Using informatics to Impact Public Health Practice –
Excerpt from “The Big Picture: Developing an Enterprise View of Public Health Information Systems”

For public health to keep pace with overall healthcare advances, real time information must be delivered to end users beyond the walls of the public health agency. Public health informatics supports this by expanding the traditional use of data for retrospective analysis of health status. “Unlike medical or laboratory equipment, which wears out and loses value with use, information becomes more valuable the more it is used. Information does not grow in value, however, merely by residing in a data base. The more it is made accessible to increasing numbers of people and used in more ways, the better it serves society.”¹ This implies a cultural shift in thinking about the value public health can bring to the modern world. This practice shift includes working across programs and jurisdictions, identifying commonalities in the work of public health, and creating the infrastructure to share information with many partners.

In 2005, the Institute published a Topic Brief, The Big Picture: Developing an Enterprise View of Public Health Information Systems. In that context, we shared a list of the “Common Elements of the Organizational focus to Informatics within a Public Health Agency.” The lessons learned from Minnesota, Indiana, and Wisconsin help illustrate these elements:

1. **Compelling Driver for Change:** In all cases, agency leadership recognized a compelling need to align their information system architecture with emerging information needs, both within the agency and with external partners, stakeholders, and other jurisdictions. Pressure from both the private sector and local health departments to adopt efficient systems also was a common external driver for change. Bill Brand of Minnesota explained, “As private providers adopted electronic health records and integrated their systems, they did not want to deal with our distinct systems and repetitive paper work. And local health departments were frustrated by being required to use dozens of stovepipe applications from the state.” Finally, the establishment of Health Exchanges and new conceptions of external stakeholder needs externally motivated change as well.

¹ The Big Picture: Developing an Enterprise View of Public Health Information Systems. Topic Brief, PHII: August 2005
2. **Leadership by a Champion:** Leadership played a crucial role in generating a formal, organizational focus to informatics for all agencies. For some, a gubernatorial initiative or legislation steered the change. For others, a thought leader or group of thought leaders prompted reorganization.

3. **Concise Vision and Purpose:** Not surprisingly, public health agencies with a strong organizational focus on informatics have established a clear vision and purpose for creating an enterprise wide organizational structure for informatics. This vision is often articulated as an opportunity to transform the practice of public health. For Bill Brand, “The ultimate purpose of data is to improve public health.” “We were not realizing the potential contained in the data before adopting our enterprise perspective to apply public health informatics to solve community health problems.” The vision also includes a notion to develop a national health information network—a network of interoperable health information exchanges throughout the US. To do so will require public health agencies to work with their community partners to address complex issues of policy, governance, technology architecture, data use agreements, privacy, security issues, and business models that ensure sustainability. Resolving these barriers will require adopting a vision of public health as an “enterprise”, not a federated network of distinct and unique operating units. An organizational approach for informatics within local and state public health agencies that extends beyond a sole information technology focus may serve as the foundation to achieve this vision. As in any endeavor, success ultimately depends upon people. Creating an “informatics-savvy organization” depends upon individuals in the public health workforce expanding—and effectively applying—their informatics knowledge and skills. This is one of the great opportunities for the public health enterprise today.