Public Health
Informatics Institute

Key Considerations for Establishing a Public Health Informatics Program

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Local and state health departments today face urgent demands and unprecedented expectations in obtaining, effectively using and securely exchanging digital information. This means that, more than ever, state and local health departments need a clear vision and strategy for increasing their information capabilities, including workforce development and ensuring robust, interoperable information systems. Informatics is the discipline that supports effective use of information and information technology, and is increasingly seen as critical to the future capability—and even credibility—of health departments.

Many health departments are struggling with the logistics of building public health informatics (PHI) capacity within their agencies, particularly creating informatics job descriptions that are not IT classifications, and knowing how to organize informatics within the agency. While there is no single, ideal way to create and organize a PHI program, there are some key considerations that can help guide decision-making.[1] Use the questions below to help inform your discussions and planning. The questions assume that you—but not necessarily senior leadership—have already identified the need to create an informatics program[2] or create a senior informatics position.

1. How would you describe the needs and challenges within your agency that could be met by a PHI program? How would you "sell" it to senior leadership? What is your "elevator speech"?

You will first need to create what is often called a value proposition or business case; that is, a compelling description of the needs and potential value of this new program. Keep your business case at a high level for now; you can get into specific needs, challenges and opportunities in the questions below.

2. Would the scope of this program initially be more internal, external or both? How about several years down the line?

It will be important to clarify early on what this program will *initially* need to focus on; that is, intra-agency informatics challenges and opportunities or external with your community partners. Both

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[1] Originally developed by Bill Brand, MPH, Public Health Informatics Institute; Martin LaVenture, PhD, Minnesota Department of Health; Priya Rajamani, PhD, University of Minnesota; Wu Xu, PhD, Utah Department of Health.
[2] The word "program" is being used here rather than "unit" or "position" in order to avoid making assumptions about what organizational approach is best for you. So "program" is being used in the most generic sense; "initiative" or "project" might be synonyms for its use.

can be critically important, but one may be more urgent for you now, perhaps because of broader agency priorities, a potential funding source or other factors.

3. What, if any, would be the primary responsibilities of this program internally for the first 2-3 years?

Responsibilities might include developing an agency-wide informatics strategy roadmap,[3] developing an agency-wide/enterprise approach to receiving electronic data submissions from community partners, or improving agency-wide information security. It may also include a variety of informatics assessment activities, such as staff training needs, current use of standards and data trading partners, or inter-agency data exchange/integration opportunities. In the area of workforce development, your responsibilities might include providing informatics training to staff who work with information and information technology. And in the area of information systems/technology, it may entail supporting efforts to modernize select information systems to be more standards-based and interoperable, to provide informatics or project management consultation to programs whose information system(s) do not adequately support the work of the program or to a program that is migrating to a new information system. Being as specific as possible will help later when you identify what skills and attributes you need in your informatics staff.

4. What, if any, would be the primary responsibilities of this program *externally* for the first 2-3 years?

These responsibilities may include being a primary liaison with a health information exchange/health information service provider, the Medicaid program or health reform initiatives around population health improvement, or taking the lead in addressing health disparities. They may involve better understanding the information needs of external partners, serving as an informatics liaison to large health systems or universities working on population health informatics/analytics, or even creating a jurisdiction-wide public-private e-health initiative. Again, being specific will assist your planning efforts.

5. Given your responses to questions 3 and 4, what skills and attributes would a lead public health informatician need to manage the program?

Assuming you would start with a single position that could later grow a broader program, what leadership, scientific/informatics, and other qualities would be ideal given your needs? What types of work experience? Regardless of other attributes, strong communications skills will be critical given how informatics is such a "bridging" and "translation'" discipline.[4]

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[3] See www.phii.org/infosavvy for guidance.
[4] See Workforce Position Classifications and Descriptions at https://www.phii.org/resources/view/6423/workforce-position-classifications-and-descriptions.

6. **If you could add other staff to the program, either groomed from inside the agency or hired from without, what skills would they need to have to address the range of needs you identified? How many staff in what roles would be necessary? Do you prefer academic degrees in informatics, field experience or a combination?**

   People with informatics knowledge and skills can come from public health, clinical and IT backgrounds. You may need all three or some more than others. Think carefully about your priorities and how best to differentiate these informatics positions from IT positions.[iv]

7. **Where would a PHI program/staff ideally be located within the organization?**

   There is no single, best way to organize informatics within an organization. Where it is located has much to do with its primary responsibilities. Is much of its work in one area, such as surveillance/infectious diseases? Or does it have agency-wide responsibilities that would benefit from placement in a division or bureau that has similar cross-program responsibilities? Are informatics staff best centralized in one unit or decentralized across programs? You may want to look at how epidemiology is organized; a centralized or decentralized model for epidemiology may similarly work for informatics.

8. **How will you distinguish the PHI program from central IT?**

   Among the biggest challenges to creating an informatics program is the need to clearly articulate how PHI is different than IT. While the discipline of PHI includes some aspects of data and IT sciences, it marries those with the disciplines of public health, organizational behavior, change management and others. PHI helps to ensure that it *is the work of public health programs and practitioners drives how the IT should function to support that work.* It is more about sociology than technology, focusing as it does primarily on the people, policy and process aspects of information management and use.

9. **What name would you give a unit, if established as such?**

   A name can convey a lot about the scope of responsibility and even authority. "Office of Public Health Informatics Support" says something quite different than "Office for e-Health Strategy." Is the word *informatics* understood by leadership and staff? If not, do you want to use terms such as *e-health or e-public health*?

10. **What are the possible funding mechanisms for a PHI program?**

    Always an issue for public health, funding seems particularly challenging today. No single funding stream is likely to adequately support all your informatics needs. Various CDC cooperative agreements may be able to collectively support various activities/positions if done strategically across the programs that manage those agreements internally. Medicaid funding, either the 90-10 HITECH or MMIS funding stream,[5] are good sources for external funding now but require persistence, effective relationship building and a long-range view.

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[5] A toolkit to assist in planning to access these funds can be found at
http://phii.org/resources/view/9505/planning-toolkit-preparing-access-cms-90-10-funding-public-health.