MHA
MISSOURI HOSPITAL ASSOCIATION

POPULATION HEALTH ASSESSMENT

2020 SURVEY RESULTS

INTRODUCTION

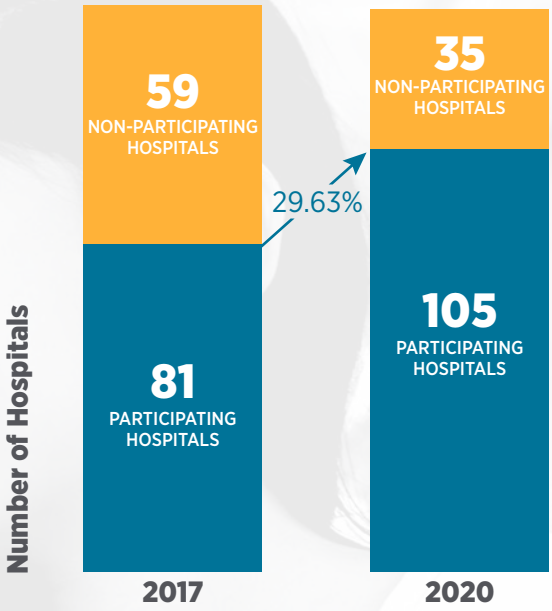
As the landscape in health care continues to shift from volume to value, hospitals and health systems are faced with mounting pressure to implement innovative care redesign strategies aimed at improving care delivery and lowering costs. The Centers for Medicare & Medicaid Services and other payers gradually are moving toward value-based care, where health outcomes will continue to play a significant role in the payment equation. These payment arrangements have made it necessary for hospitals and health systems to change from episodic care to a population health-based model that integrates preventive care while addressing social determinants of health, such as food, housing and transportation. The catalysts for SDOH collection were the 21st Century Cures Act and the IMPACT Act, as well as optional supplemental benefit packages for MC+ Managed Care beneficiaries. On the same note, through mortality reviews, health outcomes data review and patient feedback, hospitals have learned that SDOH-related issues are the root cause of many lags and disparities in improving health. Integrating best practice population health improvement strategies that incorporate clinical and nonclinical factors will be important in shifting how care is delivered using a more holistic approach.

The Missouri Hospital Association recently completed its 2020 Population Health Assessment Survey — an important step in helping hospitals and health systems evaluate their progress in transitioning to a value-based environment. The data and information derived from this survey will be used as a basis for driving MHA's population health improvement strategy. This report summarizes the survey results statewide and by hospital type. Individual survey results identifying strengths, weaknesses and opportunities for improvement, were shared with each participating hospital.

A total of 105 Missouri hospitals participated in the 2020 Population Health Assessment Survey compared to 81 in 2017, which equates to a 29.63% increase. **Chart 1** shows the proportions of hospitals that participated in the 2017 and 2020 surveys.

CHART 1

Survey Participation by Year

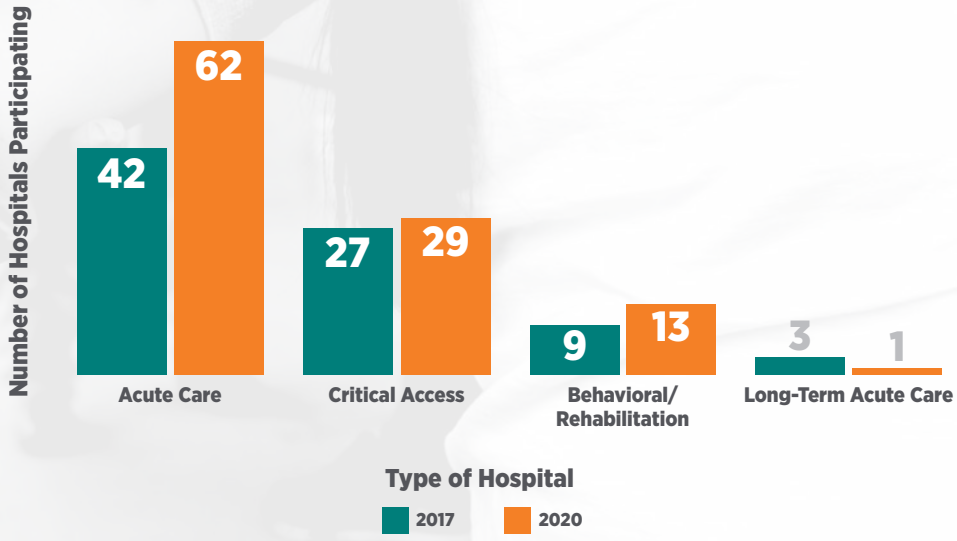


Source: MHA — Population Health Assessment Survey, 2017/2020

Chart 2 shows the type of hospitals that completed the survey by year. Compared to 2017, the 2020 results showed an increased response rate from acute care hospitals, critical access hospitals, and behavioral and rehabilitation facilities.

