

Table 1. Milestones at the Global Level

Global Milestones (1st order)	Global Milestones (2nd order)	Measurement	Definition details
<i>Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
	First Discovery (original innovation)	Date of discovery for the original product or intervention which the current intervention is adapted from.	Earliest date found of the intervention idea or development (e.g. date that pre-clinical trials completed, date of SRA approval or patent, date when idea was proposed to regulators such as in case of HIVST, date that platform for product was invented such as GeneXpert for Xpert MTB/RIF diagnostic)
Ideation (specific intervention)		Date of discovery or idea for specific intervention	
	Patent approved	Date of patent approval	
First reference of intervention		Date that the intervention was first found in the literature describing the product and its potential impact	Earliest date that the intervention was referenced in the literature, usually after preliminary testing for its intended purpose (can include publication date of pre-clinical trials, reports, etc.)
	Application to begin testing submitted to SRA	Date that new device, drug, or diagnostic application was submitted to an SRA body for initial approval to begin testing. For devices of nonsignificant risk, date of IRB submission.	This includes Investigational New Drug (IND) applications for <i>new drugs</i> (FDA only) or equivalent for other SRA approval bodies. For <i>devices of significant risk</i> , this includes Investigational new device (IDE) or equivalent for other SRA bodies.

Speedometer Framework Data Dictionary

Global Milestones (1st order)	Global Milestones (2nd order)	Measurement	Definition details
<i>Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
			<i>Devices of nonsignificant risk date do not require IDE, but they must have an IRB approved</i>
Proof of Concept		Date intervention demonstrated to be safe and effective for intended purpose in humans	Date results shared (e.g. publication) from clinical trials for drugs, diagnostics, and other interventions that require SRA approval (Phase IIb studies or equivalent). If no SRA approval necessary, then date that efficacy was demonstrated (RCT or equivalent published)
	Phase III complete	Date of completion of Phase III clinical trial	
	Application for product approval submitted to SRA	Date that application for drug, device, or diagnostic was submitted to stringent regulatory authority (SRA)	Includes NDA application new drugs (FDA only) or equivalent for other SRA approval bodies. Also includes pre-market notification or pre-market approval for devices
SRA Approval		Date of Stringent Regulatory Authority (SRA) approval or clearance	Approval from a stringent regulatory body defined by ICH including FDA, EMA, CE Marking (European FDA), Japan, Swiss Medic of Switzerland, Health Canada, Australia, Norway, Iceland, Liechtenstein
	Post-marketing research complete	Date of completion of Post-marketing research or Phase IV clinical trial	

Speedometer Framework Data Dictionary

Global Milestones (1st order)	Global Milestones (2nd order)	Measurement	Definition details
<i>Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
1st In-country Introduction		Date the intervention was used in a LMIC country for the first time outside of a research study	Date the intervention was used (launched / commercialized / procured) in a LMIC country for the first time outside of a research study
WHO Emergency Use Listing		Date that intervention listed by the WHO for emergency use	
Application submitted to WHO approval body or other global procurement list		Date of application for list (WHO Prequalification or equivalent) that is referenced for country procurement	Approval submissions for other global lists include USAID approved product list, WHOPES, Essential Medicines List
	WHO Site inspection	Date of completion of Site inspection for WHO Prequalification	
	WHO Lab evaluation	Date of Laboratory Evaluation for WHO Prequalification	
Approval by WHO body or other global procurement list		Date of intervention approved for global list (WHO prequalification, endorsement or equivalent)	Global lists include USAID approved product list, WHOPES, Essential Medicines List, PEPFAR approval list
WHO initial policy guidelines		Date that the WHO recommended the intervention in an official guideline	

Speedometer Framework Data Dictionary

Global Milestones (1st order)	Global Milestones (2nd order)	Measurement	Definition details
<i>Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
	WHO policy update	Date of updated WHO recommendation (if any between initial and latest)	
WHO latest policy guidelines		Date of most recent recommendation update	
Global uptake of the intervention at 20%		Date that coverage of the intervention reached 20% globally using one of the global coverage indicators and an appropriate denominator (see Table 6)	Global coverage can be measured through: <ol style="list-style-type: none"> 1) Demand-side measures (most preferred) 2) Supply-side measures 3) Policy measures See Table 6 below for specific indicators and how to determine denominator
Global uptake of the intervention at 50%		Date that coverage of the intervention reached 50% globally using one of the global coverage indicators and an appropriate denominator (see Table 6)	
Global uptake of the intervention at 80%		Date that coverage of the intervention reached 80% globally using one of the global coverage indicators and an appropriate denominator (see Table 6)	
	Intervention no longer in use	Date intervention data showed lack of effectiveness for specific indication	

