A HEALTH POLICY AND SYSTEMS RESEARCH READER ON HUMAN RESOURCES FOR HEALTH
Chapter 1. Health worker profiles: boundaries, metrics and modelling

Kerry Scott & Asha George
Outline

1. Defining HRH profiles
2. Background on HRH profiles
3. Illustrative primary research articles
4. Research challenges, gaps and future directions
1. Defining HRH profiles

- This presentation focuses on understanding health worker profiles in three ways:
  - **Definitional boundaries**: research that sets, broadens or questions how we define the health workforce
  - **Measurement metrics**: research that grapples with the methodological complexities of describing and assessing the health workforce
  - **Planning models**: research that supports planning on how to meet future health needs through HRH modelling
2. Background on HRH profiles

• Who are included as “human resources for health”?
  – Discuss with a neighbor for 3 minutes
2. Background on HRH profiles

• How do we define human resources for health?
  – 2006 *World Health Report*: health workers are “all people engaged in actions whose primary intent is to enhance health” (WHO, 2006, p. 4)
  – This expansive definition aligned with JLI and GHWA efforts in 2000s to:
    • highlight the shortage and maldistribution of HRH,
    • improve measurement,
    • expand the number of occupations tracked in global HRH databases
  – But many who engage in health work are still not counted
2. Background on HRH profiles

• Contributions of HPSR:
  – Highlight the experiences and needs of health workers previously neglected by HRH policy
  – Broaden and problematize our conceptual understandings of HRH categories, especially for LMIC health systems
    • Health systems as fluid and complex
    • Health workers as public and private actors, formal and informal providers, drawing from biomedical and traditional/complementary understandings
Multidisciplinarity a key aspect of HPSR

- Descriptive: To describe to enable comparability with other contexts and experiences
- Exploratory: Initial research to understand and build hypotheses, concepts, theories
- Explanatory: In-depth research using and testing theory to explain causal mechanisms
- Emancipatory: To jointly understand a problem, act on it, and learn from working collaboratively and address power
- Influence: To assess the impact of one variable on another (adequacy, plausibility and probability analysis)
- Predictive: To inform about the consequences of preferences and decisions
- What if? What next?
- How to empower with change?
- What works to effect change?
3. Illustrative primary research articles

• How **boundaries** are set has political implications
  – Framing “care work” (Bedford 2011);
  – aspects of health workforce migration (Arah 2007)

• How to **measure** the existing health workforce
  – Using existing data (Rao et al. 2012),
  – using surveys with community free listing (Ahmed et al. 2011)

• How to **model** future health workforce needs
  – Dynamic modelling and stakeholder engagement
  – (Crettenden et al. 2014; Jansen et al. 2014)
### 3. Illustrative primary research articles

**How boundaries are set has political implications**


<table>
<thead>
<tr>
<th>Cadres</th>
<th>Family members providing care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical area</td>
<td>Global</td>
</tr>
<tr>
<td>Research methods</td>
<td>Qualitative: document review and in-depth interviews</td>
</tr>
<tr>
<td>Research inference</td>
<td>Explanatory</td>
</tr>
</tbody>
</table>
What makes it exemplary?

- Article questions who is served by boundaries and definitions
- “Equal sharing of responsibilities between women and men”
- Theme enabled broad agreement, directed focus towards need for state-provided support
- But heteronormative, conservative “family values,” removed agency from people with disabilities
- Unearthed implicit assumptions and at times unintended consequences of HRH policy classifications
How boundaries are set has political implications


<table>
<thead>
<tr>
<th>Cadres</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical area</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Research methods</td>
<td>Quantitative: ranking and correlational analyses on African health professional emigration database</td>
</tr>
<tr>
<td>Research inference</td>
<td>Descriptive</td>
</tr>
</tbody>
</table>
What makes it exemplary?

- Article shows that the metrics used shape our understanding of the problem
- Looks at physician out-migration according to three metrics:
  - Total number of emigres
  - Emigration as a fraction of potential physician pool that ends up working in destination countries;
  - Migration density
- Different measurement strategies for HRH problems can shift our understanding of how extreme a problem is and which countries to focus on
How to measure the existing health workforce


<table>
<thead>
<tr>
<th>Cadres</th>
<th>Multiple public and private health workers including informal providers</th>
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<tbody>
<tr>
<td>Geographical area</td>
<td>India</td>
</tr>
<tr>
<td>Research methods</td>
<td>Quantitative: national census and sample survey data</td>
</tr>
<tr>
<td>Research inference</td>
<td>Descriptive</td>
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</tbody>
</table>
What makes it exemplary?

- Article combines census and survey data to assess status of HRH in India, including unqualified providers.
- Authors make use of routine data in innovative manner to overcome limitations in availability, quality and accessibility.
How to measure the existing health workforce


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<tbody>
<tr>
<td>Geographical area</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Research methods</td>
<td>Quantitative: provider survey, community free listing</td>
</tr>
<tr>
<td>Research inference</td>
<td>Descriptive</td>
</tr>
</tbody>
</table>
What makes it exemplary?

- Included classification codes for typically overlooked cadres
- Used rosters and community key informant free listing to identify all health care providers
3. Illustrative primary research articles

How to model future health workforce needs


<table>
<thead>
<tr>
<th>Cadres</th>
<th>Public and private physicians, nurses, midwives</th>
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<tbody>
<tr>
<td>Geographical area</td>
<td>Australia</td>
</tr>
<tr>
<td>Research methods</td>
<td>Mixed: policy/national data review; scenario modelling; stakeholder consultation</td>
</tr>
<tr>
<td>Research inference</td>
<td>Predictive</td>
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What makes it exemplary?

- Dynamic stock and flow modelling across various scenarios
- Consultation with a technical working group improved assumptions used in the model, bolstered stakeholder trust and support for evidence
3. Illustrative primary research articles

**How to model future health workforce needs**


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<th>Cadres</th>
<th>Physicians, nurses and midwives</th>
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<tbody>
<tr>
<td>Geographical area</td>
<td>Republic of Guinea</td>
</tr>
<tr>
<td>Research methods</td>
<td>Mixed: needs based and health sector demand and supply based modelling; policy dialogue</td>
</tr>
<tr>
<td>Research inference</td>
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</table>
What makes it exemplary?

- Guinea: UHC planning cannot rely on current service use data
- Instead, use health needs-based modelling with supply (health worker availability) and demand (budgeted positions available)
- Stakeholder engagement to ensure political feasibility
4. Research challenges, gaps and future directions

• Accounting for plurality in human resources for health
4. Research challenges, gaps and future directions

- Accounting for plurality in human resources for health

- Improving routine data quality and use
4. Research challenges, gaps and future directions

- Accounting for plurality in human resources for health
- Improving routine data quality and use
- Creating a more inclusive foundation for human resources for health planning
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Contact

kerry.e.scott@gmail.com
asgeorge@uwc.ac.za

http://www.who.int/alliance-hpsr/resources/publications/9789241513357/en/