

4.6 Coverage, quality and recency of evidence syntheses

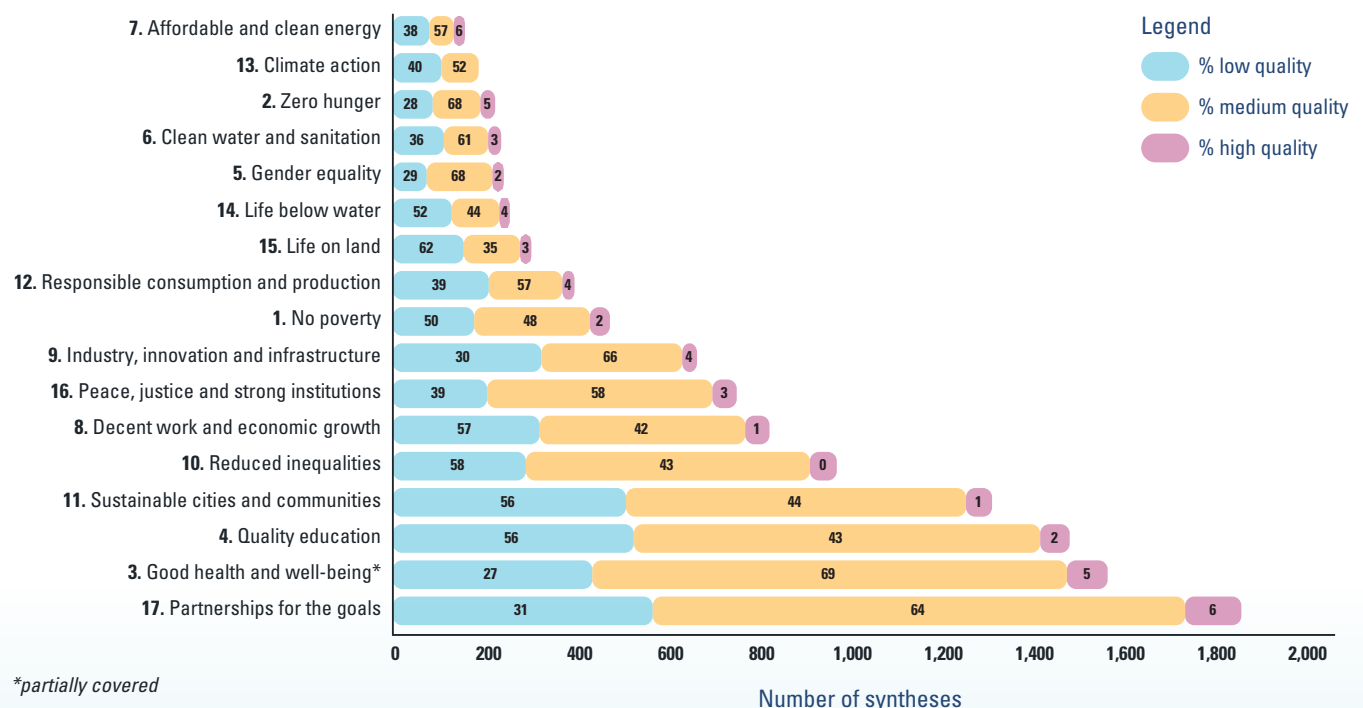
The global stock of evidence syntheses suffers from incomplete coverage of priority topics, a wide spectrum of quality (of the synthesis), and problems with recency (of the search for potential studies to be included in the synthesis). Analyses of two 'one-stop shops' for evidence syntheses illustrate the magnitude of the problem. One 'shop' focuses on all of the non-health Sustainable Development Goals, or SDGs (Social Systems Evidence), and the other focuses on all potential COVID-19 responses (COVID-END inventory of best evidence syntheses and the larger database from which the inventory is drawn).

