The State of Population Health: Seventh Annual Numerof Survey Report

Conducted by Numerof & Associates in collaboration with David Nash, Founding Dean Emeritus of the Jefferson College of Population Health

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Preface

The environment in which our seventh annual State of Population Health Survey was launched was unique; 22 months into the most serious pandemic ever to hit the United States, and 2 months from the initial release of the Pfizer-BioNTech COVID-19 Vaccine. At the time, our nation was fully immersed in the Covid-19 pandemic and managing the crisis demanded the full attention of our nation’s healthcare leaders. Thanks to their efforts and at great cost, the worst of the pandemic appears to be behind us, yet we are literally and figuratively still catching our breath.

However, with a death toll of over one million individuals in the U.S., simply returning to the way things were done before the pandemic would be a grave mistake. Rather, we must consider the profound lessons Covid-19 taught, many of which carry enormous relevance to population health as an approach to care delivery and the way we pay for it.

One lesson is about the folly of believing that the health of any population can be independent of its most at-risk segment. In its relentless focus on disadvantaged subpopulations and others burdened with chronic disease, Covid-19 highlighted the inadequacy of a transaction-based approach to care. Fee-for-service reimbursement reinforces an approach that is fragmented, provider- rather than patient-centric, that has ignored social determinants of health, and that overutilizes and under-delivers as a result. This created reservoirs of vulnerable subpopulations among the larger society, and we have all paid a price for that.

Another major lesson that Covid-19 has taught us is that there is more than one kind of “financial risk.” For decades now, the traditional healthcare establishment has largely resisted efforts by payers, particularly CMS, to link reimbursement to the efficiency and quality of care delivered. Payment schemes that made providers’ payment contingent on their management of cost and quality have been regarded as too “risky,” and on those grounds, the industry has historically and stubbornly clung to fee-for-service.

Covid-19 has totally changed this picture. The cancellation of elective procedures to cope with the influx of Covid patients left many hospitals across the country in financial freefall and forced them to realize that there is risk in fee-for-service. Those few provider organizations with a substantial number of patients covered by capitated contracts continued to collect their per-member-per-month payments, but these providers were few and far between – and the greater healthcare delivery community has been significantly damaged as a result.
This is the context in which we report the most recent findings from our State of Population Health Survey. The data was collected while the country was still very much combatting the pandemic, from October 2021–March 2022, and our results suggest where we might expect population health to go from here.

We believe it is important to report and discuss this data as it will prove particularly insightful in contrast to the picture that emerges from our future assessments, when the pandemic is fully behind us and its implications are more clearly defined.
Executive Summary

For the seventh consecutive year, Numerof & Associates, in collaboration with Dr. David Nash, Founding Dean Emeritus of the Jefferson College of Population Health, conducted a study of the evolution of population health management in the United States. As U.S. government policy grows more focused on moving to a value-based model, population health management will be increasingly seen as a key part of the solution for realigning the healthcare industry to deliver better care at lower costs.

This report is based on an online survey of nearly 300 C-suite healthcare executives, combined with open-ended interviews with selected executives that provide additional color around the numbers. Key study findings include:

Despite wide agreement that population health is the future, risk-based models remain a marginal component of health systems' business.

Consistent with years past, a significant majority of respondents (81%) said that population health would be “critically” or “very” important for future success, but they also made it clear that their organizations are still early in their journey toward a new model. While 85% of respondents said their organizations have some revenue at risk, for 2 out of 3, it was 20% or less. In fact, the median amount of revenue at risk – as measured by the percentage of revenues in risk-based agreements – was only 10% – the same it has been in 5 of the 6 prior administrations of this survey. Similarly, the majority of respondents reported no capitated revenue at all. No surprise then that only about 1 in 3 respondents believe they are “very” or “completely” prepared for risk-based agreements.

Consistent with the above, progress toward population health fell short of respondent predications made 2 years prior. The Covid-19 pandemic was almost certainly a factor in this lack of progress. On the upside though, the pandemic may be providing some impetus for change.

