A new study shows lack of interoperability and standards is holding an industry back. Here’s why.

Data is often called the great equalizer, helping businesses and organizations of all sizes improve customer service, boost profitability and reduce errors. In the healthcare industry, data is transformational, enabling all of the above with the added benefit of improving patient outcomes and well-being. However, as researchers and clinical caregivers know, most patient data lives in silos, making it difficult to share and analyze data and, in some cases, to coordinate care between providers. The problem is exponentially more difficult for homecare and hospice providers. This cohort needs access to patient data and the ability to send and receive information and orders – which can often change – but often lacks the technology to make it all happen.

"When meaningful use was announced it came with incentive dollars for the hospital systems to make those changes. Our industry can want to improve interoperability and make those changes, but it’s expensive and we’re the poorest guppies in the food chain." - Joan Williams, Director of Health Information Management, Lower Cape Fear Hospice
What is the biggest barrier to adoption of electronic exchange of health information between home health and hospice organizations and acute care organizations?

A clear business case
Clear standards
Lack of regulation
Other
Cost
Too many referral sources with different preferences

That’s the picture painted by a recent study commissioned by the National Association for Home Care & Hospice (NAHC) and sponsored by industry post-acute technology provider Forcura. The study demonstrates how far we, as an industry, still need to go. The results show that collaboration and data sharing are difficult if not impossible for most agencies, leaving most stuck with overwhelmingly manual processes. Another key takeaway from the report: Leading-edge survey respondents believe that interoperability and automation can fix these shortcomings, a belief shared by NAHC President William A. Dombi. “Electronic messaging is in play, but physicians apparently do not like having to go into multiple portals when [they] use different vendors,” he says. “Interoperability would help a lot.”

Getting on the Case

Despite the emergence of Meaningful Use and the Health Information Technology for Economic and Clinical Health (HITECH) Act, there is still very little communication between acute care facilities and home healthcare and hospice providers. The biggest barrier to electronic data exchange is an ever-growing array of referral sources, all of which have different communication preferences, according to survey respondents. Indeed, the NAHC/Forcura study found that agencies deal with a wide range of referral sources—upward of 20,000, with an average of 396. (The larger the organization, the higher the average number of referrals it reported.) Agencies serving between 150 and 1,000 patients on a monthly basis have an average of 223 sources, while larger organizations that serve between 1,001 and 10,000 patients monthly have an average of 1,397 referral sources.

“We have hundreds of referral sources,” agrees Linda Murphy, the CEO of Concierge Care in Jacksonville, Fla. “They come in via eFax, Curaspan, e-sign and telephone or are hand-carried in by the account executives from referral sources.”

It might be surprising that the number-one way all agencies receive patient referrals is by phone, cited by 89 percent of respondents. Fax is the second-highest delivery method, as evidenced by the 80 percent of agencies reporting that methodology. One-third of agencies still
One area that’s critical—and where data exchange is so important—is maintaining an accurate medicine profile. We’re always trying so hard to get this in place that we’ve put small, inexpensive printers in our nurses’ homes as a workaround.”

Karen Marshall Thompson, Executive Director, SOMC Home Health Services

Manual processes can lead to mistakes, though. In some cases, agencies may waste time and resources setting up for a patient who has been assigned elsewhere, says Rachel Manchester, chief nurse and director of clinical quality home health for Providence Home and Community Care in Tukwila, Wash.

“A referral might go out to five different agencies at once, and everyone might say they have room for that patient on the schedule,” she explains. “Many times, more than one agency replies to the [request] with availability and there isn’t clear communication saying whether or not we’ve obtained the referral. This causes multiple agencies to start the referral process on the same patient. Having interoperability would greatly assist with the provider-to-referral communication piece that is missing today.”

Other mistakes may seem innocuous but can lead to delays in care, says Manchester. Even something as simple as transposing a number on a patient address or telephone number can be a big problem. Automation would remove those mistakes from the equation, she says, adding, “If we had interoperability it would stop the defects. We could also ensure that the minimum specifications would always be met.”

It’s not just telephone referrals that cause problems. Faxed and emailed orders can also affect an agency’s level of care—especially when they involve incomplete patient information, says Karen Marshall Thompson, executive director of Portsmouth, Ohio-based SOMC Home Health Services. “One area that’s critical—and where data exchange is so important—is maintaining an accurate medicine profile,” she says. “We’re always trying so hard to get this in place that we’ve put small, inexpensive printers in our nurses’ homes as a workaround.”