CHART 2

Survey Participation by Hospital Type and Year



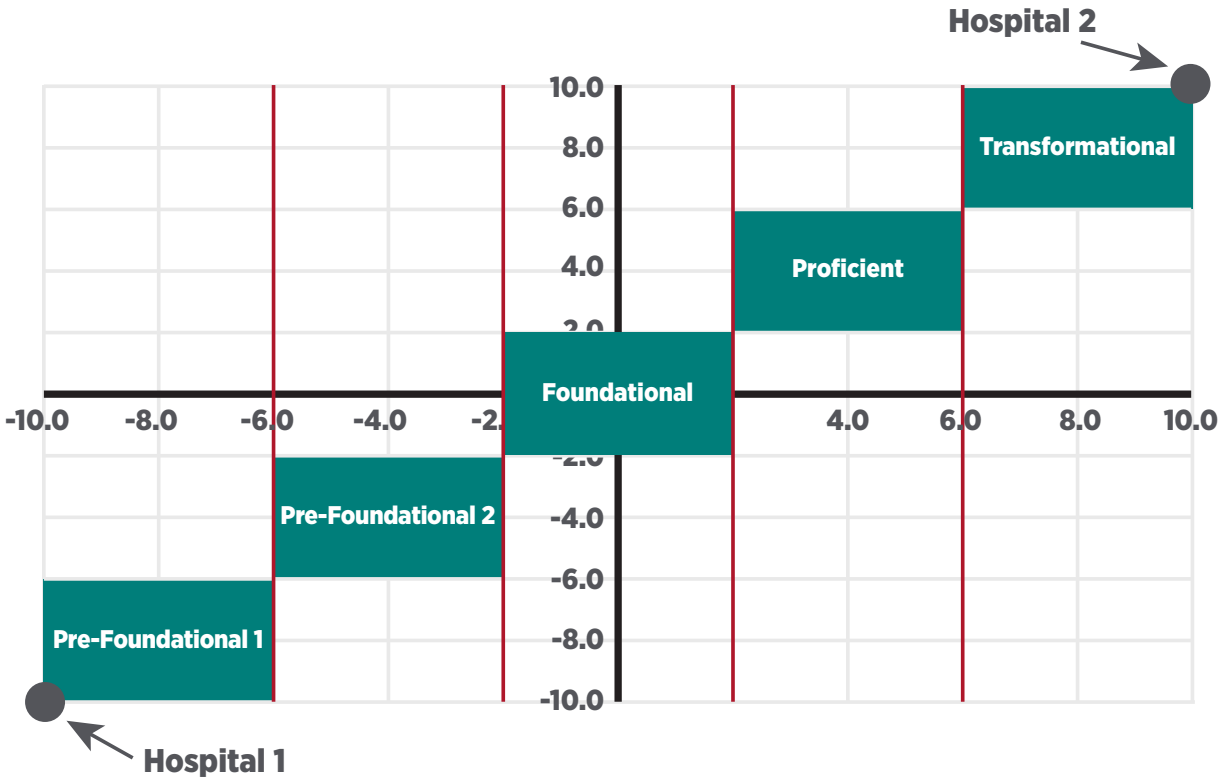
Source: MHA — Population Health Assessment Survey, 2017/2020

STATISTICAL METHODOLOGY

Each component of the nine domains of the assessment tool was comprised of a five-point bipolar Likert scale. This psychometric scale was used to classify the perception of each hospital's position in the five maturity scale categories shown in **Figure 1**.

FIGURE 1

Population Health Assessment Maturity Scale



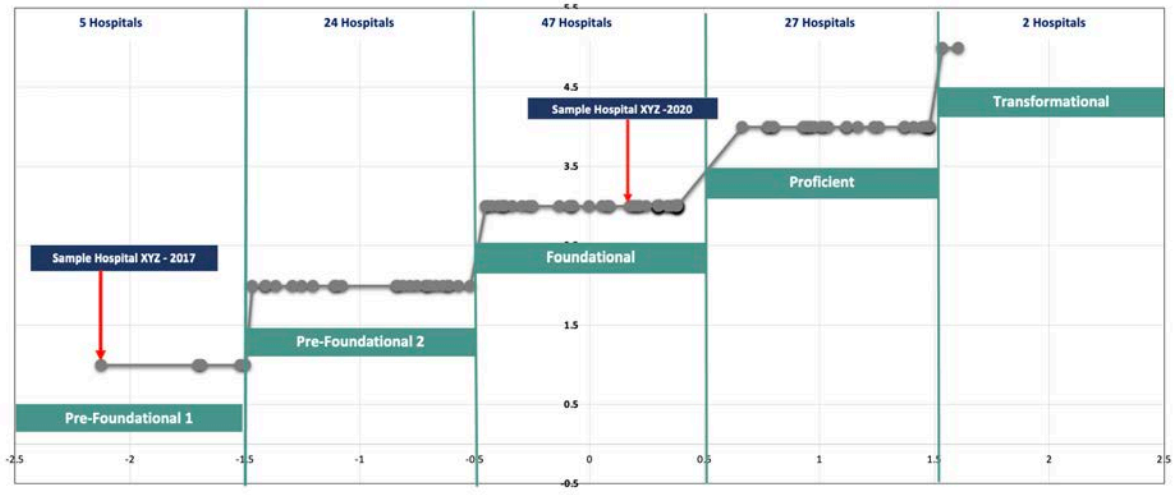
To ensure the integrity and accuracy of the survey, Pearson's correlation was observed among the scales and subscales producing positive values, confirming the measurement of maturity as a single domain. Item scale analysis for each variable was completed using summary statistics, such as mean, standard deviation, sum, minimum and maximum. To measure internal consistency of the items within each of the nine domains, Cronbach's alpha was employed, revealing moderate to high agreement for each of the nine domains measured. This confirmed that all were closely related, thus confirming the validity of the assessment tool from both a scientific and statistical standpoint. Once results were gathered from the survey, each hospital's score was recorded, organized and analyzed. A Z-transformation was conducted to normalize each of the nine domain's scores, as well as the overall score for each individual hospital.

Chart 3 shows the position of each hospital on the maturity scale using the weighted Z category versus weighted Z-score, respectively. Approximately 45% of hospitals fell below the Foundational level, 26% in the Proficient level, 23% in the Pre-Foundational 2 level, 5% in the Pre-Foundational 1 level and 2% in the Transformational level. While there was a decrease in the number of hospitals in the Transformational level — 11 in 2017 versus two in 2020 — there was a significant increase in the number of hospitals that fell in the Foundational and Proficient categories.

