2019 SURVEY ON HIE TECHNOLOGY PRIORITIES

THE STATUS OF HEALTH INFORMATION EXCHANGE IN 2019

eHealth Initiative Foundation
www.ehidc.org

About eHealth Initiative

eHealth Initiative and Foundation (eHI) convenes executives from every stakeholder group in healthcare to discuss, identify and share best practices to transform the delivery of healthcare using technology and innovation. eHI, and its coalition of members, focus on education, research, and advocacy to promote the use of sharing data to improve health care. Our vision is to harmonize new technology and care models in a way that improves population health, consumer experiences and lowers costs. eHI serves as a clearinghouse, and has become the go-to resource for the industry through its eHealth Resource Center. For more information, visit ehidc.org.

About Orion Health

Orion Health is a leading population health management company and one of the world's foremost providers of healthcare integration solutions to healthcare organizations. Worldwide, Orion Health solutions are used in more than 20 countries by more than 300,000 clinicians. As a global health technology company, we provide an open platform which enables access to healthcare by more than 100 million patients globally.   In the US, the company provides interoperability, population health management and precision medicine solutions for Health Information Exchanges (HIEs), Accountable Care Organizations (ACOs) and Payers. The company is committed to continual innovation, investing substantially in research and development to cement its position at the forefront of precision medicine. More information can be found at http://www.orionhealth.com. Connect with us on Twitter, Facebook and LinkedIn.

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Introduction and Overview

For almost two decades, eHealth Initiative and Foundation (eHI) has monitored the state of health information exchanges. Healthcare is experiencing rapid evolution with the emergence of new technologies and payment models. In response, both the public and private sectors are seeking ways to improve the quality and safety of care, resulting in a growing momentum to improve interoperability. Organizations like health information exchanges (HIEs) and health information networks (HINs) act as a source of valuable information and services, making the continued evaluation of their challenges, opportunities, and priorities important.

Background on Health Information Exchanges

As the name implies, HIEs provide technology and services to help their stakeholders exchange electronic health information. HIEs do not provide healthcare services. Instead, they impact the quality and cost of care, and ultimately outcomes, by sharing patient health data across organizations within a region, community, or hospital system.

Numerous trends that will drive the adoption of new technologies, the ability to exchange various data types, and the direction of HIE priorities are already evident in 2019. The healthcare industry is in the process of adopting performance-based funding models in place of more traditional reimbursement-based models. Industry is also facing an influx of value-based care initiatives; growing support for application programming interface (API) based interoperability standards, such as HL7®'s Fast Healthcare Interoperability Resources (FHIR®); complex laws for sharing non-traditional types of data; and the push for nationwide exchange of electronic health information across disparate HINs. As new payment models emerge, healthcare stakeholders are increasingly seeking out new types of data that will give a wider perspective of a patient's health and social experiences.

An HIE's ability to integrate data enables and supports value-based care. Stakeholders can monitor their quality and cost of care, leading to improvements in care quality and care coordination, and eventually, cost savings. However, not all HIEs have the ability to integrate the many types of data necessary to enable and support value-based care and cost-lowering activities. HIE capabilities may be limited for a variety of reasons, including technical functions, costs, competing priorities, and issues around ownership and control of the data by stakeholder organizations participating in the HIE.

Based on results from eHI's 2019 Survey on HIE Technology Priorities, this report examines HIE perspectives on:

- Adoption of new technology
- Integrating clinical and claims data
- Types of data being exchanged
- Business drivers and priorities
- Challenges associated with the aforementioned

SURVEY RESPONDENTS

Fifty-three U.S. based organizations in 35 states completed the survey (Figure 1). A broad swath of organizations representing all corners of the nation were represented in the survey. **Respondents had the option to select more than one type of HIE:** 60% are a regional or community HIE; 38% are a state-designated HIE; 23% are a private or proprietary HIE; and 4% are hybrid HIEs.

