Patient / Client Health Information Survey of Wisconsin’s Local Health Departments and Tribal Health Clinics, 2013

Wisconsin Department of Health Services
Division of Public Health
Office of Health Informatics
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FOREWORD

This report summarizes the findings of a 2013 survey of Wisconsin Local Health Departments and Tribal Health Clinics regarding their informatics activities. The Department of Health Services produced this publication, which was prepared in the Office of Health Informatics, Division of Public Health.

In the Office of Health Informatics, Bethany Bradshaw, an Applied Public Health Informatics Fellow, conducted the survey and compiled this report. Patricia Nametz edited the report. Draft review and comments were provided by staff in the Office of Health Informatics, Division of Public Health. The report was prepared under the supervision of Oskar Anderson, State Registrar, Vital Records Section and Director of the Office of Health Informatics; Dr. Henry Anderson, Chief Medical Officer and State Occupational & Environmental Disease Epidemiologist; and Milda Aksamitauskas, Section Chief, Health Analytics Section.

Additional health-related statistical information for Wisconsin is available through the Internet on the Department of Health Services website, at http://dhs.wisconsin.gov/stats/. Wisconsin Interactive Statistics on Health (WISH) is a data query system that allows users to obtain other data tailored to their specifications at http://dhs.wisconsin.gov/wish/.

Comments, suggestions, and requests for further information may be addressed to DHShealthstats@wisconsin.gov.

Suggested Citation:

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EXECUTIVE SUMMARY
In November 2013, the Wisconsin Department of Health Services (DHS) distributed a survey entitled “Patient/Client Health Information” to Wisconsin’s Local Health Departments (LHDs) and Tribal Health Clinics (THCs). This report will:
• Explain the purpose of the survey;
• Provide an overview of the survey questions and methodology;
• Summarize the survey results; and
• Provide suggestions for next steps for DHS and local public health.

RESULTS
Of the 99 Wisconsin LHDs and THCs, 58 responded to the survey. These responses were well distributed across the Division of Public Health (DPH) regions and represent county, city-county, and city LHDs, as well as THCs. LHDs and THCs continue to primarily use traditional mechanisms, namely fax and phone, for accessing externally housed patient/client health information (PHI). Health information exchange activities, such as secure messaging and participating in a Health Information Exchange, are limited. The Wisconsin Department of Health Services is LHDs’ and THCs’ most common health information exchange partner.

Paper systems remain by far the most common in-house PHI management system, and 60% of responding LHDs and THCs have no electronic health record (EHR) system for their PHI. Of the LHDs and THCs without EHR systems that see a potential value in EHRs, 60% have no plans to implement an EHR system. This suggests that many LHDs and THCs believe that the business case for investing in an EHR system is unclear, not feasible, or not compelling. EHR adoption varies most significantly across DPH regions and by LHD and THC level of service. LHDs and THCs identify a need for dedicated staffing for or training on EHR designing, customizing, and implementation.

RECOMMENDATIONS
LHDs and THCs vary considerably in their familiarity with EHR systems and health information exchange. LHDs and THCs could share and benefit from this diverse knowledge and experience through a LHD and THC Informatics community of practice or similar forum. The community of practice could also be a platform for LHDs and THCs to collaborate with organizations that specialize in informatics, such as Wisconsin’s federally designated Health IT Regional Extension Center (the Wisconsin Health Information Technology Extension Center, or WHITEC). There are several potential hosts for an LHD and THC informatics community of practice in Wisconsin.

The survey could also be expanded to capture LHDs’ and THCs’ relevant business processes, including assessing EHR return on investment and evaluating EHR systems. Adding “early adopter” LHD and THC profiles would further our understanding of their informatics activities. Questions about EHR adoption could also be included with the mandatory annual Local Health Department Survey under section 251.05, Wisconsin Statutes, whose results reflect responses from all Wisconsin LHDs.
PURPOSE OF THE SURVEY

Wisconsin is a home rule state, meaning that Wisconsin’s Local Health Departments (LHDs) and Tribal Health Clinics (THCs) operate with significant independence from the Wisconsin Department of Health Services (DHS). Consequently, Wisconsin LHDs and THCs vary greatly in the services that they provide and in their administrative functions. This survey explores these services and functions as they relate to patient/client health information (or personal health information (PHI)), which may include individually identifiable health information.

The purpose of this survey was to assess LHDs’ and THCs’ public health informatics capacity. Public health informatics can be defined as “the systematic application of information and computer science and technology to public health practice, research, and learning.”¹ Health informatics is also commonly referred to as eHealth. This survey asked LHDs and THCs about their use of health information exchange (HIE) as an element of informatics. The survey used the 2012 Minnesota Health Information Technology (HIT) Local Public Health Survey’s definition of HIE: “the electronic transmission of health-related information between organizations according to nationally recognized standards. Health information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.”²

This interest in LHDs’ and THCs’ informatics capacity was motivated by two factors: the first is the Medicare and Medicaid Electronic Health Record (EHR) Incentive Program (“Meaningful Use”), and the second is the Healthiest Wisconsin 2020 state health plan.

As Meaningful Use drives more health care providers to adopt electronic health records, LHDs and THCs may in turn modify their practices for capturing, storing, sharing, and using their patient/client health information. The Meaningful Use public health objectives for Stages 1 and 2 have significantly increased the amount of public health surveillance data that is available to LHDs and THCs, which may further motivate their transition to more sophisticated data management systems. In response to these changing clinical and public health data landscapes, LHDs and THCs are expected to move toward electronically exchanging patient/client health information through health information exchanges and other secure methods.

The latest Wisconsin state health plan highlights the importance of communication across health care settings and actors. One of Healthiest Wisconsin 2020’s Infrastructure Focus Areas is “access to high-quality health services” that are “coordinated across health, public health, and other care systems” (p. 5).³ Health information exchange is a promising option to facilitate this care coordination across diverse users, locations, and systems in public health and clinical settings.