“Communication methods used for exchanging patient care information:

- **Fax**: 76%
- **Hand delivered**: 53%
- **E-fax**: 34%
- **Document management**: 25%
- **Other**: 15%
- **Email**: 15%
- **Direct secure messaging**: 11%

396= the average number of referral sources
40= the median number of referral sources

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Karen Marshall Thompson, Executive Director, SOMC Home Health Services
**Percentages of industry referrals received by:**

- **Fax**: 27%
- **Phone**: 24%
- **E-referral portal**: 13%
- **E-fax**: 11%
- **Email**: 6%
- **Hand-delivered**: 5%
- **Direct secure messaging**: 4%
- **Other**: 1%

**Over 50% of referrals are currently received by manual methods (phone and fax).**
**Direct secure messaging, although widely available, is only responsible for delivery of 4% of referrals**

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**Show Me the Money**

The study also found that agencies would like to connect to acute care providers’ electronic health records (EHRs) to speed the transfer and sharing of data, but there are serious barriers to making that happen. The survey explored the reasons electronic data exchange has been slow to catch on, especially since hospitals and other acute care providers are already using EHRs and other technology to disseminate and share information. Agency respondents detailed many reasons. For example, while the use of electronic health records could certainly help agencies with receiving referrals, the sheer proliferation of EHRs within acute care settings and on the part of agencies makes it a difficult proposition, especially since respondents reported a perceived lack of communication and collaboration between technology vendors.

Consider a midsized agency with more than 400 referring acute care organizations. It’s likely that many of those referrers use different EHRs – and that those EHRs are different from what the agencies use. Numbers bear this out. Survey respondents say they use a wide variety of EHRs with no one EHR gaining a majority, and their answers to questions on barriers to interoperability or organizational challenges were the same regardless of EHR. Without an industrywide standard or API, agencies must prepare for – and pay for-- integrations with every potential EHR out there.

In fact, cost was a barrier cited by more than 25 percent of study respondents. Since there are only a few accepted standards, agencies must perform custom integration work to make electronic data exchange possible. Joan Williams, director of health information management at Lower Cape Fear Hospice, says agencies may face project costs of up to $15,000 per integration project, and that doesn’t include yearly maintenance fees. Those costs add up when you consider how many different systems must be married and supported, she says, citing the need for connectivity and interoperability with everyone from durable equipment vendors to pharmacies to acute care providers. Some agencies have up to 50 integration points, and most small agencies simply don’t have the resources to make these types of connections.

“**When Meaningful Use was announced, it came with incentive dollars for the hospital systems to make those changes,**” Williams says. “**Our industry can want to improve interoperability and make those changes, but it’s expensive and we’re the poorest guppies in the food chain.**”

One industry executive agrees: “**The magic bullet would be enforceable standards and financial support to make sure those standards are addressed,**” declares Keith Crownover, president and CEO of Delta Health Technologies.
Catch Me if You Can

The same issues plague agencies when it comes to sending orders and changes in care to referring physicians. This may be why more than three-quarters (76 percent) of agencies send orders via fax, while a whopping 53 percent hand-deliver their changes. Efax (34 percent), document management software (25 percent) and email (15 percent) round out the list. These methods require a significant commitment of time, taking caregivers away from the patients, says Nathan Barnes, director of information technology at Integrity Home Care + Hospice based in Springfield, Mo.

Barnes says his agency is currently trying to automate and integrate as much as possible in part because of his employees. “Employees were asking for a better solution than faxing,” he explains. “The caregivers have to go out to homes, have to take notes on physical paper, come back to the office and fax it to providers. On both the patient side and the provider side, it caused delays.” Today, Integrity’s nursing staff electronically submits change orders and, since everything is barcoded, centralized and automated, the information can be – and is -- delivered quickly and to the right person.

Contrast that experience to the one at SOMC Home Health Services. While Marshall Thompson says her agency is “pretty good” at getting signed orders back within 30 days, some of its providers need what she calls the red folder system. “The day before [the order] expires we take that order, put it in a red folder and drop it off at the physician's office,” she says. “Our employee has a relationship with the people in the office, so [those staffers] will make sure it gets signed off on.” These last-minute signatures affect the bottom line, too. SOMC Home Health Services has a benchmark of about 50 days in accounts receivable. “Certainly, though, something more automated that got our AR performance down would be great,” Marshall Thompson says.