In the 2019 survey, participants predicted that a median of 30% of total revenue would be at risk in 2021 – 3 times that of the actual median. This shortfall has been observed in all previous administrations of the survey, and was especially predictable this year, given how much focus the pandemic has demanded of healthcare leaders.

However, results do indicate a silver lining to the Covid-19 experience. 60% of participants agree that at-risk contracting is likely to increase in light of the pandemic – a significant increase from 39% in last year’s survey. Similarly significant, albeit less enthusiastic changes were noticed with regard to
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capitation, where 10% of participants moved from “disagreeing” to either “agreeing with” or “neutral on” the notion that Covid-19 would accelerate acceptance of capitated models. There was also wide agreement (78% of respondents) that joint efforts with payers would become more probable post-Covid, and 41% of participants reported payers to be “very” or completely willing to engage in risk-based agreements – a new high for the survey.

There continues to be 3 primary motives for organizations to pursue population health: 1) to control clinical costs, quality, and outcomes; 2) alignment with company mission/culture; and 3) performance based financial incentives. However, the threat of financial loss continues to loom large, along with other key barriers.

Controlling clinical cost and quality was the most commonly cited primary driver for pursuing population health (31% of respondents) as it has been each year since 2016. Organization mission/culture (22%) and performance-based financial incentives (21%) were the second and third most commonly cited – a finding consistent with each of the past 4 years. In light of Covid-19’s disruptions to fee-for-service revenue streams, we explored the extent to which increased revenue predictability was a driver. To our surprise, only 1% of respondents reported this as their primary reason for pursuing population health and it was deemed a “significant driver” only 31% of the time.

Consistent with prior years, the threat of financial loss was the most often cited barrier to population health (21% of respondents). Uncertainty around when to transition, difficulty changing the organization’s culture, difficulty modeling the cost of care across the continuum, and issues with internal systems were also commonly acknowledged key challenges.

Often, a fear of financial loss is well founded: many organizations lack the capabilities needed to manage variation in costs at the physician level.

Concerns around the threat of financial loss are consistent with 60% of respondents rating their organizations’ ability to manage variability in cost of care as “average” or “below average.” This sentiment likely stems from most organizations’ struggles to engage physicians – the leading driver of utilization costs – to establish appropriate standardization in clinical practice patterns that minimize variability in cost. Doing this effectively requires mechanisms such as evidence-based care paths, order entry systems that flag variation, providing physicians with comparative cost and quality data, and linking physician compensation to cost and quality outcomes. Routine use of any one of these infrastructure processes was found to be highly predictive of organizations’
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preparedness for risk and reported ability to manage cost at the physician level. But they remain absent or underdeveloped in most organizations with little progress made over the past 5 surveys.

**Organizations are expanding their reach across the continuum as well as into their communities to address social determinants of health (SDOH).**

One of the most significant continuing trends over the past six years is increased involvement in care offerings along the continuum that attempt to respond to underlying social determinants of community health. Most notably, telehealth, preventative care/wellness programs, home health services, and retail clinics have become more prominent in recent years. Over half of respondents said that their organizations offer assistance with transportation, food, and nutrition, and 35% provide housing or community development support, most often in partnership with other community organizations.

In summary, respondents believe population health is critical to their organizations’ future, but risk-based agreements remain a marginal piece of the industry’s collective revenue model. As evidenced by more offerings across the continuum of care and an increased focus on SDOH, there have been some modest adjustments to the current model, but organizations continue to avoid true accountability for cost and quality, with the principal reason being fear of financial loss. As long as administrators are reluctant to engage with physicians to address the impact of clinical choices on cost and quality, the principal driver of these outcomes will remain outside their control.
Methodology

Although population health management has garnered significant attention, there has been little effort given to tracking the actual progress made toward value-based models of care. Recognizing the critical need for this research, Numerof & Associates partnered with Dr. David Nash, Founding Dean Emeritus of the Jefferson College of Population Health, on an annual study to define and track the evolution of population health management in the U.S.

