

Commit to your health.

State of Wyoming,
Department of Health (WDH)
HIE Strategy Assessment & Implementation Plan

Environmental Scan Findings FINAL

May 18, 2016



Version History

Version	Date	Comments
Version 1.0	2/25/2016	Initial draft with web-survey findings.
Version 2.0	5/4/2016	Draft expanded to include findings from focus groups and targeted interviews.
Version 3.0	5/12/2016	Incorporated feedback from WDH.
Version 4.0	5/18/2016	Final, WDH approval granted.



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1. Executive Summary

Public Consulting Group, Inc. (PCG), on behalf of the Wyoming Department of Health (WDH), conducted an Environmental Scan of the provider community to gather information and knowledge of the Electronic Health Record (EHR) Incentive Program, the adoption and use of EHR systems, the level of clinical data exchange, and interest, readiness, and preferences for a statewide health information exchange (HIE). The Environmental Scan consisted of three key components: a Provider Web Survey, inperson Focus Groups, and Targeted Interviews. This document describes key findings and observations from the Environmental Scan regarding Wyoming providers' health information technology (HIT) and HIE landscape.

First, PCG conducted a Provider Web Survey to glean information regarding HIT and HIE from a large sample of providers across the state. This method allowed PCG to efficiently obtain a basic understanding of the extent of providers' adoption and use of HIT, and the interest in and perceived value of an HIE. Next, PCG conducted Focus Groups and Targeted Interviews in tandem. The Focus Groups were held in six cities to in order to capture the different needs of populations located in different regions of the state. These cities included Casper, Cheyenne, Cody, Jackson, Laramie, and Sheridan. PCG facilitated conversations between Wyoming healthcare professionals, and collected valuable qualitative data to supplement the quantitative data obtained from the Web Survey. For the Targeted Interviews, PCG engaged various key stakeholder groups to gain a broader understanding of the HIT landscape in Wyoming, including providers who attended the Frontiers in Wyoming Medicine Conference. Like the Focus Groups, the Targeted Interviews provided an opportunity to gather detailed information on HIT adoption and HIE preferences.

This report details the findings from each of the three Environmental Scan components. An overall assessment of the information gathered led to the identification of five key areas for the development of a statewide HIE: Outreach and Marketing, Security and Privacy, Defining Value, Sustainability Vision, and Governance Structure. Below are the findings that support the need to address these five key areas. The *Overall Conclusions and Next Steps* section of the Environmental Scan further details these findings and lists considerations for moving forward.

Key Area	Support from Findings	
Outreach and	A significant number of providers indicated little or no knowledge of the EHR	
Marketing	Incentive Program. The majority of participants across the Environmental Scan components stated	
	The majority of participants across the Environmental Scan components stated that they had no awareness of the previous statewide HIE efforts, and also had limited knowledge of the Total Health Record (THR) Gateway. Education on HIE and outreach for buy-in was lacking in the previous HIE initiative.	
Security and Privacy	Focus Group and Targeted Interview participants described their concern that electronic data is more likely to be exposed and used improperly.	



Key Area	Support from Findings	
	Patients may not want their data shared so broadly by their providers.	
Defining Value	 Participants described different needs in their referral patterns, which cross state lines, and the clinical data they would like to exchange. There was a general consensus that HIE participation should not be mandated; rather, the HIE should demonstrate value to gain voluntary participation. 	
Sustainability Vision	 There was a general concern from all participants regarding the cost of an HIE and whether it could be sustainable. Multiple participants commented that costs are most burdensome to small clinics/practices and rural providers. The previous statewide HIE effort lacked a sustainability model beyond federal funding. Participants made suggestions regarding technology solutions that would minimize costs, such as utilizing existing HIEs or cloud-based solutions. Participants generally agreed that those who utilize the HIE and obtain value from it should pay into the HIE. 	
Governance Structure	 There was a general consensus that a government entity should have a limited role in managing an HIE. Subject matter experts, particularly in HIT, should be on the HIE board. There was no clear consensus regarding whether an HIE Governance Structure should take on a public, private, or public/private partnership model. 	



2. Provider Web Survey

2.1 Provider Web Survey Methodology

Using the email survey tool SurveyMonkey, PCG and WDH developed a nineteen-question survey aimed at understanding the provider community's adoption and use of Health Information Technology (HIT) throughout the state. The survey included a combination of multiple choice and open response questions. PCG and WDH collaboratively determined a key Healthcare Provider Stakeholder distribution list of approximately 1,444 providers. The survey link was distributed to this group on February 2, 2016 and remained open through February 19, 2016, with one reminder email sent out on February 16, 2016. The PCG and WDH team also attended the Frontiers in Wyoming Medicine Conference, and encouraged providers to participate in the survey by both handing out survey links as well as having available iPads with the online survey available. A total of 307 responses were received, which yielded a 21.3% response rate. The web survey conducted in 2010 yielded a total of 108 responses. The following sections describe PCG's findings regarding Wyoming providers' HIT and HIE landscape and readiness.

2.2 Survey Findings

2.2.1 Survey Participant Overview

The majority of provider respondents were individual providers (47.1%). Respondents who specified "Other" included public health offices, dental offices, skilled nursing facilities, long term care facilities, nursing homes, etc.

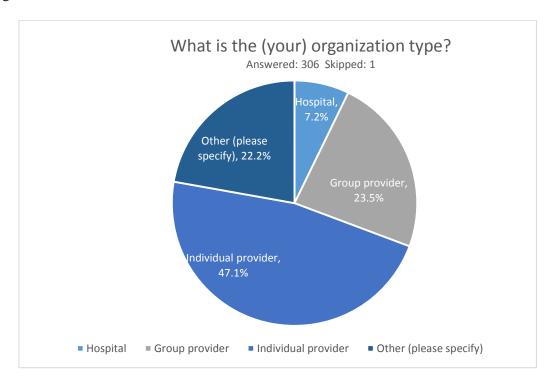


Figure 1: Organization Type



The majority of responses were collected from Natrona County (19.4%), Laramie County (13.7%), Sheridan County (9.0%), and Fremont County (8.7%) which are four of the five most populated counties in Wyoming.

2.2.2 EHR Incentive Program Findings

According to the survey, the knowledge, use, and adoption of HIT seems to vary substantially across Wyoming providers. When providers were asked to rate their level of knowledge regarding the Medicare / Medicaid EHR Incentive Programs, the average rating was 2.59 on a 5-point scale. A majority of the respondents (62.9%) stated that they have never participated in an EHR Incentive Program.

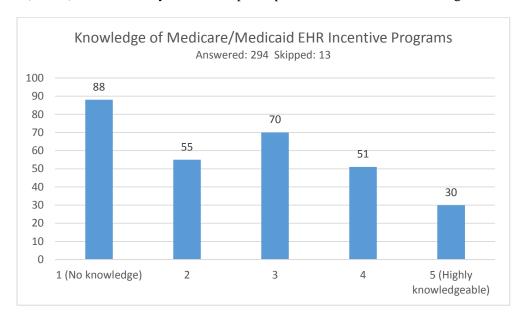


Figure 2: Knowledge of Medicare/Medicaid Incentive Programs

Of the respondents who stated that they had participated in an EHR Incentive Program, the majority (46.2%) of these providers have achieved Stage 2 of Meaningful Use.



