on many aspects of practice, including history-taking, examination, treatment, or advice. A sample of 30+ outlets is typically recommended.	• When combined with questionnaires or interviews, can compare knowledge and reported practice with actual practice • Relatively quick and easy to conduct • Data simple to analyze	• Response may be specific to the scenario presented • Research assistants can vary in reliability • Collecting data while hiding purpose may be considered an ethical problem • Need adequate sample size of visits to obtain a reliable picture

[14] Adapted from Ross-Degnan, D., Vialle-Valentin, C., and Briggs, J. 2013. *Improving Medicines Access and Use for Child Health: A Guide to Developing Interventions*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Table 5: Key Standard Tools and Guides

Tool / Guide	Source	URL
How to investigate drug use in health facilities	WHO/INRUD	http://archives.who.int/PRDUC2004/RDUCD/INRUD_2000_CDROM/Manuals/How%20to%20Investigate%20Drug%20Use.pdf
Measuring medicine prices, availability, affordability and price components	WHO/HAI	http://whqlibdoc.who.int/hq/2003/WHO_EDM_PAR_2003.2.pdf?ua=1
Pharmaceutical sector country profile data collection tools	WHO	http://www.who.int/medicines/areas/coordination/Empty_English_Questionnaire.pdf?ua=1
Improving medicines access and use for child health	Forthcoming SIAPS/MSH, similar tools in WHO/MeTA household survey manual	http://www.who.int/medicines/areas/coordination/household_manual_february_2008.pdf
Adherence and indicator survey and manual	INRUD	http://www.inrud.org/ARV-Adherence-Project/Adherence-Survey-Tools-and-Manual.cfm