Location of Survey Respondents

■ *States with at least one respondent*
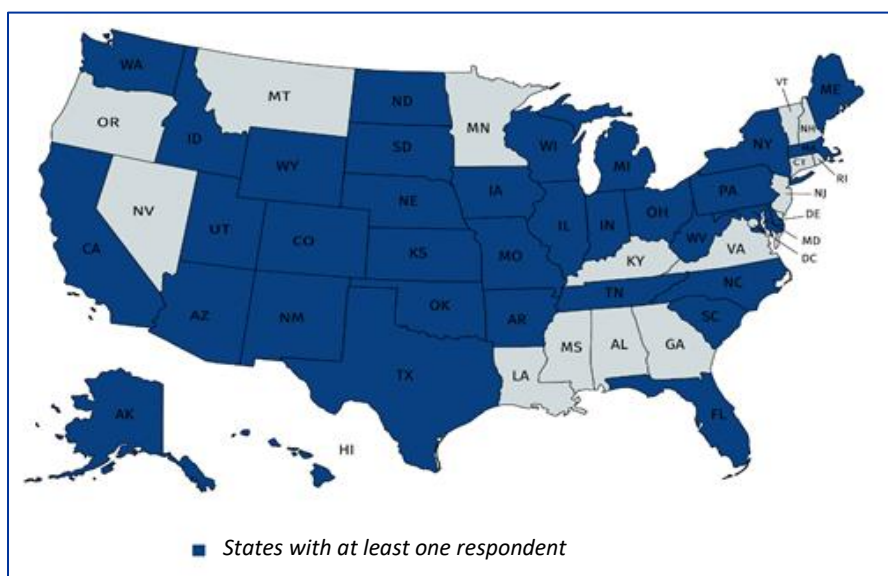
Figure 1. HIEs were asked to select the state or U.S. territory in which their HIE is headquartered.

METHODOLOGY

The 2019 Survey on HIE Technology Priorities was launched on February 19, 2019 and closed April 12, 2019. Announcement of the survey was communicated through email and phone calls to a list of contacts identified as being in a leadership position at an HIE in the United States or a U.S. territory.

The survey consisted of 20 multiple-choice questions. Participants were required to answer a question inquiring whether their organization facilitates the exchange of health information as an HIE (Yes or No). Those answering "no" to this question were disqualified and sent to the end of the survey. The remainder of the survey questions did not require an answer. Each response was reviewed carefully and significantly incomplete responses, duplicates, or responses from organizations not considered an HIE were excluded.

After review, a total of 53 respondents were included in the results. A list of participating HIEs can be found at the end of this report. While responses were reviewed by eHealth Initiative staff for reasonableness, this survey should be considered a non-scientific snapshot of industry perspectives and the state of the field.

PAYERS PARTICIPATING IN EXCHANGES

When health information exchanges came into existence nearly two decades ago, very few payers participated in data exchange. Today, more payers are actively participating and exchanging data with HIEs. As a result, HIEs have access to significant amounts of claims data, information that is critical in forming a more complete picture of a patient.

HIEs that work with a number of payers help exchange data for the millions of members each payer represents. The survey asked respondents to indicate how many payers participate in their exchange, as well as how many members those payers represent (see figures 2 and 3). For the purposes of stratifying the survey data, respondents were placed into groups based on the number of members for which the HIE manages payer claims, referred to as members throughout the survey.

> **What does the term "members" mean in this report?**
>
> PAYER → 100,000 members
>
> HIE → PAYER → 1 million members
>
> PAYER → 2.5 million members
>
> *In this example, the HIE has access to claims data for more than 3 million members from 3 different payers.*
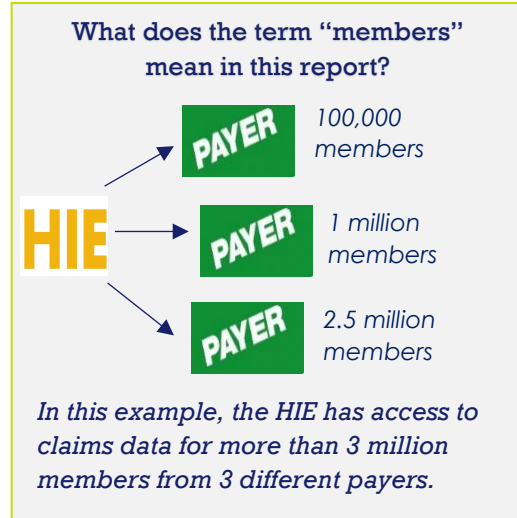
About half of the survey respondents (49%) have 3 or fewer payers participating in their exchange. Of the organizations that have payers participating in their exchange, only 24% or 13 organizations have access to the claims data for more than 3 million members. There are some differences between HIEs that manage large amounts of claims data and those that do not have access to this data. These variances are explored in a later report section entitled *Integrating Clinical and Claims Data.*

Payers Participating in an HIE

# Payers Participating in HIE	% of respondents	# of respondents
0	15%	8
1 — 3	34%	18
4 — 10	38%	20
11 or more	13%	7

Figure 2. HIEs were asked, "How many payers participate in your exchange?"