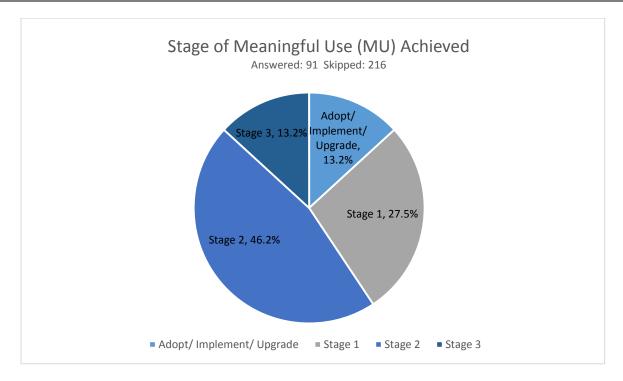


Figure 3: Stage of MU Achieved

When asked about the level of support providers had received from their EHR vendor, the mean rating was 3.40 on a 5-point scale, 1 being no support and 5 being very supportive.

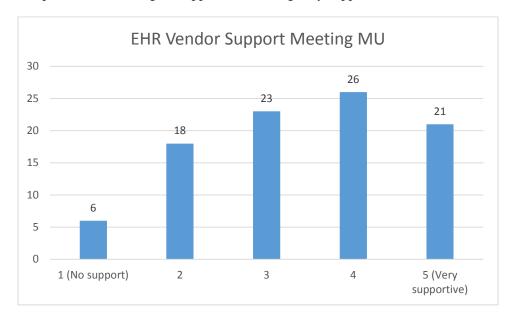


Figure 4: EHR Vendor Support Meeting MU



When respondents were asked if they have received support from an organization other than their EHR vendor to achieve MU, 34.2% stated that they have utilized Health Technology Services Regional Extension Center (REC). Providers who specified "Other" (55.3%) included responses such as:

- Medicare:
- Indian Health Services;
- Billing Clinics;
- Professional Organizations; and
- None/not applicable.

2.2.3 EHR Status

Approximately 63.8% of the providers that responded to this survey stated that they have an EHR. Of those respondents with an EHR, the majority (74.2%) do not use any software to assist with care coordination. Common responses for organizations that do use software to assist with care coordination included Dentrix Dental System, Therapy Notes, and the Wyoming Immunization Registry, among other programs.

Positively, a notable percentage of respondents (32.4%) indicated that they had experienced no barriers with the adoption and use of an EHR. However, the remaining respondents indicated experiencing technical, financial, operational, and other barriers. Common themes in the open responses included an EHR not being able to meet specific or nuanced needs, physician and staff resistance to change, lack of support, adopting an EHR being a time-consuming process, lack of communication with other EHRs, poor connections, etc.

The majority of respondents (48.8%) indicated that they are not currently sharing clinical data electronically. However, a number of providers indicated various methods of clinical data exchange.



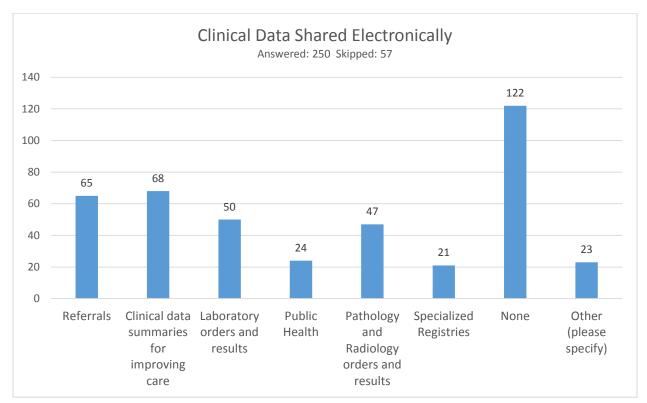


Figure 5: Clinical Data Shared Electronically

The majority of respondents (79.8%) do not have Direct Trust, a certified Direct Secure Messaging (DSM) account. As WDH has a limited number of DSM accounts that can be offered to the provider community at no cost, identifying and prioritizing providers who are interested in DSM and want an account is a key next step.

2.2.4 HIE Participation

When asked about their level of interest / need in participating in an Exchange across provider networks both in and out of Wyoming, the average rating was 2.82 on a 5-point scale.



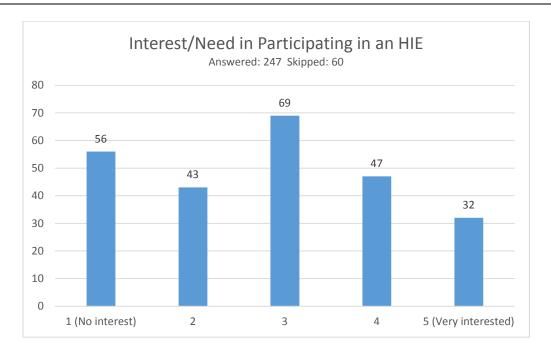


Figure 6: Interest/Need in Participating in an HIE

There seemed to be provider interest across the spectrum of services that could be provided by an HIE. Respondents indicated that medication history, downloadable clinical summaries, and test results would be most valuable, in addition to other HIE services such as referrals, lab results, and immunization history.

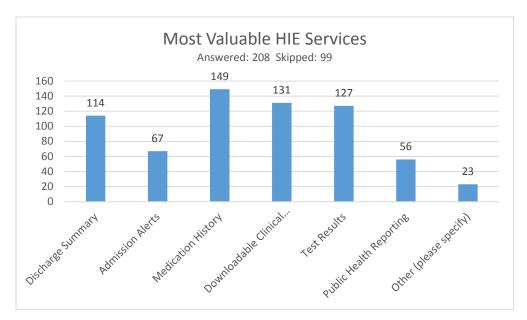


Figure 7: Most Valuable HIE Services

When asked about what gaps an HIE could fill, providers indicated that an HIE would be useful for a variety of reasons including continuity of care, discharge summaries, faster speed and ease of acquiring information, referrals and exchange of information between facilities (including across state lines to



Colorado, Utah, and Montana), medical history, radiology and lab testing done by other providers, and reduced paperwork. Importantly, 24 of 76 providers who responded to this question indicated that there were no gaps an HIE could fill or they were unsure. These data points speak to the Wyoming providers' lack of education or exposure to the services that an HIE could provide.

It will be critical to understand Wyoming providers' preferences for a sustainability model for a statewide HIE. The majority of respondents preferred a usage fees sustainability model, or a model based on the actual volume of usage (53.3%). When asked about preference of a governance structure for a statewide HIE, the majority of respondents indicated that they had no preference (80.4%). However, a recurring theme for the respondents that indicated a preference was that the HIE governance should be administered by a private non-profit organization to lead with state participation on the Board of Directors (or no state participation at all).