In this seventh year of our study, we utilized the same approach as in prior years; an online survey which was designed to assess progress, challenges, and success factors in healthcare delivery organizations’ transition to population health management, with particular interest in year-over-year trends. Approximately 10,925 individuals were invited to participate in the online survey, which was fielded from October 2021 to March 2022. The target audience was defined as physician group executives or vice presidents, as well as individuals working in U.S. provider organizations including healthcare systems, hospital, and academic medical centers.

We received 257 surveys, corresponding to a response rate of 2.6% of individuals and 12.1% of institutions. Respondents included C-suite executives across the entire U.S. in urban, suburban, and rural areas. They represented stand-alone facilities, small systems, and IDNs; for-profit, not-for-profit, and government institutions; and academic and community facilities. Similar to previous years, survey respondents participating in accountable care organizations (50%) were overrepresented compared to recently published numbers (20%).

In addition to aggregated data from the full set of survey participants, this report includes illustrations from open-ended responses and interviews with selected executives.

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1 256 responses passed the inclusion criteria, which required that respondents work for a healthcare delivery organization or physician practice as well as have at least partial knowledge of their organization’s current population health management efforts (i.e., a score of 3 or greater on a 7-point knowledgeability scale).
Introduction and Context

It is increasingly recognized that the current model of healthcare is broken. It is unaffordable, fragmented, provider- rather than patient-centric, and has little accountability for outcomes.

Moving forward, the model must focus on transparency and accountability for outcomes across the continuum. It must take into account both quality and cost to define relative value through the eyes of consumers, payers, and other stakeholders.

Population health has gained traction as an important solution in addressing the issues inherent in the current system. Although there are multiple definitions of population health, all articulate the general goal of achieving better health outcomes at lower cost by providing the right intervention for each patient at the least costly point in the care continuum. Regardless of the definition, new efforts toward effective implementation of population health management represent a paradigm shift.

The Evolution of Population Health

To understand this shift, it’s helpful to take a historical perspective. Since the 1970s, Congress and successive administrations have tried to slow the growth of healthcare costs. Attempts have included the introduction of Medicare hospital payment formulas based on fixed payments for hospital services (payments for diagnostic related group services or DRGs), health maintenance organizations (HMOs), and preferred provider organizations (PPOs).

Costs have continued to rise despite these efforts. At the same time, concerns about fragmentation of care and diminished quality have increased significantly. What has been missing from the discussion, and what lies at the heart of why healthcare hasn’t changed, is the fact that costs have not been linked to outcomes.

At the same time, employers have challenged increasing costs, seeking new ways to control them, and shifting some of the burden to employees through higher deductibles, copays, and responsibility for premiums. Payers have also been challenged by plan sponsors to reduce costs, and both payers (commercial and government) and consumers are trying to get more value for the checks they write. Their mantra has become “moving from volume to value,” with many adding in, “How do I achieve better outcomes for less?”
With the advent of “never events” in 2008, the Centers for Medicare and Medicaid Services (CMS) took a stand. For the first time, it attempted to connect payment to outcomes. No longer would CMS pay for mistakes that should have been prevented (e.g., hospital-acquired infections, medication errors, wrong site surgery, etc.).

In 2010, Patient Protection and Affordable Care Act (PPACA) legislation picked up on this theme with a range of pilot programs designed to help delivery organizations get used to the idea that going forward, quality and outcomes would affect reimbursement. This has been reflected in approaches like bundled pricing and accountable care organizations, among others.

CMS continued on the path toward value-based care by announcing in 2015 that 50% of Medicare payments would be structured according to value-based models by 2018. To meet this goal, CMS introduced various programs, including bundled payment models. Commercial payers followed suit, publicly stating their own value-based payment goals and programs for achieving them.