In this time of great change and evolving expectations, this survey is an important first step to describing and monitoring the informatics activities, needs, concerns, and opportunities in Wisconsin LHDs and THCs.
SURVEY METHODOLOGY

DISTRIBUTION
An email invitation to participate in the survey was sent to all 88 Wisconsin Local Health Departments and 11 Tribal Health Clinics in October 2013. The email contained a description of the purpose and scope of the survey. The email also included a hyperlink to access the survey, which was deployed using Select Survey. Each LHD and THC was asked to identify a respondent with extensive programmatic knowledge of the LHD’s or THC’s activities. The survey was open for three weeks. A Word document version of the survey instrument can be found in Appendix A.

TOPICS
The survey touched on a wide array of topics concerning LHDs’ and THCs’ access to, management of, and use of PHI. The survey used a skip pattern logic; thus a respondent’s answers to certain questions would determine which questions were subsequently asked. For example, if a respondent indicated that his/her LHD or THC does not have an EHR system, this triggered a follow-up question about interest in implementing an EHR system.

The survey began with questions about the respondent and the respondent’s LHD or THC. Respondents provided their name, title, and email address, as well as the name of the LHD or THC where they work. Respondents specified the health services provided by their LHD or THC (primary and/or dental care). The survey then explored the following topics:

- LHD or THC use of PHI that resides in external providers’ record systems (both paper and electronic systems);
- Mechanisms to exchange (send and receive) PHI with other organizations;
- Internal systems to manage PHI (both paper and electronic systems);
- Other organizations with whom they electronically exchange PHI;
- Challenges to electronically exchanging PHI with other organizations;
- Familiarity with Meaningful Use; and
- Interest in using a Health Information Exchange.

Several questions and definitions in this survey originated in the Minnesota Department of Health’s (MDH) 2012 Minnesota Health Information Technology (HIT) Local Public Health Survey. Questions 11, 12, 13, 14, and 15 are from the MDH survey, with slight adjustments for a Wisconsin audience.
SURVEY RESULTS

CHARACTERIZING THE RESPONDENTS
Of the 99 Local Health Departments (LHDs) and Tribal Health Clinics (THCs) that received the survey, 58 completed the survey in the allotted three-week response window (59% response rate). Three of the 11 THCs completed the survey. Forty-four county LHDs, nine city LHDs, and two city-county LHDs completed the survey.

Chart 1 summarizes how respondents self-identified their roles in a multi-select question. Many respondents provided two titles to describe their position.

![Chart 1. Self-identified Respondent Title(s) (58 LHDs and THCs reporting)](chart)


Survey responses for city and county LHDs were well distributed across the five DPH regions, as shown in Chart 2.
The 55 responding city and county LHDs vary greatly in their jurisdictional populations. Jurisdictional populations range from around 4,000 people to almost 500,000. Six respondents represented LHDs with jurisdictional populations under 15,000; 12 had populations of 15,000-19,999; 20 had populations of 20,000-59,999; and the remaining 17 LHDs have populations of 60,000 and above.

Among all 58 reporting LHDs and THCs, 50% provide only primary care, 26% provide both primary and dental care, and 24% provide neither primary nor dental care. The survey did not ask about the provision of other LHD and THC services.

ACCESSING EXTERNAL PHI AND EHR ADOPTION
Thirty-eight (66%) of all responding LHDs and THCs reported they regularly (defined as at least once a month) access PHI residing in an external provider’s paper or electronic health record (EHR) system. Table 1 shows a breakdown of LHDs’ and THCs’ access to external PHI and their adoption of any kind of EHR system by the type of care the site provides (primary care only, both primary and dental care, or neither primary nor dental care).

As one might expect, LHDs and THCs providing neither dental nor primary care have a much lower rate of accessing external PHI. Interestingly, those same LHDs and THCs not providing dental or primary care have a higher EHR adoption rate than LHDs and THCs providing primary care only and approximately the same EHR adoption rate as LHDs and THCs providing primary and dental care.
Among LHDs, use of externally housed PHI appears to be correlated with the population of the jurisdiction (Table 2). There is an inverse correlation between jurisdictional population and an LHD’s likelihood to access PHI originating in external care settings. Table 2 shows there does not appear to be a significant variation in likelihood of external PHI access by LHD staffing rate per 100,000 residents or per capita revenue. Similarly, external PHI access is fairly constant across the three Level of Services categories; however, the small sample size of Level 1 LHDs (n=3) weakens the validity of these findings. There is substantial regional variation, with the lowest external PHI access rate in the Northeastern region (43%) and the highest in the Southern region (78%).

Table 2 also presents EHR adoption rates for LHDs. The rates for using any kind of EHR system are fairly consistent among the different categories of jurisdictional population, staff-to-population ratios, and per capita revenue; the EHR adoption rate for those groups hovers around 40%. There is substantial variation in EHR adoption rates only when considering the LHDs by region: Northern LHDs have the lowest EHR adoption rate (11%) while Western LHDs have the highest (55%). Service Levels 2 and 3 LHDs have EHR adoption rates of 45% and 33%, respectively, but none of the three reporting Level 1 LHDs has an EHR system.

Of the three responding THCs, all three access external PHI and two have EHR systems.

