Public Health IT Maturity Index Questionnaire - available at http://go.umd.edu/PHITquestionnaire

1. Scale & Scope

All your responses will be kept confidential, no identifying information will be made public without your express consent. For additional details on the Public Health IT Maturity Index and to download the guide to completing the questionnaire, please visit http://go.umd.edu/phitmaturityindex. For any clarifications on this questionnaire or the PHIT Maturity Index, please send an email to chids@rhsmith.umd.edu or telephone at (301) 405-2206.

1.1 Nature of Use

- 1. How would you best describe the administrative systems used by your health department (HD)?
- Administrative systems are inconsistent across HD
- Administrative systems are mostly consistent across departments and services sites
- Administrative systems are coordinated across internal somatic, behavioral, and social services sites
- Administrative systems are coordinated across both internal and external partner somatic, behavioral, and social services sites
- 2. Which response best describes surveillance activity within your HD?
- Little automated surveillance Activity
- Surveillance is leveraging PHIT data collection systems for analysis
- Surveillance programs are digital and integrated, but not real-time
- Real-time integrated surveillance systems with HD

3. Which response best describes the use of EHR and Practice Management Systems (PMS) by your HD?

- Some sites use EHR and PMS
- All somatic care sites use EHR and PM systems
- All somatic care and behavioral health sites use EHR and PM systems
- All somatic, behavioral, and social services sites use EHR and PM systems

4. Which response best describes the use of registries across the HD?
Some sites use registries
All somatic care sites use registries
All somatic care and behavioral health sites use registries
All somatic, behavioral, and social services sites use registries
5. What level of digital consumer resources is available?
Little to no use of digital consumer resources
Digital consumer resources are provided by somatic care sites
Digital consumer resources are provided by all somatic care and behavioral health sites
Digital consumer resources are provided by all somatic care, behavioral health and social services sites
6. Which of the following best describes the availability of clients to access to their data?
Clients have little to no access to their own data in electronic form
Clients are able to access their data through portals
Clients are able to access their data through portals and have acess to mobile apps using their data, but in limited service areas
Clients are able to access their data through portals and have acess to mobile apps using their data, across several service areas
7. Which of the following best describes your use of data analytics / business intelligence systems?
Limited use of business intelligence systems
Utilize business intelligence tools for reporting of past activities in some service areas
Utilize business intelligence tools for reporting of past activities across services areas
Use sophisticated analytics such as predictive modeling to improve decision-making and forecasting
9. Which of the following best describes your HD's use of bealth information exchange (HIE)?
o. Which of the following best describes your HD's use of health information exchange (HIE)?
Some access of HIE data, though limited
HIE is widely used by HD staff, and some data is pushed to the HIE from the health department EHR or other systems
HIE is widely used by HD staff, and there is real-time bidirectional data flow with HIE and health department EHRs
1.2 Extent of Use

9. How well do the PHIT systems enable tracking of program policy changes and outcome assessments?
IT systems do not support tracking of program policy changes and outcome assessments
IT systems support some tracking of program policy changes and outcome assessments
IT systems are moderately effective at tracking of program policy changes and outcome assessments
IT systems are very effective for tracking of program policy changes and outcome assessments
10. How well do PHIT systems support rapid multi-channel communications (i.e. phone, web, social media)?
No support of rapid multi-channel communications
Some support of rapid multi-channel communications
Well developed program for support of rapid multi-channel communications, but not well-utilized
Well developed program for support of rapid multi-channel communications, with high utlization
11. How well do the PHIT systems support information exchange across community partners representing the social determinants of health (housing, nutrition, wellness)?
No support of information exchange across services areas and partners representing social determinants
Some support of information exchange across services areas and partners representing social determinants, but limited
Support of information exchange across majority of services areas and partners representing social determinants
Support of information exchange across virtually all of services areas and partners representing social determinants
12. How well do 11 systems support accountability/performance management?
IT system support for performance management objectives is limited
IT systems support some performance management objectives, but using for performance management is not easy or dynamic
IT systems support most performance management objectives, but systems are not all integrated
IT systems support on-demand performance management of program status dashboards
13. How well do EHRs and surveillance systems support communicable disease control? (i.e. ability to promptly identify, prevent and control infectious diseases)
Communicable disease control is ad-hoc and not well supported by health records, surveillance is labor intensive
Processes for EHR and surveillance system use are well-defined and requirements for systems is documented, but capabilities are marginally implemented
Processes for EHR and surveillance system use are well-defined and requirements for systems is documented, but capabilities are generally implemented

