[Implementing HITECH]

In 2010, Michigan applied for funding under the HITECH Act to build on preparatory work regarding the state-wide HIE. The State received approximately \$14m through the ONCHIT State Cooperative Agreement program to facilitate the construction of a statewide exchange.

This funding was used to further develop the Michigan Health Information Network, or MiHIN. The governance model adopted by MiHIN was a hybrid model, meaning that it was partially centralized. Data flows into a statewide hub, but only from sub-state HIOs. Clinical data does not reside in the MiHIN hub, and public health data resides in a separate exchange facilitated by the state department. In part, the Federal incentive funding was used to connect MiHIN with the State of Michigan HIE (Medicaid and public health data held at by the Michigan Department of Community Health). To some extent, this was only possible because both Medicaid and public health officials were housed within the same department. Because of the state's strong track record and supportive legal framework for collecting public health-relevant data, the state decided to emphasize public health in its Medicaid EHR incentive payment mandates. Because of Michigan's departmental structure, State Medicaid officials were able to more easily collaborate with their public health colleagues to apply for Federal incentive funding.

As a result of the 2010 Federal EHR and HIE initiatives, and their interaction with existing initiatives at the state level, Michigan now has a dual governance structure. Stakeholder groups have access to not just one, but two, arenas of shared discretion at the state level: one through the Health IT Commission and another through the MiHIN Board of Directors.

In theory, these two organizations have distinct purviews. While the Health IT Commission is meant to provide high level governance regarding policy, the MiHIN board is supposed to manage day-to-day operations. In practice, however, these governance functions overlap, and MiHIN seems far from the subordinate body. From a review of the Health IT Commission's minutes, the Commission spends more time monitoring a dashboard of state progress than it does formulating high level policy guidance. MiHIN, in turn, benefits from its direct connections with sub-state HIEs, which maintain control of much important health data.

[Methods]

This study uses a mixture of primary document analysis, a review of survey data and academic literature, and original interviews to analyze the collaborative governance models associated with HIE promotion. Primary documents pertaining to HIE promotion (relevant Federal and state laws and regulations, public statements outlining policy, strategic and operational plans, funding applications, meeting minutes, and presentations, n=76) were assembled into a text corpus and subjected to content analysis. Documents were hand coded to examine statements regarding collaborative governance, the costs and benefits of HIE, and the goals of HIE promotion.

At the state level, semi-structured interviews were conducted with 23 individuals in Michigan engaged in HIE, including those working with the Statewide HIE network (Michigan Health Information Network, or MiHIN), the Michigan Department of Community Health (MDCH), sub-state HIOs, and local public health officers. After an initial stratified sample across those groups, further interviewees were selected via a snowball sampling method to the point of saturation.

[Sub-state policy environment]