CHART 3

Distribution of Hospitals by Maturity Level

(Weighted Z-Score and Weighted Z Category)

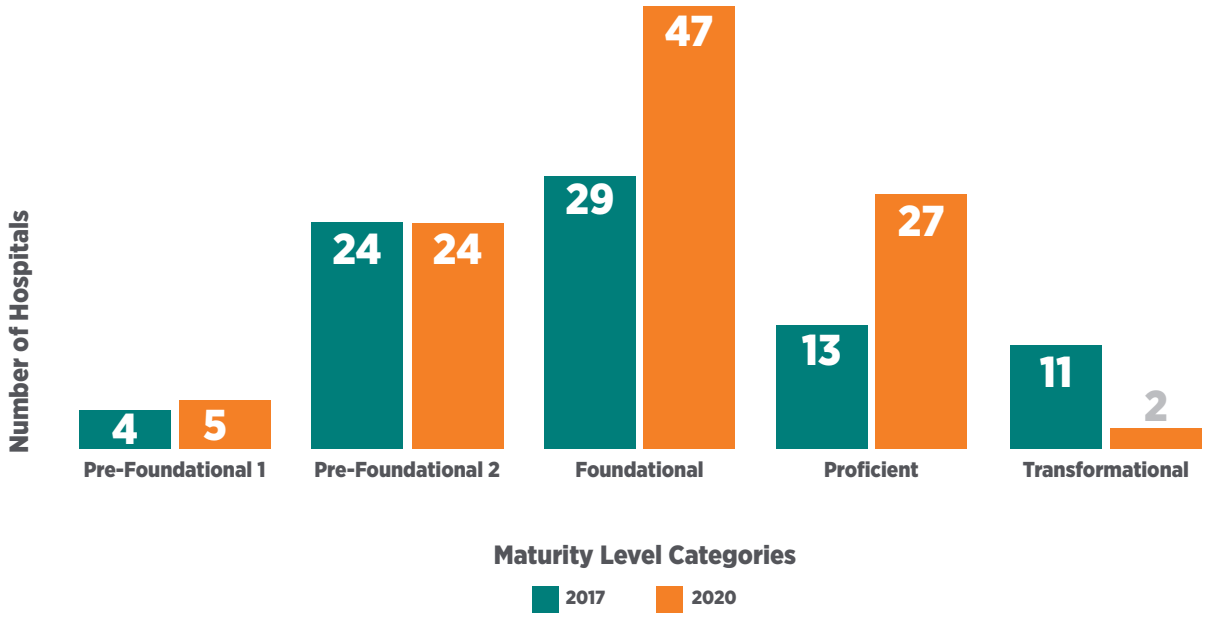


Source: MHA — Population Health Assessment Survey, 2017/2020

Chart 4 shows the distribution of hospitals in the five maturity level categories in 2020 compared to the 2017 survey. A few notable changes include a 25% increase in the Pre-Foundational 1 level, no change in the Pre-Foundational 2 level, a 62.07% increase in the Foundational level, a 107.69% increase in the Proficient level and an 81.82% decrease in the Transformational level. Increased participation by hospitals in 2020 was a key factor in proportional increases observed in some maturity categories.

CHART 4

Population Health Maturity Level Category by Year



Source: MHA — Population Health Assessment Survey, 2017/2020

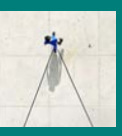


Table 1 shows a 100% increase in mean scores across all nine domain measures for hospitals that completed the survey in 2017 and 2020.

TABLE 1

Mean Score Comparison of Participating Hospitals (same cohort)*			
	2017 Mean Score (n=81)	2020 Mean Score (n=70)	Mean Score Status
Leadership	19	24	**Increased**
Patients and Family	56	71	**Increased**
Workforce	32	45	**Increased**
Finance	3	12	**Increased**
Data and Technology	10	16	**Increased**
Operations	31	44	**Increased**
Legal/Regulatory	2	4	**Increased**
Outcomes	33	44	**Increased**
Policy and Advocacy	3	4	**Increased**

Source: MHA — Population Health Assessment Survey, 2017/2020
*It is important to note that the sample size of the two surveys is different because not all hospitals participated in both the 2017 and 2020 surveys.

Table 2 shows seven of the nine domain measures saw an increased mean score, one mean score remained the same and one declined slightly in the overall results for all hospitals participating in the survey.

TABLE 2

Mean Score Comparison of ALL Participating Hospitals			
	2017 Mean Score (n=81)	2020 Mean Score (n=105)	Mean Score Status
Leadership	19	20	**Increased**
Patients and Family	56	53	**Declined**
Workforce	32	34	**Increased**
Finance	3	8	**Increased**
Data and Technology	10	12	**Increased**
Operations	31	33	**Increased**
Legal/Regulatory	2	3	**Increased**
Outcomes	33	35	**Increased**
Policy and Advocacy	3	3	**Sustained**

Source: MHA — Population Health Assessment Survey, 2017/2020

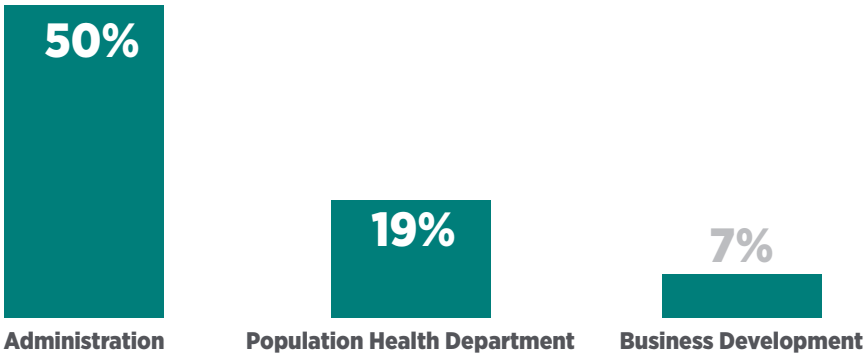
DEMOGRAPHICS

In 2017, 27% of hospitals reported that they were part of an Accountable Care Organization compared to 25% in 2020.

Chart 5 identifies the top three areas where population health is administratively based in hospitals responding to the survey.

CHART 5

Top Three Areas Where Population Health is Administratively Based



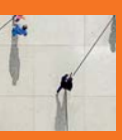
Source: MHA — Population Health Assessment Survey, 2020

Chart 6 shows the top three positions that oversee population health efforts in hospitals responding to the 2020 survey.