Number of Members Represented by Payers in HIE

# of Members	% of respondents	# of respondents
< 1 Million	34%	18
1 — 3 Million	23%	12
More than 3 Million but less than 5 Million	9%	5
5 — 10 Million	15%	8
> 10 Million	0%	0
Not sure	19%	10

Figure 3. HIEs were asked, "How many members are represented by payers in your HIE?"

HIE Business Drivers and Priorities

What are the Key Business Drivers?

Over the years, different market and policy drivers have helped propel health information exchange. In 2019, **respondents' top business drivers were managing risk and delivery on value-based contracts (58%), easier integration through APIs (47%), and providing clear value to end users (47%)** (Figure 4).

Top Business Drivers

Business Drivers	% of respondents	# of respondents
Desire of stakeholders to manage risk and deliver on value-based care contracts	58%	31
Easier integration through APIs, FHIR, etc.	47%	25
Provide clear value to end users such as care transition management and medication reconciliation	47%	25
Incentives from government agencies including CMS, state, and local authorities	34%	18
Increased demand for population health analytics tools	32%	17

Figure 4. HIEs were asked to select up to three of their biggest business drivers in the adoption of technology

Healthcare stakeholders who are planning on, or already are, taking on more risk are seeking partners and solutions that will help them deliver on value-based care contracts. HIEs are incredibly valuable in the world of value-based care due to their ability to aggregate data and present it in a meaningful way. **Value-based care trends are influencing technologies used by HIEs, with 92% of respondents somewhat or completely agreeing that the trends influence their decisions about technology adoption.**
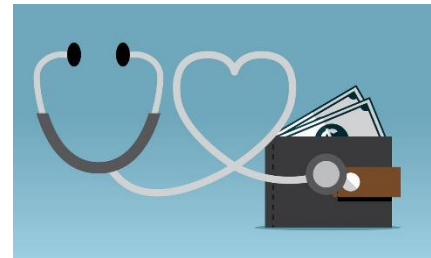
Interoperability is critical for success in value-based care, and open APIs are seen by many as a key driver behind the shift to improve interoperability. Open APIs make health data available to diverse applications and users. As demonstrated by the survey, respondents acknowledge the value of these standards. Embarking on an API strategy can allow providers to retrieve and view patient data contained in the HIE and help HIEs strengthen their position in the market.

What are the Top Priorities?

Unsurprisingly, **respondents are prioritizing interoperability (47%), value-based care (43%), and integrating workflows (40%) in the next two years** (Figure 5). HIEs are an encouraging solution to the interoperability epidemic. They look beyond simply integrating electronic health records

(EHRs) and pharmacy systems to also include health researchers, nursing homes, behavioral health, and substance abuse. HIE efforts to enhance interoperability will bring the industry one step closer to a more complete picture of the patient, putting HIEs in a unique position to impact the quality, timeliness, safety, and cost of care.

While all priorities listed in Figure 5 are important, it is important to note that respondents were asked to select three top priorities. Though some options were selected less frequently, that does not mean it should be interpreted that they are not considered a priority by HIEs.

Priorities in Next Two Years

Priorities	% of respondents	# of respondents
Enhance interoperability	47%	25
Support value-based care	43%	23
Integrate EHR and HIE workflows	40%	21
Integrate non-traditional types of data like genomics and social	34%	18
Enhance care coordination	34%	18
Long term sustainability, financial viability	32%	17
Participate in multi-state HIE	26%	14
Improve patient care at participant organizations	23%	12
Integrate clinical and claims data	19%	10
Manage the opioid crisis	17%	9
Identify and engage high-risk patients/members	15%	8
Improve care in the Emergency Department	8%	4
Use machine learning/artificial intelligence for precision medicine	8%	4
Enhance privacy / security / safety	6%	3
Enable telehealth	4%	2

Figure 5. HIEs were asked, "Select your top priorities for the next two years. Choose up to three (3)."

Is Sustainability No Longer an Issue?