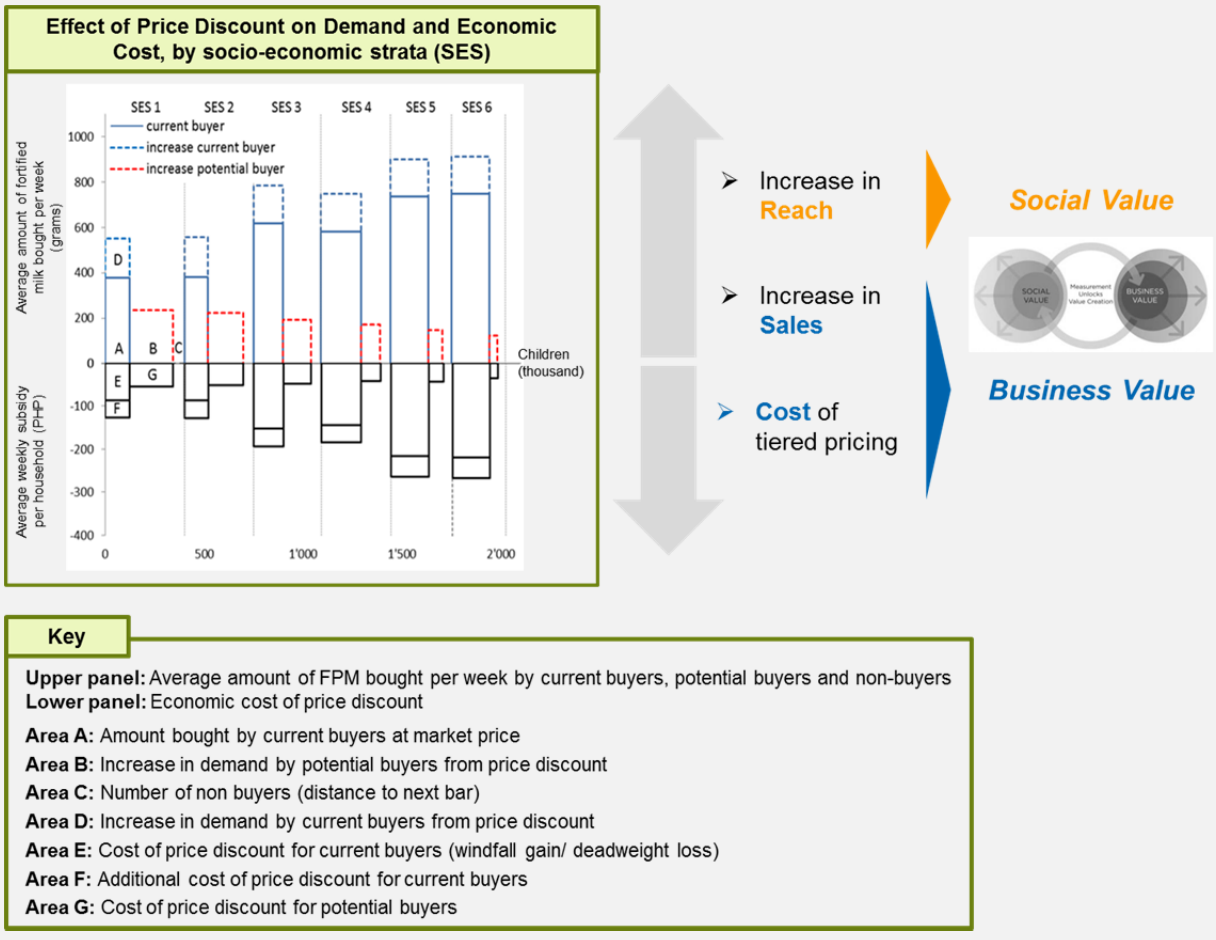
Measuring the Innovation

Nutrition

Through household surveys, Nestlé conducted a price sensitivity analysis that showed higher price elasticity of demand among poorer households. Reducing the price for the lowest socio-economic tiers would substantially increase demand for and access to Nestlé's fortified products (see Figure 16). The company also analyzed the economic impact associated with the price reduction strategy in terms of increased sales volume and cost of subsidy.

Building on the insights from measuring the innovation, Nestlé is now considering a tiered pricing commercial strategy[15] that would bring greater access and use among the people who need fortified products the most.

Figure 16: Nestlé Compared the Increase in Demand with the Economic Cost of Price Discounts[16]



Key

Upper panel: Average amount of FPM bought per week by current buyers, potential buyers and non-buyers
Lower panel: Economic cost of price discount

Area A: Amount bought by current buyers at market price
Area B: Increase in demand by potential buyers from price discount
Area C: Number of non buyers (distance to next bar)
Area D: Increase in demand by current buyers from price discount
Area E: Cost of price discount for current buyers (windfall gain/ deadweight loss)
Area F: Additional cost of price discount for current buyers
Area G: Cost of price discount for potential buyers

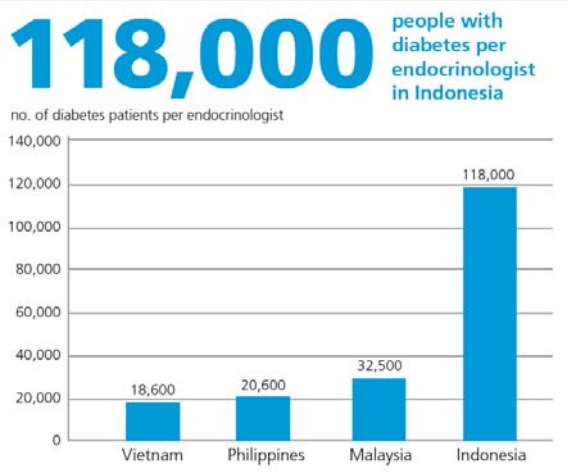
[15] Implementation pending internal decision.

[16] Source: *Cost-Effectiveness of Price Reductions in Fortified Powdered Milk for the Reduction of Micronutrient Deficiencies in 6-23 Month Old Children in the Philippines,* Wieser et al., Working Draft 2014.

