INTEROPERABILITY and POPULATION HEALTH

The Interoperability and Population Health section of the survey assess an HCO's performance in four topic areas:

1. Interoperability
2. Population Health – Disease Registries
3. Population Health – Chronic Care
4. Population Health – Interventions

Section 1: Interoperability

(PDF-045) Which of the following types of healthcare entities external to your organization can your organization's EHR successfully send discrete patient data electronically to (and for the receiving entity to claim they can incorporate the data into their patient record system)? (Check one per row)

(PDF-046) Which of the following types of healthcare entities external to your organization can your organization's EHR successfully receive discrete electronic patient data from (and incorporate their data into your organization's patient record system)? (Check one per row)

	Yes	No	Not Applicable to our Patient Population
A. Hospital/hospital system			
B. Physician practice			
C. Home health agency			
D. Long-Term/Post-Acute Care facility (Skilled nursing facility, Rehab/extended/chronic care facility			
E. Retail pharmacy			
F. Government data/records such as immunizations, death records, syndromic surveillance			
G. Laboratories			
H. Health information exchange (HIE)			
I. Insurance companies/payers (Acute/Ambulatory/LTPAC)			
J. Emergency Ambulance agency			
K. Urgent care/Freestanding Emergency centers (Acute/Ambulatory/LTPAC)			
L. Referral networks (Acute/Ambulatory/LTPAC)			
M. Insurance companies/payers			

N. Emergency Ambulance agency			
O. Urgent care/Freestanding Emergency centers			
P. Referral networks			
Q. Community Partners (patient advocacy orgs, behavioral health providers, community orgs.)			

The intent of these questions is to assess the ability of an HCO to electronically transmit (send and/or receive) patient data with specific requirements around the ability of the parties to "digest" the transmitted data.

Data transmission works when a device or piece of equipment, such as a computer, intends to send a digital data object or file to one or multiple recipient devices, like a computer or server.

K. Emergency Ambulance agency

A freestanding emergency department (FSED) is a licensed facility that is structurally separate and distinct from a hospital and provides emergency care..

L. Referral networks

Referral networks are a powerful tool that lets healthcare practitioners keep a steady track of patient referrals throughout the process of the care continuum. The primary objective is to enhance and streamline communication among all the physicians, healthcare providers, and specialists involved in a patient's care.

M. Community Partners (patient advocacy orgs, behavioral health providers, community orgs.)

Health care organizations are increasingly seeking to meaningfully partner with community members to better address community needs and priorities, especially for patients with complex health and social needs. As health care entities prioritize strategies to address health disparities and advance health equity, it is particularly important to acknowledge the critical perspectives that patients and their families can bring to inform program and policy design. It can, however, be challenging to obtain and incorporate community voices in a sustainable and authentic manner. Identifying community partners should include the widest possible net in order to ensure that everyone who may have interest and/or involvement is invited to attend. This includes educators, mental health providers, medical providers, and more.

(NEW-047) How would you characterize your adoption of Trusted Exchange Framework and Common Agreement (TEFCA) standards? (ACUTE/AMBULATORY/LTPAC)
(select one)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

A. Fully Adopted
B. Partially Adopted
C. Not Adopted

The intent of these questions is to assess an HCOs adoption of TEFAC standards.

Trusted Exchange Framework and Common Agreement (TEFCA) standards: Mandated by the 21st Century Cures Act, TEFCA outlines a policy and technical approach to enable nationwide exchange of electronic health information across disparate health information networks (HINs).

(NEW-048) How would you characterize your approach to joining a Qualified Health Information Network (QHIN)? (ACUTE/AMBULATORY/LTPAC)

A. We have already joined a QHIN
B. Joining a QHIN is a priority and actively exploring options
C. Don't have enough information to make a decision on QHIN
D. Aware of the potential need to join a QHIN, but it is not a priority right now
E. We have decided not to join a QHIN

The intent of these questions is to assess an HCOs current/projected use of QHINs.