EHRs and surveillance systems are tailored to communicable disease control needs, such as TB and HIV clinics, with welldefined policies and use of PHIT

- 14. How well do IT systems support chronic disease and injury prevention programs?
- Chronic disease prevention programs are not able to leverage EHRs and population health analytical systems
- Systems meet some reporting needs for chronic disease prevention
- Systems support reporting needs and patient targeting and intervention implementation needs
- Systems support program innovation, flexibility and reporting for chronic disease prevention
- 15. How well do EHRs and other data exchange systems support environment health programs?
- Environmental health programs are not able to apply EHR and ancillary system data
- Some data flows from EHRs to enable environmental health programming needs
- Substantial data flows from EHRs to enable environmental health program goals, but in a non real-time capacity
- Real-time robust data flow enables environmental health program innovation, reporting and action

16. How well to EHRs and other IT systems support maternal, child and family health?

- No use of EHRs to support Maternal and Child programs
- Some use of EHRs and IT to support Maternal and Child programs
- All HD maternal and child and family health sites use EHR and communicate digitally

Real-time robust information flow across units and community partners supporting maternal and child health programs and automated registry reporting

17. How well do IT systems support surveillance and epidemiology activities in the HD?

- Epidemiology and surveillance is fragmented, resource-intensive and manual
- Epidemiology and surveillance is enabled through EHR integrations
- Epidemiology and surveillance is active across multiple use cases through EHR integration and state system integration. Highly automated.
- Real-time epidemiology and surveillance is active through seamless systems

18. How well do IT systems generate complete, rapid high quality data collection to identify emerging issues (such as infant mortality, cancer clusters, opioid overdoses)?

- C Little to no proficiency in generating complete, high quality data collection for emerging issue identification
- Some emerging proficiency in generating complete, high quality data collection for emerging issue identification
- Generally proficient in generating complete, high quality data collection for emerging issue identification
- Highly proficient in generating complete, high quality data collection for emerging issue identification, with examples of success

19. What is the level of integration between IT and the hazard preparedness/response processes w your HD?	ithin
 Little IT planning and testing for emergency response 	
 An IT plan is in place for use in disaster 	
IT systems have sufficient functionality and integration to meet disaster response objectives	
Systems have been fully tested and are ready to support the disaster response plan	
20. How would you describe the generating of most reports within the HD?	
Reporting requires significant manual effort and time to complete	
Automated generation of some reports, but most reporting is not automated	
Automated generation of most reports, but requires significant time and resources	
Automated generation of most reports, produced in efficient fashion	
21. How much sharing of data is there across information systems inside the department?	
Little to no data sharing of data across HD service areas and systems	
Some sharing of data across HD service areas and systems	
The majority of systems that need to communicate electronically within HD service areas and systems are sharing da	ta
All systems needing to exchange data within HD service areas and systems are actively sharing data	
22. Which of the following best describes how connected PH departments are with clinical care?	
Little to no connectivity with clinical care community care partners	
PH department can electronically send digital health information to clinical partners in the community	
PH departments can electronically receive digital information directly into health records	
Full bi-directional flow of information across internal and external systems that support clinical care	
23. What percentage of the HD somatic, behavioral, and social services workforce are using EHRs related IT systems?	and
Less than 25% of the HD staff use EHRs	
25.1% - 50% of HD staff use EHRs	
50.1% - 75% of HD clinical staff use EHRs	
Over 75% of HD clinical staff use EHRs	

24. What is the level of EHR and related systems (PHIT) diffusion across your HD?

PHIT systems use is sporadic and not well diffused across agency

Department has central data processing, only administrators and operators have access to PHIT systems

Most users have access to PHIT systems, but there is no role specific interface.