Pharmaceuticals

In Indonesia, Novo Nordisk's medical training intervention initially targeted a manageable number of specialist doctors throughout the country but partners quickly realized that the severe shortage of specialists (see Figure 17) would make it impossible to reach those in need in a reasonable timeframe. It was decided to extend the program to general practitioners (GPs) in an innovative way. Novo Nordisk piloted a program where GPs were mentored by specialists who had benefited from the initial training. Going beyond standard process and output measures (e.g., number of professionals trained, improvement in test scores pre- and post-intervention) allowed partners to focus on the effectiveness of this shared value intervention. An assessment of clinical outcomes for this much larger pool of patients reached revealed that the diabetic patients of trained GPs experienced significant HbA1c[17] reductions after 12 weeks of insulin therapy (see Figure 18), confirming real life effectiveness of the innovation.

Figure 17: Shortage of Specialists in Indonesia[18]



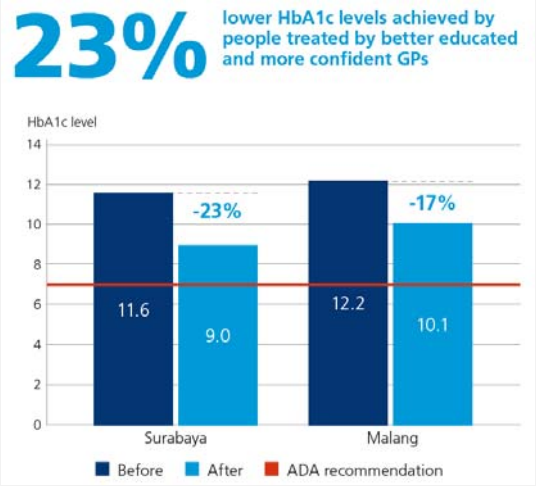


Figure 18: Potential for Improvement in Diabetes Control at Primary Care Level[19]

[17] Standard biological marker of diabetes control indicating the effectiveness of therapy over a period of several months.

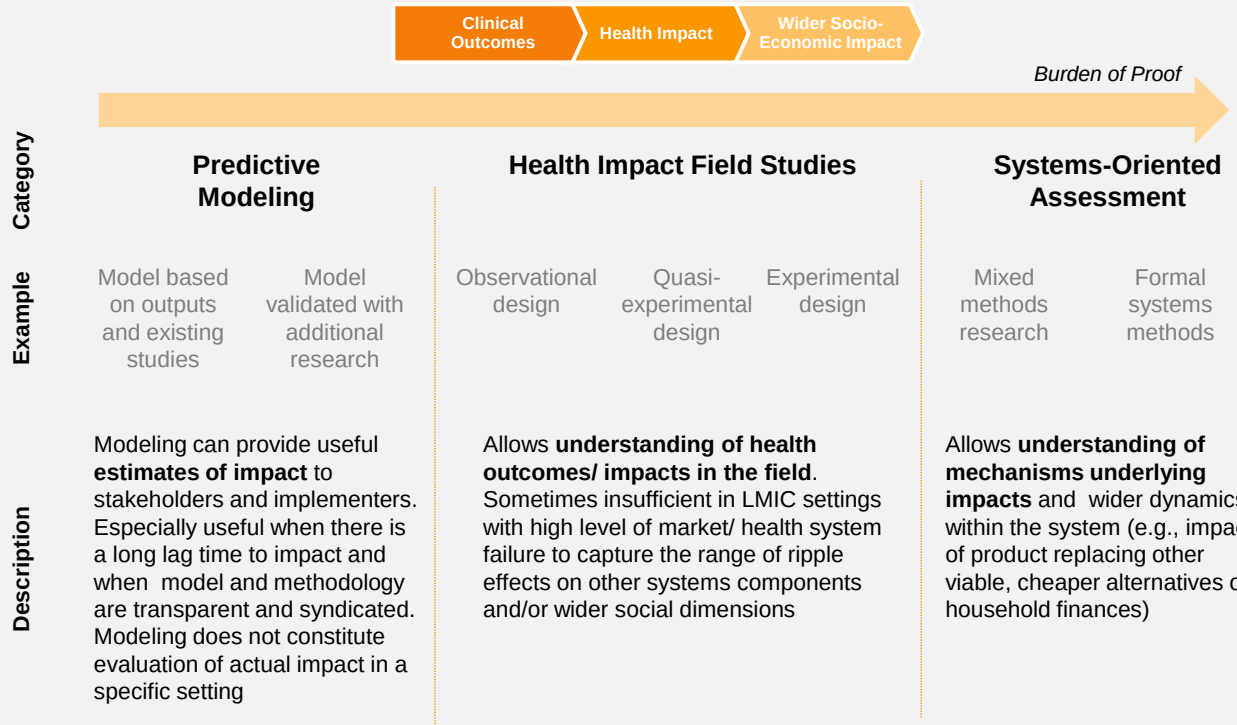
[18] Source: *Where economics and health meet: Changing diabetes in Indonesia*, Blueprint for Change Programme, Novo Nordisk 2013.

