
PNEUMONIA REPORT CARD

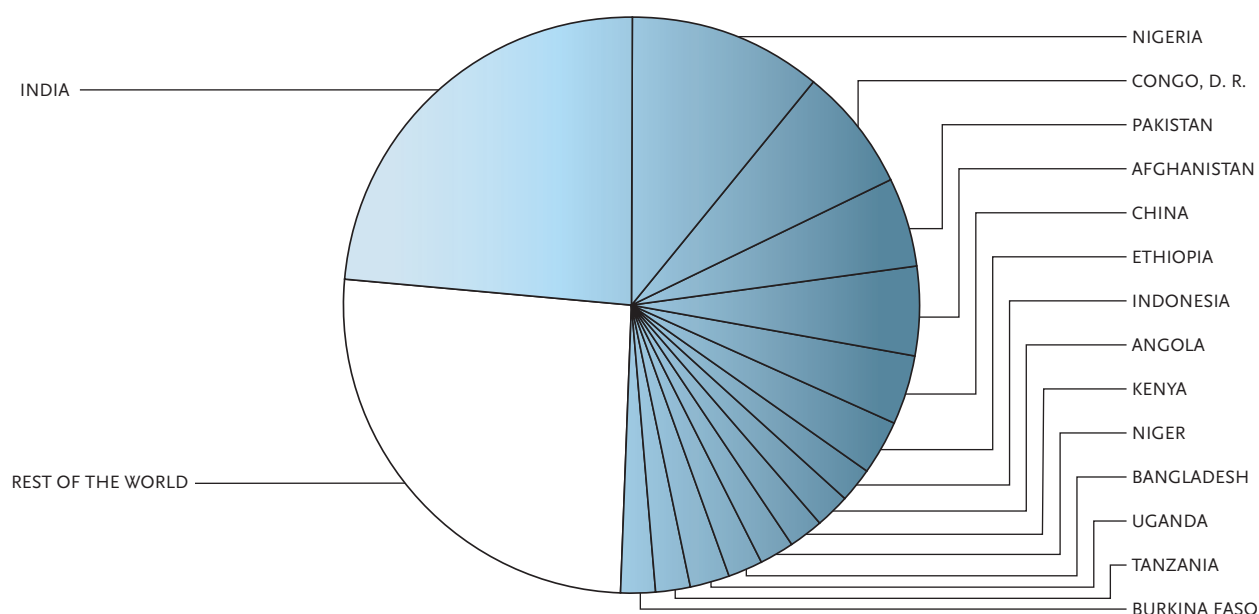
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PREPARED BY THE INTERNATIONAL VACCINE ACCESS CENTER (IVAC)
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GLOBAL PNEUMONIA DISEASE BURDEN AMONG CHILDREN UNDER AGE FIVE



THREE FOURTHS OF ALL WORLDWIDE PNEUMONIA DEATHS AMONG CHILDREN UNDER AGE 5 OCCUR IN THE 15 REPORT CARD COUNTRIES (1.17 MILLION OUT OF A TOTAL 1.575 MILLION DEATHS) BEGINNING WITH INDIA, COUNTRIES APPEAR CLOCKWISE IN DESCENDING ORDER BY NUMBER OF ANNUAL CHILD PNEUMONIA DEATHS

PNEUMONIA KILLS MORE CHILDREN THAN ANY OTHER DISEASE, according to the World Health Organization. But it doesn't have to take the lives of more than 1.5 million children each year. In 2009, with the publication of The Global Action Plan for Prevention & Control of Pneumonia (GAPP), the World Health Organization and UNICEF showed that we can reduce child pneumonia deaths by two-thirds simply by scaling up existing interventions to prevent pneumonia infections, protect children from conditions that increase the risk of pneumonia and treat infections that do occur with life-saving antibiotics.

The GAPP highlights a set of proven, effective interventions and forecasts the impact that scaling up these interventions can have on child health and survival. The GAPP-recommended measures to prevent, protect against and treat pneumonia represent a set of interventions with proven safety and effectiveness for reducing pneumonia risks in children, making them a natural focus for this Pneumonia Report Card.