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The Levels of Services are defined by Wisconsin Administrative Code, “DHS 140, Required Services of Local Health Departments.” Level 1 LHDs provide the basic, required services, while Levels 2 and 3 provide additional services.
Table 2: Summary of City and County LHDs’ Access to External PHI and EHR Adoption (55 LHDs reporting)

<table>
<thead>
<tr>
<th>Jurisdictional Population</th>
<th>Accesses PHI in external systems</th>
<th>Has an EHR system (custom, vendor, and/or open source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 15,000 (n=6)</td>
<td>83%</td>
<td>33%</td>
</tr>
<tr>
<td>15,000-19,999 (n=12)</td>
<td>58%</td>
<td>33%</td>
</tr>
<tr>
<td>20,000-59,999 (n=20)</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>60,000+ (n=17)</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Staff per 100,000 population</td>
<td>Under 3.0 (n=14)</td>
<td>50%</td>
</tr>
<tr>
<td>3.0-4.9 (n=17)</td>
<td>82%</td>
<td>35%</td>
</tr>
<tr>
<td>5.0-7.9 (n=13)</td>
<td>54%</td>
<td>38%</td>
</tr>
<tr>
<td>8.0+ (n=11)</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Per capita revenue</td>
<td>Under $8.00 (n=15)</td>
<td>60%</td>
</tr>
<tr>
<td>$8.00- 14.99 (n=13)</td>
<td>62%</td>
<td>31%</td>
</tr>
<tr>
<td>$15.00- 24.99 (n=16)</td>
<td>63%</td>
<td>31%</td>
</tr>
<tr>
<td>$25.00+ (n=11)</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Region</td>
<td>Northern (n=9)</td>
<td>67%</td>
</tr>
<tr>
<td>Northern (n=13)</td>
<td>43%</td>
<td>36%</td>
</tr>
<tr>
<td>Southern (n=11)</td>
<td>78%</td>
<td>33%</td>
</tr>
<tr>
<td>Southeastern (n=11)</td>
<td>67%</td>
<td>50%</td>
</tr>
<tr>
<td>Western (n=11)</td>
<td>73%</td>
<td>55%</td>
</tr>
<tr>
<td>Level of Services</td>
<td>Level 1 (n=3)</td>
<td>67%</td>
</tr>
<tr>
<td>Level 2 (n=31)</td>
<td>65%</td>
<td>45%</td>
</tr>
<tr>
<td>Level 3 (n=21)</td>
<td>62%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Sources: Wisconsin Department of Health Services, Office of Health Informatics, Local Health Department and Tribal Health Clinics Survey: Patient/Client Health Information, 2013. Population, staffing, and revenue data were compiled from the Wisconsin Local Health Department Survey, 2011. Level of services data was taken from unpublished Chapter 140 reviews.

Note: Given the small sample size of THCs, their external PHI access and EHR adoption rates are presented separately on the preceding page (see narrative).
Chart 3 presents the reasons why the 38 LHDs and THCs access external PHI. (Note: this was a “select all that apply” question.) The most popular reasons were referrals (89%, n= 34) and follow-up care (84%, n= 32).

Chart 3. Reasons to Access External PHI (38 LHDs and THCs responding)

Several LHDs and THCs wrote additional reasons for their external PHI access: case management, communicable disease investigations, postpartum care, and fetal/infant mortality review.

Of those 38 LHDs and THCs that access external PHI, the number of LHD or THC staff with clearance to access external PHI is as follows: 21% (n= 8) report “1 to 3” staff members have clearance, 32% (n= 12) report “4 to 6” staff members have clearance, and 47% (n=18) report “7 or more” staff members have clearance.

In another multi-select question, the 38 LHDs and THCs that access external PHI were asked to specify the mechanism(s) by which they obtain this external PHI. Chart 4 presents those results. Fax and phone were the most frequent answers, with nearly all of the LHDs and THCs reporting they use fax (95%, n= 36) and many using phone (87%, n= 33) to get externally housed PHI. The write-in “other” answers were for standard U.S. mail and Wisconsin DHS public health reporting systems.

INTERNAL PHI MANAGEMENT SYSTEMS

All 58 LHDs and THCs reported on their primary system “to contain and organize patient health information in-house.” Chart 5 presents the responses to this question. Seventy-four percent (n=43) of LHDs and THCs answered that their primary PHI management system is paper records. The next most frequent answer was a vendor-built EHR system, with 14% (n=8) of LHDs and THCs selecting that response. “Basic software” was defined as programs like Microsoft Word, Access, and Excel.
All 58 LHDs and THCs were subsequently asked to identify all PHI systems they use, including their primary system. Paper records remained the most frequently reported system, with 97\% (n=56) of LHDs and THCs reporting they use paper records for some PHI management functions. Chart 6 presents the results to this multi-select question.
LHDs and THCs with a vendor-built EHR were asked to specify their vendor. The most popular vendor-built EHR system is CHAMPS, which is used by seven responding LHDs and THCs. Other EHR vendors reported were Allscripts, CMHC, Harmony, American Data, Centricity, Clinical Data Solutions, RECIN, Atlas Development Corporation, and Netsmart Technologies.

Thirty-five (60%) of the LHDs and THCs reported that they have no EHR system of any kind; they were asked several follow-up questions to assess their interest in and plans for obtaining an EHR system. The first question asked if they saw a need for an EHR system. Sixteen (46%) of these non-EHR LHDs and THCs reported they do see a need for an EHR system; four (11%) said they did not see a need for an EHR system; and the remaining 15 (43%) were undecided.

The 31 LHDs and THCs that are currently without an EHR system and that either see a need for obtaining one or are undecided on the matter were asked a follow-up question regarding their plans for implementing an EHR system. The majority of these LHDs and THCs (61%, n= 19) stated they have no plans for implementing an EHR system. Chart 7 presents the full results for this question.
HEALTH INFORMATION EXCHANGE

All 58 LHDs and THCs were asked about their current health information exchange (HIE) activities. The question in its entirety read: “Which of the following health information exchange activities are currently used by your local health department to **electronically exchange** health information (send or receive) with other organizations, assuming appropriate consents have been obtained. Other organizations include DHS and federal programs” (emphasis in the original).

HIE was defined as “the electronic transmission of health-related information between organizations according to nationally recognized standards. HIE does not include paper, mail, phone, fax, or standard/regular email exchange of information.” This was a multi-select question. The most frequent answer was “Receive secure messages,” with half of LHDs and THCs (n=29) reporting that activity. Fifteen LHDs and THCs (26%) reported they do not engage in any HIE. Chart 8 shows all of the answers to this question.
Eight respondents selected “Other” and noted that they use DHS’s Wisconsin Electronic Disease Surveillance System (WEDSS) and Wisconsin Immunization Registry (WIR) for HIE.

