Assessing Payer Perspectives on Health Information Exchange

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Assessing payer perspectives on health information exchange

Dori A Cross, Sunny C Lin, Julia Adler-Milstein

ABSTRACT

Objective To identify factors that impede payer engagement in a health information exchange (HIE), along with organizational and policy strategies that might effectively address the impediments.

Materials and Methods Qualitative analysis of semi-structured interviews with leaders from 17 varied payer organizations from across the country (e.g., large, national payers; state Blues plans; local Medicaid managed care plans).

Results We found a large gap between payers' vision of what optimal HIE should be and the current approach to HIE in the United States. Notably, payers sought to be active participants in HIE efforts – both providing claims data and accessing clinical data to support payer HIE use cases. Instead, payers were often asked by HIE efforts only to provide financial support without the option to participate in data exchange, or, when given the option, their data needs were secondary to those of providers.

Discussion Efforts to engage payers in pursuit of more robust and sustainable HIE need to better align their value proposition with payer HIE use cases. This will require addressing provider concerns about payer access to clinical data. Policymakers should focus on creating the conditions for broader payer engagement by removing common obstacles, such as low provider engagement in HIE.

Conclusion Despite variation in the extent to which payers engaged with current HIE efforts, there was agreement on the vision of optimal HIE and the facilitators of greater payer engagement. Specific actions by those leading HIE efforts, complemented by policy efforts nationally, could greatly increase payer engagement and enhance HIE sustainability.

Keywords: health information, exchange, payers, sustainability

INTRODUCTION

A core goal of the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act is to foster the development of broad-based electronic health information exchange (HIE) across key healthcare stakeholders. HIE is a priority within HITECH because of a strong consensus among policymakers that the ability to send and receive clinical data electronically between healthcare stakeholders is central to avoiding medical errors, reducing waste, and improving population health. Yet, despite significant national and state-level investment in HIE under HITECH, in addition to investment at local levels over the past decade, HIE is still not widespread.

A persistent challenge facing HIE efforts is identifying a sustainable business model. The challenge stems from a perceived misalignment between those who bear most of the cost for enabling HIE to occur and those who benefit from HIE. As key sources of clinical data, healthcare providers are essential participants in any HIE effort. Direct benefits from HIE accrue to providers, such as reduced time and expense to exchange diagnostic test results, and based on these benefits, providers have been asked to shoulder much of the cost for establishing and participating in HIE efforts.

However, much larger benefits are expected to come from reducing redundant or avoidable utilization enabled by providers having better access to more complete patient information. These benefits would accrue to patients (in the form of better care) and to payers (in the form of lower costs). The benefits would accrue to patients and payers from information exchange among providers, without any need for patient or payer direct involvement in such an exchange.

We would, therefore, expect payers to actively support HIE efforts, and be willing to pay to promote their formation and ongoing operation. This has not proven true. HIE efforts have struggled to engage payers, and only 40% of HIE efforts in the country have one or more payers providing financial support.

Without greater payer engagement, it will be difficult for HIE efforts to achieve viable business models for long-run sustainability. This has raised questions about what may be holding payers back, and the list of potential factors is long. For example, payers may not be convinced that increased levels of HIE can lead to real healthcare cost savings because busy providers have little incentive to incorporate newly available information into their workflow and decision-making. Alternatively, payers may believe in the benefits from HIE but struggle with which specific HIE efforts to support because multiple HIE efforts may operate in the markets where a given payer has covered lives. Understanding which factors are most salient, and what we might do about them, is critically important to promote payer engagement.

OBJECTIVE

To date, there has been no systematic effort to collect national data that captures payer perspectives on HIE. We, therefore, interviewed leaders from 17 diverse payer organizations across the country to answer the following research questions: (1) how do payers conceptualize the optimal approach to HIE and how does the current approach to HIE adhere to, or diverge from, the optimal approach; (2) what factors determine whether or not payers choose to support existing HIE efforts; and (3) what actions could be taken by policymakers and those
leading HIE efforts to foster greater payer support? We also sought to understand how payer perspectives on HIE are influenced by key payer characteristics. Our findings serve to inform and guide evolving organizational and policy strategies to ensure sustainable approaches to fostering HIE.