Speedometer Framework Data Dictionary

Global Milestones (1st order)	Global Milestones (2nd order)	Measurement	Definition details
<i>Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
	Intervention no longer being produced	Date intervention was pulled off the market or manufacturing stopped	

Table 2. Characteristics of interventions and external environment for understanding pathways affecting launch and scale speed

Characteristics associated with launch and scale speed	Measurement	Definition Details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Intervention Level		
Scientific Name	Free Text	Scientific name for drug or general product name for devices, diagnostics, etc. Use the INN (International Nonproprietary Name) for drugs
Commercial Name(s)	Free Text	Brand name for specific intervention we are following
Description	Free Text	One to two sentence text description of the intervention
Intervention Type	Drop down	Categorical: drug, device, diagnostic, procedure, supplementation/fortification, vaccines, behavioral, infrastructure, service delivery, vector control, other (free)
General Health Topic	Drop down	Categorical: Infectious disease, NTDs, MNCH, Nutrition, NCDs, Trauma/Injury
Specific Disease / Health Topic	Drop down multiselect (add to as we add interventions)	Name of disease or health issue intervention is addressing. Add to as we go. Current categories include: HIV, malaria, TB, postpartum hemorrhage, club foot, jaundice, neonatal sepsis, preeclampsia, abnormal fetal heart rate, diarrhea, Syphilis, Human African trypanosomiasis, contraception, vitamin A deficiency

Speedometer Framework Data Dictionary

Characteristics associated with launch and scale speed	Measurement	Definition Details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Developer	Free Text	Name of original developer that made the product
Type of Developer	Drop down	The type of organization where the idea and original development of the intervention came from. Categorical: Private company, Non-profit company or NGO, academic institution, collaboration between public and private or other (specify)
Target Population	Free Text	Description of population that the intervention is intended to reach
Dissemination partners	Free text	Names of main global dissemination partners. List 3 to 5 top partners.
Cost to develop	Free text (number)	Specific amount (if possible)
Cost-effectiveness	Demonstrated cost-effective OR no evidence cost-effective	Demonstrated cost-effective (published review), No evidence cost-effective
Significant safety concern	Significant safety concern OR No significant safety concern	After research trials, concerns that product will be implemented safely among all groups
Significant improvement in standard of care	1) distinctly more effective than current practice (including previous generations of the product) 2) incremental improvement / not significantly more effective	Interventions that are distinctly more effective than previous generations, or have no equivalent predecessor E.G. Tafenoquine is risky for people with a certain genetic marker and so there must be a test for the gene prior to prescribing the drug. Also, Chlorhexidine was recalled for packaging that led to people putting it in infants eyes and blinding them.
Low and middle-income country specific	LMIC specific OR Not LMIC specific	Interventions developed specifically for LMIC country use

Speedometer Framework Data Dictionary

Characteristics associated with launch and scale speed	Measurement	Definition Details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Requires behavior change	Requires behavior change for the END USER OR No/Little behavior change	Interventions whose effective use requires significant change in behavior of end users E.G. LLINs require the end user to put up and sleep under the net. Chlorhexidine requires parents to spread the substance on the newborn instead of traditional materials.
Process and Regulatory related		
WHO PQ approved or equivalent	WHO approved OR Not WHO approved	Equivalent to WHO PQ would be something like WHOPES
Clear champion(s)	Clear champion(s) OR No clear champion(s)	Interventions whose development and procurement were led/championed by prominent global organizations E.G. Global health campaign initiated for product like for Sayana Press with multiple partners or the TB Alliance.
Continuum of care	Categorical: Prevention/Wellness; Awareness; Screening; Diagnosis; Treatment; Monitoring/ After Care	Where the intervention sits along the continuum of care
WHO Essential Medicines List (EML) or Essential Diagnostics List (EDL)	On List OR Not on list	
Type of pathway to scale	Open Source/licensing, Organic Growth, Organic growth with selective outsourcing, multi-stakeholder partnership, sustained service, licensing	Scale pathways taken from USAID/UNICEF: see categorizations and links in Appendix 1