2.3 Conclusions and Limitations

While the survey yielded a significant amount of responses from a wide range of Wyoming providers, responses were obtained from a low percentage of the entire Wyoming provider community, and as such, the analyses from this survey are not representative of the Wyoming provider population. Thus, the results are planned to be used for informative and descriptive purposes, rather than predictive and representative analysis. The Environmental Scan importantly also will include supplemental findings from the Focus Groups and Targeted Interviews in the sections below, which support a more holistic representation of the Wyoming provider community's use and adoption of HIT.

Some limitations of conducting the Web Survey include:

- Time constraints and resource availability The time, costs and resources required to conduct a
 survey representative of an entire population can be significant, especially when it comes to
 successfully marketing the survey and engaging participant interest. In conjunction with WDH,
 key groups of providers were included in the web-survey to determine the need and value of an
 HIE in Wyoming.
- Unique population The State of Wyoming's unique geographical landscape make it difficult to target a certain population.
- Limited distribution channels The survey's primary source of distribution was electronically through an email distribution list. As a result, providers without internet access were excluded from participation. This limitation may have been exacerbated because of Wyoming's sparsely populated rural areas that are faced with broadband challenges. Additional distribution channels, such as mail and phone, would have increased the sample size, but the team concluded that focus groups and targeted interviews will be conducted to further explore survey findings and mitigate the risk of the sample size not being representative.
- Survey length and complexity The survey set out to capture much information about Wyoming's HIT landscape. Working alongside WDH, PCG attempted to create a survey that had the right balance between user friendly and too detailed.



This provider survey will serve as a foundation for future data gathering. Understanding Wyoming's unique provider landscape is a challenging task that will require more focused questioning to smaller, more targeted populations.



3. Focus Groups

3.1 Focus Groups Methodology

To supplement the breadth of data collected from the Web Survey, PCG organized and conducted indepth Focus Groups. The Focus Groups were held in-person at multiple locations throughout Wyoming to ensure that the varying needs of providers and hospitals in different regions of the state were accounted for and represented in the Environmental Scan. PCG and WDH selected more populous cities, but extended an open invitation to providers in surrounding areas to increase provider participation. PCG conducted outreach via phone calls and emails to nine hospitals to participate in the sessions and to hold the sessions at their locations. After the Focus Groups were scheduled, PCG sent an email invitation to hospital management and local providers. The list of invitees included participants from the Web Survey who expressed interest in further discussing HIT and HIE, attendees who provided their contact information at the annual Frontiers in Wyoming Medicine Conference, and providers or clinics with a large number of Medicaid patients. Invitees were encouraged to forward the invitation to others who would be interested in participating.

The Focus Groups were conducted in six cities: Casper, Cheyenne, Cody, Jackson, Laramie, and Sheridan. Focus Groups were not held in other cities where PCG conducted outreach due to either lack of interest, or inclusion in another city's Focus Group. Interested individuals in these cities were asked to participate in a Targeted Interview.

Participation in each Focus Group ranged from two to five attendees. PCG assured all invitees and eventual participants that all comments and suggestions would be confidential and findings would be reported in the aggregate. For all Focus Groups, one PCG staff member facilitated the conversation using a set list of questions, while the second PCG staff member transcribed comments. PCG recorded the sessions only after all participants gave their consent. The recording was only used by PCG for review and clarification of the qualitative analysis in this report and will be deleted after the final Environmental Scan is submitted to WDH.

3.2 Major Payers

To learn about the payer landscape across Wyoming, Focus Group participants were asked, "Who are your major payers?" (PCG later contacted the three major private payers to participate in Targeted Interviews, described in more detail below). Major payers in the state of Wyoming include Medicare (covering about 50% of the population in some cities), Medicaid, and self-pay/private insurance including Blue Cross Blue Shield of Wyoming (BCBSWY), Aetna, Cigna, United HealthCare, and Great West. Of the private payers, BCBSWY was generally the largest payer, followed by Cigna and United HealthCare.



3.3 Health Information Technology Adoption

In order to gauge focus group participants' starting position and level of experience with HIT, PCG first asked, "What is your level of adoption of Health Information Technology (EHR, laboratory system, radiology system, ePrescribing system, etc.)?"

Overall, the participants' exposure to and level of adoption of HIT varied substantially across the six cities where PCG conducted Focus Groups. This variability ranged from participants who had never heard of or utilized Direct Secure Messaging (DSM) and practices that were reluctant to transfer to EHR systems due to perceived inefficiencies and costs, to participants who had achieved Healthcare Information and Management Systems Society (HIMSS) Adoption Stage 5.

EMR Adoption Model [™]		
Stage	Cumulative Capabilities	
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), Closed Loop Medication Administration	
Stage 5	Full complement of Radiology PACS	
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	
Stage 1	Ancillaries – Lab, Rad, Pharmacy - All Installed	
Stage 0	All Three Ancillaries Not Installed	

Figure 8: HIMSS Stages of EHR Adoption¹

There is some utilization of DSM throughout the state, but given its limitations, many providers and hospitals utilize MediTech, an EHR that provides one-way communication using a web interface to log in. This functionality is only available to providers using the same MediTech system. Others use the THR for electronic submission of Public Health data and some have the capability to use ePrescribing. There is also some integration with major labs and connections to pathology and radiology.

¹ http://www.himssanalyticsasia.org/images/emradoptionmodel-chart.jpg



Several Focus Group participants represented organizations that participate in the Medicaid EHR Incentive Program. Some expressed difficulties in meeting Meaningful Use (MU). In Sheridan, it was mentioned that providers in local towns stopped participating in Medicaid and Medicare EHR Programs and took the penalties associated with HIT adoption and meeting MU. Participants additionally expressed difficulties in finding a single package or solution able to meet the needs of every department within their organizations, and difficulties in achieving interoperability between EHRs supported by different vendors. One example from Sheridan involved a hospital on Cerner and a community health center on GE Centricity, and presently, there is no connection between these two EHRs and facilities.

Participants were also asked, "Describe your clinical data sharing with external partners or service providers. Do you want to share clinical data? If no, why not? Who are your trading partners (3rd party service providers such as laboratories, etc. and referral partners)?" The overall impression PCG obtained from the Focus Group discussions is that the ability to exchange data effectively and efficiently is significantly lacking between providers throughout Wyoming, but there is an interest and need to be able to do so. One comment made by a participant in Casper could be largely generalized as an overall observation of the level of clinical data sharing in the state; this person stated that there are mainly standalone systems with separate logins. This question prompted many "in a perfect world", future-state responses. Generally, providers seem to use primitive methods of information sharing, such as via email or web-portal viewing. Representatives from hospitals mentioned that they would like to connect with local providers and specialists for data exchange. In Cheyenne, participants discussed that a system for telehealth would be beneficial, as many patients live in rural areas and have to commute long distances to see specialists. In several locations, it was mentioned that it would be useful to share clinical data electronically according to organizations' referral patterns.