CHART 6

Top Three Positions That Oversee Population Health Efforts

Source: MHA — Population Health Assessment Survey, 2020



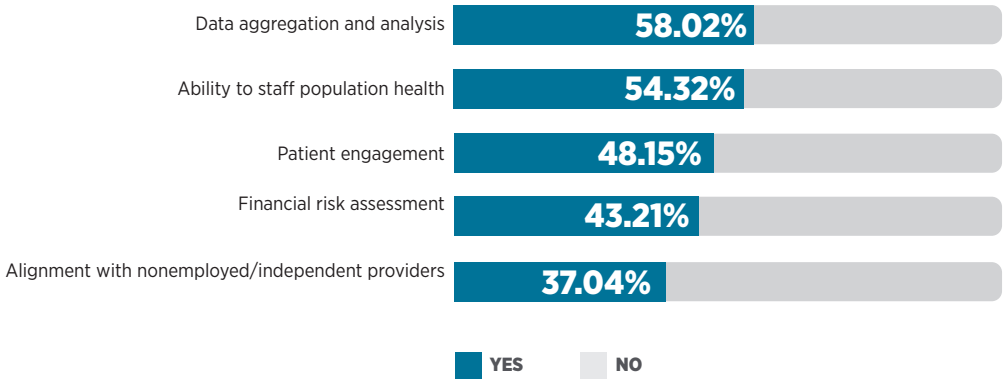
LEADERSHIP

According to the 2020 survey, more than 62% of the respondents indicated that board members, senior leadership, medical staff and managers agree that population health plays a critical role in value-based reimbursement and are focused on creating a culture to support population health initiatives. Nearly 60% indicated that population health is embedded in their strategic planning process.

Chart 7 shows the top five identified challenges in implementing population health management among all hospitals completing the survey.

CHART 7

Major Challenges Identified



Source: MHA — Population Health Assessment Survey, 2020

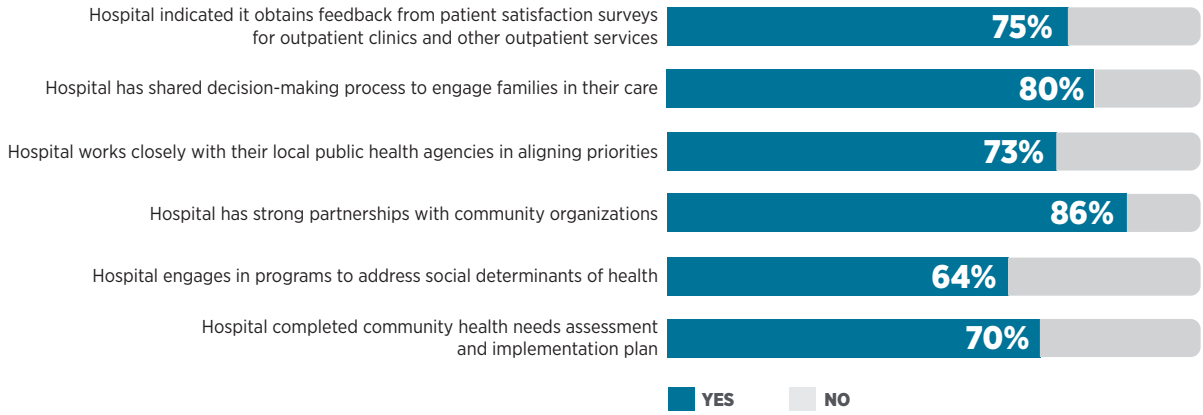
Effective leadership is critical to the success of any organization. A leader's ability to set expectations while ensuring all staff understand how their efforts contribute to the overall strategic goals is very important. Leaders must have a clear vision of where they want to take the organization, lead by example to build credibility and gain respect, show integrity by their daily actions, communicate effectively, and frequently and consistently recognize individuals "going above and beyond." While the aforementioned qualities are important, they are not exhaustive. Sharing data and information within the hospital is important for the overall success of any organization. Providing the required training, tools and resources is key to ensuring staff can meet the expectations of their job. It also is important that leaders create a conducive environment that makes everyone feel valued and appreciated.

PATIENTS AND COMMUNITY

Chart 8 shows the distribution of key patient and community measures.

CHART 8

Distribution of Hospitals in Key Areas Relating to Patients and Community Processes



Source: MHA — Population Health Assessment Survey, 2020

Information gathered is critical in identifying gaps and opportunities for improvement, thus paving the way for performance improvement.

According to the Agency for Healthcare Research and Quality, it is imperative that hospitals and health systems involve patients and their families in the coordination of care and decision-making process because it results in better health outcomes, an improved patient and family experience, and better employee satisfaction. The first step in this process involves seeking to understand the patient and family perspective, providing timely information to guide decision-making, and respecting their choices. This approach should be incorporated into patient care planning and delivery. Implementing a patient and family advisory council is an important step in this process as it brings needed input from the end user's perspective.

According to the Patient Protection and Affordable Care Act of 2010, it is recommended that hospitals and health systems collaborate with local partners when completing a community health needs assessment and implementation plan to leverage resources and share expertise. Improving the health of communities requires a multifaceted approach because no one entity can undertake this task by itself. Hospital-community partnerships should focus on developing programs based on prioritized needs through the CHNA process, as required by the PPACA. Integrating strategies that address health equity to reduce health disparities ensures that everyone has equal opportunity to live a healthy lifestyle irrespective of race, ethnicity, ZIP code or socioeconomic status.

WORKFORCE

Compared to the 2017 survey, a higher percentage of hospitals in 2020 indicated their providers and staff were aware of their hospital's population health initiatives. On the same note, the 2020 survey results showed that 73% of hospitals have formalized employee health programs with annual health risk assessments and wellness programs, compared to about 68% in 2017. Approximately 67% of hospitals revealed that their hospital's health programs have incentives for staff, 54% track their employee's wellness and 89% have employee assistance programs.

