
A Synthesis of Recent OECD High-Income Country Analyses of HRH Requirements and Labor Market Dynamics

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Background

- Human resources for health (HRH) planning affects health care system performance, which in turn affects population health.
 - Remains a major challenge despite its importance
- The World Health Organization (WHO) and the Global Health Workforce Alliance (GHWA) charged with facilitating, with partner organizations, the development of a global HRH strategy for the period 2016-2030.

Aims of the study

To inform this process, our team was asked to:

1. conduct a rapid review of recent analyses of health human resources (HHR) requirements and labour market dynamics in high-income Organization for Economic Cooperation and Development (OECD) member countries
2. identify a methodology to simulate future HHR requirements for these countries.

Objectives

- I. Identify all analyses of HRH requirements and health labor market dynamics for high- income OECD countries published within the past 10 years.
- II. Categorize the analyses according to:
 - type(s) of models used to estimate requirements,
 - professions included,
 - time frames over which they apply,
 - any labor market trends identified,
 - any assumptions on which they were based.
- III. Identify key themes and trends in these analyses that may be emerging over time.
- IV. Identify and report gaps in the knowledge base formed by these analyses to inform the development of a global HRH strategy.
- V. Identify a methodology to project future HRH requirements in OECD countries.

Synthesis Methods

Four mechanisms for gathering relevant documents:

1. Systematic search of the peer-reviewed literature (6 electronic databases)
2. Targeted website searches
 - Ministry of Health websites
 - Bureaus of statistics
 - HRH-specific planning bodies
 - Websites of reputable international organizations and agencies
3. Reference mining
4. Supplemental contributions from international advisory group

Synthesis Methods (cont'd)

- Inclusion criteria (validated by the Advisory Group):
 - Published in English between March 2005 and March 2015
 - Included primary analysis of HRH requirements or labor market dynamics
 - Pertained to one or more included countries.

- Relevant data extracted using standardized tool

- Data synthesized into a report
 - Amended and validated by Advisory Group

Development of Methodology for HRH Planning in Included Countries

- Informed by results of synthesis
- Criteria for such a methodology drafted and amended based on feedback from Advisory Group
- Synthesis found no applied (but some theoretical) examples of approaches which met all criteria

Synthesis Results

- Searches yielded >1000 documents; all titles and abstracts reviewed
- 180 documents selected for full-text review
- AG provided 11 additional documents for review
- A selection of 30 that cited multiple other potentially relevant works were mined for additional documents; 32 non-duplicates were found
- 223 documents included in the review

Synthesis Challenges

- Lack of analysis on HRH supply/requirements found
 - For several countries, no quantitative analyses of national-level HRH gaps (difference between HRH supply and HRH requirements)
 - For others, only analyses of HRH supply, not requirements
- Most studies focus on physicians and nurses; little evidence on the other HRH that make up each country's workforce
- HRH shortages or surpluses often measured in different units
- HRH research and/or policy question(s) to be answered by the various analyses are often not clear
- Important differences in the various approaches used to conceptualize and measure HRH supply, requirements, shortages and surpluses across these countries
- Assumptions used in various analyses often not explicit

Synthesis Findings

- HRH supply in included countries is generally expected to grow
 - Several exceptions, e.g. nuclear medicine technologists in Australia, surgeons in Japan, obstetricians-gynecologists in the United States, and RNs in Israel

- Not clear whether the expected growth in HRH supply will be adequate to meet health care system objectives in the future
 - Differing views about whether the requirements for different types of HRH are expected to increase or decrease in the future in different jurisdictions

Synthesis Findings

- Several recurring themes regarding factors of importance in HRH planning across the documents reviewed
 - Factors such as aging populations and health workforces as well as changes in disease patterns, models of care delivery, scopes of practice and technologies in health care.
 - Most common HRH planning approaches found through the review do not account for most of these factors

- The included documents do not collectively present a clear or consistent picture of what the HRH situation is expected to be across - or even within - these jurisdictions in the future.

Criteria for HRH planning

1. The approach is consistent with the objectives of the health care system.

2. That...
 - a) HRH requirements are derived from service requirements; and
 - b) Those service requirements are aligned with system objectives.

3. The approach considers HRH requirements in the context of production functions for health services (i.e., dependent upon the availability or use of other inputs to service production).

Criteria for HRH planning

4. The approach explicitly considers the role and determinants of productivity (i.e. units of service per hour of work).
5. HRH supply is measured in terms of time devoted to service delivery (i.e., flow generated by a stock of HRH) as opposed to focussing only on the HRH stock (numbers of HRH).
6. The approach considers the determinants of flow (e.g., hours worked) and stock (entries/exits) as policy variables.
7. The approach considers
 - a) the cost implications of HRH plans; and
 - b) the extent to which HRH plans are aligned with health system financial planning.

Conclusions

- The HRH evidence base from high-income OECD countries does not provide a clear picture of their expected future HRH situations.

- Most reviewed documents appeared to derive HRH policy questions based on predetermined planning methods as opposed to developing planning methods to address explicit HRH policy questions.

- Appropriateness of different HRH planning approaches for given jurisdictions depends on:
 - the objectives of the health care systems,
 - the precise policy questions being asked for which they are planning
 - the context in which that planning takes place.

Key Messages

- Based on the objectives of the health system, methods need to be adopted that produce relevant answers for the precise HRH questions facing policy makers in their particular contexts.
- Policy questions should come first, with HRH research methods following, rather than policy being made to fit the methods.
- From this review, we were able to develop a set of criteria for more systematic HRH planning.

The Way Forward

- Apply criteria for more systematic HRH planning;
- More in-depth practical applications within countries, both high and lower/middle income;
- HRH planning becomes more integrated with policy and system planning.

QUESTIONS?

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