Why The Lack of Interoperable Interfaces Costs Health Systems So Much

Building interfaces to connect different IT systems is complex and costly.

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As long as health care data cannot move easily from one computer system to another, health systems will have to bear the considerable expense of acquiring and reconfiguring interfaces — translation instruments that look at each incoming element of data and decide, based on instructions, how it should be altered to suit the destination system.

That expense depends on the number of interfaces, the work required by information technology pros, the prices charged by vendors — often two for each interface project — and the level of cooperation everyone displays in working to connect their products with those of their competitors, experts say.

"We've written thousands of interfaces," says Bruce Smith, chief information officer of Advocate Health Care, Downers Grove, Ill. "The cost of an interface could run from $5,000 to $100,000, and then, of course, maintaining it over time. … Some vendors are easier and have better technology in terms of fitting in. Others are not as strong, and their technologies are not as good."

When a system sets a goal of clinical integration, "if you don't have that basic level of exchange across the affiliates and owned practices and acute care sites and post-acute, it really does get complicated," says Pamela Arlotto, president and CEO of Maestro Strategies in Georgia. Dealing with interfaces "is so expensive, and there aren't enough skilled people out there who can build them. If you get in a queue, it could take months before you get the thing built, even if you're willing to pay for it."

Christus Health, based in Irving, Texas, has a lot of interfaces "bolted on" to IT network junctions in its network of more than 40 hospitals and other medical facilities in seven states. Christus' ability to manage the interfaces is getting better, says board chair Richard Clarke. "So, the information flow that we believe we need is there." Interoperability performance plays a big part in the board's ambitions of clinical integration. "The speed at which it does that, and the accuracy at which it does that … are critical in this environment that we're in today," Clarke says.

Delaware Health Information Network maintains hundreds of interfaces with nearly all health care sites in the state, but all that would not go away in an era of true interoperability, says CEO Jan Lee. "You have to create some kind of connection," she explains. "The issue is, how easy or difficult are those connections to make, and how costly?"

Lee sees the interface problem not as technological, but as a problem of vendor cooperation, involving “astronomical prices” that create “a de facto barrier to exchange.” Vendors are entitled to recover their costs, she adds. But based on her experience, Lee says, “We are never going to see widespread, easy, painless exchange of health data as long as the cost of building those connections is as high as it is today.”