It is recommended that hospitals and health systems use best practice programs and activities that seek to reduce health risks while improving health outcomes of their workforce. Organizations that implement efficient and effective wellness programs can positively influence health care costs, absenteeism, productivity and employee morale.

FINANCE

Compared to 2017 results, 2020 saw a 13% increase in the number of hospitals indicating they participate with CMS or other payers in shared savings or shared risk models for reimbursement. Among survey respondents in 2020, approximately 42% indicated their compensation and incentive programs were aligned with quality metrics for providers.

As the landscape in health care shifts from volume to value, health care organizations are faced with immense pressure to improve health outcomes, quality of care and patient satisfaction at a lower cost. This makes it important for hospitals to focus on improving and achieving optimal outcomes for patients to avoid financial penalties or optimize financial initiatives such as Medicare's Inpatient Prospective Payment System value-based purchasing program. Assessing pay-for-performance programs and emphasizing measures tied to payments is the first step in performing well within a population health environment. Creating accountability by aligning performance and overall appraisal is important to sustain financial success. Programs such as the Medicare Access and CHIP Reauthorization Act of 2015 brought about changes in how Medicare rewards providers for value over volume. Providers' performance is calculated by weighing performance in quality, cost, improvement activities and promoting interoperability and then used as the basis to determine Medicare Part B payment adjustments in future years. Additionally, Advanced Alternative Payment Models reward practices that take on added risks when treating patients, as well as giving providers incentive payments based on their performance in key areas.

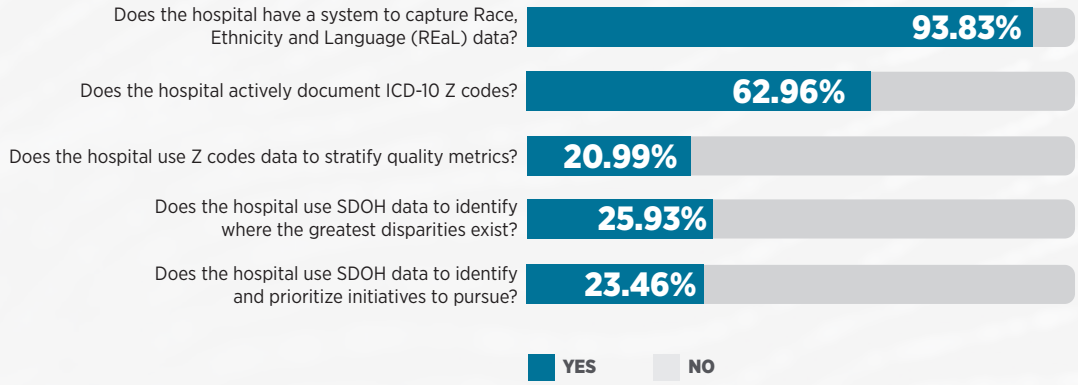
DATA AND TECHNOLOGY

Compared to 2017, the 2020 survey showed a 21% increase in the number of hospitals reporting a clinical data system that integrates patient records across both the hospital and outpatient clinics. Current survey results reveal an increase in the number of hospitals reporting that staff are educated on electronic health record capabilities for managing population health.

Chart 9 demonstrates the current data capture on key areas important in driving population health strategies. While most hospitals reported they have the necessary infrastructure to collect Race, Ethnicity and Language (REaL) data, as well as actively documenting ICD-10 Z codes, a significantly lower number of hospitals are using this data to effect change.

CHART 9

Domain Measure



Source: MHA — Population Health Assessment Survey, 2017/2020

The following are key strategies important in addressing these identified gaps.

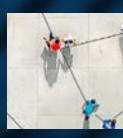
- educate about how to ask REaL questions (audience may be nurses, front-line admission staff, quality leaders)
- document and report SDOH data
- implement a robust interoperability infrastructure, which may result in improved care coordination, patient experience, patient safety, better privacy, security for patients, higher productivity and reduced costs
- use codes related to SDOH and ICD-10 Z codes
- integrate social referral platforms

To address some of the above-mentioned strategies, MHA offers the following resources.

- Policy Brief: Decoding Social Determinants of Health
- HIDI HealthStats: Z Codes for Social Determinants of Health
- Trajectories: Integrating Social Determinants of Health in Care Delivery

Data is power. Having the right infrastructure for data collection, aggregation and dissemination is important in ensuring that hospitals and health systems deliver care effectively. Using predictive and prescriptive analytics to identify patient risks in real time is critical in helping to focus attention and resources with precision. Deploying analytical tools and techniques to process key predictors from claims data, electronic health records, census and SDOH data can provide different dimensions that affect individuals, communities and population health, thereby helping care providers use a holistic approach to deliver care. The ability to capture and use data at individual and community levels is an important step in identifying health disparities, thus helping hospitals and community-based organizations target interventions with specificity. Poor health outcomes and root causes are known, and data analysis of this information helps target programs, interventions and resources.

Having the right technology is critical in care delivery. Interoperability is critical in ensuring that providers and the entire care team have all the information needed to meet each patient's unique needs. Using this technology, providers understand the different layers of clinical and nonclinical barriers to health. From a business standpoint, interoperability lowers costs by improving efficiencies, such as reducing the potential for redundant patient tests.



OPERATIONS

According to the 2020 survey, 75% of hospitals reported they have a documented process for exchanging information across care settings. There was a significant improvement — 63% in 2017 to 76% in 2020 — in hospitals reporting having chronic care management processes or programs in place to manage patients with chronic conditions. In 2020, 69% of hospitals reported they have processes in place for smooth transitions of care across all settings, including clean handoffs that are documented and tracked. This was slightly higher than the 2017 report of 64%.

Slightly more than 50% of hospitals surveyed in 2020 reported that they have processes in place for risk assessment and risk stratification of patient populations. Overall, 54% of hospitals reported they participate in the Merit-based Incentive Payment System compared to about 20% that participate in the Advanced Alternative Payment Model of the Quality Payment Program.