Chart 8. Health Information Exchange Activities
(58 LHDs and THCs reporting)


Chart 9 provides an analysis of HIE activities by EHR adoption status. The rates of receiving secure messages, not engaging in HIE, and “do not know” are similar for LHDs and THCs with and without EHR systems. Having an EHR system is associated with a higher rate of sending secure messages and securely querying patient records from other providers/facilities/organizations.
All 58 LHDs and THCs also reported on their HIE partners, meaning the organizations from which they received health information via HIE and the organizations to which they sent health information via HIE. Chart 10 (page 19) presents these results. The most common HIE partner for sending and receiving information via HIE was DHS. In general, LHDs and THCs receive health information from more organizations than they send health information to. Of the 58 reporting LHDs and THCs, 15 LHDs and THCs (26%) reported they do not receive any health information via HIE, and 15 LHDs and THCs (26%) reported they do not send any health information via HIE; however, these were not the same 15 LHDs and THCs for both questions.

The 58 LHDs and THCs specified their top three challenges to HIE with other organizations. As seen in Chart 11 (page 20), insufficient information on exchange options (48%, n= 28), unclear value for return on investment (38%, n=22) and lack of access to technical support (34%, n= 20) were the most commonly cited challenges. Of the 14 LHDs and THCs that said “HIPAA, privacy, or legal concerns” were challenges, none reported that these concerns relate to health information originating in another state.
The 19 LHDs and THCs that selected “Competing priorities” as a challenge to adopting HIE were asked to list these competing priorities. Most of these answers stressed staffing and funding shortages and insufficient staff education. Three respondents said their PHI management needs are met by existing federal and DHS databases, and thus they do not need to engage in additional HIE. Another LHD reported they are struggling with multiple internal EHR systems that are not coordinated. One LHD also described transitioning to a new EHR system as a competing priority that detracted from its ability to do HIE.

There were eight write-in answers for the top challenges to HIE with other organizations. Five noted insufficient funding to explore and develop HIE activities. Two write-in answers stated there was no need for the LHD to engage in HIE because either the LHD is transitioning out of providing the services that would merit HIE, or WEDSS and WIR meet the LHD’s needs. The last write-in answer was that the LHD’s HIE activities have been limited by its area health systems’ reluctance to share information.
Chart 10. Health Information Exchange (HIE) Partners (58 LHDs reporting)

EHR-related Staffing Needs
All 58 LHDs and THCs were asked to select their top three needed EHR-related skills and/or roles, including both adding new staff and developing current staff. Half of the LHDs and THCs (50%, n=29) said they need “a person to help design, maintain, and customize an EHR for use” and the second most commonly selected answer (45%, n= 26) was a “person to lead the implementation of an EHR.” Chart 12 summarizes the responses to this question. There were several write-in answers related to funding, which is a general staffing need and not presented in Chart 12.

Chart 12. Needed EHR-related Skills and Roles
(58 LHDs and THCs reporting)

<table>
<thead>
<tr>
<th>EHR-related skills and roles</th>
<th>Number of LHDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person to design, maintain, and customize EHR</td>
<td>29</td>
</tr>
<tr>
<td>Person to lead implementation</td>
<td>26</td>
</tr>
<tr>
<td>Person to train staff on EHR</td>
<td>22</td>
</tr>
<tr>
<td>Person to manage and process the data</td>
<td>21</td>
</tr>
<tr>
<td>Person to develop and write EHR reports</td>
<td>15</td>
</tr>
<tr>
<td>Person to get EHR ready for use</td>
<td>8</td>
</tr>
</tbody>
</table>


Meaningful Use and Health Information Exchanges
All 58 LHDs and THCs were asked to classify their familiarity with the Medicare and Medicaid EHR Incentive Programs, more commonly known as Meaningful Use. Responses are presented in Chart 13. “I know a little about it” and “I have heard of it but do not understand it” were the most frequent responses, each with 36% (n= 21) of total answers.
A subsequent question asked LHDs and THCs if they would like to receive more information from DHS about Meaningful Use. Seventy-four percent (n=43) said yes, and 26% (n=15) said no.

The final survey question assessed all 58 LHDs’ and THCs’ interest in learning more about using a Health Information Exchange to access externally housed PHI. A Health Information Exchange was defined as “an organization that facilitates the electronic transmission of health-related information between organizations according to nationally recognized standards. This electronic transmission does not include paper, mail, phone, fax, or standard/regular email exchange of information.” Ninety percent (n=52) of LHDs and THCs said yes, and 10% (n=6) said no.

**RESPONDENT COMMENTS**

Respondents were invited to provide comments at the end of the survey; 16 LHD respondents did so. These comments are summarized below:

- LHDs do not have sufficient financial resources to invest in the necessary staffing and software for increased HIE activities and/or an EHR system.
- The business case for EHR implementation is unclear—not all LHDs provide the services that would justify having an EHR system.
- Patients, LHDs, and local health providers are worried about data security.
- DHS should provide funding for updating or implementing EHR systems.
- LHDs need more information about how Meaningful Use may apply to them depending on the services they offer.
- LHDs need more information about their options for EHR systems based on the size of the LHD and the services offered.
- Clarify SPHERE’s role as an EHR system.
- The difficulties of having several internal EHR systems.
- The local health providers for the uninsured do not have EHR systems.
- The role of Health Information Organizations for LHDs.
RECOMMENDATIONS

CREATING A COMMUNITY OF PRACTICE

The survey findings suggest LHDs and THCs need more information about their options for EHR systems and HIE. Since Wisconsin LHDs and THCs are at many different stages in their EHR adoption and HIE activities, an informatics community of practice could be established to share lessons learned among all LHDs and THCs. Such a network would permit LHDs and THCs to share their questions and experiences with various HIE mechanisms and partners.