**METHODS**

**Interviews and Protocol**

We created a sampling frame of payer organizations by contacting the 48 HIE efforts that reported on our recent national survey\(^a\) that they receive financial support from one or more payers. We asked these HIE efforts to identify which specific payers were providing support as well as which specific payers had been approached but chose not to provide support or were undecided. We also asked the HIE effort to provide a contact at the payer organization who could best speak to HIE decisions. This resulted in a list of 67 payers and a contact person for each payer. In order to include a diverse group of payers in our interviews, we stratified the sampling frame based on the key payer characteristics that we hypothesized would shape HIE participation decisions: scope of geographic coverage (local, state/ regional, and national) and type of payer (private, for-profit; private, not-for-profit; Medicaid managed care, and public). We then selected 17 payer organizations, with at least one from each category (except the smallest category with only two payers identified) in order to ensure coverage across the categories (Table 1, top panel). We oversampled national, for-profit payers because of their potential to influence federal policy.

We sent an invitation email, along with our interview protocol (described below), to the contact at each selected payer organization. We then followed-up via email or phone to schedule a 60–70 minute phone interview, with the contact or a different person at the payer organization identified by the contact as in the best position to respond to our questions. We interviewed senior executives who were actively involved with and knowledgeable about their organization’s HIE strategy and decision making. For private-sector respondents, position titles included: Chief medical officer or medical director (\(n = 5\)); Chief technology officer, senior vice president of health IT or strategic IT consultant (\(n = 4\)); Executive/senior director–other (\(n = 3\)); and Vice president–other (\(n = 2\)). Respondents for public payers included state Medicaid directors and state employee benefit plan directors. Interviews took place between July and October 2014.

We developed a semi-structured interview protocol that asked broad, open-ended questions, with specific prompts, to elicit detailed description of the payer’s perspective on HIE (Online Supplement). Questions fell into four broad categories. First, we asked about optimal HIE and the extent to which the payer’s experience with current approaches to HIE adhered to that ideal. Second, we asked each payer to describe their current level of engagement with HIE efforts, the decision-making process, and the factors motivating their decision to support or not support specific HIE efforts. This included a discussion of the expected benefits of HIE that accrue to payers. Third, we asked for their assessment of current federal and state policy efforts to foster HIE. We probed on specific facilitators and barriers related to current policies, market dynamics, new models of care delivery (e.g., account-able care organizations [ACOs]), evidence for HIE impact, and varied approaches to HIE (e.g., health information organizations, the Direct protocol). Finally, we asked about viable approaches for HIE efforts and policy strategies to engage payers going forward. Prior to finalizing the interview guide, we obtained feedback from four national HIE experts to ensure that the questions were comprehensive and clear.

**Analysis**

All interviews were recorded and transcribed. To facilitate analysis of transcript content, we first created a comparative data table. We identified the key topics covered in the interview guide (which became columns in the table), and then summarized each payer’s response to the given topic (with one row per payer). Separate from the comparative data table, transcript content was coded and analyzed using Atlas.ti, a qualitative software tool. The project team developed an initial codebook based on the key topics contained in the interview guide. All three

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### Table 1: Characteristics of Selected Interview Sample

<table>
<thead>
<tr>
<th>Selected sample/sampling frame(^a)</th>
<th>Geographic Coverage</th>
<th>National</th>
<th>State/Regional</th>
<th>Local</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Profit Status</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
<td>3/6</td>
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<tr>
<td>Medicaid Managed Care</td>
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<td>1/10</td>
<td>4/27</td>
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<td>-/2</td>
<td></td>
<td>5/7</td>
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</tr>
<tr>
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<td>4/19</td>
<td>1/8</td>
<td>5/27</td>
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<tr>
<td>Total</td>
<td>6/16</td>
<td>9/33</td>
<td>2/18</td>
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</table>

<table>
<thead>
<tr>
<th>Participation in HIE efforts/ selected sample(^b)</th>
<th>Geographic Coverage</th>
<th>National</th>
<th>State/Regional</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit Status</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>-/2</td>
<td>2/3</td>
<td></td>
<td></td>
<td>2/3</td>
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<tr>
<td>Medicaid Managed Care</td>
<td>1/1</td>
<td>2/2</td>
<td>1/1</td>
<td>4/4</td>
<td></td>
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<td>Private, For-Profit</td>
<td>2/5</td>
<td>-/2</td>
<td></td>
<td>2/5</td>
<td></td>
</tr>
<tr>
<td>Private, Not-For-Profit</td>
<td>-/2</td>
<td>3/4</td>
<td>1/1</td>
<td>4/5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3/6</td>
<td>7/9</td>
<td>2/2</td>
<td>12/17</td>
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</tr>
</tbody>
</table>

\(^a\)\(N = 17\) payer organizations selected to participate in interviews from sampling frame of 67 payer organizations with prior contact with one or more HIE efforts.