Looking to the Future

Survey respondents were very clear about their technology shortcomings and how those issues affect employees, patients and accounts receivables. After all, in the home health and hospice segment the ability to effectively manage a patient begins at the point of the referral. What’s also clear: the need for connectivity and interoperability. In fact, the survey respondents interviewed said interoperability and data sharing are at the top of their wish lists. When the entire survey cohort was asked to rank the biggest organizational challenges related to lack of electronic health information exchange, team productivity and transparency took the top spot, with timely patient care and access to the entire patient chart taking the second and third spots. Lost documentation and delayed accounts receivables rounded out the answers.

Williams of Lower Cape Fear Hospice says many executives in the home healthcare and hospice industry have “no clue” about the ways the lack of technology affects them and don’t know where to start making changes. “When you say the word ‘interoperability,’ how many actually understand what that means?” she asks. “Very, very few. There needs to be more education across the board by vendors, CMS [Centers for Medicare & Medicaid Services] and other industry groups.” Williams would also like to see an expansion of standards and more standardization of data. “Start from the beginning – what we’re collecting, how we’re collecting it and how we share it,” she urges.

The study confirms this point of view. Respondents were asked what interoperability standards they were aware of and given a list that included HL7, FHIR and other APIs. More than half (54 percent) said they were not aware of any standards whatsoever. About 36 percent knew of HL7 (Health Level Seven), while 10.7 percent chose “Other,” writing in DSM, EMDI and PCI. Concierge Care’s Murphy says this needs to change. “There are some examples where [lack of standards] is being worked around,” she says. “As an industry we’re used to doing that and we do it well, but it would be so much easier if we didn’t have to.”

Standards aside, there are other technologies that agencies say could help them across the board. Marshall Thompson says she’d like to see more analytics brought into the equation so agencies could have a better view of where inefficiencies lie and make changes based on

The biggest organizational challenges related to lack of electronic information exchange:

1. Team productivity and transparency
2. Timely patient care
3. Access to whole patient chart
4. Lost documentation
5. Delayed accounts receivable
When asked what methods are used to receive referrals, the majority of respondents cited phone and fax, followed by e-referral portal and then electronic/cloud fax.

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those issues. Built-in interoperability is something that many survey respondents discussed and called a “game-changer.” Concierge Care’s Murphy, for instance, has the ability to receive referrals from one of her hospital’s EHRs, and those orders are received and processed up to 90 percent more quickly than those coming in via fax or telephone. That speeds care and reduces errors.

The Office of the National Coordinator for Health Information Technology (ONC) and the CMS are making strides to bring interoperability into the industry. This past January, ONC announced the first draft of its Trusted Exchange Framework and Common Agreement proposal, which will create a nationwide network-of-networks. In April, CMS renamed Meaningful Use, changing it to Promoting Interoperability. In addition, in August the organization went live with Blue Button 2.0, an API that gives developers access to a treasure trove of Medicare Part A, B and D data for 53 million beneficiaries.

That's a great start, but experts agree that it's up to the technology vendors to work together to make interoperability a reality. “The government is driving conversations around the common standards, but it's going to be companies like ours that will have to drive home and adopt the standards,” explains Craig Mandeville, founder and CEO of Forcura. “We have to help providers using technology to absorb information in a consistent manner.”

Barnes of Integrity Home Care + Hospice agrees more automation will happen only when vendors start working together, ensuring interoperability across the board. “I used to work for a software vendor and they just weren’t interested in [interoperability],” he recalls. “That's got to change because if vendors don't share information they are going to be left behind. Agencies are starting to demand it.”

Once that comes to fruition, true innovation can happen, says Providence Home and Community Care’s Manchester. “We're already working with a system that will track when our patients have been re-hospitalized,” she says. “It helps us identify frequent fliers, but also helps with patient care because all of the providers are on the same page at all times.”

The 2018 State of Connectivity: How Home Health and Hospice Organizations are Sharing Health Information study was commissioned by the National Association for Home Care & Hospice and sponsored by industry post-acute technology provider Forcura. More than 200 U.S.-based respondents participated in the survey, which was fielded between August 8 and August 24, 2018. Nearly all—95%—of the responses came from home healthcare and hospice industry professionals. The remaining 5% were technology professionals serving the industry.