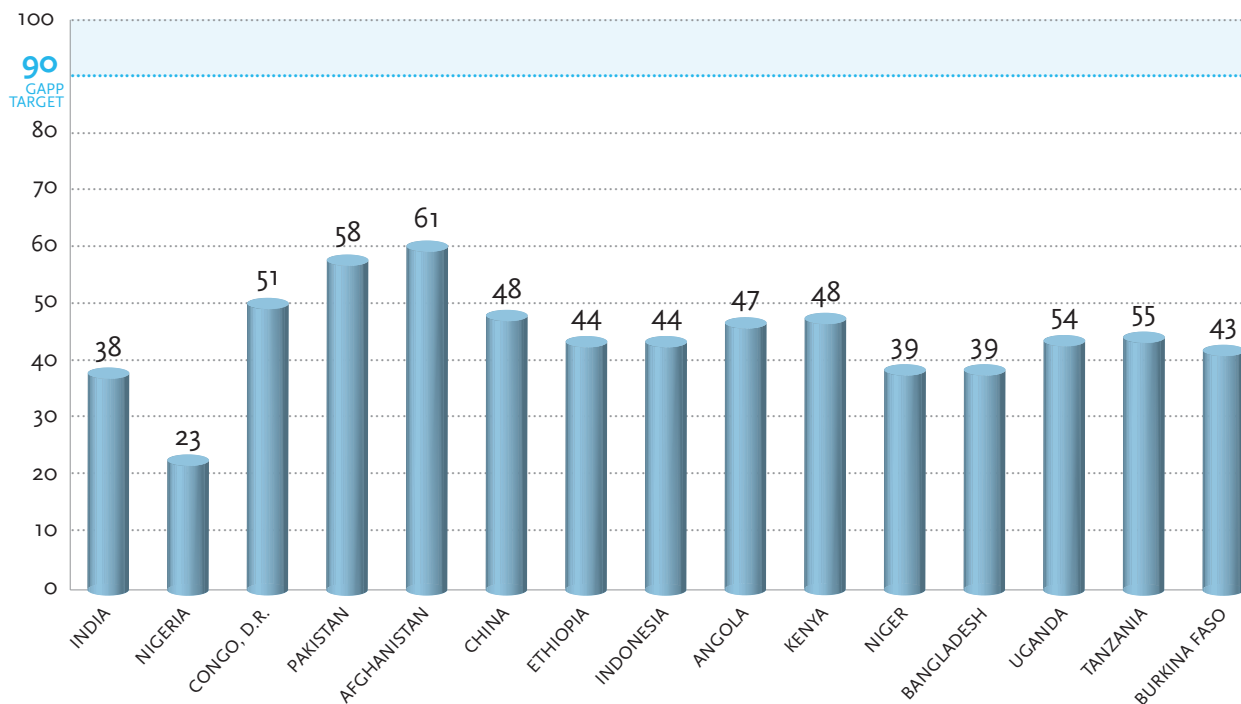
While every child in the world is at risk of pneumonia, and some countries not included in the report have a higher *risk* of pneumonia mortality relative to their population size, the 15 countries highlighted in this report account for nearly three-quarters of all child pneumonia deaths in the world (see figure above). Furthermore, in most of these countries, pneumonia is the illness that causes the most child deaths. In short, global progress against pneumonia specifically – and in reducing child mortality overall – will be virtually impossible to achieve without scaling up GAPP interventions in these countries.

By focusing on the GAPP interventions and on the countries that account for the overwhelming majority of child pneumonia deaths worldwide, this Report Card provides the first assessment of progress toward achieving the GAPP targets among the 15 countries with the most pneumonia deaths. By illustrating the current levels of coverage for each GAPP intervention (vaccines, antibiotics and breastfeeding), this report shows where substantial progress in child survival is possible and most needed, and helps focus efforts to achieve those targets in key countries.