Speedometer Framework Data Dictionary

	out, franchising, acquisition, other (free text)	
Characteristics associated with launch and scale speed	Measurement	Definition Details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Market related		
Significant product competition	Sig. product competition OR No sig. competition	Multiple generic versions of the intervention/ Significant competition among brands
Requires targeting	Requires targeting OR Does not require targeting	Interventions requiring targeting at specific sub-populations to be cost-effective E.G. Interventions like Sayana Press that require targeting at specific sub-populations (mostly young women in need of modern contraceptive) to be cost-effective
Global pricing agreement in place	Global pricing agreement OR No Global agreement	Any global pricing agreement organized by international partners E.G. Negotiated global price by partners such as for Sayana Press or for Xpert.
Centralized buying environment	Centralized OR Decentralized, or N/A	Centralized buying environments are where ~80% or more of the product is procured by one or several large buyers (organizations / large governments) E.G. Centralized—LLINs are mostly procured through large global buyers like GF Decentralized—Uterine balloon tamponades

Speedometer Framework Data Dictionary

Characteristics associated with launch and scale speed	Measurement	Definition Details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Public vs. mixed target channel	Public, Private, or Mixed	<p>Public is where ~80% or more of product is targeted to public channels as opposed to private pharmacies and facilities. Private is where ~80% or more of product is targeted to private channels as opposed to public pharmacies and facilities. Mixed channels have more distribution across public and private facilities</p> <p>E.G. LLINS are Public mostly, MiracleFeet is Private, and Sayana Press is mixed</p>
Main market type	Global, Institutional, OR Consumer	<p>See definitions in this article: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4168618/</p> <p>E.G. LLINS are global because they are procured and finalized through centralized channels. Chlorhexidine is Institutional because national institutions (like MoHs) purchase for newborn care. Sayana Press is a consumer market mainly because consumers purchase it for their own use</p>

Table 4. Milestones at the Country level

Milestones—1st order	Milestones—2nd order	Milestones—3rd order	Measurement	Definition details
<i>Priority/Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>Milestones to track if found during research, not a search priority</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
		Ethics committee submission	Submission date to the country IRB or Ethics Committee to do a research project with the intervention	Research projects can include clinical trials, or field or implementation research
	Ethics approval in-country		Date of approval of research by Ethics Board	
		Country’s first definitive research study starts	Start date of research studies in country with intervention (e.g. country clinical trials, validation studies, or demonstration/implementation trials)	Can include country clinical trials, validation studies, or demonstration/implementation trials
	Country’s first definitive research study complete		Date study results of first research study/studies entered public domain (e.g. country clinical trials, validation studies, or demonstration/implementation trials)	Field/Implementation research differs from a pilot and is to demonstrate feasibility and acceptability of intervention.
		Country pilot starts	Start date of country implementation pilot for intervention	Pilots can be sponsored by sub-national governments as well as national governments
Milestones—1st order	Milestones—2nd order	Milestones—3rd order	Measurement	Definition details

Speedometer Framework Data Dictionary

<i>Priority/Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>Milestones to track if found during research, not a search priority</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Country Pilot complete			Date implementation pilot results entered public domain	
	Product Dossier Submission to Country Regulatory Body		Submission date to the country regulatory body (e.g. NRA)	Drugs, devices, diagnostics, etc. that require approval before purchase and/or distribution
Emergency Use Authorization			Date intervention was authorized for emergency use in country	
Country Regulatory Approval (NRA approval)			Approval date to the country regulatory body	
National Essential List (medicines, diagnostic, or other list)			Date intervention is added to a national list of essential health products (e.g. Essential Medicines List (EML) or Essential Diagnostics List (EDL))	
National policy guidelines			Date of recommendation of the country for the intervention within the country's guidelines	
Implementation plan national level			Date of the implementation plan released by the Ministry of Health	
Milestones—1st order	Milestones—2nd order	Milestones—3rd order	Measurement	Definition details

