Why clinicians use or don't use health information exchange

In the March 2011 issue of the journal, Vest *et al* published one of the first empirical studies of clinicians' usage of a health information exchange (HIE).¹ The setting for this study was the emergency department (ED). The ED is one important place where an HIE may have an impact on patient care because many emergency patients are unfamiliar to ED facilities and important clinical information is often missing.²

Surprisingly, Vest *et al* found that HIE usage was much lower for patients who were new to an ED facility compared with familiar patients. The authors suggest that 'for the familiar patient, HIE might provide clinicians and organizations the necessary information to get and keep these patients out of the ED.' However, they do not explain why the HIE was not used as often for the new patient, which the authors call the 'poster child for justifying HIE in the ED setting.'

Why would clinicians use an HIE less often for new patients? I would like to suggest an explanation: the clinicians did not find the HIE helpful. The clinicians may have only accessed the HIE when they felt they had tried everything else but the patient kept returning to the ED. This interpretation is supported by the overall usage rate: the HIE was accessed in only 2.3% of all encounters, a rate which should be considered low if information is missing in approximately 32% of ED visits, as one study found.² Furthermore, the authors observed a 'degradation of (HIE) usage over time,' which also suggests that some clinicians were not finding useful information and may have given up on the HIE altogether.

If it is true that the ED clinicians did not generally find the HIE helpful, it would be important to understand why, which might be accomplished through qualitative means such as interviews. Findings from such a study might also be applicable to HIE usage in other care settings.

As HIE is a new technology, it is important to apply both quantitative and qualitative methods to understand the factors that affect usage. Quantitative measures 'may be useful, but they need to be grounded in qualitative data so that their meaning can be understood.'³

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REFERENCES

- Vest JR, Zhao H, Jaspserson J, et al. Factors motivating and affecting health information exchange usage. J Am Med Inform Assoc 2011;18:143–9.
- Stiell A, Forster AJ, Stiell IG, et al. Prevalence of information gaps in the emergency department and the effect on patient outcomes. CMAJ 2003:169:1023-8.
- Berg M. Patient care information systems and health care work: a sociotechnical approach. Int J Med Inform 1999;55:87–101.

CORRECTION

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Shortliffe EH. AMIA president's message. *J Am Med Inform Assoc* 2011;**18**:349–50. In reference 2 of this article the second author should have been listed as "Lin HS, eds". In reference 3 the first word of the title was misspelt and should have been "Computer". These have been corrected in the online version.