

POSTER ABSTRACT

The use of Burden of Diseases for improving population health and accountable care: a scoping review

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Introduction

Internationally, the Triple Aim agenda (improved health of populations, improved patient experience, and reduced per capita health care expenditures) is gaining momentum in reforming healthcare systems. Towards implementing accountable care, policymakers, insurances, and managers need information about population health status to allocate resources, set priorities, plan interventions, and measure outcomes. To this extent, consolidated tools from public health research are attracting renewed interest.

This paper aims to analyze the Burden of Diseases (BoD) tool and how it could be deployed to pursue the Triple Aim agenda, nationally or regionally.

The Global BoD (GBoD) was introduced in the 1990s and then developed by the World Health Organization (WHO) and the Institute for Health Metrics and Evaluation (IHME), relying on aggregated data, population samples, and surveys. Nevertheless, to achieve more accurate and calibrated estimates, several countries have started to develop the BoD with different methodologies, which could influence the results and the tool's deployment within accountable care.

Methods

An Arksey and O'Malley approach was used in this scoping review. Electronic database MEDLINE and search engine Google were searched from January 2010 to February 2021. National BoD reports were included, and data and methodologies were extracted. The scoping review addressed three main goals: 1) benchmarking international and national or local development of the BoD; 2) analyzing and comparing the methods and data sources; 3) comparing the deployment strategies and the tool's scope.

Results

The IHME and WHO approaches are the most consolidated hitherto. National experiences are increasing, while local applications are still limited to pilot research. Calculation methods vary based on age-weighting, discount rates, the number of included diseases and risk factors, reported advantages and disadvantages, data sources, and data computations. The deployment strategies are very fragmented and still at an embryonic stage compared to the debate on accountable care.

Discussion

Whereas the utilization of a nation-based BoD is promising, experiences are still limited. The national implementation could be more reliable and calibrated on targeted populations to guide health interventions and measure population health outcomes. Multiple factors hamper the tool's development, such as costs, human and time resources, less meticulous methodology, and health analytics availability and robustness at the country level. Also, population health strategies and outcomes measurement are not yet institutionalized within accountable care. The tool deployment is fragmented across multiple entities and governance patterns. National and private insurance players are the most active, pioneering new strategies.

Conclusions

The BoD is an efficient way to assess the impact of diseases and risk factors in populations' life and quality of life. GBoD remains an essential benchmark for researchers and public health institutions worldwide.

Lessons Learned

National tools development is increasing and could be deployed for evaluating and planning healthcare interventions at the national or sub-national level.

Limitations

This study does not use systematic review criteria, and access to tools methodologies and deployment strategies is limited through published sources.

Suggestions for future research

Assessment of the development, methods, and deployment of a national-based BoD compared to the accountable care aims and agenda.