Most users have access to PHIT systems, and there is role specific interface.

2. Quality

2.1 System Quality

- 25. How would you rate the reliability of your EHR and related IT systems?
- Systems frequently experiences outages
- System outages are experienced intermittently
- Systems outages are rare events
- High performing systems with 99.9995 percent uptime. Consistency of Performance and Dependability is high

26. How easy to use are your EHR and related IT systems?

- Systems are very difficult to use, or have no EHR
- Systems are moderately difficult to use and learn
- Systems are mostly easy to use and learn
- Systems are very intuitive
- 27. How easy to learn are your EHR and related IT systems?
- Systems are very difficult to learn
- Systems are moderately difficult to learn
- Systems are mostly easy to use and learn
- Systems are very intuitive and easy to learn
- 28. How would you describe the usefulness of your EHR and related IT systems?
- The systems fail to support many of the tasks needed to complete the public health mission
- Tasks may be accomplished, but significant workarounds are needed
- Most tasks can be accomplished effectively using the existing systems without workarounds
- Systems support all necessary tasks very effectively

- 29. How satisfied are staff with the EHR and related IT systems?
 - Most users are very dissatisfied
- Most users are somewhat dissatisfied
- Most users are somewhat satisfied
- Most users are very satisfied
- 30. How would you describe the IT support services (e.g. help desk) for your EHR and related IT systems?
- Support services provide a marginal level of service, with slow response times
- Support services provide an adequate level of service, but with response times are highly variable
- Support services provide an adequate level of service with mostly efficient response times
- Support services provide a superior level of service with rapid response times

2.2 Information Quality

- 31. How available is desired information in the EHR and related IT systems?
- Desired information is rarely available
- Some desired information may be available, but most information is not readily available on a regular basis
- Desired information is usually available in the system, but there are some types of information unavailable electronically
- Desired information is almost always readily available in the systems
- 32. How accurate is the information in the EHR and related IT systems?
- Information is rarely accurate and reconciles across units
- Information may or may not be accurate and reconciles across units
- Information is usually accurate and reconciles across units, but some information is inaccurate at times
- Information is almost always accurate and reconciles across units
- 33. On average, how long does it take to acquire information from the EHR and related IT systems?
- It takes a long time to get needed information
- Needed information is available within days
- Needed information is usually available within hours
- Needed information is generally available on-demand

- 34. How useful are the reports the EHR and related systems are able to directly provide
- Reporting is not very useful, and decision-making support is limited
- Reporting is somewhat useful and supports decision-making in some areas
- Reporting is useful and supports decision-making in several areas
- Reporting is very useful and supports decision-making in most key areas

2.3 Interoperability and Standards

- 35. How would you describe the level of interoperability across your EHR and related IT systems?
- There is little use of formal standards, ad hoc use, little inter-system communication
- Foundational allows data exchange from one information technology system to be received by another and does not require the ability for the receiving information technology system to interpret the data
- Structural intermediate level that defines the structure or format of data exchange (i.e., the message format standards) where there is uniform movement of health data from one system to another such that the clinical or operational purpose and meaning of the data is preserved and unaltered.
- Semantic interoperability at the highest level, which is the ability of two or more systems or elements to exchange information and to use the information that has been exchanged
- 36. How well do systems share data inside the department?
- Little to no data sharing of data across systems
- Some systems exchange data, but most systems do not share data
- The majority of systems that need to communicate electronically have the capability to do so
- All systems needing to exchange data within an HD are sharing data
- 37. In general, do the PHIT systems adhere to industry wide technical standards?
- Standards are not adhered to or do not exist
- Standards exist, but inconsistent use and application across systems
- Consistent use of standards across most systems, but lacking in some areas
- Consistent adoption and use of industry accepted standards across virtually all systems