KEY FINDINGS

- More than 1.16 million child pneumonia deaths occurred in just 15 countries in 2008, according to WHO figures. These 15 countries account for nearly three-quarters of all child pneumonia deaths worldwide.
- Children in the top 15 countries are at a high risk of pneumonia and are anywhere from 17 to 400 times more likely to die of pneumonia than a child living in the United States.
- Substantial improvements in pneumonia control and prevention are urgently needed in every one of the 15 countries. The current levels for nearly all interventions in these countries are far below the 90 percent coverage target levels outlined in the GAPP.
- Substantial variations can be seen across countries and interventions. Vaccine coverage data show that for vaccines that are routinely used, such as measles and pertussis, coverage is generally between 60-90 percent, lending promise to the expectation that coverage can rapidly rise to these levels for the Hib and pneumococcal conjugate vaccines against pneumonia, which have not yet been introduced in all countries.
- Generally, coverage levels for other interventions – including children with pneumonia treated with antibiotics and taken to health provider, and exclusive breastfeeding – tended to be lower than coverage with immunizations and thus, renewed efforts to raise these levels are urgently needed. Gains in these areas are likely to be strongly associated with efforts to strengthen health systems overall and to integrate the delivery of health services.
- Many of the top 15 countries are expected to introduce new pneumonia vaccines, have planned for the expansion of community-based case management and have ambitious plans for strengthening health systems. Assuring that these plans are implemented will require funding and continued public attention to pneumonia, which will help contribute to a substantial decline in childhood pneumonia deaths.

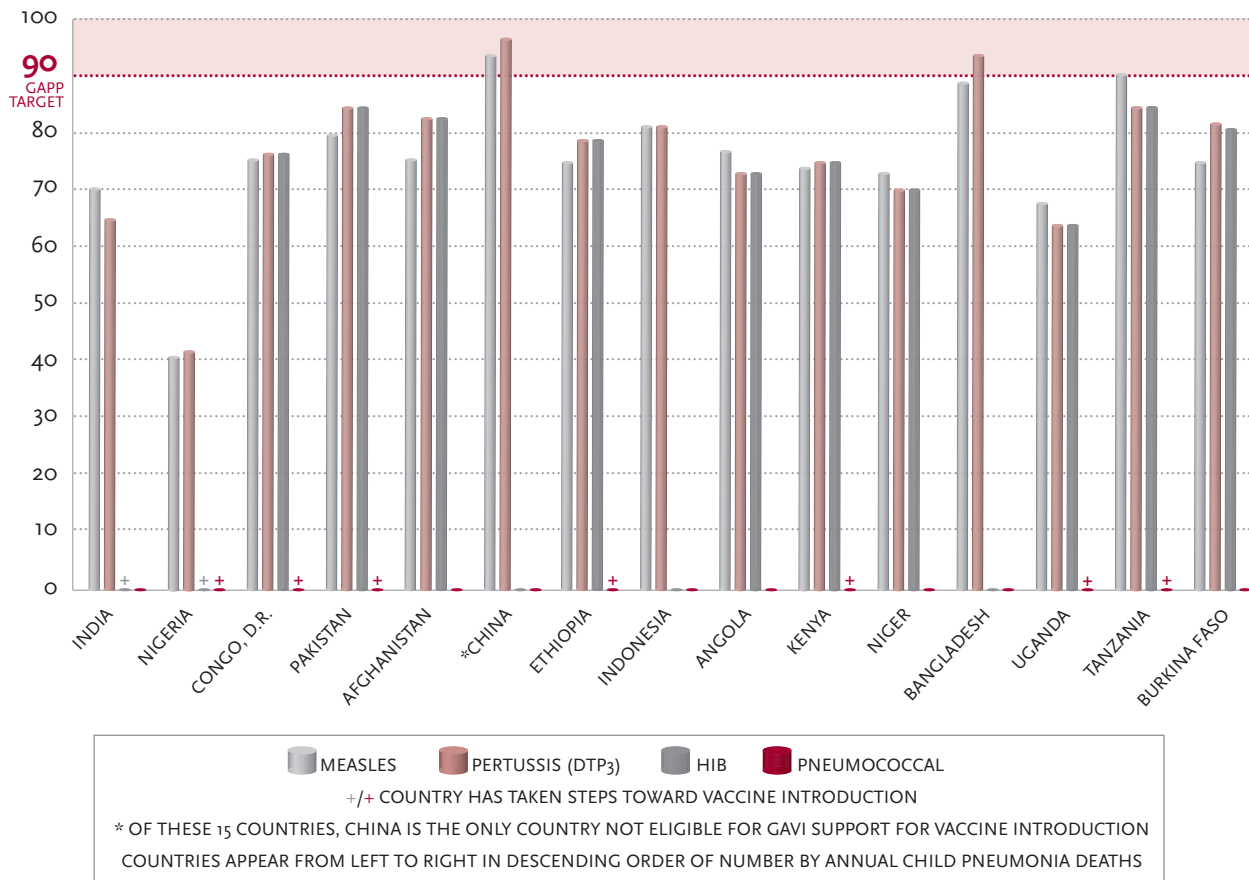
TOTAL SCORE
PROGRESS OF COUNTRIES WITH MOST PNEUMONIA DEATHS ON EFFORTS
TO PREVENT, TREAT AND PROTECT AGAINST PNEUMONIA