Speedometer Framework Data Dictionary

<i>Priority/Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>Milestones to track if found during research, not a search priority</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
		Implementation plans sub-national	Date that the first implementation plans are released for the first sub-national level	
		Budget Allocation Request	Date that budget request is made for procurement/ implementation plans by the Ministry of Health	
		Budget Allocation approved	Date that budget allocation request for procurement/ implementation plans are approved	
Launch of intervention in country			Date the intervention was used (launched / commercialized / procured) in a LMIC country for the first time outside of a research study in any part of the country	Pilots can count as introduction
		First procurement request sent by country	Date the procurement request was sent by country to supplier or centralized global buyer	
Milestones—1st order	Milestones—2nd order	Milestones—3rd order	Measurement	Definition details

Speedometer Framework Data Dictionary

<i>Priority/Higher impact milestones</i>	<i>Milestones that are lower impact but are important to understand the full timeline</i>	<i>Milestones to track if found during research, not a search priority</i>	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
		First shipment with intervention clears customs	Date that first shipment of the product clears customs	
Country uptake of the intervention at 20%			Date that coverage of the intervention reached 20% in country using one of the country coverage indicators and an appropriate denominator (see Table 6)	Country coverage can be measured through: <ol style="list-style-type: none"> 1) Demand-side measures (most preferred) 2) Supply-side measures 3) Policy measures See Table 6 below for specific indicators and how to determine denominator
Country uptake of the intervention at 50%			Date that coverage of the intervention reached 50% in country using one of the country coverage indicators and an appropriate denominator (see Table 6)	
Country uptake of the intervention at 80%			Date that coverage of the intervention reached 80% in country using one of the country coverage indicators and an appropriate denominator (see Table 6)	

Table 5. Characteristics of country environment for understanding pathways affecting launch and scale speed

Speedometer Framework Data Dictionary

Characteristics associated with launch and scale speed	Measurement	Definition details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
National procurement cycle - frequency of funding request opportunities for health products	Annual, biannual, OR other	Refers to the public health sector's procurement procedures for the type of intervention/health product (may be different for drugs and devices for instance). If the intervention is not procured in the public sector, choose N/A.
Existence of national health product distributor / purchaser	National distributor exists OR No national distributor exists (public or private)	National distributor can refer to either the public sector or private sector but they must be the distribution is centralized for the country.
Frequency of product delivery from national distributor to local levels	Monthly, Quarterly, Semi-Annual, Upon Request	The frequency of delivery from the national distributor (public or private) to the sub-national or local levels.
Pricing agreement	Country-specific pricing agreement OR No agreement	Refers to a price agreement negotiated by the MoH or public health sector (<i>not a global price for all countries</i>) and applies to the price of purchasing from manufacturing or global buyer, not cost for end user.
Price of intervention	Price-agreement price of intervention	Specific price of the intervention specified by the country -specific pricing agreement
Free or subsidized for end user	Free/subsidized for end user OR No significant cost support of end user	Intervention is provided for free or at a significant discount (subsidized) for the end user. E.g. LLINs are often provided for free through mass distribution campaigns
Ease of Regulatory pathways	Clear pathway OR Not clear pathway	Clearly defined pathway for intervention to move through the regulatory process. (E.g. Often countries have clear pathways for drugs that must follow clinical trial guidelines and have specific submission requirements.)
Characteristics associated with launch and scale speed	Measurement	Definition details

Speedometer Framework Data Dictionary

	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>
Speed of regulatory pathways	Fast OR Not fast/slow Pathway	Pathway for regulatory approval that moves relatively quickly compared to other countries or even to similar health products for different health issues (e.g. approval can be granted with WHO approval and no additional country requirements)
High-level country champion	Champion OR No champion	Can be a person or group in the public or private sector at the country level that helps launch and scale the intervention. E.g. Minister of Health, Head of Regulatory Agency, etc.
Names of champions	Name the main country champions (no more than 3)	
Cultural acceptance issue	Cultural acceptance issue OR No cultural issues	Intervention not easily accepted in country or parts of the country due to social norms of the population or policy-related acceptance issues. There is any cultural acceptance issue in the country for the intervention specifically or for the use of similar health products. (E.g. contraceptive drugs or devices and generally SRH interventions can be considered taboo in some countries making it harder for women to access them)
Corruption Index	Score of country on Corruption Perception Index in 2019 (or latest available)	The CPI is published by Transparency International every year
Characteristics associated with launch and scale speed	Measurement	Definition details
	<i>What is input into the database</i>	<i>Additional information on the scope of the indicator</i>