3.4 Understanding of a Health Information Exchange and its Impact

PCG further asked participants, "What is your understanding of an HIE?" In general, providers' understanding of an HIE varies substantially across the state, and even within particular Wyoming cities. Some participants of the Focus Groups had a very limited understanding of an HIE and would be interested in learning more about an HIE and its functions. Other participants had some exposure to HIE and EHR systems. Participants in Laramie and Cheyenne were aware of the previous HIE efforts in Wyoming and knew that the system had failed due to there being insufficient amount of information within the system. One mental health participant in Cheyenne had used the THR Electronic Health Record (EHR), but had experienced limitations in its use, as this individual felt that the solution is more focused on meeting primary care needs. Others were able to articulate examples of HIE systems, or explain different models of HIEs (for example, a participant in Cody explained the federated vs. centrally-located models).

When asked about how an HIE in Wyoming would impact providers, most Focus Group participants could imagine positive impacts including the reduction of duplication and errors, improvement in patient safety and staff efficiency, the reduction of costs, overcoming of geographical barriers for care, etc. Participants also mentioned that it would be very useful to have access to patient information from other providers, particularly for specialty providers. However, Focus Group participants also discussed



potential barriers and concerns of using an HIE, which extend from their concerns about EHRs. Some participants expressed concerns regarding HIPAA compliance and the security, level of access, and confidentiality of patient information in an EHR system versus on paper. Additionally, providers discussed that smaller practices have a more difficult time transitioning to EHRs as well as older physicians, such that an EHR could slow providers down (ex. by having to input paper information into the system). There can also be so much information in an EHR that it can be difficult to use effectively, and data can be fragmented. Given the perceived difficulty of EHR adoption, the prospect of EHR data feeding into an HIE further concerned providers, and they commented that the infrastructure for an HIE needs to be properly built to facilitate providers' use.

Focus Group participants were also asked, "What gaps could an HIE fill for providers?" Participants, mainly from Laramie, discussed many gaps that an HIE could fill for providers including proper follow-ups, improving the continuity of care, and sharing of better data in more usable formats. Furthermore, participants from multiple locations mentioned that given Wyoming's patient referral patterns, it would be valuable to have access to other HIEs across state borders, for example, CORHIO, the Colorado health information exchange. In Sheridan, participants discussed that an HIE would result in decreased duplication of patient tests and procedures, and that information would be more reliable if all housed in one place.

3.5 Health Information Exchange Participation

When asked, "Who are the key stakeholders that are 'must have' participants in a Wyoming HIE?", Focus Group participants across the state agreed that hospitals must participate in the Wyoming HIE. Ideally, providers, healthcare organizations, and labs would also participate, although participants thought this might be more challenging given the costs and less understanding of an HIE's value. Feedback regarding payers participating in the HIE was mixed, as some participants felt that payers might misuse patient data to deny services; as such, participants recommended limiting the kind of information that payers can view. Regarding industry groups as potential HIE members, participants mentioned SureScripts, the Wyoming Medical Association, quality reporting organizations, registries, pharmacies, laboratories, and payers.

Participants were also asked, "Should participation in an HIE be mandatory? If so, how, and by what means?" Overall, there was general agreement across the state Focus Group participants that making participation in an HIE mandatory would be ill-received. Further, there was general agreement that an HIE should have inherent value and incentive that would encourage providers to participate voluntarily. Transparency regarding costs is also important. Participants were concerned about the previous HIE efforts and stated that there was very little information shared with stakeholders.

3.6 Financial Sustainability

To glean insight on preferences for funding an HIE, PCG asked participants "What financial sustainability model do you see as best for the HIE (who pays and what)?" Prior to this question, the facilitator gave a brief explanation of HIE funding options, such as per transaction or volume-based



models. A majority of the participants expressed concerns about the difficulty in financially sustaining an HIE. Concerns were due to issues such as vendor fees for set-up and maintenance, the small population size of Wyoming, and the cost for individual providers and smaller hospitals. Participants in all regions commented that the state would need to be a main financial contributor. There were no definite stances on what funding model would work, but participants expressed that an HIE that brings value to providers and hospitals would encourage participation and payment. The majority of participants commented that healthcare payers should also pay for HIE use, as they could gain valuable data to improve care management and reduce duplication of services.

While there was uncertainty regarding the specifics of a sustainability plan, several participants offered potential ideas that could help contain or minimize costs of an HIE. One participant suggested implementing a cloud-based solution, which could be more affordable for a small state like Wyoming. The participant offered the example of CommonWell Health Alliance, a platform that allows providers using different EHR vendors, such as AthenaHealth, Cerner, and Allscripts, to achieve interoperability. As some Wyoming providers are currently using CommonWell to exchange information, this platform was suggested as a potential HIE solution. Another participant suggested corporate sponsorships for the HIE. These corporate sponsors would have their advertisements appear in a noninvasive way in the HIE interface. There was also a general suggestion that the state consider the return on investment of an HIE.

3.7 Governance

PCG inquired about opinions on governance by asking, "What HIE governance model would work best for Wyoming?" The facilitator briefed participants on the prior Wyoming HIE governance model, which was a private-public partnership. Overall, a significant number of participants did not feel knowledgeable enough to make detailed recommendations on governance structure. However, participants expressed a general sense that the government should not be the main entity that governs the HIE and should have limited management. One provider commented that it would be more difficult to engage providers if the HIE is in the government's control. These opinions were drawn from negative experiences with prior or existing government programs. For example, one participant questioned why the state would build another HIE when an existing HIE, the THR Gateway, has limited use. Others expressed difficulty in working with the Medicaid and Medicare programs.

Individuals who were engaged in the prior statewide HIE initiative voiced general suggestions. One commented that those on the HIE board should be subject matter experts in information technology, healthcare, and specifically, the healthcare landscape in Wyoming. Another participant expressed that the previous HIE board was too large and a smaller group would alleviate issues regarding coordination and decision making.

3.8 Lessons Learned

To assess participants' perception of the previous statewide HIE and insight on how to improve the development and establishment of a future HIE, PCG asked, "What lessons could be learned from previous initiatives in the State around HIE and Electronic Health Records?"



Overall, the majority of participants did not know that there were any previous HIE initiatives. Those working in the hospitals in Laramie and Cody were most knowledgeable about the dissolved e-Health Partnership. Both conveyed that a different sustainability plan would need to be developed prior to implementation. Specifically, a comment was made that the state needs to be upfront about funding expected of providers and hospitals from the beginning.

Across Focus Groups, providers mentioned that the lack of awareness of the prior HIE initiative warrants a stronger marketing and outreach campaign in any future HIE activity. Furthermore, individuals with knowledge of the prior HIE also supported this recommendation as they felt that not enough education was provided about the use and functions of the HIE. Participants thought that outreach would greatly improve provider buy-in and use of an HIE. A provider also commented that outreach should not only focus on the major players like hospitals, but smaller practices as well.