COUNTRIES APPEAR FROM LEFT TO RIGHT IN DESCENDING ORDER OF NUMBER BY ANNUAL CHILD PNEUMONIA DEATHS

Overall scores for Report Card countries illustrate the urgent need for efforts to scale up coverage of all GAPP interventions. These scores, which combine coverage levels on all the target interventions, ranged from a high of 61 percent to a low of 23 percent. Importantly, not all countries had current coverage level estimates for all of the GAPP interventions, highlighting the importance of improving systems for collection of indicator information. None of the countries profiled currently meet or exceed target levels for all interventions for which data was available. (Overall scores for each country were calculated based on the number of interventions for which data was available).

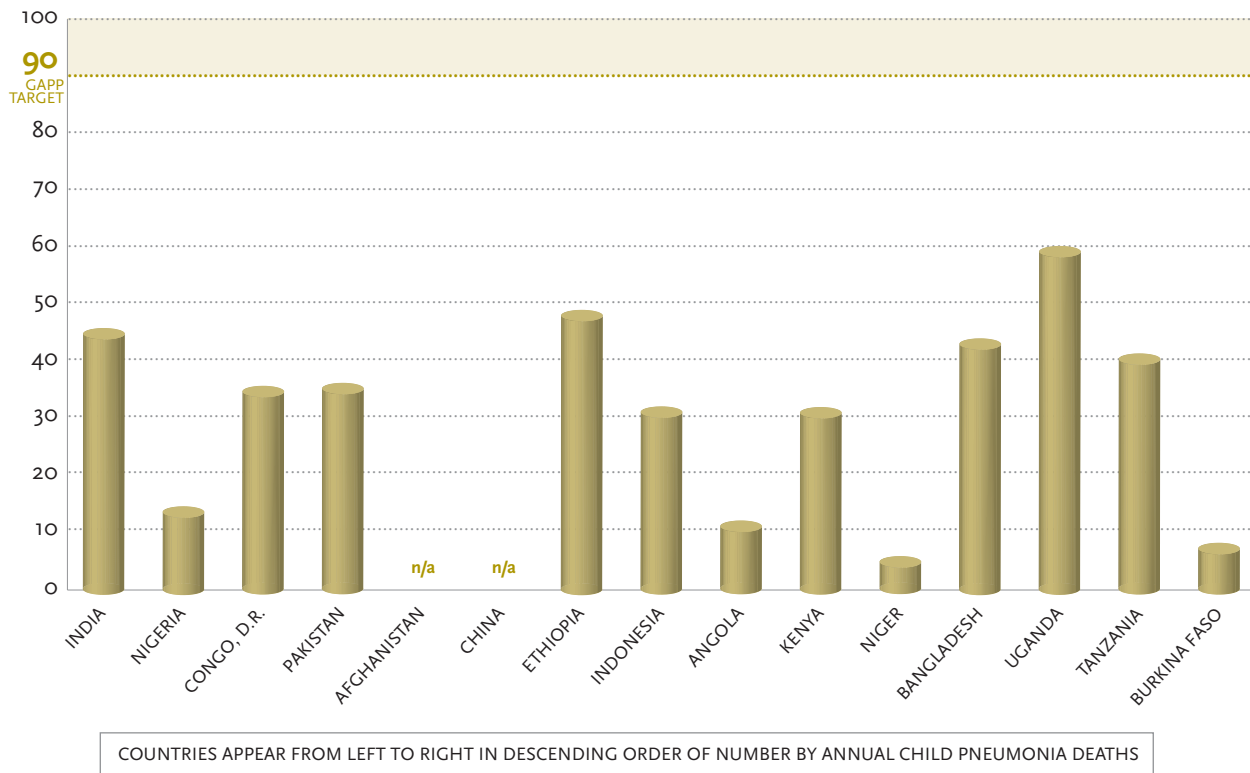
PREVENTION LEVELS OF COVERAGE WITH PNEUMONIA VACCINES



Coverage of interventions in the prevention category – namely, vaccines that prevent pneumonia or pneumonia-related illness – is generally either between 60-90 percent in countries where vaccines are in use, or zero where vaccines have not yet been introduced. These findings illustrate that moderate to high coverage rates are possible for pneumonia vaccines in these countries.