Streamlining operations to create needed efficiencies is key in driving results. The gradual transition from fee-for-service to a value-based model has made it necessary for health care organizations to align their operations to remain relevant and competitive in the market. Adopting an integrated system to capture and disseminate information to providers, leadership and staff is an important part of the value equation, as it helps organizations make decisions that influence health outcomes.

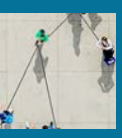
LEGAL/REGULATORY

In 2020, there was a higher percentage of hospitals that reported having structures in place to receive and distribute payments to participating providers of care compared to 2017.

Outcomes

In 2020, 93% of hospitals publicly reported their quality data, compared to 92% in 2017. Compared to 2017, 2020 results showed a slightly higher number of hospitals utilizing a balanced scorecard that tracks patient satisfaction, workforce metrics, quality measures, community impact and financial metrics. Approximately 98% of hospitals completing the 2020 survey reported that their hospital engages in an ongoing cycle of performance improvement, compared to 95% in 2017. The 2020 survey recorded an increase in the number of hospitals identifying opportunities for improvement, including bringing together providers and stakeholders to collaborate on population health improvement initiatives.

It is imperative for hospitals and health systems to focus on activities that seek to improve health outcomes to be successful under a value-based model. Promoting a well-informed diagnosis for each patient is key to ensuring that providers and the entire care team make the right decisions that result in better outcomes. Identifying and addressing clinical and nonclinical factors of health is an important consideration to make in determining a unique approach for individual patients as it may have a significant impact on their outcome. Data transparency at all levels of an organization is key to driving health outcomes. Integrating technology and streamlining processes throughout the continuum of care is important in ensuring that each patient receives the right care, in the right place, at the right time — resulting in improved health outcomes.



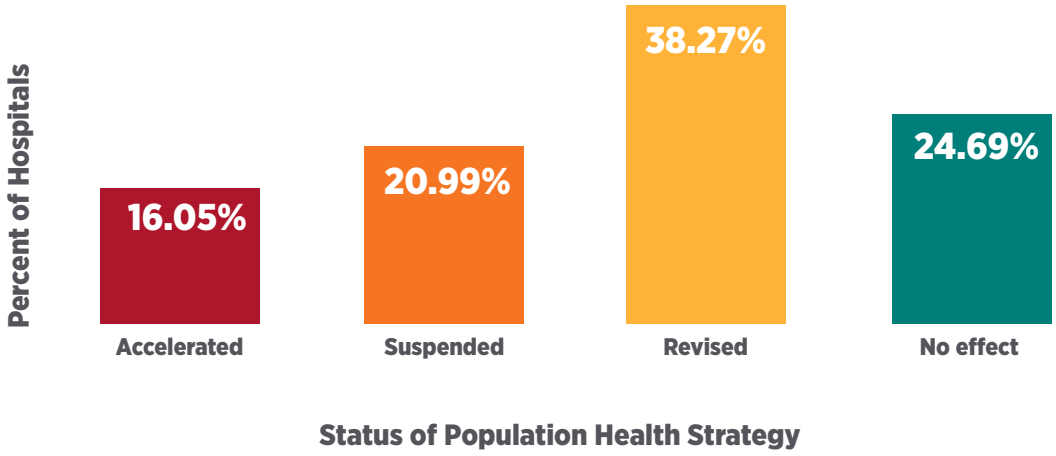
Policy and Advocacy

According to the 2020 survey, 43% of hospitals indicated they would advocate for adjustments based on SDOH and risk with value-based performance measures.

Chart 10 demonstrates how the current pandemic altered the population health strategy for hospitals completing the 2020 survey. Most reported they have revised their population health strategy.

CHART 10

How the COVID-19 Pandemic Altered Participating Hospitals' Population Health Strategy (n=81)



Source: MHA — Population Health Assessment Survey, 2020

MHA's population health assessment survey is an important tool to evaluate hospitals' progress throughout the transition from volume- to value-based care. When comparing 2020 and 2017, there was an improved mean score across all nine domains. While most hospitals have made headway on their population health journey, there is more work to be done. Key future focus areas relate to adopting innovative strategies that seek to improve access to care, data collection and analysis, technology, and health outcomes for individuals and populations. It will be imperative that hospitals and health systems design integrated population health management strategies that bring together patients and families, clinical and nonclinical care teams, and the right data to better meet patient needs. This important repositioning will ensure hospitals not only survive, but thrive.

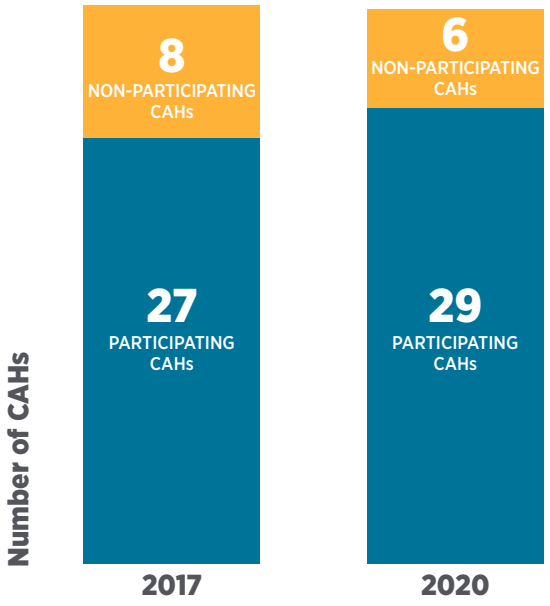
POPULATION HEALTH SURVEY RESULTS
BY HOSPITAL TYPE

CRITICAL ACCESS HOSPITALS

Chart 11 shows that the 2020 Population Health Assessment Survey response rate from critical access hospitals was 83% compared to 77% in 2017. Out of 29 CAHs that completed the survey in 2020, nine are part of a system, while the remaining 20 are not affiliated with a system.