A community of practice could explore the following topics:
- Exploring business processes and identifying areas for improvement
- Considering the return on investing in a new or updating an existing EHR system
- How to document the EHR selection process
- Choosing an EHR system while considering both the LHD’s or THC’s business needs and federal EHR certification requirements
- Consolidating multiple EHR systems
- How to meaningfully use an EHR system in practice
- HIE mechanisms: questions and experiences
- Other topics from LHD and THC users of EHR

Several LHDs reported they do not see a need for investing in an EHR system. Further research is needed to determine if these LHDs are aware of the services offered to them by EHRs and if they are meeting their clinical needs with their current information management systems. Certain EHR systems may be better suited for community-level services, which LHDs will continue to provide even if they reduce primary care services. It is possible there is not currently a clear business case for all LHDs to adopt an EHR system, and the community of practice would be an ideal environment to explore this further.

This community of practice would also serve as a repository for informatics-related materials that are specifically targeted to LHDs and THCs. One existing tool that may be helpful is the Public Health Informatics Institute’s Electronic Health Record Requirements for Public Health Agencies. This 2011 document outlines the “case management and clinical services business processes” that LHDs and THCs may wish to consider for EHR system implementation. Such a tool may help LHDs and THCs to determine if their business processes merit an EHR system, as well as to assess the adequacy of an EHR system for their needs. Similar tools for LHDs and THCs in the process of selecting or upgrading to federally certified EHR systems can be found at http://www.healthit.gov/providers-professionals/ehr-implementation-steps/step-3-select-or-upgrade-certified-ehr. LHDs and THCs may not be aware of these resources and would benefit from DHS sharing them.

All survey respondents received information from DHS about Meaningful Use as it pertains to LHDs and THCs (Appendix B) and about Health Information Exchange organizations for public health (Appendix C).
There are several potential hosts for the proposed community of practice. Possible hosts include the Wisconsin Association of Local Health Departments and Boards, the Wisconsin Public Health Association, the University of Wisconsin School of Medicine and Public Health, the American Public Health Association, and the National Association of County and City Health Officials. Alternatively, DHS could host a SharePoint site where LHDs and THCs post and access this content in a user-run platform.

**FOSTERING COLLABORATION**

Several LHD respondents mentioned their local health systems are reluctant to share their PHI, which in turn limits the LHDs’ HIE activities. DHS should encourage more collaborative information sharing among the many users of PHI. This may entail encouraging LHDs and THCs to implement only those EHR systems that meet federal standards.

**EHR SUPPORT**

Many survey respondents stressed their need for new staff or more training for existing staff for basic, preliminary EHR-related tasks. Given the wide ranges of both EHR systems being used and EHR experience, it is not feasible for DHS to provide a “one-size-fits-all” approach to EHR training for existing staff.

Many LHDs and THCs may not be aware of Wisconsin’s federally designated Health IT Regional Extension Center, which is called the Wisconsin Health Information Technology Extension Center (WHITEC). WHITEC is an operating division of MetaStar, a nonprofit corporation and the designated quality improvement organization (QIO) in Wisconsin. WHITEC’s purpose is to help “health care practices wanting to implement and achieve meaningful use of electronic health records.” WHITEC helps a wide range of practices, which may include LHDs and THCs depending on the services they provide.

**CONNECTING WITH WISHIN**

Many survey respondents indicated their interest in joining a Health Information Exchange (HIE). Wisconsin’s state-designated HIE is the Wisconsin Statewide Health Information Network (WISHIN). WISHIN’s community health record (WISHIN Pulse) will “provide an aggregated summary view of a patient’s health information from all providers who have seen the patient.” WISHIN is available for all Wisconsin providers, including providers at LHDs and THCs.

**SURVEY IMPROVEMENTS**

This survey is DHS’s first attempt to capture information about LHD and THC public health informatics activities. The survey is an important opportunity for DHS to help LHDs and THCs improve their informatics capacity and their clinical care delivery. To improve the survey response rate, this survey could be added to the mandatory annual Wisconsin Local Health Department Survey under section 250.05 requirements. If this survey remains voluntary, further analysis should compare the administrative characteristics of respondents and non-respondents.

Based on these survey results, several additional questions could be asked of LHDs and THCs with EHR systems. These questions are:
• Did you use any tools to determine if an EHR system would meet your business/clinical process needs? If so, which tool(s)?
• Have you conducted an evaluation of your EHR system to determine if it has improved your business/clinical process needs?

DHS also could profile “early adopters,” meaning the LHDs and THCs that are primarily and/or exclusively using EHR systems to manage their in-house PHI. These profiles could include:
• How they decided to invest in an EHR;
• How they funded EHR implementation;
• How they addressed staffing and training for the EHR system;
• What impact the EHR has had on operations; and,
• What their plans are for expanding or improving their EHR system.
REFERENCES


5. Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment (unpublished data), Chapter 140 reviews.


Local Health Departments and Tribal Health Clinics Survey: Patient/Client Health Information

Note: these numbers do not correspond to the numbers in the Select Survey version because the Select Survey numbers incorporate the skip logic and thus change based on survey answers.

I. Name of local health department:

II. Name, email address, and title of the person who filled out the survey:

III. Survey questions
1. Does your local health department provide the following care
   - Primary care (including home health care, immunizations, family planning, STI screening)
   - Dental care
   - Both primary and dental care
   - We do not provide primary or dental care

2. Does your local health department regularly (at least once a month) get patient/client health information from an external provider’s record system (electronic or paper record systems)?
   - An external provider is a hospital, clinic, or doctor’s office that is separate from your local health department. An external provider is not Medicaid or DHS programs like SPHERE or WEDSS.
   - Yes
   - No
   - If yes, go on to question 3
   - If no, skips to question 6

3. Please select the reasons why you access external patient/client health records: (check all that apply)
   - Referrals
   - Assessments
   - Follow-up care
   - Transfer of care
   - Update patient/client contact information
   - Other: ______________

4. How many people from your local health department have clearance to access these external patient/client health records? Please include anyone whose position may require access to external patient/client health records, even if they do not regularly access these records.
   - 1-3
   - 4-6
   - 7 or more

5. How does your local health department access patient/client health information in external providers’ record systems (electronic or paper systems)? (check all that apply)
   - Important definitions for your answer:
     - Health information exchange or HIE means the electronic transmission of health related information between organizations according to nationally recognized standards. Health
Information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.

