

Annex 1. The Service Delivery Indicators defined

School absence rate	
Share of a maximum of 10 randomly selected teachers absent from school during an unannounced visit.	During the first announced visit, a maximum of ten teachers are randomly selected from the list of all teachers who are on the school roster. The whereabouts of these ten teachers are then verified in the second, unannounced, visit. Teachers found anywhere on the school premises are marked as present.
Classroom absence rate	
Share of teachers who are present in the classroom out of those teachers present at school during scheduled teaching hours as observed during an unannounced visit.	The indicator is constructed in the same way as School Absence Rate indicator, with the exception that the numerator now is the number of teachers who are both at school and in the classroom. The denominator is the number of teachers who are present at the school. A small number of teachers are found teaching outside, and these are marked as present for the purposes of the indicator.
Classroom teaching time (also referred to as Time on Task)	
Amount of time a teacher spends teaching during a school day.	<p>This indicators combines data from the Staff Roster Module (used to measure absence rate), the Classroom Observation Module, and reported teaching hours. The teaching time is adjusted for the time teachers are absent from the classroom, on average, and for the time the teacher remains in classrooms based on classroom observations recorded every minute in a teaching lesson.</p> <p>A distinction is made between teaching and non-teaching activities based on classroom observation done inside the classroom. Teaching is defined very broadly, including actively interacting with students, correcting or grading student's work, asking questions, testing, using the blackboard or having students working on a specific task, drilling or memorization, and maintaining discipline in class. Non-teaching activities is defined as work that is not related to teaching, including working on private matters, doing nothing and thus leaving students not paying attention, or leaving the classroom altogether.</p>
Minimum knowledge among teachers	
Share of teachers with minimum knowledge	This indicator measures teacher's knowledge and is based mathematics and language tests covering the primary curriculum administered at the school level to all teachers currently teaching maths and english in grade 4, those who taught english and maths at grade 3 in the previous academic year, and up to 3 randomly selected upper primary maths and english teachers.
Textbooks per student	
Number of mathematics and language books used in a grade 4 classroom divided by the number of students present in the classroom	The indicator is measured as the number of mathematics and language books that students use in a grade 4 classroom divided by the number of students present in the classroom. The data will be collected as part of the classroom observation schedule.
Equipment availability	
Unweighted average of the proportion of schools with the following available: functioning blackboard with chalk, pencils and notebooks.	<p>Minimum teaching resources is assigned 0-1 capturing availability of (i) whether a grade 4 classroom has a functioning blackboard and chalk, (ii) the share of students with pens, and (iii) the share of students with notebooks, giving equal weight to each of the three components.</p> <p>Functioning blackboard and chalk: The enumerator assesses if there was a functioning blackboard in the classroom, measured as whether a text written on the blackboard could be read at the front and back of the classroom, and whether there was chalk available to write on the blackboard.</p> <p>Pencils and notebooks: The enumerator counts the number of students with pencils and notebooks, respectively, and by dividing each count by the number of students in the classroom one can then estimate the share of students with pencils and the share of students with notebooks.</p>
Infrastructure availability	

<p>Unweighted average of the proportion of schools with the following available: functioning electricity and sanitation.</p>	<p>Minimum infrastructure resources is assigned 0-1 capturing availability of: (i) functioning toilets operationalized as being clean, private, and accessible; and (ii) sufficient light to read the blackboard from the back of the classroom.</p> <p>Functioning toilets: Whether the toilets were functioning was verified by the enumerators as being accessible, clean and private (enclosed and with gender separation).</p> <p>Electricity: Functional availability of electricity is assessed by checking whether the light in the classroom works gives minimum light quality. The enumerator places a printout on the board and checks (assisted by a mobile light meter) whether it was possible to read the printout from the back of the classroom given the slight source.</p>
<p>Caseload per health provider</p>	
<p>Number of outpatient visits per clinician per day.</p>	<p>The number of outpatient visits recorded in outpatient records in the three months prior to the survey, divided by the number of days the facility was open during the three month period and the number of health workers who conduct patient consultations (i.e. excluding cadre-types such as public health nurses and out-reach workers).</p>
<p>Absence rate</p>	
<p>Share of a maximum of 10 randomly selected providers absent from the facility during an unannounced visit.</p>	<p>Number of health workers that are not off duty who are absent from the facility on an unannounced visit as a share of ten randomly sampled workers. Health workers doing fieldwork (mainly community and public health workers) were counted as present. The absence indicator was not estimated for hospitals because of the complex arrangements of off duty, interdepartmental shifts etc.</p>
<p>Adherence to clinical guidelines</p>	
<p>Unweighted average of the share of relevant history taking questions, the share of relevant examinations performed.</p>	<p>For each of the following five case study patients: (i) malaria with anemia; (ii) acute diarrhea with severe dehydration; (iii) pneumonia; (iv) pulmonary tuberculosis; and (v) diabetes mellitis.</p> <p>History Taking Questions: Assign a score of one if a relevant history raking question is asked. The number of relevant history taking questions asked by the clinician during consultation is expressed as a percentage of the number of important history questions to be asked based of the guidelines for management of the case (IMIC and Kenya National guidelines).</p> <p>Relevant Examination Questions: Assign a score of one if a relevant examination question is asked. The number of relevant examination taking questions asked by the clinician during consultation is expressed as a percentage of the total number of relevant examination questions included in the questionnaire.</p> <p>For each case study patient: Unweighted average of the: relevant history questions asked, and the percentage of physical examination questions asked. The history and examination questions considered are based on the Kenya National Clinical Guidelines and the guidelines for Integrated Management of Childhood Illnesses (IMCI).</p>
<p>Management of maternal and neonatal complications</p>	
<p>Share of relevant treatment actions proposed by the clinician.</p>	<p>For each of the following two case study patients: (i) post-partum hemorrhage; and (ii) neonatal asphyxia. Assign a score of one if a relevant action is proposed. The number of relevant treatment actions proposed by the clinician during consultation is expressed as a percentage of the total number of relevant treatment actions included in the questionnaire.</p>
<p>Diagnostic accuracy</p>	
<p>Average share of correct diagnoses provided in the five case studies.</p>	<p>For each of the following five case study patients: (i) malaria with anemia; (ii) acute diarrhea with severe dehydration; (iii) pneumonia; (iv) pulmonary tuberculosis; (v) diabetes mellitis.</p> <p>For each case study patient, assign a score of one as correct diagnosis for each case study patient if case is mentioned as diagnosis. Sum the total number of correct diagnoses identified. Divide by the total number of case study patients. Where multiple diagnoses were provided by the clinician, the diagnosis is coded as correct as long as it is mentioned, irrespective of what other alternative diagnoses were given.</p>