Qualified Health Information Network (QHIN): A QHIN is a network of organizations working together to share data. They connect directly with each other as a way to promote interoperability between the networks they are a part of. A QHIN is aided by the Trusted Exchange Framework and Common Agreement (TEFCA), which works to create a nationwide system that enables safe and easy healthcare information sharing. However, the success of the TEFCA relies upon the formation of QHINs, as this facilitates data sharing.

Section 2: Population Health – Disease Registries

(PDF-049) How would you describe your organization's use of the following data sources in contributing data electronically to disease registries? (ACUTE/AMBULATORY/LTPAC)
(Check one per row)

	Contributes data to disease registry and registry data is accessible at the point of care	Contributes data to disease registry but registry data not accessible at the point of care	Does not contribute data to disease registry
A. Clinician-reported data			
B. Patient-reported data/patient-generated data			
C. Electronic health records (EHRs)			
D. Ancillary clinical information systems			
E. Clinical data warehouses (CDWs) or integrated data repositories (IDRs)			
F. Administrative (claims) databases			

The intent of these questions is to assess an HCOs use of electronic disease registry(s).

Electronic disease registry(s): The registry allows providers to identify patients as having a particular condition based on tests performed by other clinicians that otherwise would be inaccessible. Thus, the registry enhances care coordination among providers electronically.

Section 3: Population Health – Chronic Care

(PDF-050) How would you characterize the adoption of technology in your organization to track the management of your chronic-care patients?

- **Fully Adopted**: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
- **Partially Adopted**: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
- **Not Adopted**: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

D. Fully adopted
E. Partially adopted
F. Not supported
G. Not Applicable to our Patient Population

The intent of these questions is to determine if an HCO uses digital health technologies to monitor the care of their chronic care patients, and if so, how extensively throughout their organization.

Chronic-Care Patients: Chronic care management includes any care provided by medical professionals to patients who have chronic diseases and conditions. A disease or condition is chronic when it lasts a year or more, requires ongoing medical attention or limits the activities of daily life.

Section 3: Population Health – Interventions

(PDF-051) How would you characterize your organization's adoption of <u>internet enabled remote monitoring devices which submit self-test results</u> from patients "outside the walls" of your facility and integrate the data into your organization's EHR, for each of the following conditions? (ACUTE/INTL ACUTE/AMBULATORY/INTL AMBULATORY)
(Check one per row)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

	Fully Adopted	Partially Adopted	Not Supported
A. Chronic obstructive pulmonary disease			
B. Congestive heart failure			
C. Diabetes			
D. Heart disease			
E. Hypertension			
F. Obesity			
G. Wellness trackers (e.g., consumer wearables)			

The intent of this question is to assess if an HCO uses remote monitoring technologies to collect patient data from their various chronic care patients, and if so, how extensively it is used by the HCO.

(PDF-052) How would you characterize your organization's adoption of real-time care management technologies for patients "outside the walls" of your facility, for each of the following chronic care conditions? (ACUTE/INTL ACUTE/AMBULATORY/INTL AMBULATORY) (Check one per row)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

	Fully Adopted	Partially Adopted	Not Supported
A. Asthma			
B. Behavioral health			
C. Cancer			
D. Chronic obstructive pulmonary disease			
E. Congestive heart failure			
F. Dementia (e.g., Alzheimer's)			
G. Diabetes			
H. End stage renal disease (ESRD)			
I. Heart disease			
J. Hypertension			
K. Obesity			
L. Sickle cell anemia			

The intent of this question is to assess if an HCO uses real-time monitoring technologies to collect patient data from their various chronic care patients, and if so, how extensively it is used by the HCO.

(PDF-053) How would you characterize your organization's adoption of technologies which allow for the integration of care management data into the EHR from patients "outside the walls" of your facility, for each of the following chronic care conditions? (ACUTE/INTL ACUTE/AMBULATORY/INTL AMBULATORY)

(Check all that apply)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

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	Fully Adopted	Partially Adopted	Not Supported
A. Asthma			
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F. Dementia (e.g., Alzheimer's)			
G. Diabetes			
H. End stage renal disease (ESRD)			
I. Heart disease			
J. Hypertension			
K. Obesity			
L. Sickle cell anemia			

The intent of this question is to assess if an HCO uses technologies to integrate data from their various chronic care patients, and if so, how extensively it is used by the HCO.