[19] Source: ibidem.

How to Measure Shared Value?

III. Take a pragmatic approach to impact measurement.

Figure 19: Burden of Proof for Impact Assessment



To optimize the cost effectiveness of measuring health impact, companies should ask the question **"will the insights help us make a decision relevant to unlocking more shared value?"** Companies should also consider the following guidelines when selecting among the different approaches available to measure impact outlined in Figure 19 above:

1. Where possible, **analyze impact using existing public data or data from proprietary sources** (e.g., using demographic health surveys to track the impact on the incidence of fever episodes in children linked to an intervention focusing on access to antimalarial treatments in a given country);

2. Where sufficient, **estimate impact through predictive modeling** (e.g., using known correlations between price of bed nets, use, impacts on malaria infection risks, and health impacts of infection to predict the benefit of a new type of bed nets);

3. Only **conduct impact studies in the field very selectively**, when insights and learnings will unlock further sales growth or other key business benefits that outweigh the cost of measurement (e.g., measuring the impact on diabetes control of health camps and the introduction of more affordable insulin by comparing villages in provinces with or without access to the product and intervention);

4. **Engage with partners** to help with measurement, sharing data for joint learning to expand shared value initiatives, particularly where the costs of measurement exceed business benefits, or to facilitate access to proprietary sets of data (or give more validity).

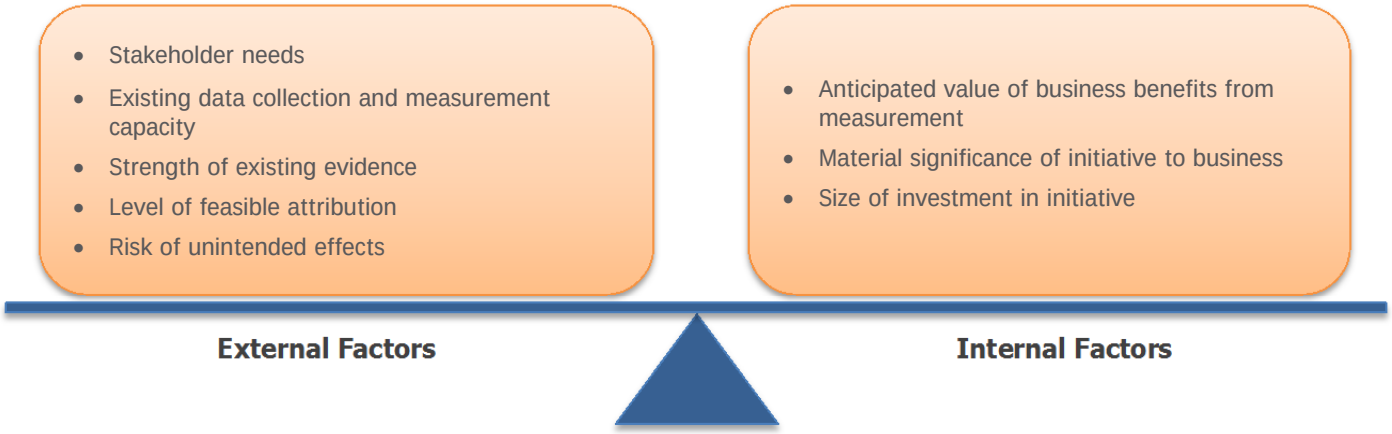
There are a variety of methods available for impact measurement and companies can also consider combining designs in a "mixed methods" approach to capture both quantitative impact and a deeper understanding of systems compounds. **Error! Reference source not found.** provides an overview of different methods for impact assessment.