CHART 11

Survey Participation by Year



Source: MHA — Population Health Assessment Survey, 2017/2020

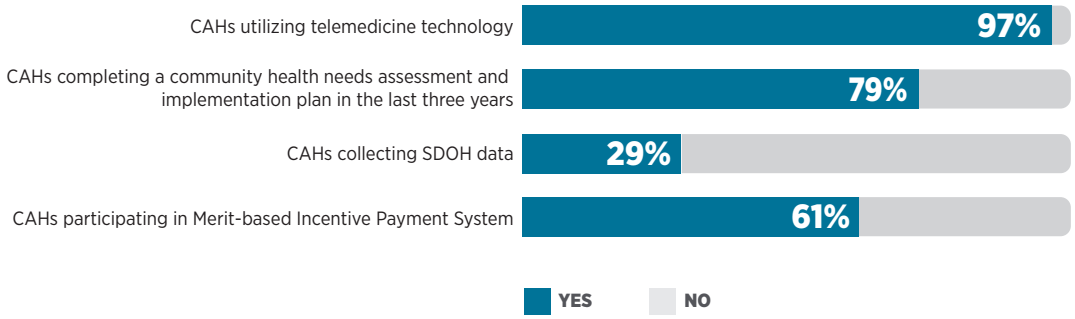
Table 3 This table shows an decreased mean score on most measures in 2020 compared to 2017.

TABLE 3

Mean Score Comparison of Critical Access Hospitals			
	2017 Mean Score (n=27)	2020 Mean Score (n=29)	Mean Score Status
Leadership	20	18	Decreased
Patients and Family	58	47	Decreased
Workforce	25	25	Sustained
Finance	3	-2	Decreased
Data and Technology	11	10	Decreased
Operations	35	26	Decreased
Legal/Regulatory	2	3	Increased
Outcomes	33	31	Decreased
Policy and Advocacy	3	2	Decreased

Based on 2020 survey results, **Chart 12** shows the distribution of CAHs on key measures. A majority of CAHs utilize telemedicine technology, complete a CHNA and implementation plan, and participate in the Merit-based Incentive Payment System. Less than 30% are collecting SDOH data.

CHART 12

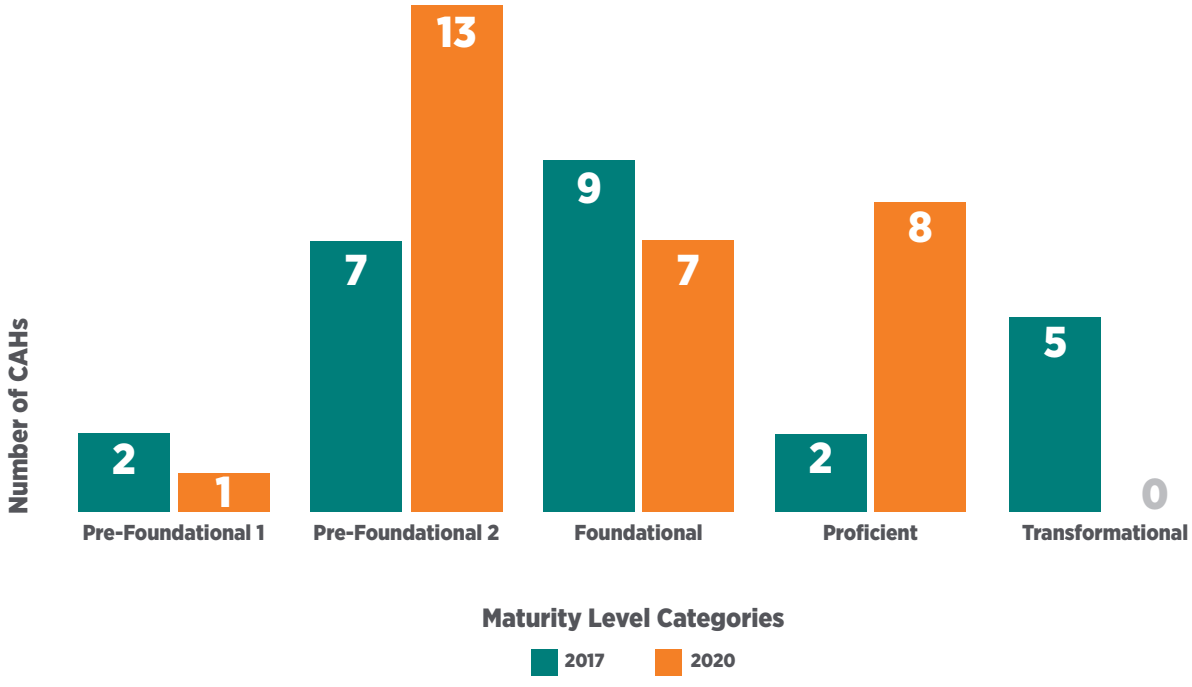


Source: MHA — Population Health Assessment Survey, 2020, n=29

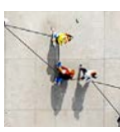
Chart 13 shows a comparison of the distribution of CAHs in the five categories of the population health maturity scale by year. Out of 29 CAHs completing the 2020 survey, approximately 45% fell under the Pre-Foundational 2 category, followed by Proficient and Foundational at 28% and 24%, respectively. There were no CAHs in the Transformational category, and only one in the Pre-Foundational 1 category.

CHART 13

Distribution of CAHs by Maturity Level



Source: MHA — Population Health Assessment Survey, 2017/2020



HOSPITALS WITH 25-150 STAFFED BEDS

Table 4 shows that hospitals with 26-150 staffed beds in 2020 had a higher mean score in all nine population health assessment domain areas compared to 2017.