(PDF-054) How would you characterize the adoption of digital health technologies in your organization used to address the following population health activities?
(Check one per row)

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

A. Data aggregation:

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Compilation of a longitudinal patient record to include clinical, claims, and care-management data				
B. Creation of a reliable master patient index (to include duplicate record merging/deletion)				
C. Aggregation of other data sources (social determinants of health, genomics, imaging data, etc.)				

B. Data analysis:

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Stratify patients according to risk				
B. Tailored advanced predictive/prescriptive analytics (i.e. AI, machine learning)				
C. Ability to identify and tag patient groups to develop internal registries				
D. Prioritized Worklist				

C. Care management:

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Identify gaps in care				
B. Empower care management workflow with data-driven intelligence				
C. Chronic disease/care management				
D. Use of social care networks for Social Determinants of Health (SDoH) referrals to community organizations (Acute/Ambulatory/LTPAC)				

E. Manage care transitions				
F. Use call center to support care coordination				

D. Administrative and financial reporting: (ACUTE/AMBULATORY/LTPAC)

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Financial performance tracking under risk-based contracts				
B. Total cost of care analytics				
C. Network utilization tracking and network optimization analysis (e.g., leakage and steering)				
D. Tool to monitor care management performance				

E. Patient engagement:

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Target patients for outreach				
B. Secure messaging between patient, care-providers and care-managers				
C. Full CRM that includes integrated patient portal, outreach, education, and satisfaction				
D. Promotion of wellness and prevention opportunities				

F. Clinician engagement:

Activities	Fully Adopted	Partially Adopted	Not Adopted	Not Applicable to our Patient Population
A. Ability to track clinician usage of population health tools and activities				
B. Quality measures and analytics at the physician level (e.g., MIPS, MACRA, etc.)				
C. Prioritized guidance on patient care-gaps and statuses				

The intent of these questions is to determine if HCOs leverage varied digital health technologies in support of their population health activities, and if so, how extensively these technologies are used throughout the HCO.

Data aggregation:

A. Compilation of a longitudinal patient record to include clinical, claims, and care-management data

A longitudinal health record is an electronic medical record of patient health information generated by one or more encounters in any care delivery setting. Each visit to the doctor usually focuses on a single reason for the encounter.

B. Creation of a reliable master patient index (to include duplicate record merging/deletion)

The Master Patient Index identifies patients across separate clinical, financial and administrative systems and is needed for information exchange to consolidate the patient list from the various RPMS databases. The MPI contains records for all the patients from all of the IHS facilities.

C. Aggregation of other data sources (social determinants of health, genomics, imaging data, etc.)

Data aggregation is any process whereby data is gathered and expressed in a summary form. When data is aggregated, atomic data rows -- typically gathered from multiple sources -- are replaced with totals or summary statistics.

Data Analysis

A. Stratify patients according to risk

Risk stratification is "the process of assigning a health risk status to a patient, and using the patient's risk status to direct and improve care.

B. Tailored advanced predictive/prescriptive analytics (i.e. AI, machine learning)

Machine Learning: Process of developing algorithms that can improve automatically through experience and by the use of data; it is seen as a building block of artificial intelligence.

Predictive Analytics: A variety of statistical techniques from data mining, predictive modelling, and machine learning that analyze current and historical facts to make predictions about future or otherwise unknown events.

Artificial Intelligence: A system that may utilize machine learning and predictive analytics to assess a situation and either recommend or take actions that maximize chances of success/positive outcomes.

C. Ability to identify and tag patient groups to develop internal registries

A patient registry is an organized system that uses observational study methods to collect uniform data (clinical and other) to evaluate specified outcomes for a population defined by a particular disease, condition, or exposure, and that serves one or more predetermined scientific, clinical, or policy purposes.