Speedometer Framework Data Dictionary

Disease/health topic burden in country	High, Medium, OR Low	Determined by the ranking of the relevant health issue for death or disability of the country. Access IHME country profiles to consult the top 10 health issues for health and disability. If the health issue for which the intervention addresses is in the top 5 for either death or disability, mark high burden. If the health issue is in the top 10, mark medium burden. If the health issue is not in the top 10 for either death or disability, mark low burden. (e.g. Neonatal disorders are #1 for causing death in Ethiopia in 2017 so Chlorhexidine would be an intervention for a high burden disease).
Burden numbers	Number of people with health issue or disease in 2019 (or latest available)	Prevalence or incidence of health issue or disease based on what is reported and relevant (e.g. Malaria incidence (estimated cases) from the past year is reported in the World Malaria Report)
Gender inequality	WEF gender gap report ranking from 2019 (range of 1-149)	The Gender Gap Report is published by World Economic Forum
Poverty	Poverty headcount ratio from latest year available (% of population)	% of population living under the poverty line according to the World Bank latest data using \$1.90 a day
Quality of healthcare system	Score on IHME Healthcare Access and Quality Index from 2016 (range of 0 to 100)	The Healthcare Access and Quality Index is published by the Institute for Health Metrics and Evaluation
Health expenditures per person	Health expenditures per person in US\$ during 2019 (or latest year available)	Health expenditures per person is published by the Institute for Health Metrics and Evaluation in their country profiles

Table 6. Coverage indicators to track to determine scale levels

Order of importance	Types of coverage	What we are measuring	Global level	Country level
---------------------	-------------------	-----------------------	--------------	---------------

Speedometer Framework Data Dictionary

			Indicators to track (annually)			
1	Demand-side	Population in need reached by intervention	Numerator	Denominator	Numerator	Denominator
			Total global population in LMICs reached by intervention through distribution or use of the intervention	Global LMIC population with health issue or disease* (in some situations can also be the addressable market or the unmet need, e.g. contraception)	Total country population reached by intervention through distribution or use of the intervention	Country population with health issue or disease* (in some situations can also be the addressable market or the unmet need, e.g. contraception)
2	Supply-side	Availability of intervention	Numerator	Denominator	Numerator	Denominator
			Total number of units of intervention procured by LMICs	Global LMIC population with health issue or disease* (in some situations can also be the addressable market or the unmet need, e.g. contraception)	Total number of units of intervention procured for country	Country population with health issue or disease* (in some situations can also be the addressable market or the unmet need, e.g. contraception)
			Total # of LMIC countries providing the intervention (where it is available)	Total # of LMICs that have populations with health issue or disease*	Total # of subnational country units providing the intervention (where it is available)	Total # of subnational country units that have populations with health issue or disease

Speedometer Framework Data Dictionary

Global **sales** of intervention in terms of value (US\$) in LMICs

Target global sales in terms of value (US\$) in LMICs

Total **country purchase amount** of intervention in terms of value (US\$)

Target country purchase amount in terms of value (\$)

3	Policy	Support of intervention	Numerator	Denominator	Numerator	Denominator
			Total # of LMICs with policy or implementation plans supporting roll-out of intervention^	Total # of LMICs that have populations with health issue or disease*	Total # of subnational units with policy supporting intervention^	Total # of subnational country units that have populations with health issue or disease

Notes:






* Denominator generally applies to intervention in order to calculate coverage rate. Each intervention is different though and requires specific calculations for that intervention (e.g. diagnostics need to be procured at a higher rate than population with disease). Some may also require incidence of disease (e.g. TB) and some require prevalence (e.g. HIV).

Denominator should focus on low- and middle-income countries (LMICs) with the health issue/disease. In some cases, it may be that international efforts are focused on a subset of particularly burdened LMICs with the health issue/disease (e.g. FP 2020 60+ countries it focuses on for increased access to contraception). This would be a good denominator in this case if most of the data was specific to this subset of countries. Explain the denominator in the Notes section.