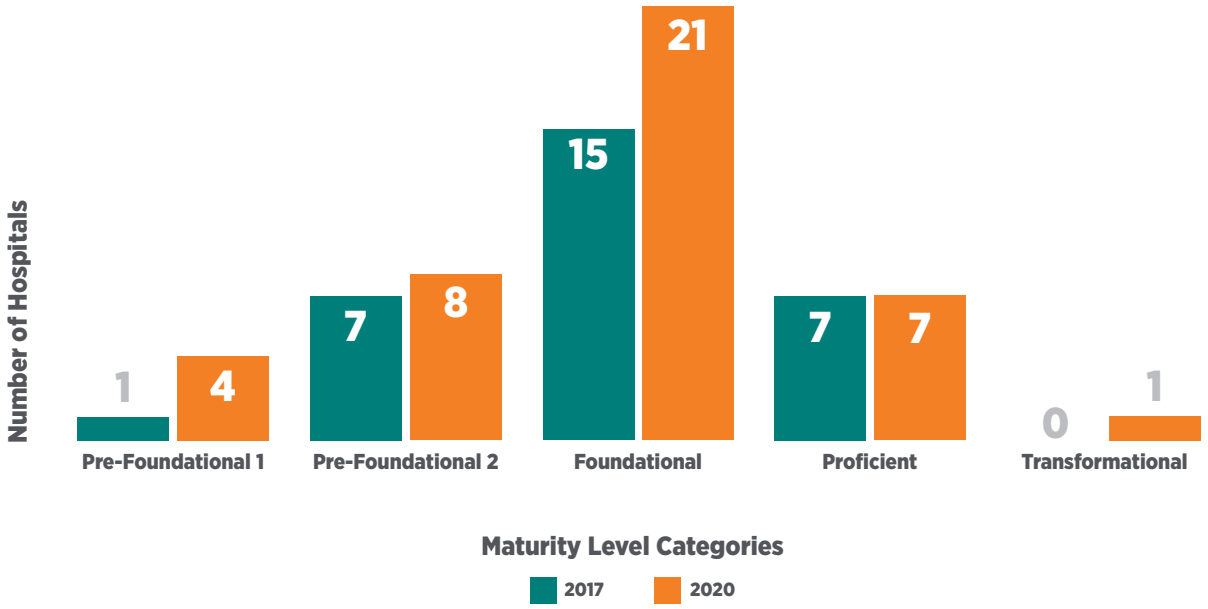
TABLE 4

Mean Score Comparison for Hospitals with 25-150 Staffed Beds			
	2017 Mean Score (n=30)	2020 Mean Score (n=43)	Mean Score Status
Leadership	10	16	**Increased**
Patients and Family	29	50	**Increased**
Workforce	16	30	**Increased**
Finance	1	5	**Increased**
Data and Technology	6	10	**Increased**
Operations	14	28	**Increased**
Legal/Regulatory	1	3	**Increased**
Outcomes	17	35	**Increased**
Policy and Advocacy	1	3	**Increased**

Compared to 2017, **Chart 14** shows there was a slightly higher number of hospitals under the Pre-Foundational 1, Pre-Foundational 2, Foundational and Transformational categories. There was no change in the number of hospitals in the Proficient category.

CHART 14

Distribution of Hospitals with 25 to 150 Staffed Beds by Maturity Level



Source: MHA — Population Health Assessment Survey, 2017/2020

HOSPITALS WITH MORE THAN 150 STAFFED BEDS

Table 5 shows an increased mean score on most measures in 2020 compared to 2017.

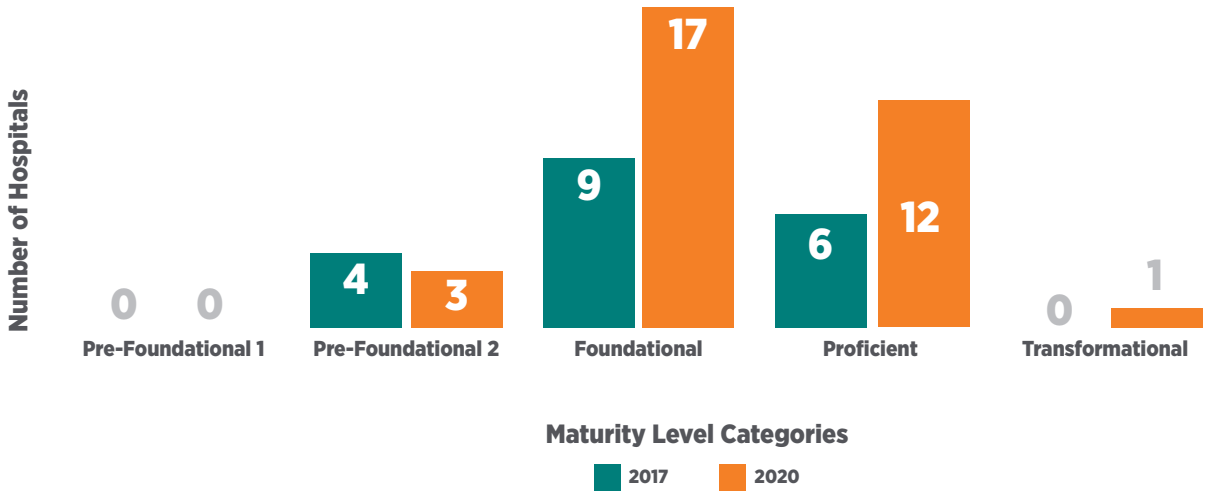
TABLE 5

Mean Score Comparison of Hospitals with More Than 150 Staffed Beds			
	2017 Mean Score (n=19)	2020 Mean Score (n=33)	Mean Score Status
Leadership	22	28	Increased
Patients and Family	61	62	Increased
Workforce	46	45	Decreased
Finance	16	19	Increased
Data and Technology	11	16	Increased
Operations	36	46	Increased
Legal/Regulatory	3	4	Increased
Outcomes	33	37	Increased
Policy and Advocacy	4	4	Sustained

Chart 15 shows a higher number of hospitals in the Foundational, Proficient and Transformational categories in 2020 compared to 2017. There were no hospitals in the Pre-Foundational 1 category in 2017 or 2020, and a slight decline under the Pre-Foundational 2 category in 2020.

CHART 15

Distribution of Hospitals with More Than 150 Staffed Beds by Maturity Level



Source: MHA — Population Health Assessment Survey, 2017/2020

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