Introduction

On January 8, 2015, the Patient-Centered Outcomes Research Institute (PCORI) Improving Healthcare Systems (IHS) program held a multi-stakeholder workgroup to explore gaps in knowledge and refine comparative effectiveness research (CER) questions on enrollee supports for high-deductible health plans (HDHPs). This workgroup included patients, researchers, clinicians, and representatives of payer, purchaser, patient and family advocacy, and funder organizations.

The day began with stage-setting presentations by:

- Robert Kaplan, PhD, Chief Science Officer, AHRQ
- Bryan Luce, PhD, MS, MBA, Chief Science Officer, PCORI
- Steve Clauser, PhD, Program Director, Improving Healthcare Systems, PCORI
- Lynn Quincy, MA, Associate Director of Health Reform
- Leah Binder, MA, MGA, CEO, Leapfrog Group
- Penny Mohr, MA, Senior Program Officer, Improving Healthcare Systems, PCORI

Participants were then organized by their interests and expertise into three breakout groups—Communications and Education for Enrollee Support, Incentives, and Clinical Programs and Care Management—that met to formulate and prioritize research questions. All participants then reconvened to summarize and discuss the results of the breakout sessions and rank a narrowed set of questions based on patient-centeredness, impact on the health of individuals and populations, assessment of current options, likelihood of implementation in practice, durability of information, and overall importance.

Why Is This an Important Area of Research?

The high-deductible health plan (HDHP) is a rapidly growing type of insurance policy that generally offers lower premiums compared to traditional plans with higher upfront costs to consumers when receiving most types of care. HDHPs are often paired with tax-favored savings accounts, such as health savings accounts (HSA) or health reimbursement arrangements (HRAs) that enable plan cost sharing and cover out-of-pocket expenses. Such plans are termed consumer-directed health plans (CDHPs). These plans are typically thought of as a way to incentivize prudent healthcare purchasing among consumers, reduce premium costs, and are being adopted by employers as a means to avoid upcoming tax penalties for offering high-cost health plans.
The impact of HDHPs on encouraging more appropriate and prudent purchasing behavior has been studied extensively. A substantial body of literature supports the premise that increased cost exposure for patients can lead to reductions in healthcare utilization and costs with a key finding being that patients do not differentiate between cutting back on needed (preventive services) and unneeded services. Studies have also shown that HDHPs tend to be selected by a relatively young, healthy, and affluent population. More recently, HDHPs are being offered as the only plan choice by a growing number of employers. As a result, HDHPs are enrolling more of the traditionally vulnerable populations (such as the medically underserved, disabled, those with poor English proficiency and health literacy, and those with low incomes relative to their deductibles). There is less research on which types of support services would positively impact access to needed care and improve patient outcomes for people who are enrolled in an HDHP. There is a need, in particular, to better understand how to tailor support services to meet the needs of this more vulnerable population.

Diverse mechanisms have been developed to help the healthcare consumer navigate the marketplace, understand their choices, and provide incentives so that they do not forgo needed care. These include:

- General informational support and consumer education
  - Provider quality information
  - Provider cost information
  - Information about the plan itself
- Consumer advocacy
  - Plan-based concierge services (e.g., find and schedule services based on quality, cost plan, and network information as available)
  - Plan-based chronic care management services
- Clinical support services
  - Outreach to enrollees when they receive specific diagnoses to give information about relative benefits, harms, and costs of their treatment choices
  - Plan- or vendor- based provision of professional second opinions and/or medical consultations
  - Requiring enrollees to use decision support or second opinion services for specific diagnoses and specialty services requests
- Financial incentives
  - Increasing contributions to health savings accounts as a reward for enrollees who utilize specified services (such as recommended preventive services)
  - Retail gift cards as a reward for enrollees engaging in specified utilization behaviors
  - Financial penalties (such as for bypassing decision support services for specific elective procedures or use of emergency room)
  - Incentives for providers to refer to high-quality, low-cost services
- Combinations of the above
Breakout Session & Report Back

Before the meeting, PCORI staff conducted informational interviews with stakeholders to identify evidence gaps, areas of research where PCORI could have an impact, and potential comparative effectiveness research (CER) questions. Invited participants proposed CER questions about this topic as well. PCORI staff grouped interventions and research gaps for further discussions into three categories: Communication and Education for Enrollee Support, Incentives, and Clinical Programs and Care Management. Stakeholders’ input was refined and staff drafted three to five representative questions in each category.