38. Which of the following describes the standardization of processes in using the EHR and related systems

There is not an EHR in use

- Some processes are standardized, but significant variation exists across service areas in use of EHR for similar tasks
- Most processes are standardized, but some variation across service areas in use of EHR for similar tasks
- Processes are standardized and well followed across service areas

2.4 Privacy

- 39. Which of the following statements best describe the privacy policies related to IT system use?
- Privacy policies are not well defined or understood
- Privacy policies exist, but they are not fully implemented in IT systems nor understood by all staff consistently
- Privacy policies exist, and are fully implemented in IT systems, are consistently understood, but they have not been audited and found satisfactory
- Privacy policies exist, and is fully implemented in IT systems, are consistently understood, and are periodically audited and found satisfactory
- 40. Which of the following statements best describes the guidelines for data sharing at the HD?
 - Service areas have inconsistent guidelines for data sharing
 - Service areas have consistent guidelines for data sharing, but systems may not fully support consistent sharing protocols or tracking of data shared
- Service areas have consistent guidelines for data sharing, and most systems support consistent and appropriate sharing, tracking of dta shared is adequate, but auditing is infrequent and/or limited
- Service areas have consistent guidelines for data sharing, and most systems support consistent and appropriate sharing, with periodic auditing and review of protocols

2.5 Security

- 41. What level of security protocols / policies are in place for IT systems?
 - Security controls are ad-hoc
 - Security controls are implemented covering access to authorized users (prevention), logging application access (detection) and tracking application changes (recovery) and implemented across most IT systems
 - Security controls are implemented covering access to authorized users (prevention), logging application access (detection) and tracking application changes (recovery), and implemented across all IT systems
 - There is a comprehensive security awareness program including prevention, detection and recovery processes and ongoing training, auditing and monitoring of risks

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3. PHIT Human Capital, Policy and Resources

3.1 Public Health Information Technology (PHIT) Training

42. What level of initial training in the use of the EHR and related IT systems (PHIT) is provided to the workforce?

- Little to no initial training being provided for PHIT use, or not widely used training
- Some initial training being provided for PHIT use (week or more) and used by majority of the public health workforce
- Well-defined and extensive PHIT initial training programs available and used by majority of the public health workforce
- 🕥 Well-defined and extensive PHIT initial training programs available and used across virtually all service areas

43. What level of ongoing training in the use of the EHR and related IT systems (PHIT) is provided to the workforce?

- Little to no continuing training being provided for PHIT use (couple days), or not widely used training
- Some continuing training being provided for PHIT use (week or more) and used by majority of the public health workforce
- Well-defined and extensive PHIT continuing training programs available and used by majority of the public health workforce
- Well-defined and extensive PHIT continuing training programs available and used across virtually all service areas

3.2 PHIT Competency Level

- 44. How skilled is the public health workforce in the use of information technology?
- Workforce is not very skilled at using PHIT
- Minority of public health workforce skilled at making use of PHIT
- Majority of public health workforce skilled at making use of PHIT
- Public health workforce broadly adept at leveraging range of PHIT tools to achieve desired outcomes

- 45. How skilled is the agency partners' workforce in the use of information technology?
- Agency partners' workforce are not very skilled at using PHIT
- Minority of agency partners' workforce skilled at making use of PHIT
- Majority of agency partners' workforce skilled at making use of PHIT
- Agency partners' workforce broadly adept at leveraging range of PHIT tools to achieve desired outcomes

3.3 PHIT Legal/Policy

46. Have policies been vetted and approved for the following PHIT related activities?

Policy for activities including:

- 1. Defining the legal health record and standards for maintaining the integrity of the record content
- 2. Transition to electronic health records
- 3. Business continuity planning
- 4. Down time procedures
- 5. Electronic sharing of clinical information with other organizations
- 6. Ownership of the electronic record
- 7. Records/information from others facilities and providers
- 8. Amendments to the electronic record
- 9. Use of community Health Information Exchange
- Policies have not been approved for these cases
- 1-3 of these policies have been vetted and approved
- 4-6 of these policies have been vetted and approved
- All of these policies have been approved for each of the above cases