Achieving ongoing sustainability has challenged HIEs in the past as evident in eHI's 2005 Survey on HIE Initiatives and Organizations. At that time, 84% of HIEs considered developing a sustainable business model a very difficult or moderately difficult challenge.[i]

Comparatively, only **a third (32%) of respondents in the 2019 survey listed long-term sustainability and financial viability as a top priority in the next two years**. Increased financial viability could be attributable to a number of factors. As HIEs have grown to scale, they have established themselves in their communities and are demonstrating clear value. In addition, the number of HIEs in the U.S. has decreased in the last two decades due to changing economic conditions, consolidation, and market forces.

INTEGRATING CLINICAL AND CLAIMS DATA

Why is it Important to Integrate Clinical and Claims Data?

An HIE's ability to integrate clinical and claims data enables and supports value-based care, allowing stakeholders to monitor their quality and cost of care, leading to improvements in care quality and care coordination, and eventually, cost savings. However, not all HIEs are able to integrate data and are challenged by limited resources, tools, capable staff, quality data, and access to claims data. Additionally, the integration of clinical and claims data may not be a priority for some HIEs at this time.

Access to both claims and clinical information helps payers monitor and provide coordination of services, complete a variety of quality assurance reporting requirements, augment reporting efforts for value-based initiatives, and support administrative transactions. While claims information already held by the payer may provide some data for these activities, clinical data can enhance the effectiveness, completeness, accuracy, and usefulness of the activities.

The majority of respondents (67%) report that they have seen a significant or very significant increase in demand from payers for more access to clinical data. At this time, 84% of respondents believe the services they are providing to payers are valuable.

Who has the Capability to Integrate Clinical and Claims Data?

Access to both claims and clinical information helps payers monitor and provide coordination of services, augment reporting efforts for value-based initiatives, support administrative transactions, and complete quality assurance reporting requirements. **As discussed earlier, 15% of respondents are not working with _any_ payers. Of those organizations that have payers participating in their exchange, 24% or 13 organizations have access to the claims data for more than 3 million members. These organizations have the greatest opportunity and capability to integrate the data.**

In comparing groups with different numbers of members represented by payers in the HIE's exchange, **85% of respondents with greater than 3 million to 10 million members are able to integrate clinical and claims data while only 50% of respondents with 3 million or less members are able to integrate the two types of data.**

Challenges in Managing Clinical and Claims Data

HIEs are faced with numerous challenges related to resources, sources of data, and technology. Survey results suggest that for respondents with at least one payer participating in their exchange, **the most significant challenges in managing claims and clinical data are data quality issues (58%), cost of technology (56%), and availability of qualified staff (49%)** (Figure 6).

Respondents also cite **the availability of claims data as a significant or very significant challenge (44%) in the management of clinical and claims data** (Figure 6). It is difficult to bring claims data into an HIE for many reasons. Clinical and revenue cycle management systems were not developed to integrate with each other, creating technical barriers. Additionally, state laws, provider membership, and contractual agreements create differences in patient participation and consent models.

Challenges in Managing Clinical and Claims Data

Challenges	% of respondents	# of respondents
Data quality issues	58%	26
Cost of technology	56%	25
Availability of qualified staff	49%	22
Claims data not available	44%	19
Privacy/security policies that limit transactions	40%	18

Figure 6. *HIEs identifying challenges in managing clinical and claims data as Significant or Very Significant. HIEs that responded as having zero payers in their exchange or not sure were excluded from these calculations.*

Are HIEs Prioritizing the Integration of Clinical and Claims Data?

Only 19% of respondents chose integrating clinical and claims data as a top priority for the next two years (Figure 5). It could be that plans want clinical data to use in their own decision-making tools, rather than having the HIE integrate clinical and claims data and perform analysis on behalf of the payer. Respondents choosing this as a priority were almost evenly distributed between the 3 million or less members group and the more than 3 million to 10 million group.

> Survey respondents are seeing a significant increase in the number of payers asking for access to clinical data.

HIEs offer many services and tools that benefit providers, payers, patients, and hospitals. This survey asked respondents which services they have already adopted and which services they are likely or not likely to adopt in the next two years. Respondents shared their biggest barriers to adopting new technologies and indicated how likely it is their technology budget will increase.

Current Capabilities

As Figure 7 demonstrates, HIEs are already **offering services such as provider alerts (77%) and HIE to HIE exchange (72%), while very few HIEs are offering services such as remote patient monitoring (6%)**.