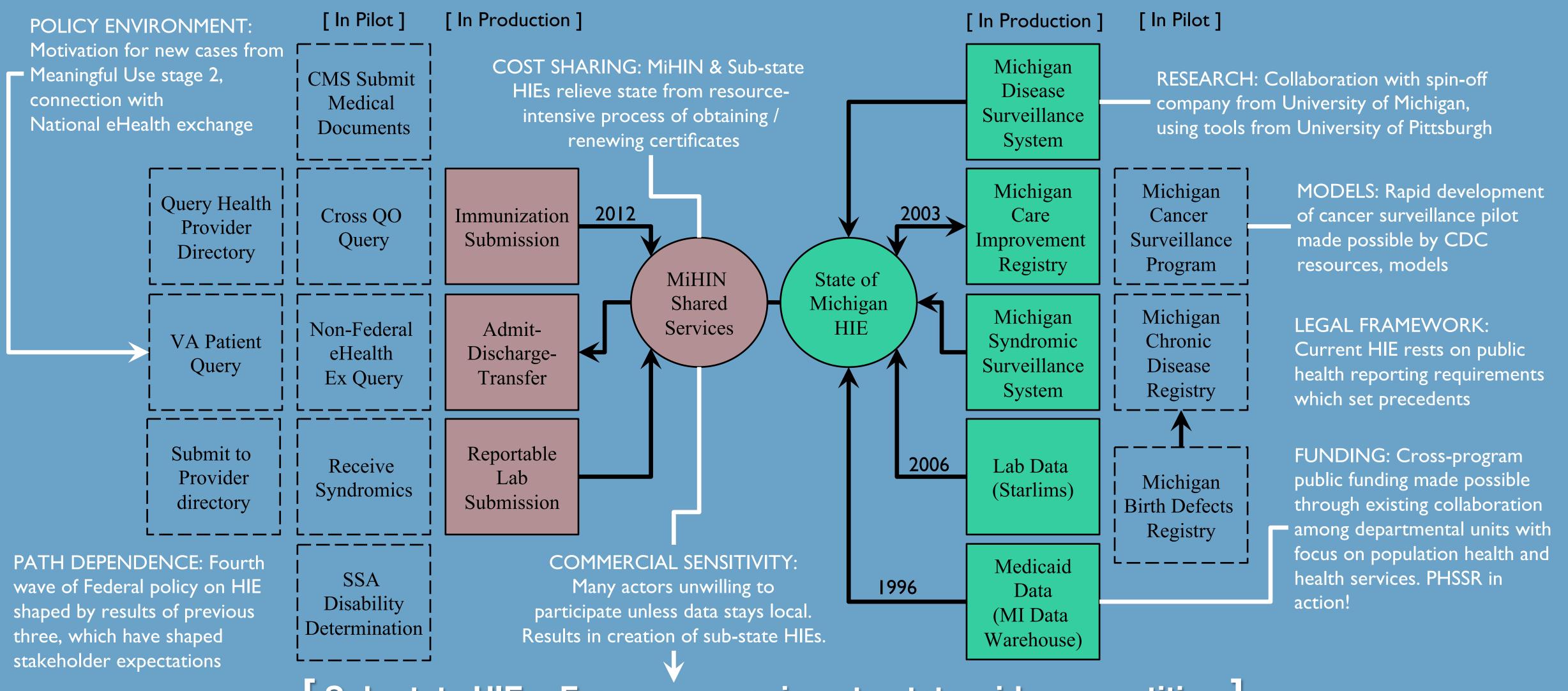
From mid-2005 onwards, multiple regional HIOs existed in Michigan, incentivized by a mixture of Federal, state, and health system initiatives. Over time, several of these HIOs have created functional sub-state exchanges, while others failed to last beyond the pilot stage. Of those identified in 2006 as existing HIOs, only those that received government funding in 2007 and 2008 proved sustainable. Over time, we can see the regional model of HIE replaced by a state-wide model. Great Lakes HIE and Michigan Health Connect (to merge in 2014) are the two largest HIOs, covering a large proportion of the state.