Another issue that was mentioned in multiple Focus Groups was the timing of the HIE initiatives. Providers were in the process of or had not yet adopted EHRs when the e-Health Partnership was developed. This limited EHR adoption led to poor participation in the HIE and offered participating providers limited data. Participants in multiple groups conveyed that an HIE brings no value to providers unless a substantial amount of information can be exchanged. Relatedly, participants who were not engaged in the last HIE expressed that they have only just adapted to EHRs and the transition from paper was a significant time and financial effort. There was a sense of the inevitability that HIT initiatives, that they were not going away, but progress towards HIE connection cannot be as time and financially intensive as the EHR implementation.

3.9 Conclusions and Limitations

The Focus Groups provided descriptive overviews of questions concerning HIT adoption and the use and the development of a potential statewide HIE in Wyoming. It is important to note that the responses outlined in this section are opinions of the Focus Group participants and are not necessarily representative of the views of the state as a whole. Overall, there was variation in HIE adoption and use, such as the level of Meaningful Use (MU) achieved and awareness of Direct Secure Messaging (DSM). This appears to vary based on the organization type for which a provider works: hospital, clinic, or smaller practice. There was a general sense of the gaps that an HIE could fill, particularly in meeting the needs of providers' unique referral patterns. Furthermore, participants envisioned the potential value an HIE could bring to their work and seemed open to the idea of a statewide HIE, but not without concerns. Security of data, ease of use, and costs were factors that would make providers hesitant in participating in an HIE.

With the exception of a few participants, there was a general consensus that HIE participation should not be mandatory given Wyoming's independent nature. The HIE must prove its value which will result in stakeholder buy-in. When the subjects of governance structure and financial sustainability were presented, many participants had questions and concerns rather than detailed suggestions. There was a sense that government control of the HIE should be limited, although funding for the HIE should be provided by a government body.

Those aware of the previous HIE effort felt that the timing may be better now to establish a statewide HIE. However, a long-term sustainability plan is a major issue that must be addressed prior to HIE



development. Participants felt that the board governing the HIE must include those with expertise and those who can advocate for the different regions in Wyoming. Lastly, it was stated multiple times by participants across all cities that education and outreach to stakeholders groups, large or small, is crucial if the HIE is to have enough information that can be exchanged.

Some limitations of conducting the Focus Groups include:

- Time constraints and resource availability The time and resources required to conduct Focus
 Groups are significant. PCG delayed holding some sessions in order to best accommodate
 participants' schedules and to obtain better turnout.
- Unique population Focus Groups were held in six cities, which provided an overall sense of the
 HIT environment and level of HIE understanding. PCG acknowledges that there are many rural
 areas in the state, but PCG chose the more populated cities to maximize participation engagement
 and turnout, and attempted to include providers living within relatively close proximity to these
 cities.
- Limited distribution channels The primary source of distribution for these Focus Groups was
 electronically through an email distribution list. As a result, providers without internet access
 were not sent invitations. PCG encouraged invitees to inform other interested individuals of the
 Focus Groups.
- Participation bias As participation was voluntary, there could potentially be some sort of bias
 amongst the participants. PCG encouraged honesty through confidentiality and privacy
 assurances and attempted to make participants comfortable to share any and all opinions.



4. Targeted Interviews

4.1 Targeted Interviews Methodology

To select Targeted Interview participants, PCG and WDH developed a register of key stakeholders who participated in the previous statewide HIE initiative and those who would be important to include in any future HIE activity. PCG and WDH categorized the list by industry or organization type (such as Payers and Department of Health), determined a point of contact for each group, and conducted outreach via phone, email, or both. If a stakeholder agreed to an interview, PCG staff held the interview in-person or over the phone, depending on timing and convenience for the participant. Interviews were scheduled for an hour and each stakeholder group was asked a different set of questions relating to the group's particular services. Below is a list of stakeholder groups that participated in the Targeted Interviews:

- Payers;
- The Wyoming Department of Health;
- Veterans Affairs;
- Providers;
- The Wyoming Medical Society;
- The Institute of Population Health;
- The Wyoming Hospital Association;
- Other HIEs;
- Long Term Care; and,
- Pharmacy.

4.2 Payers

PCG interviewed three of the major private payers in Wyoming: Blue Cross Blue Shield of Wyoming (BCBSWY), Cigna, and United Healthcare. The goal of the meetings with payers was to understand any plans for a payer HIE, the impact of an HIE on a payer, financial sustainability and governance, and recruitment of the payer's providers. All the payers had a comprehensive grasp of health information technology and the functions of a health information exchange. There was acknowledgement across all payers of the importance that data can have in improving care through care coordination and utilization management. Specifically, one payer stated that an HIE can help payers reduce duplicity in care and in case management for high-risk patients. Two of three payers felt that there would be a benefit for their company to connect to a Wyoming HIE. The other payer expressed that Wyoming is a smaller market and their internal data systems already have the capabilities that improve patient outcomes in the ways an HIE would.

Two of the payers mentioned that they, along with hospitals, physicians, and the State, are key stakeholders that should participate in an HIE. These payers expressed that all stakeholders, in addition to the populations they serve, would benefit from the HIE. All payers voiced that mandating participation in an HIE would not be well received. It was expressed that a mandatory HIE would not necessarily dictate that people were using and finding value in it. Two of the payers stated that participants in an HIE,



including payers, could pay into its sustainability if the HIE had value. For example, a payer mentioned that payers are willing to subscribe and provide some kind of payment for access to an All Payer Claims Database (APCD) because they see the value in the data they receive. An HIE financial sustainability plan should be built around use cases for different stakeholders that demonstrate a clear return on investment. Specifically, the use case for payers would be around Healthcare Effectiveness Data and Information Set (HEDIS), Gaps in Care (GIC), and the Medicare Star Ratings, which measure how Medicare Advantage and prescription drug plans perform. It was acknowledged that Wyoming is a small state; therefore, a stably funded entity would need to organize and run the HIE. For governance, two of the payers stressed that there needs to be close collaboration between payers, providers, and the State.

Based on the payers' experience in adopting different HIT systems, there was hesitation over implementation and whether there would be enough information in the HIE. One payer commented that many states and government programs have different HIT initiatives, which sometimes require rebuilding or tweaking of internal systems. Another participant questioned whether enough providers would want to exchange data, as there is apprehension to pay vendors for connections costs.

4.3 Department of Health

PCG looked to the Wyoming Department of Health for information on public health and health care services reporting systems and initiatives. The interviewees expressed that an HIE would greatly improve population health outcomes. The Public Health Division currently oversees nine electronic registries ranging from Cancer, Immunization, to Trauma. Five of the nine registries are capable of electronic data exchange. According to the interviewees, three of the registries without electronic data exchange do not need this capability. Currently, none of the public health reporting systems connect with one another and it would be helpful to pull data across the different systems and look at comorbidities. The information in an HIE used to identify comorbidities and used for other population health analysis could be de-identified. With the data, the state could forecast and model future trends on disease and determine how interventions could impact these future trends. An HIE would also be crucial for contracted programs that the State oversees and for value-based purchasing. Ideally, participation would include all types of health professionals, the State, and payers. These stakeholders would have role-based access to the HIE.