Secure messaging is an approach to protect sensitive data using industry standards. It includes security features that go beyond typical email to (1) protect the confidentiality and integrity of sensitive data transmitted between systems or organizations and (2) provides proof of the origin of the data. Secure messages are encrypted bi-directionally and are stored on network or internet servers that are protected by login. Secure messaging functionality may be integrated with the EHR or maintained in a system separate and distinct from the EHR.

- Phone
- Fax
- Remote access to external electronic health record (EHR) system
- Health information exchange (Ex. WISHIN)
- Regular email (not secure messaging)
- In-person review of original patient health records
- Secure messaging
- Other: ______________________

6. What is your local health department’s primary system to contain and organize patient health information in-house? (select only one)

**Important Definition for your answer:**

An electronic health record (EHR, also known as an electronic medical record or EMR) is a longitudinal, digital record of a patient’s care. This record may include identifiable information about the patient such as demographics, medical conditions, procedural history, allergies, and medications. An EHR system houses the individual EHRs.

- Paper records
- Basic software (Ex. Microsoft Word, Access, Excel)
- A federally provided system (Ex. Epi Info)
- A custom built electronic health record (EHR) system (i.e. the system was designed in-house)
- A vendor built electronic health record (EHR) system (i.e. an “out of the box” system, potentially with some local customization)
- An open source electronic health record (EHR) system (i.e. software whose source code is freely available and modifiable)

7. Select all system or systems that your local health department currently uses to contain and organize patient health information in-house. (check all that apply)

**Important Definition for your answer:**

An electronic health record (EHR, also known as an electronic medical record or EMR) is a longitudinal, digital record of a patient’s care. This record may include identifiable information about the patient such as demographics, medical conditions, procedural history, allergies, and medications. An EHR system houses the individual EHRs.

Only include systems that are currently operational. Note: if you are only using one system, your answer to this question may be the same as your answer to the preceding question.
☐ Paper records
☐ Basic software (Ex. Microsoft Word, Access, Excel)
☐ A federally provided system (Ex. Epi Info)
☐ A custom built electronic health record (EHR) system (i.e. the system was designed in-house)
☐ A vendor built electronic health record (EHR) system (i.e. an “out of the box” system, potentially with some local customization)
☐ An open source electronic health record (EHR) system (i.e. software whose source code is freely available and modifiable)

➢ If selected a vendor built EHR system, go to question 8
➢ Otherwise, go to question 9

8. Please specify your electronic health record (EHR) vendor and version (product name and number).
   a. Vendor name: ____________________________
   b. Version (product name and number): __________________________

➢ Go to question 11

9. Do you see a need for your local health department to have an electronic health record (EHR) system?
   ☐ Yes
   ☐ No
   ☐ Undecided

➢ If selected yes or undecided, go on to question 10
➢ If selected no, skip to question 11

10. What are your local health department’s plans for implementing an electronic health record (EHR) system?
    ☐ We have selected an EHR system but have not begun implementation
    ☐ We have selected an EHR system and are implementing it now
    ☐ We are in the process of researching and/or selecting an EHR system
    ☐ We have no plans to implement an EHR system

11. Which of the following health information exchange activities are currently used by your local health department to electronically exchange health information (send or receive) with other organizations, assuming appropriate consents have been obtained. Other organizations include DHS and federal programs. [check all that apply]

   Important definitions:
   Health information exchange or HIE means the electronic transmission of health related information between organizations according to nationally recognized standards. Health information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.
   Secure messaging is an approach to protect sensitive data using industry standards. It includes security features that go beyond typical email to (1) protect the confidentiality and integrity of sensitive data transmitted between systems or organizations and (2) provides proof of the origin of the data. Secure messages are encrypted bi-directionally and are stored on network or internet servers that are protected by login. Secure messaging functionality may be integrated with the EHR or maintained in a system separate and distinct from the EHR.
☐ Send secure messages or attachments to providers/facilities/organizations (e.g. during referrals, transitions of care)
☐ Receive secure messages or attachments from providers/facilities/organizations (e.g. information from specialists, hospitals to whom your patients were referred)
☐ Securely query for patient records from providers/facilities/organizations
☐ Do not know
☐ Do not exchange with other organizations
☐ Other: ________________________

12. Does your local health department **electronically receive** health information **via health information exchange** from any of the organizations listed below? *(check all that apply.)*

*Health information exchange or HIE means the electronic transmission of health related information between organizations according to nationally recognized standards. Health information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.*

☐ County/city departments /program outside or inside jurisdiction but outside local health department
☐ Health or county-based purchasing plans
☐ Home Health Agencies
☐ Hospitals
☐ Jail/Correctional Health
☐ Laboratories
☐ Local health departments outside jurisdiction
☐ Long Term Care Facilities
☐ Wisconsin Department of Health Services (EX. WEDSS, WIR, SPHERE)
☐ Pharmacies
☐ Primary Care Clinics
☐ Wisconsin Statewide Health Information Network (WISHIN)
☐ Other: ________________________
☐ Do not electronically receive health information via health information exchange

13. Does your local health department **electronically send** health information **via health information exchange** to any of the organizations listed below? *(check all that apply.)*

*Health information exchange or HIE means the electronic transmission of health related information between organizations according to nationally recognized standards. Health information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.*