D. Prioritized Worklist

As healthcare organizations move toward value-based care and seek to improve performance and overall financial health, clinical documentation improvement (CDI) programs are under intense pressure to ensure documentation supports medical necessity and accurately captures each patient's clinical picture. As healthcare organizations move toward value-based care and seek to improve performance and overall financial health, clinical documentation improvement (CDI) programs are under intense pressure to ensure documentation supports medical necessity and accurately captures each patient's clinical picture.

Care Management

A. Identify gaps in care

A “gap in care” is defined as the discrepancy between recommended best practices and the care that's actually provided. For example, a person is overdue for a recommended screening – like an annual mammogram, colonoscopy, or well visit – based on their age or other risk factors.

B. Empower care management workflow with data-driven intelligence

Data-driven decision-making (DDDM) uses information that has been gathered, modeled, and analyzed to gain an understanding of specific business challenges and to support effective solutions. Data-driven decisions that nurse managers make include assigning unit and shift staffing levels based on patient acuity rates, increasing focus on infection control measures based on patient infection figures, and a heightened concentration on service delivery based on patient satisfaction survey results

C. Chronic disease management

An integrated care approach to managing illness which includes screenings, check-ups, monitoring and coordinating treatment, and patient education.

D. Use of social care networks for Social Determinants of Health (SDoH) referrals to community organizations

A community’s social care organizations are essential for addressing basic needs such as housing, transportation and food.

Administrative and financial reporting

A. Financial performance tracking under risk based contracts

Risk-based contracting is the act of establishing a contract between providers and payers that makes the provider (namely, the provider group) responsible for all the costs incurred in the care of empaneled health plan members.

B. Total cost of care analytics

Total cost of care (TCOC) analytics is a metric that attempts to look at what it costs an entity to care for its customers. In other words, it is the cost associated with a population and its specific conditions. Cost of Care analysis is most often used to measure efficiency. By looking at utilization rates you can measure how good a care management department is doing or where they can improve.

C. Network utilization tracking and network optimization analysis (e.g., leakage and steering)

Network Utilization is the proportion of the current network traffic to the maximum amount of traffic that can be handled. It indicates the bandwidth consumption in the network.
Network Optimization refers to the tools, techniques, and best practices used to monitor and improve network performance. It involves analyzing the network infrastructure, identifying bottlenecks and other performance issues, and implementing solutions to eliminate or mitigate them.

D. Tool to monitor care management performance

Care management programs apply systems, science, incentives, and information to improve medical. practice and assist consumers and their support system to become engaged in a collaborative process. designed to manage medical/social/mental health conditions more effectively.

Patient Engagement

A. Target patients for outreach

Using technology and data to inform risk stratification can help deliver care targeted to each patient's individual needs and risks.

B. Secure messaging between patient, care-providers and care-managers

Secure messaging in healthcare is essentially HIPAA-compliant communication, which regulates who has access to text conversations and how they are stored. Mimecast provides end-to-end encryption text messaging, which prevents anyone other than the sender and recipient from monitoring the text conversation.

C. Full CRM that includes integrated patient portal, outreach, education, and satisfaction

Full (or complete) CRM is a SaaS solution that provides organizations the tools they need to effectively manage everything from marketing to sales, operations and more - all under one roof.

Clinician Engagement

A. Ability to track clinician usage of population health tools and activities

Population Health Management (PHM) Software integrates data across healthcare IT systems and stores and aggregates patient data for analysis. These tools provide a large patient data resource and set of analytic tools to better predict and manage illnesses and diseases..

B. Quality measures and analytics at the physician level (e.g., MIPS, MACRA, etc.)

Measures physician performance in effectiveness of care, access/availability of care, utilization, risk adjusted utilization, and misc. measures reported using electronic clinical data systems.

C. Prioritized guidance on patient care-gaps and statuses

Care Gaps identify missing recommended preventive care services so that providers may address them when they interact with their patients.