Health-related SDGs Overview

The SDG Index

Definitions

The **health-related SDG index** – often abbreviated to the "SDG index" – is a summary measure that reflects a given location's performance across health-related Sustainable Development Goal (SDG) indicators. For the Global Burden of Diseases, Risk Factors, and Injuries Study 2017 (GBD 2017), 41 individual indicators were included in the health-related SDG index.

Measurement approach

The SDG index summarizes how well a location is doing across the health-related SDG indicators covered by the index relative to other places over time. The index is measured along a scale of 0 to 100, with 0 capturing the worst levels across countries and over time, and 100 reflecting the best levels across locations and over time. For GBD 2017, the time period assessed was 1990 to 2017, as well as 2018 to 2030 (see *Projections to 2030*).

The index was calculated in two steps: (1) taking the geometric mean by SDG target and (2) taking the geometric mean across targets. This approach was used to weigh the health-related SDG targets more equally; this was important since some SDG targets involved many indicators and others only included one or two indicators.

Additional detail on the SDG index construction can be found here: http://www.healthdata.org/research-article/measuring-progress-1990-2017-and-projecting-attainment-2030-health-related

Index values and estimates

Definitions

The SDG index is shown as "index values," which are reported along a scale between 0 and 100. This index is based on individual health-related SDG indicators that are scaled (see *Measurement approach* below). The SDG index is meant to provide an easy way to directly compare overall performance across locations and over time.

Individual health-related SDG indicators are reported in terms of both "index values" (scaled 0 to 100) and "estimates." "Index values," also known as "scaled values," range from 0 to 100 and allow for a more standard way of comparing between very different types of health measures (e.g., mortality rates and intervention coverage). "Estimates" refer to the underlying indicator values – deaths per 100,000; proportion of children under 5 who are overweight; cases per 1,000; and so on. For this analysis, researchers also call these estimates "unscaled values" as they are not scaled relative to other places over time.

Measurement approach

To scale each indicator from 0 to 100, we grouped indicators by "positive indicators" (better performance is associated with higher values, such as skilled birth attendance) and "negative indicators" (better performance is associated with low values, such as mortality from road injuries). For the positive indicators, the value of 0 was assigned to places with the lowest levels (the 2.5th percentile) between 1990 and 2030, and the value of 100 was given to places with the highest levels during this time (the 97.5th percentile). The remainder of indicator-specific estimates were then assigned values of 0 to 100 based on this range.

For the negative indicators, the value of 0 was assigned to the places with the highest levels (the 2.5th percentile) between 1990 and 2030, and the value of 100 was given to the places with the lowest levels during this time (the 97.5th percentile). The remainder of indicator-specific estimates were then assigned values of 0 to 100 based on this range.

Projections to 2030

For GBD 2017, indicator-by-indicator projections to 2030 were generated on the basis of past trends (1990 to 2017). This analysis allows for a better understanding of potential trajectories for priority health areas in the SDG era based on past rates of progress. More detail on the statistical methods used for these projections can be found online http://www.healthdata.org/research-article/measuring-progress-1990-2017-and-projecting-attainment-2030-health-related, but in sum, to produce projections of indicator estimates, researchers used a weighted average of the indicator and country-specific annualised rates of change from 1990 to 2017 with weights for each annual rate of change based on out-of-sample validity.

SDG indicator targets

Definitions

Across the 17 SDGs, 169 targets were established by the United Nations with the aim of creating a way to measure progress for the SDGs. Some targets are very specific, identifying an exact level to be reached by 2030 (e.g., Target 3.1 "By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births"). Others are less defined and do not provide explicit thresholds for target attainment (e.g., Target 3.5: "Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol"). For GBD 2017, 25 of the 41 currently measured health-related SDG indicators had defined SDG targets linked to them. Researchers assessed potential attainment of these targets, most of which are set for 2030, using indicator projections based on past trends.

Measurement approach

Four health-related SDG indicators had explicit numerical values associated with their targets, and three indicators had targets specifying a relative reduction to achieve between 2015 and 2020 or 2030 (e.g., "Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents"). The remaining 18 indicators had targets citing "achieving elimination," "ending epidemics," or "reaching universal coverage or access." For indicators with universal coverage or access targets, the target was considered achieved if indicator estimates equaled or were greater than 99%. For indicators with elimination targets, the target was considered achieved if indicator estimates equaled or were less than 0.5% for prevalence measures and 0.00005 for other nonfatal measures (i.e., 0.005 cases per 1,000 or 0.5 cases per 100,000).