Services Currently Being Offered – HIEs Overall

Type of Service	% of Respondents	# of Respondents
Provider alerts	77%	40
HIE to HIE exchange	72%	38
Care coordination tools	40%	21
E-referrals/E-consults	21%	11
All payer claims database	15%	8
Medication reconciliation	11%	6
Remote patient monitoring	6%	3

Figure 7. *Percentage of HIEs indicating they have already adopted the following challenges*

Which Services will be Offered in the Next Two Years?

The survey indicates a likely increase in HIE technology budgets. **Technologies such as care coordination tools are likely or very likely (40%) to be adopted by respondents in the next two years while others like remote patient monitoring are not likely or not very likely (40%)** (Figure 8).

Likelihood of Services to be Offered in Next Two Years – HIEs Overall

Type of Technology	Not likely or Not very likely		Somewhat likely		Likely or Very likely	
	%	#	%	#	%	#
Care coordination tools	4%	2	11%	6	40%	21
E-referrals/E-consults	6%	3	28%	15	30%	16
All payer claims database	21%	22	15%	8	19%	10
Medication reconciliation	8%	8	30%	16	34%	18
Remote patient monitoring	40%	26	13%	7	17%	9

Figure 8. *"What is the likelihood of your HIE adopting the following technologies in the next two years?"*

Deep Dive into Service Adoption

The following section is a deep dive into the likelihood of service adoption in the next two years for respondents with 3 million or less members, compared to respondents with more than 3 million to 10 million members. Figures 9 and 10 reference this data.

Likelihood of Services to be Offered in Next Two Years — 3 Million Members or Less

Type of Service	Not likely or Not very likely		Somewhat likely		Likely or Very likely		Already adopted this technology	
	%	#	%	#	%	#	%	#
HIE to HIE exchange	7%	2	0%	0	33%	10	60%	18
Provider alerts	3%	1	0%	0	21%	6	76%	22
E-referrals/E-consults	7%	2	27%	8	33%	10	23%	7
Remote patient monitoring	47%	14	20%	6	17%	5	3%	1
Care coordination tools	3%	1	7%	2	54%	16	33%	10
Medication reconciliation	17%	5	27%	8	37%	11	10%	3
All payer claims database	50%	15	17%	5	20%	6	7%	2

Figure 9. HIEs with 3 million or less members represented by payers. "What is the likelihood of your HIE adopting the following technologies in the next two years?"

Likelihood of Services to be Offered in Next Two Years — More than 3 to 10 Million Members

Type of Service	Not likely or Not very likely		Somewhat likely		Likely or Very likely		Already adopted this technology	
HIE to HIE exchange	0%	0	0%	0	0%	0	92%	12
Provider alerts	0%	0	0%	0	0%	0	92%	12
E-referrals/E-consults	0%	0	31%	4	31%	4	15%	2
Remote patient monitoring	54%	7	0%	0	8%	1	15%	2
Care coordination tools	0%	0	8%	1	23%	3	62%	8
Medication reconciliation	8%	1	31%	4	30%	4	15%	2
All payer claims database	23%	3	15%	2	16%	2	38%	5

Figure 10. HIEs with more than 3 million to 10 million members represented by payers. "What is the likelihood of your HIE adopting the following technologies in the next two years?"

Care coordination tools

Care coordination tools can enhance communication between providers, improve outcomes and patient safety, and reduce unnecessary testing. **Forty percent of respondents have already adopted care coordination tools.** A third (33%) of respondents with 3 million or less members have adopted the tools and 54% are likely or very likely to adopt these tools in the next two years.

For respondents with more than 3 million to 10 million members, 62% have adopted care coordination tools and 23% are likely or very likely to adopt the tools the next two years.

Remote patient monitoring (RPM)

RPM is a healthcare delivery method that uses technology to monitor patient health outside of a traditional clinical setting. HIEs may support RPM by sharing generated data or generating a notification that a remote visit occurred. **Very few respondents reported adopting RPM (6%) and are not likely or not very likely to do so in the next two years (40%).** Almost half (47%) of respondents with 3 million or less members are not likely or not very likely to adopt RPM and only 3% have already adopted the technology. Over half (54%) of respondents with more than 3 million to 10 million members are not likely or not very likely to adopt RPM, while only 15% have already adopted the technology.