Table 6: Methods for Impact Assessment

Method	Description	Advantages	Disadvantages
Experimental	Randomized control trials. Need baseline data from before program started, and at least one more round of data including the same sample of participants. In addition, data needs to be collected from randomly assigned control and "treatment" groups.	• Quantitative and rigorous understanding of the impact of the program • Low or limited concern about confounding factors due to the inclusion of randomly assigned control groups	• Risk of over-emphasizing quantitative data and miss out on insights on underlying systems components from discussion and description • Expensive • Rare to be able to use existing data
Quasi-experimental	Natural experiments, interrupted time series designs. Need before and after data, but "treatment groups" are defined ex-post based on an external event that effectively created the same variation in the data as pre-determined treatment and control groups.	• Quantitative and rigorous understanding of the impact of the program • Greater ability to use existing data for quantitative analysis • More affordable	• Risk of over-emphasizing quantitative data • Risk that the experimental design is not valid (e.g., if control group has different characteristics, or got access to treatment/intervention) • Few scenarios where this method can be used effectively
Non-experimental	Includes a broad range of approaches, including statistical analysis that does not include before after analysis or a control group. Instead, statistical analysis uses characteristics of participants to account for differences in outcomes. Non-experimental approaches also include more qualitative methods such as case studies, ethnography and focus groups.	• Maximum ability to use existing data for quantitative analysis • Ability to use more open-ended format and thoroughly explore the systems components through qualitative analysis • Most affordable	• Substantial concern about confounding factors due to lack of strong counterfactuals

Selecting the most appropriate methodology and approach for a specific corporate initiative will depend on a number of external and internal factors, outlined in the graphic below:

Figure 20: Factors Influencing the Optimal Approach for Measuring Impact



For the external factors, an illustrative list of implications for impact assessment (see Figure 21) can help companies determine whether it is necessary or feasible to go beyond predictive modelling for any given specific shared value initiative:

Figure 21: Considerations and Implications for Impact Assessment

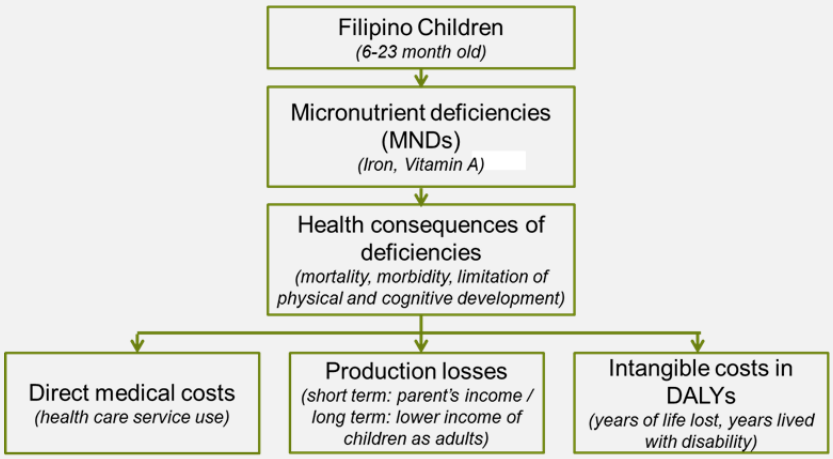
External Context Considerations	*Illustrative Implications*
	Go beyond predictive modeling if…
Stakeholder Needs including internal accountability/ case making and needs/ expectations of external stakeholders	…stakeholders do not find it credible, or if making the internal case requires evidence that cannot be modeled
Existing Data Collection/ Measurement Systems including ability to access and/ or partner	…data collection systems enable robust methodologies, or data can be accessed/ generated at a reasonable cost (e.g., availability of baseline data or control group)
Strength of Existing Evidence including efficacy and plausibility of effectiveness	…there is insufficient research on efficacy or insufficient field-wide experience to make an argument for plausible effectiveness of delivery
Level of Feasible Attribution including complexity of system as well as role of other stakeholders/ interventions	…the impact of the intervention can be easily linked to the company, and the context is conducive to more invasive approaches (e.g., medical testing, using a control group)
Risk of Unintended Effects now and in the longer term	…initiative is targeting an especially vulnerable population, or project is touching several components of the system in new and untested ways