☐ County/city departments /program outside or inside jurisdiction but outside local health department
☐ Health or county-based purchasing plans
☐ Home Health Agencies
☐ Hospitals
☐ Jail/Correctional Health
☐ Laboratories
☐ Local health departments outside jurisdiction
☐ Long Term Care Facilities
☐ Wisconsin Department of Health Services (EX. WEDSS, WIR, SPHERE)
☐ Pharmacies
☐ Primary Care Clinics
☐ Wisconsin Statewide Health Information Network (WISHIN)
☐ Other: _______________________
☐ Do not electronically send health information via health information exchange

14. Which EHR-related skills and/or roles are in greatest need within your organization? This includes adding new staff or developing the current staff. (select up to 3)
☐ A person to lead the implementation of an EHR
☐ People to develop and write reports from an EHR
☐ People to help design, maintain and customize an EHR for use in our facility
☐ People to get the EHR ready for use (e.g. entering orders, patient information, etc.)
☐ People to manage and process the data, information, and knowledge (e.g. informatics nurse or public health professional)
☐ People to train staff on how to use the EHR
☐ Other (specify): _______________________

15. Indicate the largest challenges related to electronic exchange of health information via health information exchange with outside organizations: (select up to 3)
Health information exchange or HIE means the electronic transmission of health related information between organizations according to nationally recognized standards. Health information exchange does not include paper, mail, phone, fax, or standard/regular email exchange of information.

☐ Competing priorities
☐ Do not know exchange partners’ ability to electronically exchange health information.
☐ Exchange partners do not have the ability to electronically exchange health information.
☐ HIPAA, privacy or legal concerns
☐ Inability of our organization’s EHR system to generate/receive electronic messages/transactions in standardized format
☐ Insufficient information on exchange options available
☐ Lack of or access to technical support or expertise
☐ Limited broadband/internet access
☐ Subscription rates for exchange services are too high
☐ Unclear value on return on investment (ROI)
☐ Other (specify): _______________________

If you indicated competing priorities, please briefly list or explain the competing priorities:
___________________________________________________

➢ If selected “HIPAA, privacy or legal concerns,” go to question 16
➢ If you selected “Competing priorities,” go to question 17
➢ Otherwise, go to question 18
16. Are these “HIPAA, privacy, or legal concerns” because the health information originates in another state?
   - [ ] Yes, specify state(s): __________________
   - [ ] No

17. Please briefly list or explain the competing priorities:
   [free text comments box]

IV. Meaningful Use
18. How familiar would you say you are with Meaningful Use, which is also known as the Medicare and Medicaid EHR Incentive Program?

   Meaningful Use is a federal incentive program. Meaningful Use provides payments to eligible professionals, eligible hospitals, and critical access hospitals that adopt certified EHR technologies and demonstrate certain EHR capabilities. These EHR capabilities include reporting to some public health registries.

   - [ ] I have never heard of it
   - [ ] I have heard of it but do not understand it
   - [ ] I know a little about it
   - [ ] I feel comfortable explaining it to my staff

19. Would you like to receive more information from DHS about Meaningful Use?
   - [ ] Yes
   - [ ] No

V. WISHIN
20. Would you be interested in learning more about accessing external patient health information through a state or national Health Information Exchange?

   A Health Information Exchange is an organization that facilitates the electronic transmission of health related information between organizations according to nationally recognized standards. This electronic transmission does not include paper, mail, phone, fax, or standard/regular email exchange of information.

   - [ ] Yes
   - [ ] No

VI. Submission screen

Thank you for taking this survey! Your answers will help DHS better respond to the needs of local health departments.

DHS will send information on Meaningful Use and your Health Information Exchange options to the email address that you provided in this survey. DHS will send notifications to that email address of any upcoming webinars or information sessions about the topics discussed in this survey. DHS will also notify that email address when the report summarizing survey results is available.

If you have any questions about this survey or would like to provide more information, please email Bethany Bradshaw at Bethany.Bradshaw@wisconsin.gov.
Overview of Meaningful Use for Wisconsin’s Local Health Departments

Background
The Centers for Medicare and Medicaid Services (CMS) introduced the Medicare and Medicaid EHR Incentive Programs to encourage the adoption of electronic health records (EHR) and to improve clinical outcomes. These programs are commonly referred to as Meaningful Use because they are tied to “meaningful use” of federally certified EHR technologies (CEHRT). Providers demonstrate meaningful use by adopting CEHRT and meeting objectives that are defined by CMS. The program targets two groups of providers: Eligible Professionals and Eligible Hospitals (including Critical Access Hospitals).

Meaningful Use is divided into three stages, each with a different focus and different mandatory “core” objectives and optional “menu set” objectives. Eligible Professionals and Eligible Hospitals have different objectives for each stage. Each stage also includes public health reporting objectives, which will increase the information that public health programs receive. This is intended to strengthen public health programs by improving their capacity for disease surveillance and disease prevention.

Eligibility
Clinical staff at local health departments that provide health services for either Medicare or Medicaid beneficiaries and receive payments from Medicare or Medicaid may be eligible to participate in either the Medicare or Medicaid EHR Incentive Program. Under the Medicare program, physicians are eligible. Under the Medicaid program, physicians, dentists, nurse practitioners, nurse midwives and certain physician assistants are eligible if at least 30 percent of their patient volume is enrolled in Title 19 Medicaid. Medicare payment reductions will begin in 2015 for providers who are eligible for the Medicare Incentive Program but decide not to participate. Eligible Professionals who meet the Meaningful Use requirements could receive up to $63,750. To participate, the Eligible Professional has to use CEHRT.

Stages 1 and 2 Public Health Objectives
All public health objectives are subject to the public health agency’s capacity to receive the data and to applicable state and local law. Stage 3 objectives have not been finalized.

Stage 1 Public Health Objectives
Stage 1 public health objectives are all menu set objectives; however, providers must choose at least one. A provider meets a Stage 1 objective by conducting a test of electronic data transmission with the public health program. Providers are expected to establish ongoing data submission if the test is successful.