Participants divided into three breakout sessions that spent two hours discussing, revising, and formulating potential CER questions. The Communication and Education for Enrollee Support breakout group focused their discussion on preventive services, the lack of information transparency across stakeholder groups (provider, insurance, state, employer), and the need for personalized tools and information. This group identified families with children, low-income individuals, and individuals with limited English proficiency as populations of interest. The Incentives breakout group discussed the need to determine effective social and financial incentives that lead to better patient engagement and identified the newly insured as a population of interest. The Clinical Programs and Care Management group discussed employer involvement in providing strategies for enrollee support as well as pharmacy integration. This breakout group discussed the individuals with mental illness and substance users as populations of interest.

During the breakout sessions and report-back, workgroup participants identified a number of additional considerations for research within the broader topics including: specific populations of interest and enhancements to HDHPs such as patient engagement initiatives, access to and utilization of deductible-exempt services, changes to provider network configuration, decision supports, and provider-facing incentives. Participants also identified research gaps in enrollee support in HDHPs, particularly for vulnerable populations and voiced a need for the development of effective tools (trusted, actionable, just-in-time) that consumers may use to inform their healthcare choices. Finally, participants raised questions about whether CER-like questions were of primary importance given the crucial need to understand broader policy implications and population-level impacts in this area and whether or not research on some of the interventions was sufficiently specific to patients enrolled in HDHPs.

Research Questions Rank Results

After review and discussion of the breakout group questions, participants ranked a narrowed set of questions—seven in total—on a 5-point scale based on its patient-centeredness, impact on the health of individuals and populations, assessment of current options, likelihood of implementation in practice, durability of information, and overall importance. Each participant was also asked to recommend one of the seven CER questions for PCORI to pursue as top priority. Overall, participants rated each question as being highly patient-centered and each question received at least one vote for top priority. After evaluating participants’ recommendations, the following questions were identified as top priorities:
Comparison of Patient-Centered Outcomes (PCOs) in basic HDHPs versus enhanced HDHPs
  - Enhancements may include: funding of health savings account (HSA), patient engagement initiatives, broader inclusion of deductible-exempt services, network configuration, decision support, and/or ties to provider-facing initiatives
  - Target populations: low income, low health literacy, chronic diseases, newly insured
  - Outcomes: leave patient-centered outcomes up to investigators

For patients that are enrolled in HDHPs, what is the difference in health outcomes for those that have “better pharmacy benefits” (exempt medications) versus (nonexempt medications) paired with chronic disease management offered by employer versus standard care?

The question “Comparison of PCO between basic HDHP versus enhanced HDHP” received the highest number of votes (11) for PCORI top-priority question and the highest average overall importance score (4.05). This question received the highest frequency of “very high importance” rankings in terms of overall importance. Participants felt that this question had a high impact on health and populations but a lower likelihood of implementation in practice. The question “For patients that are enrolled...” received the second highest number of votes (5) for PCORI top-priority question and a slightly lower average overall importance score (4.00) than the previous question. However, this is the only question in which participants ranked this question as “moderate importance” or higher for overall importance criteria (i.e., no participant ranked this question as “low importance” or “very low importance” in terms of overall importance). Participants also felt that this question had a high impact on health and populations but scored lower on assessment of current options. See the appendices below for scoring information of overall importance criterion and rank of top-priority question for all CER questions. Specific data for rating of other criteria is available upon request.

Opportunity to Work with the Agency for Healthcare Research and Quality (AHRQ)

AHRQ has long been involved in funding research on health systems and healthcare financing change and examining its impact on patient access, cost, and use of services. Related to enrollee support in high-deductible health plans, AHRQ has funded systematic reviews on the use of consumer-oriented strategies for improving health benefit design and the impact of clinical decision support tools. The agency is also developing and assessing the implementation of tools to enhance shared decision making. Several new initiatives will strengthen the agency’s capacity to evaluate the rapid changes occurring in healthcare organization and financing. For example, a planned linkage of AHRQ’s national Medical Expenditure Panel Survey (MEPS) will enable researchers to examine the types of insurance plans being used and their relationship to health outcomes. As part of its mission, AHRQ is charged to work with partners, such as PCORI, to make sure that the evidence is understood and used. With complementary interests in the enrollee support in high-deductible health plans, there is an opportunity for PCORI to work closely with AHRQ on a new initiative on this topic.
Next Steps

