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The EPOC taxonomy of health systems interventions

Background

The scope of the Cochrane EPOC Group covers a broad range of health systems interventions. To help review authors and users of our review findings to better describe and organise these interventions, we have developed a taxonomy that can be used to classify health systems interventions into categories based on conceptual or practical similarities.

How the taxonomy was developed

The first EPOC taxonomy of health systems interventions was developed in 2002, and included the following categories: (1) professional interventions; (2) financial interventions; (3) organisational interventions; and (4) regulatory interventions.

This taxonomy was extensively revised and updated between 2013 and 2015 to address key gaps and also to bring the EPOC taxonomy into alignment with other taxonomies that were being used to classify health systems interventions in widely used online databases (Lavis 2015). Our starting point was a taxonomy for health systems arrangements developed for the Health Systems Evidence database (www.healthsystemsevidence.org) (Lavis 2015). We applied this taxonomy to all of the interventions included in four overviews of systematic reviews of health systems interventions of high relevance to low income countries (Ciapponi 2014; Herrera 2014; Pantoja 2014; Wiysonge 2014). The taxonomy was then revised iteratively to ensure that all of the included reviews were appropriately categorized and that all relevant health system arrangements and implementation strategies were included and organized logically. We then applied the revised taxonomy to all of the interventions covered by EPOC reviews. Further minor revisions were made to the taxonomy at this stage to ensure appropriate categorisation of interventions and we also refined the definitions of each of the categories and subcategories.

Overview of the EPOC taxonomy

The EPOC taxonomy includes four main domains of interventions (Table 1).

Table 1: Main domains of the EPOC taxonomy of health systems interventions

| Category | Definition |
|---------------------------|---|
| Delivery arrangements | Changes in how, when and where healthcare is organized and delivered, and who delivers healthcare |
| Financial arrangements | Changes in how funds are collected, insurance schemes, how services are purchased, and the use of targeted financial incentives or disincentives |
| Governance arrangements | Rules or processes that affect the way in which powers are exercised, particularly with regard to authority, accountability, openness, participation, and coherence |
| Implementation strategies | Interventions designed to bring about changes in healthcare |

| | |
|--|---|
| | organizations, the behaviour of healthcare professionals or the use of health services by healthcare recipients |
|--|---|

Each of these main domains includes a number of categories and subcategories, and these can be viewed [here](#).

We recognise that there is overlap between categories and subcategories, and that some interventions could be classified in more than one category. For example ‘telemedicine’ is classified as an ICT intervention and could also be classified as a change in where care is provided and a change to the healthcare environment. If review authors are concerned about overlap we advise that they address this when writing the protocol, or in the update of a review, by focusing on the function of the intervention within the context of their review. We welcome suggestions on how the EPOC taxonomy can be improved – please send suggestions to epoc@ndph.ox.ac.uk

We also recognise that there is no universally agreed upon classification system for health systems interventions and that any system for categorising health system interventions is, to some extent, arbitrary. However, we hope that this taxonomy will facilitate explicit and systematic synthesis and interpretation of the existing body of evidence on health systems interventions across studies.

How review authors can use the EPOC taxonomy

Review authors can use the taxonomy in a number of ways:

- To understand and explore the scope of EPOC
- To see [where reviews have been undertaken](#) and where gaps exist. Some of these gaps are reflected in a list of [priority review topics](#)
- To explore where a proposed intervention would fit into the taxonomy. This may help in conceptualising interventions, and developing inclusion criteria, when planning a new review or an update
- To group interventions in reviews that include multiple types of interventions for a particular group of people (e.g. people with multimorbidity in primary care or community settings) or to improve a particular outcome (e.g. the proportion of health professionals serving in rural and other underserved areas). In such reviews, the taxonomy may also be helpful as a framework for exploring heterogeneity

We recognise that individual subcategories within the EPOC taxonomy can be further broken down into groups of related interventions and that the taxonomy does not provide this level of detail. Review authors can draw on existing taxonomies for a specific subcategory of intervention to further differentiate and organise interventions for a particular review. Examples of where this has been done include the review of interventions to reduce corruption in the health sector (Gaitonde 2010) and the review of interventions for improving coverage of child immunization in low- and middle-income countries (Oyo-Ita 2011).

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