Measuring the Impact

Nutrition

Nestlé used predictive modeling to demonstrate the cost effectiveness of reducing micronutrient deficiencies in the Philippines through fortified food products, estimating the improvements in direct medical costs, future workforce productivity and disability-adjusted life years (DALYs) averted brought by increased consumption of their products (see Figure 22).

Figure 22: Health Economic Model Simulating the Consequences of MNDs in Childhood over the Entire Lifetime[20]



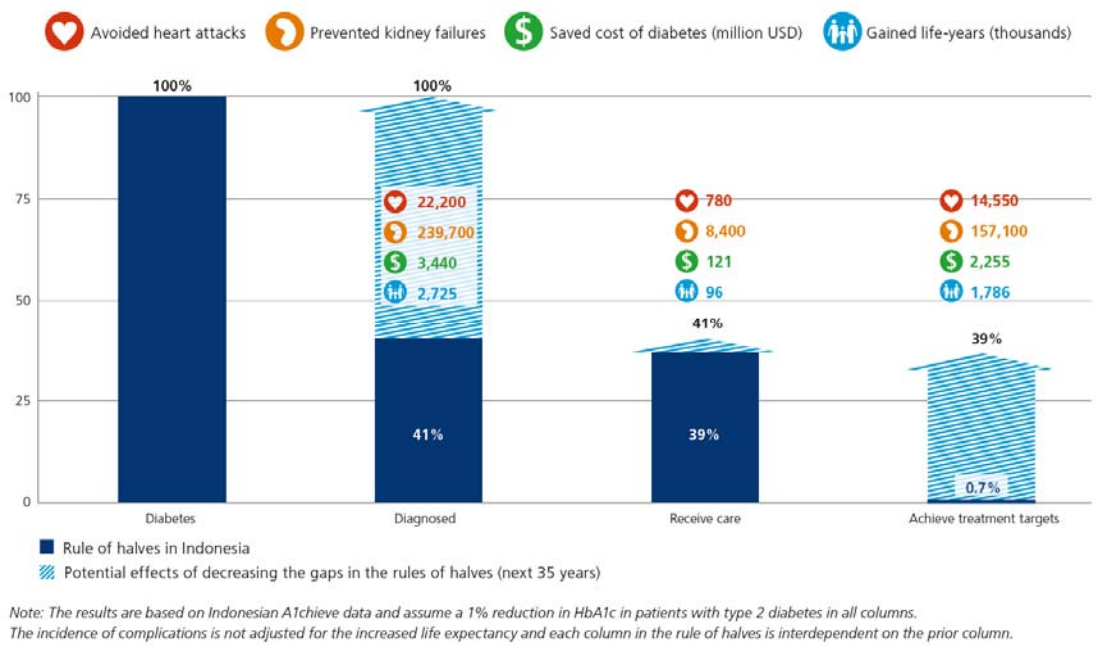
The company is in the process of launching several field studies across different geographies to validate and further inform their understanding of the impact of specific fortified food products on health and other life outcomes for specific customer subpopulations (e.g., lower socio-economic groups). This information, while costly to generate, is expected to further strengthen Nestlé's relationships with governments and other key global health partners in its target markets, further differentiate Nestlé's product from competition and eventually lead to increased sales and market share. The cost of generating useful insights through measurement is weighed against its potential value.