\(^b\)\(N = 12\) payer organizations participating in an HIE effort (exchanging data and providing financial support) from 17 payer organizations selected for interview sample.
investigators independently coded the first four interview transcripts, then jointly reviewed and reconciled to ensure consistent application of the codes and identify missing codes. We then revised the codebook, and the final codebook was applied to the remaining transcripts.

The comparative data table and the Atlas.ti database enabled us to pursue complementary analytic approaches to identify key themes. The former enabled us to assess a particular topic within the context of a given interview, while the latter enabled us to identify all instances of a particular code (or combination of codes) across interviews. For each research question, we identified the relevant topic headings from the data table as well as the relevant codes (or groupings of codes). We then extracted and reviewed the subset of data from the data table, and the Atlas.ti query results. This served to identify the key themes, as well as areas of concordance and discordance, that comprise our findings.

RESULTS

Overall Value of HIE

All payers acknowledged the need for HIE to address information fragmentation in the healthcare system in order to improve quality and reduce cost. Stated most directly by a state-level, commercial payer respondent: “HIE is the foundation on which we can start making meaningful changes in the healthcare system. […] We have a long way to go, and, without HIE, it will be hard to change the system.” In addition, payers felt that HIE had recently become a higher priority among both payers and providers due to healthcare reform efforts that focus on population health. For example, ACOs have increased the extent to which providers are seeking information about care that their patients receive outside ACO providers, and payers are seeking to help them by providing them better access to claims data and clinical data when possible.

Optimal HIE, and the Gap between Optimal HIE and Reality

From the payer perspective, the key obstacle impeding broad payer engagement stems from how our country has approached HIE. Payers shared five common principles for what constitutes optimal HIE (Table 2). For each principle, payers felt that HIE has developed in ways that fail to adhere to it.

The first principle is that there should be a single network, or ability to access data through a single connection to a network-of-networks. HIE has instead developed in an ad hoc manner, primarily at the community and state/regional levels. As a result, payers are asked to support multiple HIE efforts. This is particularly true for national and state/regional payers that operate in many different markets; payers with large geographic coverage areas reported receiving a large number of uncoordinated individual participation requests from different HIE efforts. Engaging with multiple external HIE efforts is costly and complex, from both a decision-making and an implementation perspective.

Second, payers should have broad access to clinical data and the ability to contribute their administrative data, within a robust privacy and security framework. Payers felt that clinical and administrative data were complementary and created a complete picture necessary for key HIE use cases from which they derive direct benefit, such as identification of care gaps, performance measurement, and population analytics. Specifically, payers felt that clinical data is rich but narrow, because it is organized around specific encounters while claims data captures the entire episode of care but in limited detail. However, payers felt that HIE has developed in a provider-centric way in which clinical data and provider use cases take precedent over claims data and payer use cases. As a result, payers are often asked to contribute financially to HIE efforts, but are excluded from exchanging data. Some payers attributed this deprioritization of payer participation to providers’ historical distrust of payers, driven by the fear that data could be used against provider and patient interests (e.g., premiums, screening, and profiling). By excluding payers from exchanging data, payers felt that HIE efforts miss opportunities to gain more complete data, and prevent payers from directly and tangibly benefiting from data exchange.

Third, data should not be treated as a competitive commodity that, when hoarded by either payers or providers, confers advantage. Many payers described the need to approach HIE in a way that “levels the playing field” by encouraging broad participation and sharing of data, and having organizations compete based on how they use data to offer better products and services. However, their experience was that providers and other payers had a data hoarding mentality that limited the breadth of data they were willing to share.