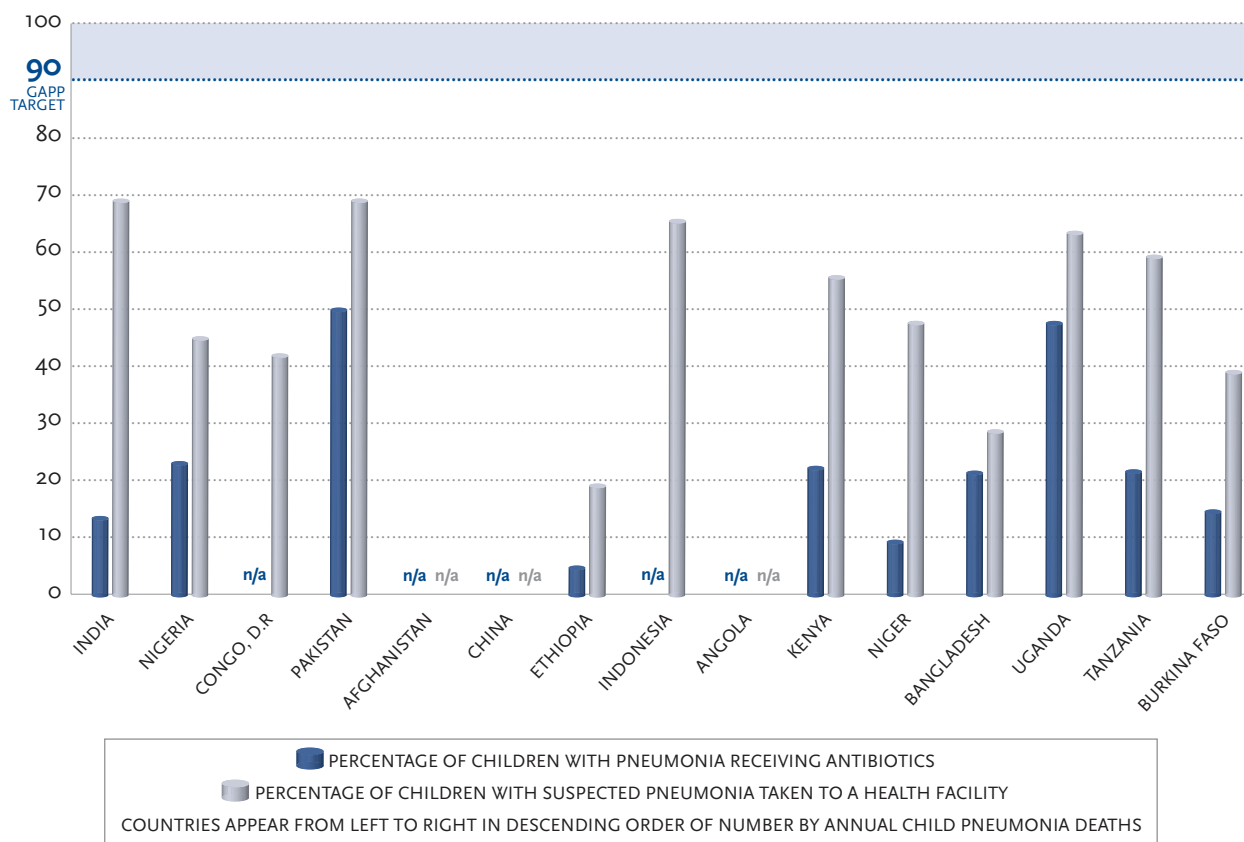
Only three countries reported coverage above the target level of 90 percent for any vaccine, showing that the targets are achievable but that continued efforts to raise coverage in nearly all countries is critical. Furthermore, with levels of coverage for vaccines generally higher than those for interventions designed to protect against or treat pneumonia (including exclusive breastfeeding in the first six months of life and use of antibiotics, respectively), efforts to leverage vaccines to improve the coverage of other interventions are also needed, particularly as vaccines have been shown to address some of the inequities of access to care in many countries.