[20] Source: *Burden of Micronutrient Deficiencies by Socio-Economic Strata in Children Aged 6 Months to 5 Years in the Philippines,* Wieser et al., BMC Public Health 2013.

Pharmaceuticals

Novo Nordisk also used predictive modeling to estimate the long-term impact of its shared value activities in Indonesia. Applying evidence-based assumptions to national epidemiological data, the company is able to quantify the potential impact of current diabetes control interventions in terms of future cardio-vascular and renal complications avoided, costs saved, and life-years gained (see Figure 23). This information allows the company to engage with national stakeholders and local organizations to establish a more functional health system around diabetes management in Indonesia and pave the way for further business growth.

Figure 23: Reducing the Burden of Diabetes in Indonesia[21]



Note: The results are based on Indonesian A1chieve data and assume a 1% reduction in HbA1c in patients with type 2 diabetes in all columns. The incidence of complications is not adjusted for the increased life expectancy and each column in the rule of halves is interdependent on the prior column.

[21] Source: *Where economics and health meet: Changing diabetes in Indonesia*, Blueprint for Change Programme, Novo Nordisk 2013.

IV. Integrate and leverage measurement competencies.

Companies need to integrate the competencies of market expansion and product teams, health outcomes/economics groups, corporate social responsibility, and finance teams to benefit shared value measurement. Externally, companies should establish measurement partnerships with implementation partners to expand access to existing data, to understand and use validated evaluation methods. Working in conjunction with academic institutions, NGOs or patient associations can allow access to new data and the generation of critical insights, while protecting anonymity of patients and maintaining an appropriate distance between companies and care providers. To do this effectively, companies will need to involve stakeholders earlier and be more transparent with their measurement methodology.

Integrating and Leveraging Measurement Competencies

Nutrition

At Nestlé, measurement is spearheaded by the Public Health Nutrition Department within the Health Economics Group at the Nestlé Research Center, which is working in close collaboration with country and product teams. Externally, Nestlé collaborated with the Philippines Food and Nutrition Research Institute to develop their approach and to access existing data (e.g., the National Nutritional Survey). In other countries, the company has collaborated with similar institutions to add on modules to existing national survey processes. The internal setup has allowed Nestlé to link measurement to business decision making, and the external partnerships have contributed to reducing the cost of measurement and given credibility to the process.

What Happens Next?

Looking ahead, the consultative group is keen to build on this work by testing its recommendations on specific shared value initiatives. The group will share the findings from this consultation work with shared value initiative owners and corporate leaders alike, with a view to applying the principles and frameworks outlined in this document, and tailoring them to a variety of real-life situations in the field. Future convening opportunities will provide current and future participants of this working group a forum to share learnings from these experiences, and further advance the approach to shared value measurement for health solutions.

In parallel, the group will also seek to continue building the field by exploring outstanding questions for shared value measurement, such as understanding the costs and benefits of different measurement approaches, achieving measurement transparency, and learning how to implement shared value measurement in effective and efficient ways.

Finally, the group will advocate for increased sharing between companies and the global health field, and facilitate knowledge exchange efforts and systems wherever possible.[22]

[22] For example, the group is keen to continue to facilitate communication and shared learning opportunities for companies and other stakeholders. We encourage the readers of this report to use the resources and communication tools of the Shared Value initiative (e.g., blogs and discussion boards on www.sharedvalue.org) to continue the discussion of shared value measurement for health solutions.

Appendix - List of Figures and Tables

Figures:

Tables

Appendix - List of Participating Organizations and Contributors

Organizations	Contributors	Titles
Companies		
Abbott	Susan Beverly Chandni Saxena	Director, Global Citizenship & Policy Shared Value Lead, Global Citizenship and Policy
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