Despite falling short of their value-based payment goals for 2018, CMS continued to pursue a market-based healthcare system that prioritizes value over volume. The Trump administration introduced the Pathways to Success redesign of the MSSP program and Direct Contracting to expedite delivery organizations’ adoption of two-sided risk. These programs coincided with an initiative to expand patient choice and improve site-of-care flexibility for Medicare beneficiaries. Price transparency rules followed shortly thereafter, requiring hospitals to post their prices for 300 common services by the start of 2021. However, despite a Supreme Court decision affirming the new rules, non-compliance with the rule remains widespread. Numerous administrative, legal, and economic barriers must be addressed before it will make a significant impact on the industry.

Meanwhile, the Medicare Access and CHIP Reauthorization Act (MACRA) remains in effect with broad political support. Signed into law in 2015 with data collection starting in 2017, MACRA is designed to encourage physicians to shift from fee-for-service to alternative payment models linked to cost and quality. Stakeholders across the industry see the program as an improvement to the preceding legislation intended to control federal healthcare spending, but MACRA is by no means a holistic solution to reshaping physician practice patterns.
Outside of the policy realm, non-traditional players continue to methodically build out their presence in the delivery space and chip away at the market that has belonged to conventional providers. Walmart continues to open standalone clinics offering primary care, dentistry, eyecare, lab tests, even behavioral health services, at costs significantly less than most conventional providers. CVS maintains over 1100 Minute Clinics across the country offering basic ambulatory treatments for emergent illnesses and injuries; and over 900 HealthHUBs (i.e., “Minute Clinics on steroids”) specializing in chronic disease and offering expanded medical and wellness services. A long list of other challengers — Amazon, Apple, Walgreens, and other less recognizable names — are also building and testing unconventional solutions with the potential to cause major disruption for traditional providers.

If these organizations’ internal investments weren’t enough to concern traditional healthcare organizations, their M&A activity should be. Walmart acquired MeMD, providing it with virtual care capabilities to go alongside its growing brick-and-mortar presence. As part of its goal to “reinvent healthcare”, Amazon bought One Medical along with its disruptive patient-centric primary care technology platform. The latest warning shot is the acquisition of home health service provider Signify Health by CVS. Taken together, the strategic moves by these not-in-kind competitors and others sends a clear message: Barriers to entry in healthcare are eroding and if traditional health systems won’t satisfy consumers’ unmet needs, somebody else will. While some delivery organizations have taken steps to compete with these new players on the basis of cost and quality, most have not. They’ve instead turned to familiar protective strategies, such as reducing direct competition through acquisitions or lobbying aggressively to create regulatory barriers through trade groups such as the American Hospital Association (AHA).

And of course, there’s Covid-19. From a financial perspective, the pandemic redefined risk for healthcare providers; or at least, it should have. What is apparent is that those few providers with capitated contracts continued to receive their PMPM payments through the pandemic. The providers who relied on expensive, FFS elective procedures to sustain their balance sheets found themselves in financial freefall. After years of calling capitation “taking on risk,” the pandemic showed the unlimited risk that lies in fee-for-service.

More importantly, the pandemic proved that the health of one population cannot be viewed independently of its most at-risk segment. In light of this realization, it is incumbent on provider organizations to consider population health management a fundamental component of their mission to improve the health and well-being of those they serve.
The data summarized in this report was gathered 1 year after the onset of the pandemic. It reflects the thinking of those closest to population health efforts across the conventional healthcare delivery community, and the implementation status of their institutions. It illustrates the slow progress of a new idea in the face of established interests developed over decades. As we continue to emerge from the pandemic, the same tensions — over the cost and quality of care, the proper role of the consumer/patient, and the accountability of providers — will reassert themselves with greater urgency than ever. Where the industry goes from here will be a function of what we see in this data, the experience that executives take away from the pandemic, and the growing pressure for change.

The principal driver of healthcare cost growth is a payment model that rewards the provision of service, and not the clinical or financial outcomes achieved. Until that issue is addressed, we will not succeed in bending the cost curve. Providers still have the opportunity to rethink their business models and demonstrate the critical role they can and should play in keeping our population healthy and healthcare costs low. We strongly believe the push toward value will continue, but exactly how that will translate into future policy remains to be seen. Forward-thinking providers will continue to move in this direction — as long as they can maintain control over their trajectory.

