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Developing an Informatics-Savvy Health Department: From Discrete Projects to a Coordinating Program. Part I: Assessment and Governance

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As we have noted in prior columns in this Management Moment series, building an informatics-savvy health department represents a central opportunity and challenge for public health agencies.[1,2] Given how critical information is to every program within a health department, it is also critical that informatics—how information and information technology (IT) are used to improve practice and population health outcomes—be organized and supported as not just a series of discrete, unconnected *projects* but rather as an ongoing, coordinated and coordinating ***program*** within and across the agency. Public health informatics is not so much about a project that needs to be implemented as a program that must be established and maintained; in other words, it is a foundational capability in an era of e-public health. This programmatic focus is driven by a commitment to developing a strong business case[3] supported by sustainable approaches to accountability and shared decision making. A strong informatics program helps build a stronger health department that is more flexible and efficient and can better meet the needs of the community.[4]

To achieve the outcome of an informatics-savvy health department, managers and leaders should commit to (1) creating a shared vision and governance approach guided by effective leadership, (2) creating a skilled workforce, and (3) ensuring well-designed and effectively used information systems.[1,2] In this article, we discuss the steps needed and questions to be asked to realize these outcomes, beginning with the need to assess how well the health department captures, uses, and exchanges information both across programs within the department and with community partners. This assessment should relate both to current capabilities and to desired future capabilities. We also present here specific steps related to ensuring information system governance and effective leadership.

Assessing Informatics Capabilities

To begin the assessment process, the leader can pose questions that will lead to a search for answers: "Leaders ask questions. Asking the right questions takes as much skill as giving the right answers."[5] Leaders might ask about the status and needs of the organization's capability to collect, use, protect, and share information both externally and internally.

Certain questions can be asked of your agency's capabilities and processes in working with your community partners:

- Who do we collect data from and how are they collected?
- How do those data get stored, analyzed, used, managed, and shared?
- What national standards and transport methods are used?
- Do we have an inventory of what data are routinely exchanged for which purposes and under which legal authorities?
- Is there an inventory of existing data use agreements?
- Do we have a strategy and plan to improve consistency of data exchange with *external* stakeholders?
- Do we have a structured way to get input from stakeholders, develop shared implementation plans, and recommend priorities and policy actions?[6]

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- What gaps, barriers, and opportunities have the programs identified in working with data exchange partners?

Looking internally, it is critical to understand the capabilities of agency programs to manage and use their data sets and information systems. Questions might include the following:

- Are we getting access to the data we need?
- Who else internally might benefit from access to a specific data set?
- Are we optimizing the value of our data by finding new ways to use them?
- Can we link data in ways that improve our efficiency while still protecting privacy?
- Are there information functions across programs that could be done once and shared?
- Which of our systems/programs are most at risk for not keeping up with evolving needs and standards?
- What gaps, barriers, and opportunities have the programs identified?

To address such questions, we recommend creation of an agency informatics profile using the Public Health Informatics Profile Toolkit[7] to assess the state of:

- **Interoperability** between information systems across the agency[8];
- **Data exchange and standardization** with internal and external stakeholders[9];
- **Relationships with an IT unit** or services provider (internal or external);
- **Training needs and training opportunities** for the current workforce; and
- **Funding and governing** informatics activities, including support for staffing needs, physical facilities, and information systems.

Ensuring Effective Governance and Strong Leadership

To achieve the goal of developing an informatics-savvy health department, leadership is key to achieving a shared vision and establishing governance approaches for agency information and information systems use. Key questions include the following:

- Do we have a documented **vision and strategy for informatics and for the information in our agency**? Our vision should be bold, embracing the mission of the agency and reflecting more than adding capability but improving the health of the communities served.
- Does our strategy include **policies for decision making and governance** that include action for:
  - Information and system issues across the agency programs (eg, cross-agency data standards for demographics)?
  - Issues for internal agency programs?
  - Issues with stakeholders including interoperability and data sharing agreements?
  - Privacy, confidentiality, and informed consent?
- Do we have an **organizational focal point for informatics** (eg, an informatics unit, a chief informatics officer, a chief information strategist) with cross-agency responsibility and authorities?
- Do we have **financing models to support sustained investments**?
- Do we have a **roadmap** to guide implementation of the vision?[10]

Summary

Your health department is stronger and more effective when you begin to manage information and information systems as an ongoing, coordinated and coordinating *program* within and across the agency. The program can be modest but should be guided by principles including a commitment to ongoing business case development, supported by sustainable approaches to accountability and decision making, informed by data and stakeholder input, and committed to workforce development and training in informatics. Our recommendations are about more than just gathering information for the sake of having it; these recommendations are about using that information to identify strategic and tactical issues to enhance the information capabilities within the agency. As a result, building an informatics-savvy health department can become a central focus in strengthening the health agency and thereby serving population health. Ultimately, the informatics program should leverage the uses of health information, systems, workforce, and technology to improve the health of individuals and the community.

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