3.4 Open Data and Innovation Policy

- 47. What level of policies/initiatives is in place to support open data innovation?
- Limited to no open data initiatives
- Policies for open data innovation exist, but systems to support are not deployed
- Policies for open data are approved and information systems to support have been implemented, but uptake is marginal
- Robust open data programs are in place that support timely release of data via public channels

- 48. What level of policy support is in place for public health research using agency data
- No policy in place
- Some policies are in place, but process is difficult to navigate and not generally well supported with resources
- O Policies are in place, with clear navigation and guidelines, but is not generally well supported with resources
- Robust policies, systems and processes in place to support public health research with agency data and corresponding resources

3.5 PHIT Resources

- 49. How would you describe the budget for your HD that is applied towards IT?
- IT spending is marginal and under-funded for the strategic needs of HD
- IT spending provides for adequate maintenance of most systems but most needed expansions and upgrades are unfunded
- IT spending provides for adequate maintenance and expansion of most systems but some needed upgrades are unfunded
- IT funding is sufficient and steady to meet HD IT needs

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4. Community Digital Infrastructure

4.1 Community Partner Infrastructure

- 50. With what proportion of the labs within your community are you able to exchange data?
- None
- Some, but not most
-) Most
- 51. With what proportion of the pharmacies within your community are you able to exchange data?
- None
- Some, but not most
- Most

52. With what proportion of the outpatient health clinics within your community are you able to exchange data?

- None
- Some, but not most
- Most
-) All

53. With what proportion of the acute care hospitals within your community are you able to exchange data?

- None
- Some, but not most
- Most
-) All

4.2 Health Information Exchange (HIE) and Integrated Reporting

54. Rate the level of HIE connectivity within your community

- No health information exchange is operating
- An HIE operates, with a minority of hospitals and labs in the community sharing data with the HIE
- \bigcirc The majority of hospitals and labs in your community are sharing data with the HIE
- Virtually all hospitals, labs, pharmacies, imaging centers in your community are sharing data with the HIE

55. To what extent is the HIE(s) in your community leveraged for surveillance activities?

- No health information exchange surveillance activity
- 1-2 of the following surveillance activities are provided by the HIE: electronic lab reporting, specialized cancer case reporting, other specialized registry, emergency department chief complaints or discharge diagnoses, geolocated event analysis
- 3-4 of the following surveillance activities are provided by the HIE: electric lab reporting, specialized cancer case reporting, other specialized registry, emergency department chief complaints or discharge diagnoses, geolocated event analysis
- All of the following surveillance activities are provided by the HIE: electric lab reporting, specialized cancer case reporting, other specialized registry, emergency department chief complaints or discharge diagnoses, geolocated event analysis
- 56. How is immunization registry data reported?
- Data is manually entered and updated
- Some immunization registry data is automatically reported from EHRs or HIE, but not the majority of immunization data
- The majority of immunization registry data is automatically reported from EHRs or HIE
- Successful ongoing submission of electronic immunization data from EHR to an immunization registry or immunization information system of all immunization data

57. What is the capability of your state reporting systems to accept data directly from HD PHIT systems

- No capability of state public health authority to receive data directly from EHRs
- Some limited capability of state public health authority to receive data directly from EHRs and related IT
- \bigcirc A majority of public health authority data reporting can be done directly from EHRs and related IT
- Substantially all state-level required data reporting may be done directly from HD EHRs and related IT

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Respondent Characteristics
58. What is the size of the population served by your organization?
─ <50,000
50,000–499,999
500,000+
59. What geographic jurisdiction is served by your organization?
City or Town
County
Multi-County
Other (please specify)
60. What type of governance does the health department have?
Local (HD is a unit of local government)
State (HD is a unit of state government)
Shared (HD governed by both state and local authorities)
61. To receive your response data as an Excel and Report please enter your name and email address below.
62. What is the name of your organization?
63. In what zip code is your organization's headquarters located?