**Charting Progress Toward Population Health**

If we are serious about better health and better health outcomes at lower cost, then we need to think about using nontraditional delivery options and consider how these tie into current efforts. Population health is not a new concept, but it has attracted renewed interest across the healthcare industry as a way to move toward a value-based model. Whether it’s thought of in terms of the health of individuals in a given geographic area, or as a financial risk model relying on capitated funding for delivering health services, population health is likely coming into its own.

Despite a variety of definitions, at its core, population health is about managing the health of a defined population by providing the right intervention for a specific patient at the least costly point in the care continuum. Its goals include improving care coordination, enhancing health and wellness, eliminating disparities, and increasing transparency and accountability. When population health management works well, acute care utilization is reduced, total healthcare costs are lower, and “healthcare” finally becomes more than just “sick care.”

Inherent in making the transition to population health management is the ability to assume financial risk. This is newly charted territory for most
healthcare providers. Many have questions about how to initiate the journey, and most importantly, how to ensure a successful transition.

In the midst of this dramatic change, it is critical to define where organizations are in the transformation process, and to track those changes year by year. In response to this need, Numerof & Associates partnered with Dr. David Nash, Founding Dean Emeritus of the Jefferson College of Population Health, on a multi-year assessment of healthcare delivery organizations across the U.S. This report highlights key findings from the seventh year of our study.
Key Research Findings

Building upon the firm’s deep expertise in the realm of value-based care, Numerof’s national surveys of healthcare executives across seven successive years indicate that population health remains a dynamic area, as seen in the following key themes.

1. Population health is expected to be an important driver of future success; however, participation in risk-based initiatives continues to be marginal

Consistent with past surveys, a majority of respondents considered population health important for their organizations’ future success. In 2021, 81% of respondents said that population health would be “critically” or “very” important for future success – nearly the same as in 2020.

Figure 1: How important do you think population health will be for the future success of your organization?

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critically important</td>
<td>38%</td>
</tr>
<tr>
<td>Very important</td>
<td>43%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>14%</td>
</tr>
<tr>
<td>Slightly important</td>
<td>5%</td>
</tr>
<tr>
<td>Other*</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Represents responses of “Slightly” or “Somewhat important”

That robust expectation though is in contrast with how ready respondents said they are now.

In the 2021 survey only 25% felt they are “very” or “completely” prepared for payment models involving risk.
Key Research Findings

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Figure 2: How prepared do you think your organization is now for payment models involving financial risk related to the cost and quality outcomes?

If we add in respondents who feel “moderately prepared” for payment models involving risk, that boosts the total to 69% – considerably higher, but with far less conviction.

Participation in Risk-Based Initiatives

Most respondents reported some participation in alternative payment models. But unsurprisingly given their perceived lack of readiness for risk, the extent of their progress – as measured by the percentage of revenues in risk-based agreements – still appears limited.

Figure 3: How much of your revenue is subject to performance-related gain or loss?

*Represents responses of “Somewhat prepared”, “Somewhat unprepared”, Very unprepared” or “Completely unprepared”*
While more than four in five (85%) respondents reported their organization was in at least one agreement with a payer that includes upside gain and/or downside risk, less than a third (32%) of respondents said that their organizations received over 20% of its revenue through such contracts (see Figure 3). In fact, the median amount of reported revenue that flows through risk-based contracts was only 10%. This finding was consistent with 4 of the previous 5 survey administration. We also surveyed participants on capitated contracts and for the first time since 2017, more than half of respondents reported no revenue through capitation. These findings are noted in Figure 4 below.