^ Most likely only applies to public level health systems. Can include: recommendation in a national (subnational) health policy, inclusion in a national (subnational) implementation plan for the disease area, inclusion on the national EML, or regulatory authority approval

Appendix 1—Types of Pathways to Scale from USAID and UNICEF

Speedometer Framework Data Dictionary

	Main feature	Details
 Organic growth with selective out-sourcing	1 Scale-up led and coordinated by the innovator, selectively out-sourcing activities to partners. The innovator often creates a new entity to drive the scale-up	<ul style="list-style-type: none"> ▪ Select functions are outsourced to partners, including any combination of the following: <ul style="list-style-type: none"> – Upstream partners to help facilitate clinical, regulatory and policy requirements – Contract manufacturers and suppliers – Partners to provide logistics/distribution and servicing capacities – Partners to help generate user demand and ensure user adoption (e.g., marketing, user training) – Partners to reach and acquire buyers (e.g., sales, tender response)
 Multi-stakeholder partnership	2 Multiple partners (including the innovator) with common or complementary interests work together to drive scale-up. This often includes private sector partners and can be referred to as public-private partnerships	<ul style="list-style-type: none"> ▪ Partnership provides partners with a platform to work together and pursue a common agenda, sometimes with formally outlined objectives, key policies and principles to guide actions ▪ A project manager (one individual or a team) could be chosen to coordinate activities among the partners. This role is also referred to as an “uptake coordinator” ▪ Innovator retains ownership and some decision-making power, and could handle selected scale-up functions
 Licensing out	3 Licensing rights to parties to drive commercialization and generate a financial payback to the innovator	<ul style="list-style-type: none"> ▪ Licensing can occur at all stages, from early product development to scale-up ▪ Rights that are licensed out could be limited by geography, market segment, and/or “field of use” (with the innovator retaining ownership of the IP) ▪ Innovator’s degree of engagement and control can vary widely, based on the contract’s terms
 Open licensing	4 Replicating the product technology by setting up an open license that allows others to use the IP	<ul style="list-style-type: none"> ▪ IP owner allows others to use the technology through an open license with few or no restrictions. Other organizations can build on the IP to enhance the product ▪ Innovator could choose to remain involved and provide ongoing support to replicators of the technology ▪ This model can be extended to include cases when an innovator does not create any license and simply allows others to freely use the technology (particularly relevant for hardware innovations, which could be more costly and burdensome to establish IP for than software innovations)
 Getting acquired	5 Sale of innovation or business to a buyer	<ul style="list-style-type: none"> ▪ Sale can occur at all stages, from early product development to scale-up ▪ Aspects being sold could be limited to intellectual property (through a full technology transfer, where the innovator loses ownership of the innovation), or include physical assets, part or all of the organization

Source: USAID. (2016). Pathways to scale: A guide on business models and partnership approaches to scale-up. <https://www.usaid.gov/cii/pathways-scale>

Speedometer Framework Data Dictionary

Table 1: Scale models and their deployment by UNICEF

An overview of major scale models that we have studied and synthesized, and our use of them to scale innovations.

	Scale models	Which innovations apply them
Less influence	Open Source <i>An Open Source license grants permission to access, re-use, make alterations or additions, share, improve, and build upon a work with few or no restrictions.</i>	<ul style="list-style-type: none"> • Digital health • Generation Unlimited Youth Challenge 2019 • Human Centred Design for Health • RapidPro platform • UPSHIFT
	Organic growth <i>Deploying in-house expertise to expand innovation to other locations as opportunities arise and with demand. Also referred to as branching.</i>	<ul style="list-style-type: none"> • Generation Unlimited Youth Challenge 2018 and 2019 • Internet of Good Things • U-Report • UPSHIFT
	Organic growth with selective outsourcing <i>Outsourcing only part of the functions required to scale and performing the rest in-house.</i>	<ul style="list-style-type: none"> • Digital Health • Human-Centred Design • Real-time information applications on RapidPro
Moderate influence	Sustained service <i>Initiative/intervention that provides service/ products as is with incremental improvements, should have a sustainable business model.</i>	Internet of Good Things
	Licensing <i>Licensing is a legal relationship where a party is granted a limited right to use its Intellectual Property or manufacture the licensor's products or technology in exchange of a royalty fee.</i>	Biosensors
More influence	Franchising <i>The franchisee pays fees for the right to operate a business, participate in a standard operating system, and use the brand name and proprietary information of the franchise.</i>	Not yet applied
	Acquisition <i>Acquisition is the outright purchase of an innovation by another organization. Through acquisition, the purchasing organization can achieve economies of scale, increase the client base, gain efficiencies and enhanced market visibility.</i>	TextIt to become RapidPro

Source: UNICEF. (2019). Scaling innovation for every child. <https://www.unicef.org/innovation/reports/scaling-innovation-every-child>