

**PMCOE in a Box**  
***Questionnaire 1:***  
***Vision for Clinical Care Improvement***

As a prospective PMCOE, it is vital for your team to develop a vision of what a successful future with precision medicine looks like. This questionnaire was designed to help guide brainstorming and out of the box thinking in relation to precision medicine. This questionnaire will also serve as a success metric to drive work in the near-term. Work should be able to be tied back to this vision during each step in the formation of the PMCOE.

Proposed PMCOE Name:

1. What are your department's top challenges for your treatment of patients? What are the hurdles in increasing patient survival or quality of life? What is the best way to transform clinical care in your field?

2. What subset of your patients has the worst trajectory?

3. Outside of the PMCOE clinic, how would the new PMCOE advance the standard of care on a national level, using evidence based decision making?

(For example, the MS PMCOE and Johns Hopkins HealthCare partnered with RadNet, the largest nationwide imaging company in the United States. Through collaboration, RadNet is changing their MS imaging protocol to match the MS PMCOE standard. RadNet is also working to deliver de-identified MS images to Johns Hopkins. This collaboration provides improved patient care, lower healthcare costs, and advances the science of medicine.)

**Table 1. inHealth Value Matrix**

Reputation/ Leadership	Increased Efficiency/ Lower Barriers to Research, Analytics, Synergy	New Grants Using inHealth Resources	New Philanthropy
<ul style="list-style-type: none"> <li>• Invitations to present at National/International Meetings</li> <li>• Invitations to present to government (Hill, State Governments)</li> <li>• International prizes</li> <li>• Press</li> <li>• Papers in premier journals</li> <li>• Leading symposia at JH</li> <li>• Rankings (e.g. US News)</li> </ul>	<ul style="list-style-type: none"> <li>• Use of a shared data source by other researchers</li> <li>• Use of an analytic method by other researchers</li> <li>• Use of analytic software by other researchers</li> <li>• Size of research staff activities (less staff, or less manual work, in FTEs)</li> <li>• Collaborations with other researchers</li> <li>• Delivery of beta version of PMAP</li> <li>• Number of active PMAP users</li> <li>• Number of data sets delivered through CCDA and PMAP</li> <li>• Number of papers published using JH patient data</li> <li>• Number of research proposals submitted using JH patient data</li> <li>• Number of curated cohort databases used by JH researchers               <ul style="list-style-type: none"> <li>○ Redcap databases created by CTSA</li> <li>○ Clinical cohort databases ingested into PMAP</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Number of extramural grants</li> <li>• Dollar value of extramural grants</li> </ul>	<ul style="list-style-type: none"> <li>• Direct support for PMCoE or faculty</li> <li>• Direct support for inHealth</li> </ul>
Improved Efficiency of Care/Improved Reimbursement	Value to Health System and Payers	Value to Pharma	Value to Tech Industry
<ul style="list-style-type: none"> <li>• Shifting appropriate care out of hospital (in-hospital vs non-hospital revenue)</li> <li>• Avoiding unnecessary care based on measurement rather than human judgement</li> <li>• Out of state patients</li> <li>• &lt;Value added in financial model for PMCoE&gt;</li> </ul>	<ul style="list-style-type: none"> <li>• Services/Consulting provided to JH, external payers, other health systems based on inHealth analytic methods</li> <li>• Average cost of care per patient at JH (esp for EHP, US Family Health Plan, and Priority Partners)</li> <li>• Average cost of care per patient at other payers/health systems using inHealth tools, with equal or better health outcomes</li> <li>• &lt;Other specific value propositions defined by PMCoEs&gt;</li> </ul>	<ul style="list-style-type: none"> <li>• Dollar value of collaborations and research support</li> <li>• Use of inHealth tools for new trials</li> <li>• Use of inHealth tools in Trial Innovation Centers</li> <li>• Services/Consulting to Pharma, CROs, etc. to implement inHealth measurements and analytic methods</li> <li>• Patients on:               <ul style="list-style-type: none"> <li>○ New pathways that define subgroups</li> <li>○ New tools (e.g. to identify trial populations)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Existence of a collaboration</li> <li>• Applicability of JH findings to general population               <ul style="list-style-type: none"> <li>○ E.g. Leadership in multi-center consortium for Prostate tool</li> </ul> </li> <li>• Applicability of JH tools to industry</li> </ul>

4. What other opportunities could the new PMCOE pursue to maximize the value of the PMCOEs efforts? (The value matrix in Table 1 helps to brainstorm possible options for capturing value)

5. How would the new PMCOE improve data collection to accelerate these efforts?

6. How would you measure the impact of a precision medicine intervention at Johns Hopkins and internationally?

7. What is the current state of operations and what is the desired state of operations in the PMCOE? (Patient flow, data flow, operational staffing, communication, etc.)

8. How would you describe these efforts to a potential philanthropic donor in under 60 seconds?  
(Elevator Pitch)

9. Please identify who will fill the following roles:

Director (with responsibility for meeting metrics/goals)

Faculty/Scientific Lead

Data Manager

Data Science – *inHealth Resource*

Health Economics – *inHealth Resource*

Health System Business Analysis – *inHealth Resource*

Project Management – *inHealth Resource*