The Wyoming Department of Health interviewees were not in agreement regarding whether HIE participation should be mandatory. One interviewee supported a mandate as it would help providers comply with quality and clinical programs which require sharing information for Medicaid and Medicare patients. Another interviewee acknowledged that a mandate would negatively impact certain providers, such as those who work in rural areas, and that required participation would be burdensome in terms of high costs. These providers should be incentivized to participate as opposed to being required to participate. Regarding financial sustainability, an interviewee commented that all participants of an HIE need "to have skin in the game" which reflects the value they are receiving. For example, a payer's share would be based on their patient proportion. As it would be cost prohibitive to build a completely new HIE, the interviewees suggested building upon the THR Gateway or connecting to CORHIO.

In considering lessons learned, one representative commented that the previous HIE board did not include anyone with an HIE background, and initially there were no full-time employees under the HIE. A more



robust board and work force would support the success of an HIE. Furthermore, these interviewees acknowledged that the timing is better now to establish an HIE as providers understand that HIT is the future of healthcare coordination and delivery. There was initial resistance to EHR implementation, but this transition has now occurred and there is overall improvement in technology which will aid in the HIE development.

4.4 Veterans Affairs

The focus in meeting with the Veterans Affairs (VA) took place in an effort to understand any HIE initiatives within the agency, the impact of a statewide HIE, and participation in the HIE. There are two VA Medical Centers in Wyoming, one located in Cheyenne and one in Sheridan, and the Sheridan Center primarily focuses on mental health. There are thirteen (13) other VA clinics which are a combination of outpatient, telehealth, and community-based outpatient clinics. These centers are connected to the VA's EHR system, but patient records are locally stored. To access records for a patient who has gone to another VA, a provider must request access. Currently, the VAs in Wyoming are not connected to any other EHRs or HIE. The VA representative expressed that a state HIE would be significant for both the VA and hospitals as many veterans are referred to hospitals. Patients and providers in the VA and hospitals could reduce duplication in services and make better decisions on treatment. For example, older veterans may not recall what medical care they have received and the medications they have been prescribed; therefore, an HIE would provide critical information for providers at different locations. For the HIE to have value, particularly for the VA, hospitals and providers would need to be key participants. There was hesitation regarding payer participation and their having access to all patient information.

Regarding governance, the representative commented that if the government wants to implement significant changes which will impact people, there should be a collaborative effort with these people. This approach would result in a practical strategy and the technology components would follow. For financial sustainability, there were concerns about the potential financial burden that could be placed on smaller provider practices, especially after they have just adopted EHRs. At the time of EHR transition, some providers had limited access to technology and were not ready for the transition. For an HIE initiative, the state would have to fund and coordinate the development and connections to the HIE.

4.5 Providers

PCG interviewed providers in both an informal and formal setting. PCG scheduled Targeted Interviews with providers who were interested but unable to attend a Focus Group. Additionally, PCG gathered feedback from providers at the Annual Frontiers in Wyoming Medicine Conference. As the conference drew providers from across the state, there were varying experiences with HIT and varying opinions on HIE initiatives.

The providers who participated in the formal Targeted Interviews expressed that the impact of an HIE would allow hospitals and providers to efficiently share data without "jumping through hoops" while waiting for information. For example, one clinic uses AthenaHealth's EHR and is connected to the Wyoming Medical Center, but this requires a separate login to access patient records. The provider at the



clinic must login, download the attachment, go back into their own EHR system, and manually place the information in the patient's electronic record.

There was overall interest among providers who participated in informal Targeted Interviews in how an HIE would function and how it would impact their practice. While there was a lack of awareness of the previous statewide HIE effort, providers had gone through EHR implementations, with experiences ranging from negative to positive. For those with positive experiences, the idea of an HIE was more well received, as these individuals saw the benefit in electronic records and the potential to efficiently obtain information. Multiple providers expressed that there needs to be reliable and timely clinical data exchange on patients as many travel extensive distances for care and then return to their local provider. Those with a negative EHR experience viewed an HIE as burdensome on workflow. Specifically, a provider commented that the time to enter and search for data in an EHR system was more time consuming than doing so in a paper chart. There was general agreement that Wyoming is especially unique and disperse with different needs across the state; therefore, an HIE would need to comprehensively address various needs.

Overall, providers agreed that hospitals, clinics, and individual providers are key participants in order for an HIE to be useful. One interviewee expressed that large hospitals and medical groups could join first and then the smaller providers could join the HIE, since patients seek care from both groups. However, participation in the HIE should not be mandatory, but rather positioned as adding value. In line with this position, there was an overall consensus that the government should neither impose a mandate for participation nor be the governing body of the HIE. A suggested governance structure involved a board with a director and the state as a shareholder. The director should have IT knowledge and the board members should represent different regions of the state. This board would rotate following a fair-board model.

For several providers who were engaged in the previous HIE initiative, there was an understanding that EHR adoption and Meaningful Use incentives were still in their early phases. Presently, as time has passed and these activities have been established, providers are more attuned to acceptance of an HIE. An interviewee commented that too much responsibility was assigned to the providers, and they were not ready at that time for the development of an HIE.

4.6 The Wyoming Medical Society

The Wyoming Medical Society (WMS) is a physician advocacy organization representing 500 active physicians throughout the state. In total, there are about 850-900 members which includes physicians and physician assistants who may be professionals in training, active, or retired. Throughout the past few years, WMS has discussed and listened to members' experiences with HIT, particularly EHRs. The transition from paper to EHRs (and the associated costs to meet Meaningful Use and avoid Medicare penalties) has been the primary reason cited by providers for leaving private employment to work for hospitals. Physicians have additionally expressed frustrations over the excessive amount of notifications and alerts when using EHRs. These alerts are not filtered for importance or relevance. Given that providers do not have time to review each alert, they could potentially overlook significant alerts.



The WMS representative mentioned that an HIE would be valuable to physicians in that it would alleviate the need to manage login information for multiple systems and would allow for efficient access to patient history. Furthermore, an HIE could support telehealth efforts in the state, allowing patients to receive care without driving long distances. An HIE would allow telehealth sites to retrieve patient records from across the state and borders. Another benefit of an HIE would be limiting the unsecure exchange of data, such as faxing and texting.

Per the WMS representative, a significant number of providers currently participate in an HIE solution called the CommonWell Health Alliance, which allows providers using different EHR platforms, such as AthenaHealth, Cerner, and Allscripts, to achieve interoperability. It was noted that some EHR vendors, like Epic, do not participate in this initiative. The WMS representative suggested exploring the CommonWell HIE or other cloud-based solutions for a statewide HIE, as these solutions may reduce costs in the development and maintenance of the HIE.

When asked about key stakeholders, the WMS representative stated that hospitals and providers were the obvious necessary participants, but that pharmacies and laboratories could also offer valuable information (once HIPAA barriers were addressed, including protecting the privacy and security of patient data). The interviewee viewed payers as stakeholders but not necessarily direct participants, as they are already able to obtain needed information through claim submissions. While mandatory participation in the statewide HIE would help achieve populating sufficient data in the system, the WMS representative did not think participation should be mandated, and offered the suggestion of granting providers a choice via an opt-out option.