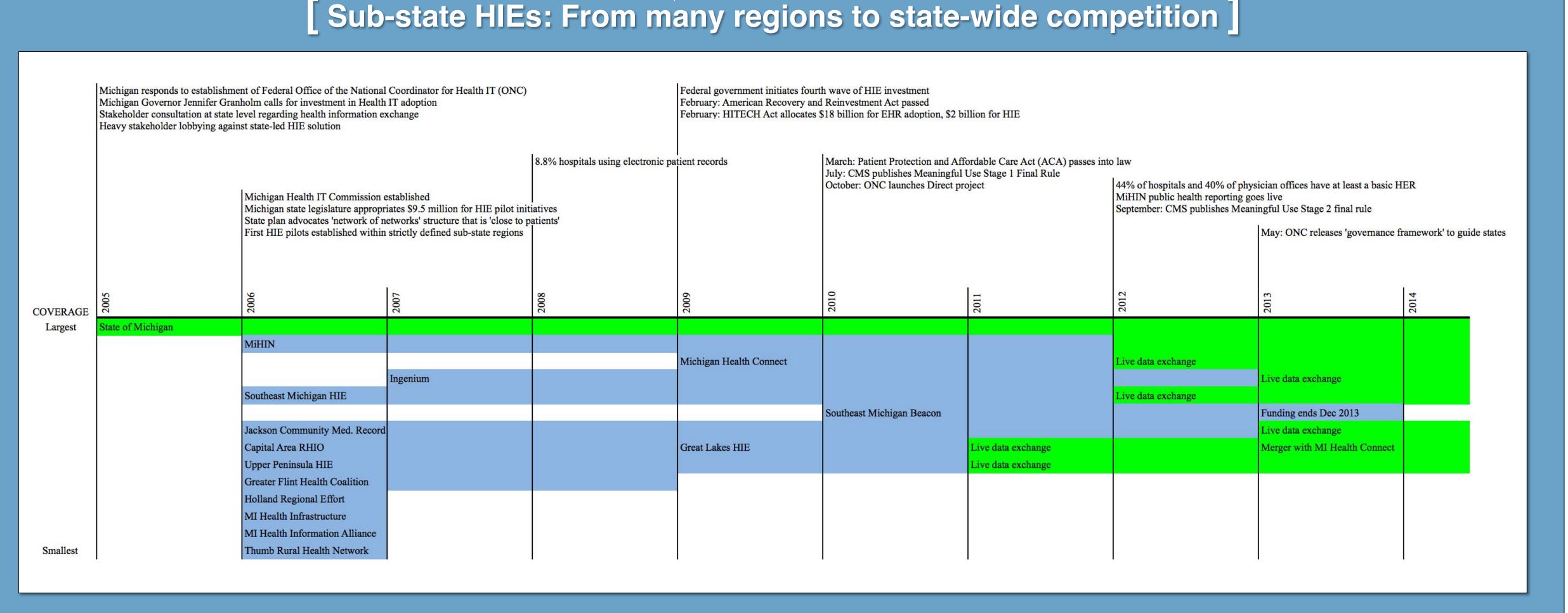
An examination of the governance structures of these sub-state HIOs shows that rather than being evenly balanced bodies, many of them are dominated by a particular kind of health organization, frequently one or more local dominant health providers or large employers. One common factor among sub-state HIEs is low representation of both the public (patients) and governments representing the public interest. With a few exceptions, local health departments do not participate in sub-state HIOs in Michigan.

Collaborative Governance for Health Information Exchange Holly Jarman, University of Michigan School of Public Health

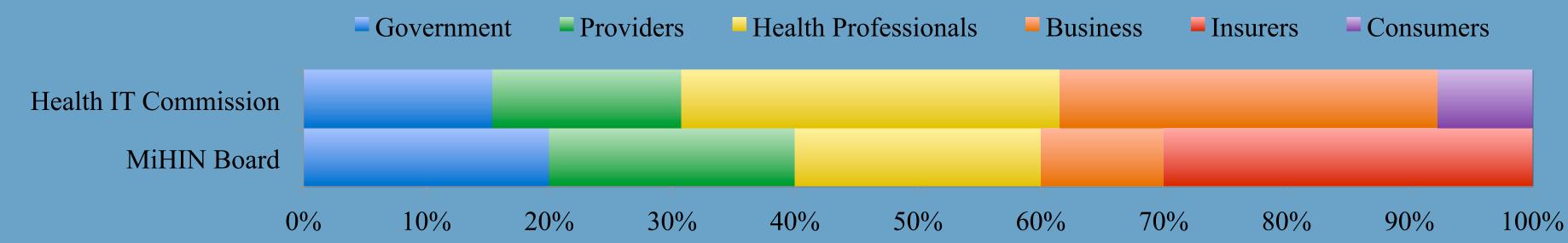
Public Entrepreneurs & Public Policies Play Important Role in Realizing HIE]

