Personal Health Systems:

Wiring up Multi-layered national innovation systems

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# Multi-layered European innovation system of personal health systems

<table>
<thead>
<tr>
<th>Layer</th>
<th>Challenges</th>
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| **Transnational innovation systems** | Fragmentation of PHS initiatives  
Duplicity of efforts  
Lack of standards and interoperability  
Room for further coordination |
| **National innovation systems** | National health systems reluctant to new product service systems  
Barriers to market access  
Rigidities in reimbursement models  
Lack of interoperability, fragmentation of health data  
Duplicity of efforts  
Promising private sector initiatives |
| **Regional innovation systems** | Promising pilots that often suffer from lack of sufficient scale  
Difficulties in streamlining PHS efforts with the national health system |
| **Innovation ecosystems**     | Promising public sector pilots  
Promising private sector initiatives  
Difficulties in engaging all relevant stakeholders including e.g. patients/citizens |
## Multiple layers vs. three facets of foresight

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<tr>
<th>Layer</th>
<th>Knowledge</th>
<th>Relations</th>
<th>Capabilities</th>
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<tr>
<td>Transnational innovation systems</td>
<td>• Strategic plan and topics suitable for European collaboration &lt;br&gt; • Re results: certain areas identified for further PHS research; importance of specialisation and certification was also noted</td>
<td>• International networks, alliances and projects engaged to contribute to the further networking and community building around PHS &lt;br&gt; • Re results: areas were identified calling for international collaboration mainly on PHS research</td>
<td>• New methods developed and applied with engagement of stakeholders for dissemination for international constituencies &lt;br&gt; • Re results: importance of keep supporting PHS research and exchange good practices experiences</td>
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<td>National innovation systems</td>
<td>• Common themes for PHS at national levels to address them at the transnational levels &lt;br&gt; • Common barriers to be addressed such as the governance of national health systems &lt;br&gt; • Re results: PHS education and research to be supported</td>
<td>• Engagement of national level stakeholders including health practitioners, researchers, policy makers and NGOs &lt;br&gt; • Re results: importance was noted to include all key stakeholders (research, policy, industry, society)</td>
<td>• New methods were developed and applied including: workshops, scenarios and online engagements &lt;br&gt; • Re results: PHS education of users, practitioners, professionals etc.</td>
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<td>Regional innovation systems</td>
<td>• Cross-feeding between regional projects on good practices, methodologies and case studies &lt;br&gt; • Re Results: Exchanging PHS knowledge and experience between regions (e.g. in the UK, with diverse regions and experiments)</td>
<td>• Engagement of regional level stakeholders including health practitioners, researchers, policy makers and NGOs</td>
<td>• Reviews, workshops, surveys and interviews &lt;br&gt; • Re Results: Identify best practices and lessons learned through the extraction of explicit (technical) and tacit (cultural) aspects involved in PHS implementation and use</td>
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<td>Innovation eco-systems</td>
<td>• Cross-feeding and systemic approach for the identification and engagement of stakeholders &lt;br&gt; • Future visions and scenarios supported the reflection on new business models. &lt;br&gt; • Re results: PHS research, education and innovation to be supported at national / EU levels</td>
<td>• Engagement of different types of stakeholders to provide good coverage of eco-systems &lt;br&gt; • Identification of new stakeholders &lt;br&gt; • Industry was difficult to engage due to lack of interest in EU projects &lt;br&gt; • Re results: Importance to engage users apart from usual suspects</td>
<td>• Workshops and online engagements &lt;br&gt; • Re results: PHS skills to spread in all relevant professions but also need to recognise new roles and professions in healthcare sector</td>
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