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Dr. Kronick,

On behalf of the American College of Emergency Physicians (ACEP) and our 33,000 members, I am writing in response to your request for comments on key questions regarding AHRQ’s Effective Health Care systematic review on Health Information Exchange (HIE). ACEP strongly supports the development of well-designed HIEs that allow rapid access to patient specific information, integrated into existing clinical workflows, for physician use in the care of emergency patients. HIE offers the promise of improving transitions of care across settings, decreasing readmissions, reducing repeat imaging studies, decreasing preventable medication errors, longitudinal patient outcomes data, and public health surveillance. To realize many of the above promises of HIE it is important that the information being exchanged is timely, that the information be available from a comprehensive set of data sources, that patients be matched across and within care settings, and that access to the information be integrated into established clinical workflows.

Timeliness
Ideally the HIEs would have the ability to share information in nearly *real time*, so that patients referred to the emergency department (ED) for urgent needs will not require duplicative testing.

Comprehensive Data Sources
While clinical summaries are helpful they alone are not enough, rather medication lists, radiology, labs, and other clinical information must also be made available. Although 58% of hospitals were exchanging some type of health information outside of their organization in 2012, only 33% shared medication lists (Furukawa 2012). HIE’s that share radiographic data have been associated with significant reductions in redundant imaging in several EDs (Lammers 2013, Bailey 2013).

Concordant Patient Matching
Patient matching processes are necessary to avoid mis-matched and unmatched records to patient safety errors and address continuity of care across disparate health systems (ONC 2014). Patient matching across care settings also allows emergency departments to identify 20% more frequent ED users HIE-wide versus site specific and target case management and other services to those patients who tend to be sicker, with more co-morbid, complex, and more acute conditions (Shapiro 2013).

Workflow Integration
Poorly designed HIEs can disrupt workflow and increase the potential for medical errors (Thorn 2014). Even when HIEs are available, non-technical
barriers, such as restrictive access policies, significantly impede use for emergency physicians (Thorn 2014, Johnson 2011). Usage rates of portal-based HIEs, which require clinicians to log into an external web site outside of their electronic health record has been low (Bailey 2013), while one-click integration into standard EHR workflows without additional login barriers have been extremely helpful (Genes 2011, Halamka 2013). Although query-based exchange allows providers to find or “pull” information from the HIE, the HIE should also “push” information on matched patients. By informing clinicians that external data exist and integrating them in to the workflow of the EHR, barriers to health information exchange use are reduced and care coordination is significantly enhanced (Halamka 2013).

Key Question 4: What is the current level of use and primary uses of HIE?
- Consider sub-question: Do level of use and primary uses vary by discipline/occupation/provider type?
- Thorn et al 2014 suggested that nurse practitioners used HIE more frequently than other provider types in the emergency department.
- Consider adding a sub-question that elicits overall use as well as subset analysis for those studies that provide any information related to use of HIE data by data source.
- Also consider if “use” varies if accessed externally or integrated into existing EHR workflows.

Key Question 5: How does the usability of HIE impact effectiveness or harms for individuals and organizations?
- Consider sub-question: Does the impact on effectiveness or harms for HIE usability vary by health care settings or systems?
- Also, please consider the clinician end-user perspective in defining “usability”. ACEP would be willing to offer assistance in identifying individuals with expertise in the “usability” of emergency department information systems.

In addition to these important points, please see attached a list of relevant resources that may be helpful in your systematic review of the literature in determining the different facilitators, barriers, benefits, and harms of HIE, which vary by health care setting, specifically the emergency department where we see 130 million visits a year.

Thank you again for the opportunity to share our comments regarding your review of HIE. If you have any questions, please do not hesitate to contact Stacie Jones, MPH, Quality and Health IT Director at sjones@acep.org.

Sincerely,

Alexander Rosenau, DO, CPE, FACEP
President

cc: Michael J. Gerardi, MD, FACEP, President-Elect, ACEP
    Kevin Baumlin, MD, FACEP, Chair, ACEP Emergency Medicine Informatics Section
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Relevant Resources for Health Information Exchange