While the WMS interviewee was uncertain about financial sustainability models, this individual believes that if the state is leading the HIE development effort and is emphasizing the importance of a statewide HIE, then the state should financially invest in the HIE. On a similar note, the WMS representative noted that a governance model would depend on the HIE funding streams. For example, if hospitals were supporting the majority of the funding, then they should have significant representation within the governance structure. If the state were to pay for HIE efforts, then the state should run the HIE with advisory roles from other stakeholders. The WMS representative also suggested that legislative representatives be included early on in the HIE development, as their buy-in and support will be important for funding and policy issues.

As WMS was involved in the e-Health Partnership, the interviewee offered key lessons learned. This individual believes that communication between stakeholders is critical and that Wyoming stakeholders must not compete with one another, especially given the amount of money invested in previous HIE initiatives. Also, the interviewee stated that it is important that HIE costs are spread appropriately, as Wyoming has a small population and providers cannot absorb high costs.

4.7 The Wyoming Institute of Population Health

The Wyoming Institute of Population Health (IPH) is an organization with the mission of transforming healthcare by assisting providers in implementing healthcare innovation practices and developing



strategic platforms and models for patient care and population health management. A key focus of IPH is improving the continuum of care; thus, IPH emphasizes the patient-centered medical home (PCMH) model. PCG met with a representative of IPH for a targeted interview. Given that IPH is not clinical, the organization does not use any Electronic Health Record (EHR) or clinical systems. While IPH is not currently participating in a Health Information Exchange (HIE), the organization has a robust understanding of HIE and the value an HIE could bring to the state of Wyoming. IPH sees HIE as vital to their work in supporting care coordination and the PCMH model, and sees a need to connect providers across the continuum of care (ex. primary care providers and specialists). IPH emphasized that HIE should be messaged as being in the best interest of patients. IPH sees hospitals, critical access hospitals (CAHs), and primary care facilities as key stakeholders in a Wyoming HIE. Rather than having mandatory participation in an HIE, IPH believes that a framework of incentivizing providers would be better. Regarding an HIE financial sustainability model, IPH considered the possibility of hospitals paying via a subscription fee model. IPH also stated that a mix of the private/public partnership would work best for an HIE governance model.

4.8 The Wyoming Hospital Association

The Wyoming Hospital Association (WHA) is an organization representing the conglomerate of statewide hospitals. PCG also had the opportunity to meet with a representative of WHA for a targeted interview. The WHA is made up of 27 hospitals and the organization serves to represent its members and advocate for in-state and federal legislation, as well as to educate providers on issues and legislation that impact hospitals. As a member of the board of the previous statewide HIE effort in Wyoming, the WHA has a clear understanding of the aims and functions of an HIE. The WHA representative expressed frustrations regarding the lack of return on investment of the previous HIE effort, given that the participants put in substantial amounts of time and money and received limited value back because the functionality and interoperability were limited. A key problem was the lack of provider buy-in. Per the WHA representative, at most, two hospitals are connected to another state's HIEs, and it would be very helpful to have interoperability according to referral patterns. Regarding exchange of clinical data, the representative commented that all hospitals are essentially compartmentalized and that there are some connections to Medicaid, immunization, and public health reporting. The WHA representative's belief is that all partners must participate for this HIE to work, but participation should not be mandated; rather, the HIE must prove that it can work and be affordable. When asked about an HIE sustainability model, the WHA representative expressed concerns that Wyoming is too small to be sustainable on its own and that surrounding states should be utilized and/or Wyoming could potentially purse a co-op with another state. The representative further advocated for a public-private partnership when asked about the best HIE governance model for Wyoming. A key lesson learned from the previous initiative is that champions are needed within each industry and ultimately it was an issue of cost.

4.9 Other Health Information Exchanges

Other HIEs, while not located in the state of Wyoming, are still important stakeholders in a Wyoming statewide HIE effort given the uniqueness of the Wyoming healthcare landscape; the majority of its population is largely distributed along its border. Thus, provider referral patterns are often *inter*-state rather than *intra*-state. Providers in the southwest region of the state frequently send patients across the



border to receive treatment in Utah. As such, PCG interviewed a representative of the Utah Health Information Network (UHIN) as part of the targeted interviews. UHIN has two segments to the organization: a clearinghouse for Medicaid and the HIE. About 1,200 organizations access these segments. The most used use-cases for UHIN include notification of admissions to the emergency department and notes transcription. A group in Evanston, Wyoming is currently connected to UHIN per its referral patterns. When asked about 'must have' participants in a Wyoming HIE, the UHIN representative mentioned the four largest hospitals, the WHA, physicians, the Wyoming Medical Association, patient representatives, and payers. The UHIN representative further recommended incentivizing providers rather than mandating HIE participation. The financial sustainability model used by UHIN splits cost models for different types of stakeholders such that payers pay based on PMPM, hospitals pay based on their market share of hospital discharges from the previous year, and physicians pay a flat annual fee. When asked about important lessons learned from previous HIE initiatives, the UHIN representative mentioned community buy-in and collaboration across functionalities and communities as critical.

4.10 Long Term Care

PCG met with the Wyoming State Long Term Care Ombudsman, a federally-mandated program created to meet the needs and concerns of long term care facilities in the state. This program serves and advocates for 4,500 residents across 81 long term care facilities, and is federally and state funded. The Wyoming State Long Term Care Ombudsman does not currently utilize Health Information Technology (HIT) and does not participate in an HIE; thus, it has a very limited understanding of HIE and its potential value to the state. However, it was mentioned that it would be valuable to have information transferred for residents who see specialists and transition to long term care, and to know the history of the patient immediately. The representatives of this program did not have enough of a knowledge base on this topic to be able to answer questions regarding key stakeholders of a Wyoming HIE, potential industry groups as members of the HIE, or mandatory participation in the HIE.

4.11 Pharmacy

As part of the Targeted Interviews, PCG met with a representative from the Wyoming State Board of Pharmacy. This board includes roughly 1,500 licensed pharmacists, 600 of whom work in Wyoming, and about 180 pharmacies, predominantly chain pharmacies. When asked about the level of adoption of ePrescribing in Wyoming, this representative shared that over 80% of pharmacies can receive prescriptions electronically and are accredited. Due to the geographical nature of the state, there are large gaps in pharmacy care and inadequate coverage, with some regions of 100 square miles with no pharmacies and only a single Tele-pharmacy in the entire state. For pharmacy, an HIE could allow pharmacists to make better, more informed decisions if they had more information regarding diagnoses and the reason a medication was prescribed. This representative believed that the Medicaid Department is a key stakeholder, 'must have' participant in a Wyoming HIE. Further, the representative did not think making HIE participation mandatory would be well-received in Wyoming and discussed that the HIE would have to be truly easy to use, a time-saver, and better for patients for it to be valuable.