<table>
<thead>
<tr>
<th>Median % of revenue at risk</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median % of capitated revenue</td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>
2. Organizations are failing to meet their own expectations around risk

The extent to which respondents feel ready to take on risk now also stands in stark contrast to predictions made in earlier surveys. In 2019 the survey asked, “how ready will your organization be to assume risk for cost and quality in 2 years?” As shown in Figure 5, estimates of progress that would be made far exceeded assessments made in the 2021 survey.

Figure 5: Respondents’ readiness to assume risk in 2021 falls far short of their predictions two years prior

<table>
<thead>
<tr>
<th>Readiness Level</th>
<th>2021 Projection</th>
<th>2021 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely prepared</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>Very prepared</td>
<td>45%</td>
<td>22%</td>
</tr>
<tr>
<td>Moderately prepared</td>
<td>44%</td>
<td>30%</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>23%</td>
<td>7%</td>
</tr>
<tr>
<td>Other*</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Represents responses “Completely”, “Very”, or “Somewhat unprepared”

Similarly, respondents have also predicted a dramatic increase in the percentage of annual revenue that would be at risk in the next two years, but as shown in Figure 6, here too actual progress has failed to keep pace with expectations. According to respondents of our 2019 survey, a median of 30% of healthcare delivery organization’s revenue would flow through risk-based contracts in 2021, three times the actual median amount reported above. In short, respondents expected more rapid progress over the past 2 years than what has materialized.
Consistent with prior administrations of this survey, these findings highlight the continuing failure of the delivery sector to adopt population health principles, specifically, accountability for cost, quality, and outcomes that matter. While the general expectation is that this is the future of healthcare, the progress of change significantly lags expectations.

Even those on the industry’s cutting edge believe there’s significant progress still to be made, as noted by a senior vice president of an east coast IDN: “We have done very well, but that is in comparison to most other health systems. If we look at what is possible, and think about true, nimble, and innovative population health organizations, we have a long way to go.”

Respondents pointed to a variety of factors that have contributed to the slow adoption of risk, many of which stem from a reluctance to leave fee-for-service behind. This is reportedly the case for a medical group in the Midwest whose CEO commented, “We have opportunity to be more aggressive in moving to risk-based payment models but have had some resistance from our more traditional fee-for-service hospital-based operating units.”

Organizations have grown comfortable with fee-for-service. After decades of operating under the model, they know how to maximize their margins within it. In contrast, population health represents uncharted territory that, absent external events, many organizations are unwilling to enter. A vice president from a major health system in the west acknowledged this, commenting, “the uncertainty with both government and private payers is a significant barrier to moving forward.”
Despite the modest progress and aforementioned barriers, expectations around alternative payment models remain high relative to what’s in place today. Respondents indicated that a median of 25% of revenue will flow through risk-based contracts in 2023 - more than double the 2021 amount. There was an interesting dichotomy between predictions made by respondents from organizations with revenue at risk today vs. those without. The former predicted their proportion of revenue at risk will increase by 15 percentage points (15% to 30%) while the latter, despite having less experience in population health, forecasted a jump of 25 percentage points (0% to 25%). This is evidence of a general observation we’ve made throughout the seven years of this survey, which is that until organizations adopt a sizable amount of risk and move up the experience curve, there’s a degree of naivete regarding the challenges associated with transitioning to population health and a tendency to overestimate the pace at which risk will be adopted.
Impact of the Pandemic on At-risk Contracting and Capitation

In 2020, when asked whether they think that the pandemic will accelerate at-risk contracting, organizations gave mixed responses. But this year’s results paint a more definitive picture, one where at-risk contracting will become more prevalent going forward (see Figure 7).

Figure 7: Responses to the suggestion that at-risk contracting will increase post-covid

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>39%</td>
<td>60%</td>
</tr>
<tr>
<td>Neutral</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Disagree</td>
<td>31%</td>
<td>14%</td>
</tr>
</tbody>
</table>

In addition, the most recent survey showed some evolution of thinking regarding capitation.