Stage 2 Public Health Objectives
Stage 2 public health objectives are a mix of core and menu set objectives. For Stage 2, providers are required to register with the Wisconsin Department of Health Services, Division of Public Health (DPH), within 60 days of the beginning of their EHR reporting period. Stage 2 promotes ongoing data submission, which is the ability of a provider to regularly report data from its CEHRT to a public health program using the Program Year 2014 standards and specifications for the entire reporting period.

A provider can meet the ongoing data submission requirement by registering with DPH within 60 days of the start of their EHR reporting period and meeting one of the following:
• Achieve ongoing data submission in Stage 1 and satisfy the Stage 2 Meaningful Use technical standards and specifications for ongoing data submission.
• Achieve ongoing data submission during Stage 2.
• Be in the process of achieving ongoing data submission at the end of Stage 2.
• Be in a queue awaiting an invitation from DPH to begin the onboarding process.

A provider will not meet the ongoing data submission requirement if they fail to do the following:
• Register with DPH within 60 days of the start of their EHR reporting period.
• Respond within 30 calendar days to requests by DPH for action on two separate occasions.

Summary of Stage 1 and Stage 2 Public Health Meaningful Use Objectives for Wisconsin Providers

<table>
<thead>
<tr>
<th>Public Health Objective</th>
<th>Stage 1</th>
<th>Stage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eligible Professionals</td>
<td>Eligible Hospitals</td>
</tr>
<tr>
<td>Immunizations: DPH is accepting data sent to the Wisconsin Immunization Registry (WIR)</td>
<td>Menu</td>
<td>Menu</td>
</tr>
<tr>
<td>Reportable Lab Results: DPH is accepting data through the State Lab of Hygiene.</td>
<td>N/A</td>
<td>Menu</td>
</tr>
<tr>
<td>Syndromic Surveillance: DPH is accepting data sent directly to BioSense 2.0 or via WISHIN to BioSense 2.0. DPH can only accept data from certain Eligible Professionals, but all are encouraged to register.</td>
<td>Menu</td>
<td>Menu</td>
</tr>
<tr>
<td>Cancer: DPH is accepting data through the Wisconsin Cancer Reporting System (WCRS).</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Specialized Registry: DPH has not identified any specialized registries ready to receive clinical data electronically from CEHRT.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

What is the role of the Wisconsin Division of Public Health?
DPH currently has four roles in Meaningful Use:
  1) Publicize the capacity of DPH public health programs to receive data.
  2) Register providers.
  3) Onboard providers.
  4) Acknowledge test data submission and ongoing data submission when achieved.

What is the role of Wisconsin Local Health Departments?
Please join DPH in helping providers meet these public health objectives, including providers within your department if applicable. With your support, providers can strengthen Wisconsin’s public health programs while achieving some of their Meaningful Use objectives. Your role is to guide Meaningful Use participants to DPH’s Public Health Meaningful Use website at www.dhs.wisconsin.gov/ehealth/PHMU/index.htm. This website contains information about how to register with DPH public health programs, as well as up-to-date information about DPH program capacity to receive data from providers.

If providers in your community have specific questions that are not answered on the website, they can email DHS eHealth at ehealth@wisconsin.gov. You can also send your questions or concerns about Meaningful Use to DHS eHealth at ehealth@wisconsin.gov.

Resources:
• http://www.dhs.wisconsin.gov/ehealth/PHMU/index.htm
• http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives
Health Information Exchanges for Wisconsin’s Local Health Departments

What is a Health Information Exchange?
There are two meanings to the phrase “health information exchange”:
1) **Verb**: The electronic sharing of health information among organizations
2) **Noun**: An organization that provides services to enable the electronic sharing of health information

This fact sheet is about Health Information Exchange organizations (HIEs), which are also called Health Information Organizations or HIOs. HIEs facilitate and expedite the electronic exchange of health information between participating organizations according to nationally recognized standards. This health information is securely exchanged according to state and federal privacy regulations.

Why would a Local Health Department use a Health Information Exchange?
HIEs have been targeted primarily at clinical health systems, but there is growing interest in harnessing HIE functionalities for public health. Participating Local Health Departments (LHD) have access to health information from other electronic health record (EHR) systems that reside in or are accessible through the HIE. HIEs improve the completeness, efficiency, and timeliness of health information exchange. The full utility of an HIE depends on the health services that an LHD offers.

What are some Public Health Use Cases for HIE participation?
**Mandated reporting of lab results or disease diagnoses**: An LHD could send all reportable results or diagnoses that they collect to an HIE, which would in turn submit that data to state-level public health programs.
- Syndromic surveillance is the only Wisconsin public health reporting program that currently supports HIE data submission. In coming years, more Wisconsin public health reporting programs will be able to receive HIE data submission.

**Population-level surveillance**: Aggregated, population-level health information can inform an LHD about the prevalence of conditions like asthma or obesity in their service area. LHDs can use this information to determine their priority areas and outreach efforts.

**Care delivery**: For LHDs that provide clinical services like immunizations and screenings for sexually transmitted infections, the HIE can provide helpful information about a patient’s care history. This minimizes duplicative services and improves the timeliness of appropriate care delivery.

**Investigation and case management**: LHDs can use the HIE to securely access and share information about someone who has a reportable disease. This may include the person’s health history, contacts, and care received for the reportable disease. This electronic exchange reduces the administrative burden of traditional information gathering through phone calls, in-person visits, and faxing.

What Health Information Exchanges are in Wisconsin?
If you are interested in joining an HIE, Wisconsin has several options. Contact the HIEs listed below to find out if their service is offered in your area:
- **Wisconsin Statewide Health Information Network (WISHIN)**: http://www.wishin.org/
- **HIE Bridge Health Information Exchange**: http://www.hiebridge.org/
- **Healtheway (eHealth Exchange)**: http://www.healthewayinc.org/

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1 [http://www.healthit.gov/providers-professionals/health-information-exchange](http://www.healthit.gov/providers-professionals/health-information-exchange)