Drug availability	
<p>Share of basic drugs which at the time of the survey were available at the facility health facilities.</p>	<p>Priority medicines for mothers: Assign score of one if facility reports and enumerator confirms/observes the facility has the drug available and non-expired on the day of visit for the following medicines: Oxytocin (injectable), misoprostol (cap/tab), sodium chloride (saline solution) (injectable solution), azithromycin (cap/tab or oral liquid), calcium gluconate (injectable), cefixime (cap/tab), magnesium sulfate (injectable), benzathinebenzylpenicillin powder (for injection), ampicillin powder (for injection), betamethasone or dexamethasone (injectable), gentamicin (injectable) nifedipine (cap/tab), metronidazole (injectable), medroxyprogesterone acetate (Depo-Provera) (injectable), iron supplements (cap/tab) and folic acid supplements (cap/tab).</p> <p>Priority medicines for children: Assign score of one if facility reports and enumerator confirms after observing that the facility has the drug available and non-expired on the day of visit for the following medicines: Amoxicillin (syrup/suspension), oral rehydration salts (ORS sachets), zinc (tablets), ceftriaxone (powder for injection), artemisinin combination therapy (ACT), artusunate (rectal or injectable), benzylpenicillin (powder for injection), vitamin A (capsules)</p> <p>We take out of analysis of the child tracer medicines two medicines (Gentamicin and ampicillin powder) that are included in the mother and in the child tracer medicine list to avoid double counting.</p> <p>The aggregate is adjusted by facility type to accommodate the fact that not all drugs (injectables) are expected to be at the lowest level facility, dispensaries./health posts where health workers are not expected to offer injections.</p>
Equipment availability	
<p>Share of facilities with thermometer, stethoscope and weighing scale refrigerator and sterilization equipment.</p>	<p>Medical Equipment aggregate: Assign score of one if enumerator confirms the facility has one or more functioning of each of the following: thermometers, stethoscopes, sphygmometers and a weighing scale (adult or child or infant weighing scale) as defined below. Health centers and first level hospitals are expected to include two additional pieces of equipment: a refrigerator and sterilization device/equipment.</p> <p>Thermometer: Assign score of one if facility reports and enumerator observes facility has one or more functioning thermometers.</p> <p>Stethoscope: Assign score of one if facility reports and enumerator confirms facility has one or more functioning stethoscopes.</p> <p>Sphygmometer: Assign score of one if facility reports and enumerator confirms facility has one or more functioning sphygmometers.</p> <p>Weighing Scale: Assign score of one if facility reports and enumerator confirms facility has one or more functioning Adult, or Child or Infant weighing scale.</p> <p>Refrigerator: Assign score of one if facility reports and enumerator confirms facility has one or more functioning refrigerator.</p> <p>Sterilization equipment: Assign score of one if facility reports and enumerator confirms facility has one or more functioning Sterilization device/equipment.</p>
Infrastructure availability	
<p>Share of facilities with electricity, clean water and improved sanitation.</p>	<p>Infrastructure aggregate: Assign score of one if facility reports and enumerator confirms facility has electricity and water and sanitation as defined.</p> <p>Electricity: Assign score of one if facility reports having the electric power grid, a fuel operated generator, a battery operated generator or a solar powered system as their main source of electricity.</p> <p>Water: Assign score of one if facility reports their main source of water is piped into the facility, piped onto facility grounds or comes from a public tap/standpipe, tubewell/borehole, a protected dug well, a protected spring, bottled water or a tanker truck.</p> <p>Sanitation: Assign score of one if facility reports and enumerator confirms facility has one or more functioning flush toilets or VIP latrines, or covered pit latrine (with slab).</p>