All payer claims database

Only 7% of respondents with 3 million members or less have already adopted an all payer claims database, 50% are not likely or not very likely to adopt within the next two years, and only 20% are planning to adopt one in the next two years. Thirty-eight percent of respondents with more than 3 million to 10 million members have adopted an all payer claims database and 16% are likely or very likely to to do so in the next two years. Twenty-three percent are not likely or not very likely to adopt in the next two years.

What are the Barriers to Adopting New Technologies?

Although the majority of respondents (74%) indicated their technology budgets are likely to increase in the next two years, several challenges to the adoption of new technology persist. Respondents report that the cost of technology (87%), competing priorities (74%), and enhanced utilization and optimization of the solution (72%) are significant challenges.

Top Challenges in Adopting New Technology

Challenges	% of Respondents	# of Respondents
Price/cost	87%	45
Competing priorities	74%	38
Enhanced utilization and optimization of the solution	72%	38
Adaptability of the technology	59%	31
Technical challenges	41%	22

Figure 11. Challenges in adopting new technology rated significant or very significant

Data Exchanges

Which Data Types are Difficult to Exchange?

HIEs typically exchange clinical, claims and cost, pharmaceutical research and development, public health, and quality reporting data. As the healthcare industry aims to gain a more accurate picture of a patient through access to a wider range of data types, some data are proving more difficult to exchange than others.

Most Challenging Data Types

Types of Data	% of Respondents	# of Respondents
Social determinants of health	52%	27
Behavioral health	50%	26
Advance directives, living wills, power of attorney documents	46%	24
Genetic	35%	18
Medications filled	35%	18
Device data	27%	14
Patient-reported data	27%	14
Unique identifier(s) for implantable device(s)	27%	14
Care plans	25%	13
Claims data	23%	12
Quality reporting	21%	11

Figure 12. "Which of these types of data is your organization having difficulty exchanging?"

Deep Dive into Data Difficulties

The following section provides a deep dive into difficulties in exchanging data types for respondents.

Exchanging social determinants of health data is difficult for a majority of respondents

Social determinants of health (SDOH) data offer promise for addressing socio-economic issues that impact a patient's health. A lack of consensus on standards for capturing and representing SDOH data creates barriers to its collection and use, as does navigating legal parameters for cross-sector information sharing. **Overall, 52% of respondents experience difficulty in exchanging SDOH data.** Fifty-seven percent (n=30) of respondents with 3 million members or less and 42% (n=12) of respondents with more than 3 million to 10 million members are having difficulty exchanging SDOH data.

Medications filled data is somewhat more difficult for respondents with more members

The ability to see medications filled data gives stakeholders the opportunity to recognize and track patients who fail to fill prescriptions and to provide targeted interventions to improve medication adherence. **Respondents had similar difficulties in exchanging medications filled data, but respondents with more than 3 million to 10 million members indicated a higher percentage of difficulty (42%; n=12) than those with 3 million or less members (30%; n=30).** Overall, 35% of respondents are experiencing difficulty in exchanging medications filled data.

Quality reporting data is easier for HIEs with fewer members

Overall, 21% of respondents reported having difficulty exchanging quality reporting data. **Very few respondents with 3 million or less members are having difficulty (13%; n=30) as compared to half (50%; n=12) of respondents with more than 3 million to 10 million members.**

Progress in exchanging radiology images

Historically, the process of exchanging radiology images has been expensive and time-consuming. This survey indicates that progress has been made in HIEs supporting the exchange of imaging information and reports, with only 15% of respondents reporting difficulty. **Respondents with 3 million or less members are having less difficulty (7%; n=30) than respondents with more than 3 million to 10 million members (25%; n=12).**

Behavioral health data is more challenging for respondents with less members

Due to legal and technical challenges, the exchange of behavioral health data continues to lag behind less sensitive types of data. Two-thirds (66%) of respondents with 3 million or less members report behavioral health data as difficult to exchange. **Alternatively, only a quarter (25%) of respondents with more than 3 million to 10 million members reported difficulty exchanging behavioral health data.**

Policy Perspective

Respondents Expect TEFCA to Make a Significant Impact on Interoperability

The Office of the National Coordinator for Health Information Technology (ONC) released their second draft of the Trusted Exchange Framework and Common Agreement (TEFCA) on April 19, 2019, outlining a "common set of principles, terms, and conditions to support the development of a common agreement that would help enable nationwide exchange of electronic health information across disparate health information networks (HINs)." [ii]

Almost two-thirds (60%) of respondents predict that TEFCA will have a significant or very significant impact on interoperability. TEFCA represents a potential for disruption. Organizations that voluntarily decide to participate will be required to make significant changes before they become Qualified Health Information Networks (QHINs) or QHIN participants. Despite concerns and a sense of uncertainty for HIEs that may struggle to stay afloat as the ecosystem changes, most stakeholders voice their overall support of the framework and its potential to enable true interoperability across the healthcare industry.