Use cases rooted in political and legal environment









Collaborative Governance as a means to market creation

The current Federal program incentivizing HIE is a large scale experiment in collaborative governance -a test of the ability to bring together public and private sector actors to identify and pursue common goals. From the creation of ONCHIT onwards, collaboration with outside actors was strongly emphasized. The Executive Order establishing the agency in 2004 required it to "Advance the development, adoption, and implementation of health care information technology standards nationally through collaboration among public and private interests", something that was reinforced in the core strategic policy documents created by the agency. HIE had not arisen spontaneously as a solution to shared problems in the sector. Previous attempts at incentivizing HIE had failed, it was argued, because the health IT market had failed to provide appropriate solutions to interoperability problems in the health sector. Potential health IT actors were discouraged from entering the market because there was a first mover disadvantage –the first major company into the market would have to 'learn by doing', making costly mistakes which other market entrants could learn from and avoid. Not only that, but while the benefits of HIE were seen as potentially accruing mainly to payers, the costs would be borne largely by providers. In the absence of market-based mechanisms which would normally match up demanders and suppliers, it was hoped that collaborative governance networks could allow the identification of market opportunities and the alignment of goals among a group of diverse organizations.

Lessons Learned

Political Structures Matter

Firstly, these findings show that effective collaborative governance, where discretion over policy outcomes is shared among public and private actors, takes both time and resources. The respective creation and extinction among HIOs in Michigan between 2005 and 2013 shows that convening stakeholders is not enough to ensure functional HIF

In fact, convening stakeholders may not be a direct substitute for central policy direction. In Michigan, consulting extensively with stakeholders, including existing sub-state HIOs, served to reinforce the existing structures of HIE within the state. In other words, asking regional HIOs how they should be governed resulted in a policy emphasis on regional HIOs.

In short, a networked structure is only as strong as the sum of its parts. Because of its hybrid, 'network of networks' structure, query-based exchange is available in Michigan only through regional hubs rather than through the state-wide exchange. In this, Michigan is similar to other more diffuse HIO structures found in other states. The risk inherent in this model is therefore that one or more of these sub-state exchanges will fail or withdraw its data, leaving the state-wide exchange, and the public, impoverished as a result.

Sustainability Requires Risk Management

HIE can bring benefits, but it comes with risks. Some of the biggest of these are concerning the ongoing sustainability of the Exchanges and funding streams. In Michigan, one of the significant risks in adopting a 'network of networks' approach is that one or many of the sub-state HIOs will prove unsustainable. This carries real consequences —particularly in those areas where access to health resources of all kinds is particularly low. One of the biggest risks for HIE sustainability is that it will mimic patterns in other areas of the health sector, meaning that citizens with the least access to healthcare obtain the fewest benefits from HIE.

The possibility of HIE failure raises some important questions. What happens to data when HIEs die? What is the return on investment for the public? And does having more sub-state HIEs mean more risk? There is an argument to be made here for creating an environment where it is politically acceptable to plan for failure as well as success. Although sustainability plans were required by ONCHIT, evidence suggests that oversight regarding adherence to these plans is lacking.

Public Health is Publicly Funded

A third important point is that the 'market takeoff funding' model common in Federal discourse —where the Federal government covers some of the extensive start-up costs of an HIO before it transitions to a fee-for-service model- becomes muddier when considering the public interest and what the public gets as a return on its investment. Given that taxpayers at the state and Federal levels are funding a large proportion of all HIE efforts in the US, it is disconcerting to see a low level of citizen and patient involvement in governing HIE initiatives and an emphasis on individuals as 'consumers' of healthcare services.

In particular, there may be difficulties in pursuing the public interest in HIE settings due to questions about ownership of data and competition. Transitioning from a largely public-funded model (currently adopted by the majority of HIOs) to a fee-for-service model requires some important adjustments that may not sit well with taxpayers. Interviewees in Michigan, for example, reported that getting providers to understand and accept that public health data was not theirs to sell proved difficult. There is a strong need for further analysis of the public value provided by HIE, as well as defining the public interest in pursing HIE beyond public payer cost savings.

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