In 2020, nearly as many respondents agreed the pandemic would accelerate acceptance of capitated models as those disagreeing. In 2021, 10% fewer respondents disagreed with this premise with a significant (p=0.039) uptick on those “neutral” on the topic (see Figure 8). This suggests healthcare executives still remain lukewarm to capitation, which is generally consistent with other survey findings. While nearly all respondents (92%) expect to have some capitated revenue in 2023, the strong majority (78%) believe it will represent no more than 20% of total revenue.
With recognition of the disruption Covid-19 has had on utilization patterns, and fee-for-service revenue streams as a corollary, many respondents see risk-based models as a means of stabilizing revenue. For example, an executive at a large IDN commonly viewed as a leader in population health noted, “at-risk contracts smooth out revenue streams since dollars continue to flow [when utilization slows] unlike with FFS.” Similarly, a vice president of population health supporting an east coast health system positioned alternative models as a hedge against care disruptions, commenting, “our existing value-based care income provided substantial financial consistency during COVID.” Another respondent – the Chief Strategy Officer of an academic medical center in the Northeast – explained his organization has an increased interest in revenue diversification through capitation specifically, commenting, “neither pure FFS nor pure capitation are great reimbursement models when utilization patterns become unpredictable.”

However, not all survey participants view the pandemic in this light. One respondent – a senior director of population health, positioned Covid-19 as a setback for value-based care, citing its detrimental impact on staffing, preventative care, annual visits, and risk-coding, as well as the sudden uptick in utilization in 2021 that followed the slowdown of 2020. While such concerns are legitimate and will need to be addressed, they are short-term. By and large, respondents’ sentiments suggest that the pandemic will have an accelerating impact on population health over the long-term, but with a major caveat, appropriately characterized by the CMO of a major Northeast health system: “The complexity lies in performance when there is not a pandemic, as well as the ability to demonstrate the connection between clinical activities and financial outcomes.”
3. Organizations see population health as an opportunity to improve control of clinical costs, quality, and outcomes

Figure 9 below reflects what respondents said was the primary driver for pursuing population health in their organization. Responses to this question have been remarkably consistent. Controlling clinical cost and quality has been the leading driver each year since 2016. Organization mission/culture and performance-based financial incentives have been the second and third most commonly cited driver each of the last 4 years. We included, “to add predictability to our revenue model” as an option this year in light of the aforementioned disruptions to FFS revenue streams. To our surprise and despite the anecdotes shared above, only 1% of respondents reported this as their primary reason for pursuing population health. In fact, this was deemed a “significant driver” only 31% of the time – the lowest frequency of all responses listed in Figure 9. Considering the regularity with which health systems are reporting delayed/cancelled procedures as a contributor to poor financial performance, it’s clear that many health system leaders have yet to see alternative business models as a path toward financial stability.

**Figure 9: Primary reason for pursuing population health**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better control of clinical costs, quality, and outcomes</td>
<td>31%</td>
</tr>
<tr>
<td>It’s part of our mission statement/culture</td>
<td>22%</td>
</tr>
<tr>
<td>Programs/models with performance-based financial incentives (e.g.)</td>
<td>21%</td>
</tr>
<tr>
<td>Current FFS model won’t last forever</td>
<td>14%</td>
</tr>
<tr>
<td>Competitive advantage in the marketplace</td>
<td>8%</td>
</tr>
<tr>
<td>Current or future penalties from the government</td>
<td>2%</td>
</tr>
<tr>
<td>To add predictability to our revenue model</td>
<td>1%</td>
</tr>
</tbody>
</table>
4. The threat of financial loss remains the leading barrier to embracing population health

As discussed above, health systems see population health as the future, but have consistently fallen short of their own expectations regarding their transition to risk. This raises a simple but important question: Why?