4.12 Conclusions and Limitations

PCG utilized Targeted Interviews to gather information regarding the impact of an HIE from a range of stakeholder groups. The persons chosen were seen as subject matter experts or key personnel in the stakeholder group. It is important to note that the responses outlined in this section are opinions of the Targeted Interviews participants and are not necessarily representative of the views of the stakeholder group as a whole.

All interviewees expressed that patient care could be improved by an HIE, which would positively impact their organization. Like the Focus Groups, the majority of interviewees did not believe that HIE participation should be mandatory, and making it so would lead to resistance in HIE use. HIE value must be defined so all stakeholder groups are compelled to subscribe and pay into the HIE. As some stakeholder groups were not involved in the previous HIE efforts, it was difficult for them to formulate opinions on governance structure or a financial sustainability model. For those with knowledge of past HIE activity, it was suggested that the State should leverage existing HIEs to contain costs. Lessons learned from across the interviews included determining a more robust financial sustainability model, outlining a more collaborative effort across stakeholder groups, and putting forth a better campaign to educate and obtain provider buy-in.

Some limitations of conducting the Targeted Interviews include:

- Time constraints and representative availability PCG contacted representatives using the stakeholder register, but there were cases in which representatives were too busy or felt they were not the correct person to contact. These instances resulted in either an interview with another representative or no meeting at all.
- Participation bias As participation was voluntary, there could potentially be some sort of bias
 amongst the interviewees. PCG encouraged honesty through confidentiality and privacy
 assurances and attempted to make interviewees comfortable to share any and all opinions.



5. Overall Environmental Scan Conclusions and Next Steps

Collectively, the Web Survey, Focus Groups, and Targeted Interviews offer a comprehensive Environmental Scan of the HIT and HIE environment in Wyoming. The data and information collected can provide WDH with valuable tools for the decision making process regarding the status of the EHR Incentive Program and the potential for development of a statewide HIE. Overall findings suggest that there is openness and agreement regarding an HIE because of the positive impact to patient outcomes. Although the overall findings are positive about the use cases and need for HIE, we acknowledge there is an unresolved conflict which we observed from stakeholders regarding how the HIE can be best funded and the governance of the organization. The Environmental Scan participants did not have an overall consensus or agreement regarding the potential source of funding or the possible make-up of the governing body. Our conclusion is that an effective resolution to these conflicting ideas and opinions will be to institute an ongoing collaboration and communication process between WDH and the stakeholders. The mission of WDH is to facilitate and foster a transparent assessment and evaluation process. We do conclude that in addition to resolution of the conflicting ideas, there are key areas that WDH must focus on and address in order for an HIE to have successful buy-in and participation from stakeholders as the process continues forward. As outlined above in the Executive Summary and expanded upon here, these key areas include Outreach and Marketing, Security and Privacy, Defining Value, Sustainability Vision, and Governance Structure. Developing strategies, plans and possible solutions for these identified issues will assist WDH in building a clear roadmap for the development of a statewide HIE.

Key Area	Findings	Next Step Considerations
Outreach	The Web Survey results indicated low	Collaborative effort:
and	participation in Direct Trust, and a large number	Provide stakeholders with
Marketing	of participants stated that they were not	the opportunity to comment
	knowledgeable on EHR Incentive Programs.	and give feedback on all
	 Focus Group participants across all locations 	phases of an HIE
	expressed lack of knowledge or use of Direct	development.
	Trust.	Champions: Have a
	The majority of Focus Group participants and	representative for each
	Targeted Interview representatives did not know	region of the State speak on
	that there previously was a statewide HIE, and	the HIE and assist in
	in some cases, did not know about the existence	obtaining provider buy-in.
	of the THR Gateway.	Education: Inform and train
	Participants engaged in the prior statewide HIE	providers on HIE use and
	commented that providers were not educated	functions. In addition,
	enough on using the HIE and there was not	educate providers on HIT
	enough participation for the HIE to have value.	initiatives and incentives.
	Smaller practices noted that outreach and	Outreach: Schedule in-
	development of the HIE should include both	person time with providers
	small and large stakeholders.	and practices as needed,
	Focus Groups and Targeted Interview	with a focus on the rural
	participants have more interest in an HIE than	providers and practices.



Key Area	Findings	Next Step Considerations
	Web Survey participants.	
Security and Privacy	 Focus Group and Targeted Interview participants described their concern that electronic data is more likely to be exposed and used improperly. Patients may not want their data shared so broadly. There were suggestions from multiple participants that an HIE should have role-based access. 	 Require strict security standards from technology vendor. Consider roles and their minimum level of access to data required. Educate providers on how existing HIEs address and protect security and privacy concerns.
Defining Value	 Participants described different needs in their referral patterns, which cross state lines, and the clinical data they would like to exchange. There was a general consensus that HIE participation should not be mandated; rather, the HIE should demonstrate value to gain voluntary participation. The Web Survey results suggest multiple types of providers would like to exchange clinical data. Key features an HIE could bring include discharge summaries, medication history, clinical summaries, and test results. Other stakeholder groups, such as Public Health and Payers also see value in an HIE for population health management. Without ease of use and if workflow is disturbed, providers will be deterred from using the HIE. 	 Define business cases for different stakeholder groups. Include the functions most important to stakeholders in the requirements expected of a technology solution vendor. Provide an HIE connection interface option within a provider's existing EHR.
Sustainability Vision	 There was a general concern from all participants regarding the cost of an HIE and whether it could be sustainable. Multiple participants commented that costs are most burdensome to small clinics/practices and rural providers. The previous statewide HIE effort lacked a 	 Create a financial sustainability model that looks at initial and future costs. Be transparent with stakeholders by sharing information on the short-
	 sustainability model beyond federal funding. Participants made suggestions regarding technology solutions that would minimize costs, such as utilizing existing HIEs or cloud-based 	term and long-term financial sustainability plan. Consider different payment methodologies based on



Key Area	Findings	Next Step Considerations
	 Participants generally agreed that those who utilize the HIE and obtain value from it should pay into the HIE. The government should also be a source of funding for an HIE. 	practice size to not adversely impact small practices and rural providers. • Reduce cost by leveraging existing HIE architecture and/or selecting a cost conscience solution.
Governance Structure	 There was a general consensus that a government entity should have a limited role in managing an HIE. Subject matter experts, particularly in HIT, should be on the HIE board. There was no clear consensus regarding whether an HIE Governance Structure should take on a public, private, or public/private partnership model. Participants stated that an HIE board should include representatives from the different regions of the state. A participant engaged in the prior statewide HIE suggested a smaller board for more effective and efficient decision making. A participant suggested engaging state legislators early on in the process to obtain buyin. 	 Further research best practices in states with a successful statewide HIE. Continue to seek input from stakeholders on a governance structure that would best meet Wyoming's needs.



6. Appendix A: Supplementary Materials

6.1 Provider Web Survey – Results Summary



SurveySummary_0219 2016.xls

6.2 Focus Groups – Answers Matrix



6.3 Targeted Interviews – Stakeholder Questions





