Section 1: Selecting Your Evaluation Team

This section describes how to start a successful HIE project evaluation by assembling your evaluation team with expertise in the following areas:

- Technical implementation
- Health care operations
- Clinical care
- Research methodology
- Project management
- Health care consumer (patient) perspective

The first step in conducting a successful HIE project evaluation is selecting your evaluation team. Depending on the number of organizations exchanging health information, the volume of data being exchanged, the evaluation duration, and the evaluation plan complexity, the expertise may need to be provided by (1) team members who are working full-time or part-time on the evaluation, (2) affiliates who join the evaluation team as needed, or (3) consultants. Together, the needed expertise provides a strong foundation for your HIE project evaluation.

The ideal evaluation team includes individuals with expertise in the following areas:

- **Technical Implementation.** These are information technology (IT) experts who specialize in health IT implementation, ideally with experience in HIE projects, health IT and HIE standards, and clinical data warehousing. A technical implementation expert can help you to determine what is technically possible to measure. Your evaluation team needs to understand the technical infrastructure of the HIE system, the standards it uses, and the types and sources of data being exchanged, in order to determine what data are available for the evaluation and to estimate the effort required to collect and process the data. Your evaluation team also needs to have the technical expertise and authority to demonstrate the feasibility of your evaluation plan to project stakeholders.

- **Health Care Operations.** These are individuals with a detailed understanding of the administrative and business side of health care operations. This expertise is needed to document health care workflows pre- and post-HIE, in order to determine efficacy and to measure impact. While technical expertise enables data exchange and captures the raw measurement data, health care operations expertise is needed to understand how the data can be used to create meaningful measures. A health care operations expert can communicate with organizational staff and administrators, represent their needs to the evaluation team, and help determine what health care organizations and stakeholder need to measure. In addition, health care operations expertise will help determine the validity of measures for financial assessments of HIE costs and savings, such as reduced utilization of services.
Clinical Care. These are individuals with clinical understanding and expertise, preferably well-respected clinicians in your community who understand the challenges faced by local clinicians and can serve as your clinical champions. HIE projects nearly always have a stated goal of improving clinical outcomes. Also, clinicians’ acceptance of HIE and the evaluation outcomes will be major determinants of the success and sustainability of your HIE project. Therefore, a clinician’s presence on the evaluation team is essential to ensure that the clinical measures selected for your evaluation effort are appropriate and meaningful to your local community. It would be ideal to find an evaluation team member with both clinical and health care operations expertise to help balance the two perspectives, such as a senior clinician with administrative experience.

Research Methodology. These are individuals with experience designing and conducting health care studies, preferably from a public health or population-level perspective, and with training in biostatistics. Research methodologists, who often have academic affiliations, can help determine which measures are reasonable and appropriate to capture in the context of resource and methodological constraints. Based on your technical expert’s determination of what can be measured, and your health care operations expert’s recommendation of what is important to evaluate, your research methodologist can help you determine which measures are feasible and relevant, and the corresponding data and sample size requirements. The methodologist will help determine the appropriate study design and data collection tools, and can analyze quantitative data and interpret study results. An experienced methodologist also is needed to manage oversight over the evaluation, human subjects’ protection, patient privacy, and compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

Project Management. These are individuals who have demonstrated project management expertise, preferably with experience in multiorganizational experience, and ideally health IT experience. Evaluating an HIE project is a complicated effort, and experienced project managers can help your team develop and manage the evaluation work plan. The evaluation team typically needs to manage data collection from multiple organizations, and coordinate activities across organizations and their stakeholders. An experienced project manager can serve as the bridge among these parties and the evaluation team, and help to ensure timely completion of disparate tasks across many participating organizations, helping to support a successful evaluation.

Health Care Consumer (Patient) Representation. These are individuals who are patients or their caregivers, and who can represent the patient perspective to the evaluation team. Ideally, the patient representative should be influential and well-respected, familiar with the health care consumer experience in the HIE community, and able to share first-hand experiences of being a patient or caregiver. Even though almost everyone is a patient, it is preferable to have a dedicated patient representative, rather than to ask other team members to represent multiple perspectives.

Although you might be able to conduct a successful evaluation with a team that lacks some of these areas of expertise, the absence of these professional skills and knowledge has limited many HIE project evaluation efforts. Therefore, it is strongly recommended that you assemble a team with all of the core expertise listed above prior to developing an evaluation plan.