Fourth, payers should contribute to supporting HIE in proportion to the value that they derive. Payers felt that there is an expectation that they should be supporting HIE efforts, even without a clear statement of the value that would be derived from doing so. While there were different perspectives on whether or not that value would need to directly and immediately accrue to the payer, none of the payers felt that they were being offered a clear value proposition in return for their support. As one national payer respondent explained, “Writing the check and just hoping we get savings back, but not being able to prove it, doesn’t work for insurance companies.”

Fifth and finally, payers felt that the value proposition for HIE should be framed around the triple aim of improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care. Partly as a result of data hoarding behaviors, many HIE efforts were unable to achieve broad-based, comprehensive sharing of data, and, therefore, approached payers with a narrow value proposition framed around one particular outcome (e.g., reducing diagnostic testing).

Engagement with HIE Efforts

Despite agreement on the suboptimal state of HIE, there was considerable variation in the decisions that payers ultimately made with respect to supporting HIE efforts, and the perceived value that such engagement generated. Some payers were highly engaged and felt that HIE efforts generated sufficient value for themselves or their covered lives to justify the cost of engagement. Other payers chose not to engage because they felt that current approaches to HIE did not generate value or were not sustainable. These perspectives translated into varied patterns of HIE engagement. Of the 17 payers, 14 payers reported engaging with an HIE effort, either through providing funding, playing a leadership role or participating in data exchange (i.e., sending and/or receiving data). Nine payers were involved in founding HIE efforts, by providing start-up funding and/or leadership. Twelve payers reported that they were currently financially supporting one or more HIE efforts, and the same twelve payers reported exchanging data through an HIE effort, either by receiving data, contributing data, or both. These 12 payers were distributed across all the categories in which we sampled (Table 1, bottom panel). National, for-profit payers were, however, the least likely to be in this group.

Factors that impacted payer assessment of value and the resulting participation decision included some that are outside the control of HIE efforts, and some that are within the control of HIE efforts. The first factor outside the control of HIE efforts was the degree of alignment between the geographies where payers had covered lives and the geographic coverage of HIE efforts. National payers had the greatest misalignment; they would have to engage with many HIE efforts to achieve any meaningful
level of “HIE coverage” for their covered lives. This made it hard to justify investment in any given local or state/regional HIE effort. State/regional payers had the least misalignment, and did not identify geographic fragmentation of HIE efforts as an issue. For these payers, there was typically one (or in some cases a few) HIE efforts with which it made sense to engage in order to achieve broad “HIE coverage.”

The second factor outside the control of HIE efforts was payer decision-making processes, which also varied by payer type. National
payers had complex decision-making processes around HIE engagement. They attributed this to the fact that they are large organizations with many levels of approval and different HIE participation criteria at each level. As a respondent from a national payer (that chose not to participate in an HIE effort) explained, “Local health plans could decide whether to invest or not; the decision-makers are all up and down one hallway. In my company, those people are scattered to all 4 points of the company.” State/regional and local payers did report more decision-making agility than national payers, which they attributed to having a small, well-defined team tasked with making HIE participation decisions and established criteria for when they would participate.

### Making the Business Case to Payers to Support HIE Efforts

In response to factors under the control of HIE efforts, payers identified several strategies that could be employed to overcome barriers to payer value realization and increase engagement. First, payers identified specific use cases that could be supported by HIE efforts and would generate the return on investment needed to justify payer HIE participation. Second, payers suggested that HIE efforts could serve as a forum in which to strengthen bridges between payers and providers. Payers reported a lack of trust between payers and providers in many communities, with relationships that can be tense due to the nature of business relations and territorial feelings about patient information and care decisions. Payers felt that HIE efforts provided an ideal setting to shift towards a more collaborative, trusting relationship. They suggested that this could be specifically facilitated by stronger integration of payers into the leadership of HIE efforts.

Third, payers sought assurance that HIE efforts would be sustainable. Payers were concerned that their investment in HIE would not generate long-term value because most HIE efforts did not have a sustainable business model. Many respondents mentioned that the ability of an HIE effort to support its operations outside of state and federal grants was important, particularly given that HITECH funding for HIE through the State HIE Cooperative Agreement Program recently ended. Payers also focused on markers of sustainability related to provider engagement, and specifically the need to see evidence of buy-in from senior leadership of local provider organizations.