Moving Forward

HIE efforts to enhance interoperability will bring the industry one step closer to a more complete picture of the patient, putting HIEs in a unique position to impact the quality, timeliness, safety, and cost of care. This year's survey illustrates that HIEs are making progress in demonstrating their clear value. It also highlights a number of challenges and barriers that must be overcome before reaching true interoperability. Moving forward, it is necessary to consider:

- **Value-based care is driving the work of HIEs in the next two years.** HIEs are driven by the desire of their stakeholders to manage risk and deliver on value-based care contracts. Value-based care is also influencing HIEs' decisions to adopt new technology and services.

- **Long-term sustainability is less of an issue for HIEs.** Two decades ago, HIEs considered developing a sustainable business model a difficult challenge. Today, HIEs are more successful in demonstrating clear value to their stakeholders.

- **HIEs are seeing an increase in demand for more access to clinical data from the payers in their exchange**. Payers want deeper clinical data for lowering administrative costs and for reporting (medical management, chart audits, and HEDIS measures).

- **Payer-specific use cases and use cases for integrating clinical and claims data are necessary.** HIEs will need participation from payers to remain viable. Producing use cases that demonstrate the beneficial relationship between payers and HIEs may increase payer engagement and HIE sustainability.

- **SDOH data protocols should be standardized.** Industry needs solutions that remove barriers to capturing and using SDOH data, which can provide a clear picture of a patient and inform their care plan.

- **HIEs must remain relevant in the world of commercial vendors and TEFCA's QHINs.** Although HIEs believe TEFCA will make a significant impact on interoperability, they are unsure of what TEFCA means for their future as an HIE. Potential competition from big commercial vendors, CommonWell, and others that will be considered QHINs once TEFCA triggers a change in the healthcare ecosystem.

2019 Survey Participants

- AGENCY FOR HEALTH CARE ADMINISTRATION
- ARKANSAS OFFICE OF HIT
- CLINICAL CONNECT HIE
- COASTAL CONNECT HIE
- COMMUNITYHEALTH IT
- CONNECTHEALTHCARE
- CORHIO
- CRISP
- DHIN
- ETHIN
- GREAT LAKES HEALTH CONNECT
- GREATER HOUSTON HEALTHCONNECT
- HASA
- HAWAII HIE
- THE HEALTH COLLABORATIVE
- HEALTH CURRENT
- HEALTHECONNECT ALASKA
- HEALTHECONNECTIONS
- HEALTHELINK
- HEALTHINFONET
- HEALTHIX
- HEALTHLINC
- HEALTHLINKNY
- HEALTHSHARE EXCHANGE
- IDAHO HEALTH DATA EXCHANGE
- INDIANA HIE
- IOWA HIN

- KANSAS HIN
- KEYSTONE HIE
- LEWIS AND CLARK INFORMATION EXCHANGE
- LINCOLN LAND HIE
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- MO HEALTH CONNECTION
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- NEW MEXICO HEALTH INFORMATION COLLABORATIVE
- NORTH DAKOTA HEALTH INFORMATION NETWORK
- OHIO HEALTH INFORMATION PARTNERSHIP
- ONEHEALTHPORT
- PASO DEL NORTE HIE
- QUALITY HEALTH NETWORK
- RIO GRANDE VALLEY HIE
- ROCHESTER RHIO
- SAN DIEGO HEALTH CONNECT
- SCHIEX
- SOUTH DAKOTA HEALTH LINK
- UP HEALTH CARE SOLUTIONS
- UTAH HIN
- WEST VIRGINIA HEALTH INFORMATION NETWORK
- WISHIN
- WYOMING DEPARTMENT OF HEALTH

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[i] *2005 Health Information Exchange Survey Report.* (2005) https://www.ehidc.org/resources/2005-health-information-exchange-survey-report

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