International Health IT Benchmarking: Learning from Cross-Country Comparisons

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It is essential to make appropriate use of information and communication technologies in order to improve care, to increase the level of engagement of patients in their own care, as appropriate, to offer quality health services, to support sustainable financing of health care systems, and to promote universal access.

66th WHA, 2013
✓ **Objective**
  - Pilot benchmark measures of health ICT availability and facilitate cross-country learning

✓ **Approach**
  - Prior OECD effort selected & defined functionality-based measures
  - This OECD Working Group compiled results for subset of measures with broad coverage
    - New and/or adapted country-specific or multi-national surveys and other sources from 2012-2015
    - Includes 38 countries
  - Also synthesized learnings to inform future benchmarking
### Countries Included in Pilot

<table>
<thead>
<tr>
<th>NEW NATIONAL SURVEY(S) BASED ON OECD MODEL SURVEY</th>
<th>EXTRACTED AND MAPPED DATA TO MODEL SURVEY/INCORPORATED INTO EXISTING NATIONAL DATA COLLECTION</th>
<th>MULTI-NATIONAL SURVEY(S) WITH DATA RELATED TO MODEL SURVEY</th>
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<tbody>
<tr>
<td>Brazil</td>
<td>Canada</td>
<td>Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey (acute care survey only), United Kingdom</td>
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<tr>
<td>Israel</td>
<td>Denmark</td>
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<td>Korea</td>
<td>Finland</td>
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<td>Uruguay</td>
<td>Germany &amp; Austria (acute care) The Netherlands Switzerland United Kingdom United States</td>
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<td>(Sweden, Norway, Iceland in the context of Nordic collaboration)</td>
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Grouping Countries by Extent of Functionality

**MINORITY**
Available in less than half of all practices or acute care organizations

**MAJORITY**
Available in 50-74% of all practices or acute care organizations

**MATURITY**
Available in at least 75% of all practices or acute care organizations
Benchmarking Scope: 4 Types of Solutions

- **Point of Care Systems**
  Provider-centric electronic records used to store and manage information at the point of care

- **Health Info Exchange**
  Electronic exchange of patient information between points of care

- **Telehealth**
  Exchange info and provide health services across geographic, time, social, and cultural barriers

- **Patient Online Services**
  Personal health records or patient access to online services
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**Patient Online Solutions**
Personal health records or patient access to online services
Point of Care Solutions in Primary Care

% countries by extent primary care practices store and manage patient information electronically

Electronic records widely used in primary care in almost all countries

Functionality & frequency of use varies

RESULTS
Health Information Exchange

% countries by extent acute care facilities exchange radiology results and/or images electronically with outside organizations

Health information exchange widespread in some countries but generally less common than point of care solutions
RESULTS

Telehealth

% countries by extent acute care facilities have synchronous telehealth (typically videoconferencing) capability

Availability of telehealth differs greatly across countries

Uses vary (e.g. e-learning and administration versus patient consultations)
Patient Online Solutions

% countries by extent primary care practices offer patients e-requests for prescription refill/renewal

RESULTS

Limited patient e-Rx refill/renewal requests in most countries

e-Booking similar

Other patient online services less common
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# Countries by Health ICT Maturity Level

**Primary care e-records**

**Exchange radiology results/images**

**Telehealth in acute care (synchronous)**

**Patient e-prescription renewal/refill request**

**Patient e-appointment booking**

**Patient access to test results online**

**Secure messaging with patients**

**Status of Uptake**
- Mature (75%+)
- Majority (50-74%)
- Minority (0-49%)
- Not available
Lessons Learned from Pilot

Cross-country benchmarking is feasible

Methodological factors affect comparability

Technical, socio-cultural, health system, legal, & other factors influence health ICT adoption & use

Analytic approaches can mitigate comparability issues

No single country leads on everything

Early opportunities to inform policy; more to do
LOOKING AHEAD

Planned Next Steps for Health ICT Benchmarking

- In-depth analyses
- Expanded participation
- Advancing the model survey
- Emerging trends & priorities
Thank You

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