Payers recognized their role in sustainability, and stressed that they would be willing to pay “their fair share” for data access, but wanted to know that other stakeholders were also contributing in a way that would keep HIE efforts sustainable in the long term. Payers sought funding mechanisms that were fair, transparent and set up the HIE effort to be operationally self-sustaining. Most payer organizations acknowledged the slow and costly initial stages of HIE development, and were willing to shoulder a disproportionate share of costs upfront. They were generally accepting of a long time horizon for achieving more equitable cost sharing as well as operational sustainability. However, payers looked for commitment to these principles by HIE efforts as indication that payers were considered true partner organizations and not solely a funding mechanism.

### Table 3: Payer HIE Use Cases

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Number of Payers Citing Use Case</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payer-led Care Management</td>
<td>14</td>
<td>Identifying gaps in care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managing authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilitating care continuity</td>
</tr>
<tr>
<td>Payer-led Population Health Analytics</td>
<td>9</td>
<td>Sending list of patients overdue for preventive or chronic care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generating ACO metrics</td>
</tr>
<tr>
<td>Payer-led Quality Reporting</td>
<td>7</td>
<td>Generating metrics for HEDIS (Healthcare Effectiveness Data and Information Set, a performance measurement program for health plans), Pay-for-Performance and State reporting requirements</td>
</tr>
<tr>
<td>Payer-led Provider Profiling</td>
<td>7</td>
<td>Creating provider-level or practice-level performance metrics</td>
</tr>
<tr>
<td>Payer-led Patient Profiling</td>
<td>4</td>
<td>Identifying:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High-risk patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequent utilizers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drug-seekers</td>
</tr>
<tr>
<td>Provider-led Care Coordination</td>
<td>7</td>
<td>Reducing duplicate services</td>
</tr>
<tr>
<td>(with benefits that accrue to payers)</td>
<td>6 additional:</td>
<td>Reducing readmissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>possible under certain circumstances</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifying and managing high utilizers</td>
</tr>
</tbody>
</table>

For a more detailed analysis of HIE use cases and examples, please refer to Table 3. These use cases are crucial for understanding how HIE efforts could support payer engagement, value realization, and decision-making processes.
Creating a Conducive Policy Environment to Foster Payer Engagement in HIE

Payers also identified several policy actions that could overcome barriers to payer value realization and increase engagement. There were mixed opinions on the impact of recent policy efforts to promote HIE under the HITECH Act. Most payers felt that the Meaningful Use program moved HIE forward by catalyzing electronic health record adoption rates – an enabling component for HIE – and by including HIE-focused criteria in Stage 2 Meaningful Use. The State HIE Cooperative Agreement Program also provided a welcome influx of money to build and enhance HIE infrastructure. However, respondents felt that HITECH did not go far enough in supporting HIE development or increasing provider engagement in HIE. Stages 1 and 2 Meaningful Use criteria set a low bar that was perceived to be insufficient to drive real gains in provider participation in HIE efforts and routine use of exchanged data in clinical decisions. Payers thought that federal and state governments were well positioned to incentivize and increase provider participation in HIE efforts. Future stages of Meaningful Use that require connecting to local HIE efforts would be ideal, but were seen as unachievable in the absence of robust interoperability standards. Other suggestions included expanding the use of state Medicaid contracts that required managed care entities to contribute data to local or state HIE efforts, as well as extending this approach to Medicare Advantage contracting. Nearly all respondents wanted the federal government to be more active in setting and enforcing interoperability standards in order to improve the quality and usability of data. This would generate value for all participating stakeholders using exchanged data. As one respondent stated, “The standards become a limiting factor. […] a lot of the big HIEs are starting to deal with that, but […] for the real value-added data - [data to] drive down readmissions and provide better outcomes - the pipelines for that kind of data don’t have support.” Many payers were critical of the federal government’s promotion of Direct, which allows for email-like transactions between provider electronic health record systems. Respondents noted that, when it comes to Direct functionality, the technology is not advanced enough, “mirroring email, [and] not much better than fax.” Direct provides a useful stopgap for providers to communicate in the absence of robust HIE, but it does not support activities that are value-generating for payers, especially when provider uptake is limited.