SDG evidence syntheses

Of the 4,131 SDG evidence syntheses – defined as overviews of reviews, reviews of effects, and reviews addressing other questions – included in Social Systems Evidence as of 12 August 2021:

- coverage was uneven, with seven SDGs addressed by a relatively small number of evidence syntheses (263 or fewer) relative to the number of questions that can be asked in relation to each SDG (2 – Zero hunger, 5 – Gender inequality, 6 – Clean water and sanitation, 7 – Affordable and clean energy, 13 – Climate action, 14 – Life below water, and 15 – Life on land)
- quality was uneven, with seven SDGs addressed by a stock of evidence syntheses in which at least half are of low quality (6 – Clean water and sanitation, 7 – Affordable and clean energy, 9 – Industry, innovation and infrastructure, 12 – Responsible consumption and production, 13 – Climate action, 14 – Life below water, and 15 – Life on land)
- all SDGs have a median year of last search that is five or six years ago (2016 or 2017)
- only between one in 10 (12%) and one in 20 (21%) evidence syntheses about most SDGs included at least one study from a low- and middle-income country, with an even lower percentage (3%) for one SDG (9 – Industry, innovation and infrastructure).

The number and quality of evidence syntheses are presented by SDG in the bar chart below.



Keep the following in mind with this bar chart:

- the numbers add to more than the total number of evidence syntheses because a synthesis may address more than one SDG
- the number of evidence syntheses addressing:
 - SDG3 is a significant undercount, with health-related evidence syntheses included only if they also address another SDG)
 - SDG17 is a significant overcount, with many evidence syntheses addressing another SDG as their primary question also addressing partnerships as a secondary question
 - SDGs 7, 13, 14 and 15 may be an undercount as they have been a more recent focus for inclusion in Social Systems Evidence
- quality ratings have been completed for 85% of the evidence syntheses included in Social Systems Evidence.

COVID-19 evidence syntheses

Of the 4,256 COVID-19-related evidence syntheses included in the full COVID-19 database and the 562 COVID-END inventory of best evidence syntheses, as of 1 August 2021:

- coverage was uneven, with only 237 evidence syntheses addressing economic and social responses to COVID-19 (of which only 49 were included in the inventory), while much higher numbers addressed clinical management (3,128), public-health measures (1,148), and health-system arrangements (818)
- quality was uneven, with roughly one quarter (26%) of COVID-19 evidence syntheses being low quality and over half (56%) being medium quality
- three of the four COVID-19 response categories have a median date of last search that is within 4.5 months of the World Health Organization (WHO) declaring a pandemic (11 March 2020).

The much more recent median search date for clinical management – 12 months after the pandemic declaration and 4.5 months before the analysis was completed – was driven by the large number of comparisons of drug treatments, all with the same search date, on the COVID-NMA living evidence platform. The number and quality of evidence syntheses are presented by broad category of COVID-19 response in the bar chart below.



Keep in mind the following with this bar chart:

- the numbers add to more than the total number of evidence syntheses because a synthesis may address more than one category of the COVID-END taxonomy
- evidence syntheses needed to have a quality rating of medium or high to be considered for inclusion in the COVID-END inventory of 'best evidence syntheses.'

These findings echo similar shortfalls in the stock of evaluations (specifically randomized-controlled trials), evidence syntheses, and evidence maps (of evaluations and evidence syntheses) available to inform decision-making about:

- education, where only 25% of trials had more than 1,000 participants (and only 12% of trials conducted in the 1980-2016 period were performed in Asia, Africa or Central and South America) (5)
- health, where only 16% of evidence syntheses incorporated quality assessment in their analysis (although 70% conducted such as assessment) and more generally reporting quality was highly variable (6)
- sustainable development in low- and middle-income countries, where four or fewer evidence maps reported outcomes relevant to eight of the 17 SDGs in the 2010-17 period, and one quarter of the evidence maps did not address equity in any way.(7)

Other such stock-taking exercises have been framed more positively, such as the one noting that the 740 randomized-controlled trials in social work demonstrate that this approach to evaluation is indeed possible in the field.(8)