PROTECTION EXCLUSIVE BREASTFEEDING IN THE FIRST SIX MONTHS



Exclusive breastfeeding, the key protection intervention in the GAPP, is characterized by sub-optimal coverage levels ranging from <10 percent to 60 percent in the top 15 countries, all of which fall far short of the 90 percent GAPP-established target. Exclusive breastfeeding can have multiple positive effects on child health – including protection against diarrhea and other infections – demonstrating that renewed efforts to increase breastfeeding are urgently needed to help improve child survival.

TREATMENT
PERCENTAGE OF CHILDREN WITH PNEUMONIA WHO ACCESS A CARE FACILITY OR RECEIVE ANTIBIOTICS



Access to pneumonia treatment in the Report Card countries is far lower than the GAPP target levels, with coverage ranging from <10 percent to 50 percent. Because prevention and protection interventions are less than 100 percent effective and do not address every cause of pneumonia, children will always need access to safe, effective treatments for pneumonia. Expansion of community-based management programs that use village health workers to bring antibiotics to ill children in remote areas and programs that improve the quality of care and treatments at facilities for the most seriously ill children are both necessary for reaching GAPP targets.

MOVING FORWARD

Based on existing information, this report shows that increasing coverage on all GAPP interventions is urgently needed in the countries where three-quarters of the world's childhood pneumonia deaths occur. Progress on these interventions is possible, and promising signs are visible in many countries. For the prevention interventions, with support from the GAVI Alliance, introductions of Hib and pneumococcal conjugate vaccines are expected to occur in the next five years in nearly all of these countries.

Efforts to strengthen routine immunization systems in these countries are underway, with support from the GAVI Alliance and others, and these are likely to help increase overall coverage of all pneumonia and pneumonia-related vaccines, including those for measles and pertussis. In addition, the WHO Reaching Every District (RED) strategy is working to improve the equitable coverage of vaccines within countries by raising coverage in all districts above 80 percent.

Efforts to strengthen health systems and link interventions through integrated programs are also underway in Report Card countries. When these efforts include community-based service delivery, they are likely to help improve access to antibiotics and oxygen therapy, through both expanded community-based management programs and improved quality of facility-based care. With improved community involvement, these interventions should help lift levels of exclusive breastfeeding.

This first-ever Pneumonia Report Card focuses on three key types of interventions from the GAPP in 15 key countries. It is important to recognize that other interventions such as reducing indoor air pollution, preventing and treating HIV infection, handwashing and improved nutrition may also play important roles in reducing pneumonia risk, and that pneumonia is an important problem in many countries.

Success with the GAPP initiative will depend on increasing and sustaining commitment at all levels. Without substantial increases in maternal and child health program funding, for example, these targets will not be met. Increased support for both community-based treatment programs and the GAVI Alliance, which is facing a major funding shortfall, are urgently needed. Country governments will also need to make pneumonia a core component of their national strategies for health and development and make universal, equitable implementation of these interventions a national priority.

METHODOLOGY

There are important limitations that should be considered when interpreting the scores in this report. First, the report is based on reported coverage levels, and in some cases reported and current coverage levels may differ. Second, the report illustrates national level data and as such, these national average levels may mask significant variations in coverage that exist within countries.

All data analyzed in this report were drawn from UN sources. Data reported in the 2010 *Countdown to 2015* country reports were used to assign coverage levels for each intervention. These interventions include: Protection (percent of children exclusively breastfed for the first six months of life), Prevention (percent coverage of measles, pertussis (DTP-3), Hib and pneumococcal conjugate vaccines) and Treatment (percent of children with symptoms of pneumonia seeing a qualified health provider, and percent of children with symptoms of pneumonia receiving antibiotics). Additional data was taken from UNICEF's 2009 *State of the World's Children* report. Country scores (see page 4) are reported as a percentage of their maximum possible score, as data for some countries on one or more interventions were not available.

Overall scores were derived from the sum of the percentage coverage of seven key indicators outlined in the GAPP report (as available for each country), divided by the total possible score. For example, a country with data for all seven interventions would have their combined coverage of those interventions divided by 700 percent to arrive at their composite score. A country with data for only five interventions would have their combined coverage divided by 500 percent.