Payers were cautiously optimistic regarding the effects of the Affordable Care Act on HIE development. Respondents acknowledged that ACOs and other value-based payment models promoted under the Affordable Care Act encourage providers as well as payers to think more about HIE for population health management, risk management, and outcomes monitoring. Most respondents felt that the momentum from the Affordable Care Act was driving HIE forward, though some payers expressed concern that ACOs would give rise to proprietary HIE approaches to HIE, rather than attempting to shape HIE policies or lead the formation of HIE efforts. When asked, most payers were willing to take a leadership role in HIE efforts. However, in many of the domains in which payers were critical of current approaches to HIE, they had not taken proactive steps to reshape the approach. While not all payers that we interviewed are in a position to have a large impact on policy or market approaches to HIE, many payers are in such a position (such as the large, national payers that were the least likely to support HIE efforts). But, they chose not to use their influence in this domain. This suggests that, while HIE may be perceived as valuable on the margins, it is not essential to payers’ core business. In turn, this makes it challenging to garner broader payer support.

Nonetheless, we identified specific strategies that are likely to increase payer engagement. This suggests that increasing payer engagement is feasible; it does not, however, mean that doing so is easy or without consequences. For HIE efforts, the key question is whether pursuing these strategies and increasing payer engagement will affect the degree to which providers find HIE participation attractive. This is a challenging balancing act. Ideally, both providers and payers would shift away from norms of information opacity and data hoarding to valuing transparency, openness, and sharing. While payers claim to have the right intentions for seeking greater access to clinical data, as long as reimbursement rates are regularly renegotiated, providers have reason to be skeptical of payer involvement in HIE. The key to breaking this stalemate may lie in the rise of ACOs and other risk-based contracting approaches, especially if they are negotiated for multiple years at a time. For providers, this increases the value of more timely access to claims data, as well as decreases the need to limit payer access to clinical data (to prevent profiling or impede fee negotiations). HIE efforts with provider organizations that have taken on risk-based contracts may, therefore, be particularly well-positioned to increase payer engagement.

There are several actions that policymakers can take to promote payer engagement, including continuing to push on the use of standards to promote interoperability, as outlined in the recently released Shared Nationwide Interoperability Roadmap. Increasing provider engagement in HIE will largely depend on what is included in the final Stage 3 Meaningful Use criteria; if HIE criteria are substantially ramped-up (and expanded beyond Directed exchange), this will serve to bolster payer confidence in HIE sustainability and utility, and will likely result in greater engagement. More broadly, expanding Centers for Medicare and Medicaid Services (CMS) ACO demonstrations (and working in parallel to ensure that these do not result in proprietary HIE...
approaches crowding out community-based HIE approaches) may help create the conditions in which all stakeholders see the benefit of investing in robust, sustainable HIE.

Limitations
We attempted to include in our sample a diverse group of payers featuring different experiences with, and perspectives on, HIE. However, the perspectives captured in our results likely reflect those that are most engaged with HIE, because we created a sampling frame based on payers with at least some contact with HIE efforts, and because we interviewed contacts who were closest to HIE decision-making in their organization. This is also reflected by the fact that many of the payers that were identified by one HIE effort as “not participating,” were participating in a different HIE effort (which we learned during the interview). Ultimately, only three payers in our sample had never engaged with an HIE effort. Nonetheless, because little is known about payer perspectives on HIE, interviewing those with the most HIE experience serves to generate more informative results. A second limitation is that we were unable to verify the accuracy of statements made by payers in the interviews (e.g., reports of provider resistance to payer engagement in HIE efforts). In future work, it will be important to assess the generalizability of our findings, and identify misalignments between payer perspectives and those of other HIE stakeholders.

CONCLUSION
Achieving sustainable approaches to HIE is essential to ensure that the large national investment in health IT over the past decade translates into improved care. This study provides the first in-depth assessment of payer perspectives on HIE, interviewing those with the most HIE experience serves to generate more informative results. A second limitation is that we were unable to verify the accuracy of statements made by payers in the interviews (e.g., reports of provider resistance to payer engagement in HIE efforts). In future work, it will be important to assess the generalizability of our findings, and identify misalignments between payer perspectives and those of other HIE stakeholders.

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COMPETING INTERESTS
None.

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SUPPLEMENTARY MATERIAL
Supplementary material is available online at http://jamia.oxfordjournals.org/.

REFERENCES