To conclude the day, it was noted that the IHS program at PCORI intends to continue to refine the questions put forth by the workgroup. In addition, program staff will continue conversations with AHRQ about the potential of developing a funding announcement on enrollee support in high-deductible health plans.
## Appendix

### A. Summary report of the mean score and standard deviation (STD) for the criteria of “overall importance” on a scale of 1-5, with 1 scoring low and 5 scoring high, and number of votes for top-priority question that PCORI should pursue.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean Overall Score with Standard Deviation (STD) (On a 1-5 scale with 5 being high)</th>
<th>Vote (number of votes for top-priority question)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of patient-centered outcomes (PCOs) between basic HDHPs versus enhanced HDHPs</td>
<td>4.05 STD: 1.20</td>
<td>11</td>
</tr>
<tr>
<td>• Enhancements may include: funding of health savings account (HSA), patient engagement initiatives, broader inclusion of deductible-exempt services, network configuration, decision support, and/or ties to provider-facing initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Target populations: low income, low health literacy, chronic diseases, newly insured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Outcomes: leave patient-centered outcomes up to investigators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For patients that are enrolled in high-deductible health plans, what is the difference in health outcomes for those that have “better pharmacy benefits” (exempt medications) versus (nonexempt medications) paired with chronic disease management offered by employer versus standard care?</td>
<td>4.00 STD: 0.71</td>
<td>5</td>
</tr>
<tr>
<td>What is the impact of clinical outcomes and utilization for employees that have a health reimbursement account (HRA) versus health savings account (HSA) (controlling for the level of funding) and versus no account associated with the high-deductible health plan?</td>
<td>3.67 STD: 1.28</td>
<td>1</td>
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<tr>
<td>What are the most effective mechanisms (E-assistance, personal, or community partners) to inform consumers regarding coverage of preventive services (and those that are exempt from the deductible) under their plan?</td>
<td>3.50 STD: 0.83</td>
<td>3</td>
</tr>
<tr>
<td>Question</td>
<td>Mean Overall Score (On a 1-5 scale with 5 being high)</td>
<td>Vote (number of votes for top-priority question)</td>
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<tr>
<td>What is the difference in outcomes between having primary care visits in-house for free/low-cost covered by employer versus out-of-house primary care visits covered by the employer versus telemedicine versus standard (out of house)?</td>
<td>3.42 STD: 1.12</td>
<td>2</td>
</tr>
<tr>
<td>• Outcomes: patient satisfaction/experience, immunizations, quality of life, work absenteeism due to illness, avoidable admissions, alteration of health status, inappropriate emergency room (ER) visits</td>
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</tr>
<tr>
<td>What are the most effective mechanisms to inform consumers regarding services without first-dollar coverage, or which require out-of-pocket payment, under their plan?</td>
<td>3.33 STD: 1.00</td>
<td>1</td>
</tr>
<tr>
<td>Compare the patient-centered outcomes (PCOs) effect of social and financial incentive structures on the understanding of and engagement with high-deductible health plans.</td>
<td>3.24 STD: 0.91</td>
<td>3</td>
</tr>
<tr>
<td>• Target populations: low income, low health literacy, chronic diseases, newly insured</td>
<td></td>
<td></td>
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<tr>
<td>• Potential comparators: incentives for educational programs, health savings account (HSA) funding, premium reduction, gift cards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Outcomes: leave patient-centered outcomes up to investigators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Displays the frequency of each ranked score for the criteria “overall importance” per question

Comparison of PCOs between basic HDHP versus enhanced HDHP

For patients that are enrolled in high-deductible health plans, what is the difference in health outcomes for those that have “better pharmacy benefits” (exempt medications) vs. (nonexempt medications) paired with chronic disease management offered by employer vs. standard care?

What is the impact of clinical outcomes and utilization for employees that have an HRA vs. HSA account (controlling for the level of funding) and vs. no account associated with the high-deductible health plan?

What are the most effective mechanisms (E-assistance, personal, or community partners) to inform consumers regarding coverage of preventive services (and those that are exempt from the deductible) under their plan?

What is the difference in outcomes between having primary care visits in-house for free/low-cost covered by employer vs. out-of-house primary care visits covered by the employer vs. telemedicine vs. standard (out of house)?

What are the most effective mechanisms to inform consumers regarding services without first-dollar coverage, or which require out-of-pocket payment, under their plan?

Compare the PCO effect of social and financial incentive structures on the understanding of and engagement with high-deductible health plans.

Enrollee Support for High-Deductible Health Plans Workgroup Summary