With this in mind, our survey explored the barriers impeding health systems’ progress toward population health. Figure 10 below reflects what respondents reported to be the primary barrier – the single most challenging obstacle. As has been the case each year since 2016, the threat of financial loss was the most often reported primary barrier (21% of respondents). There have been no significant changes to our year-over-year findings with respect to this question. Uncertainty around when to transition, difficulty changing the organization’s culture, difficulty modeling the cost of care across the continuum, and issues with internal systems remain often cited key challenges.
The fact that respondents cite threat of financial loss as their primary barrier is consistent with respondents’ self-assessment of their organizations’ capability to manage the cost of care (see Figure 14 below). Very simply, most provider organizations have not engaged with clinicians to influence clinical decision-making in ways that would make it more efficient and that would minimize variability in cost and quality. With recognition that physicians – the leading driver of cost in the hospital – are operating independently and without common processes and metrics make the organization subject to surprises in the cost of care. Concerns about financial loss have a solid basis in reality.

In order to gain some measure of predictability and control over key cost drivers, significant effort is required of most organizations to design and implement care paths, model costs, and track performance and variability in real time. At-risk initiatives launched by CMS (e.g., Medicare Shared Savings) have provided organizations with some incentive to stand up these mechanisms, but their development is often met with pushback from clinicians and administrators alike. This resistance is likely what respondents had in

### Figure 10: Primary barriers to pursuing population health

<table>
<thead>
<tr>
<th>Potential threat of financial losses by moving to a new model</th>
<th>21%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsure of when to make the transition from the current model</td>
<td>14%</td>
</tr>
<tr>
<td>Difficulty in changing the organization’s culture</td>
<td>12%</td>
</tr>
<tr>
<td>Difficulty in modeling the cost of care across the continuum</td>
<td>12%</td>
</tr>
<tr>
<td>Issues with internal systems (e.g., IT, tracking, management)</td>
<td>10%</td>
</tr>
<tr>
<td>Resistance/lack of buy-in from executive leadership in the organization</td>
<td>9%</td>
</tr>
<tr>
<td>Lack of clear evidence that a population health model will succeed</td>
<td>7%</td>
</tr>
<tr>
<td>Lack of leadership/accountability in the organization for population health</td>
<td>6%</td>
</tr>
<tr>
<td>Resistance/lack of buy-in from physicians in the organization</td>
<td>4%</td>
</tr>
<tr>
<td>Lack of robust cost accounting system</td>
<td>2%</td>
</tr>
<tr>
<td>Lack of appropriate skills/capabilities among the organization’s employees</td>
<td>2%</td>
</tr>
<tr>
<td>Negative results with at-risk models in the past</td>
<td>2%</td>
</tr>
<tr>
<td>Resistance/lack of buy-in from the board of directors in the organization</td>
<td>0%</td>
</tr>
</tbody>
</table>
mind when they identified difficulty in changing the organizations’ culture as the second most significant obstacle in moving toward population health, as noted by one Chief Medical Officer: “We have been inhibited by culture and success in FFS, but the ACO/MSSP path toward increased risk is a solid platform for culture change.”

Uncertainty about when to make the transition to population health (second place) remains an obstacle for many providers, described by one respondent as “a juggling act to balance volume and value.” Part of the issue is that providers know that they’ve generally seen operating revenue from fee-for-service – even if it has been shrinking over time. Consequently, many feel that exiting fee-for-service too early will leave money on the table. A Chief Medical Officer from a major health system in the Midwest captured the point: “We’ve made slow progress – we’re hampered by ongoing FFS revenues.”

Modeling of the total cost of care across the continuum is an important exercise to mitigate the threat of financial loss and determine the appropriate pace at which organizations should transition to population health. However, many organizations struggle with this assessment as it hasn’t been a requirement in fee-for-service models. Most organizations lack the tools and data to credibly forecast what their return would be under various at-risk scenarios and as a result, many respondents (12%) identified difficulty in modeling the cost of care across the continuum as their organizations’ primary barrier.

Success in population health requires internal systems (e.g., IT systems, organizational processes, and competencies/capabilities) that are far different from what most provider organizations have in place to support fee-for-service models. Respondents recognize this gap as indicated by it being identified as the 5th most significant barrier and corresponding free responses, including the following from a one IDN’s Chief Population Health Officer: “developing IT and analytic resources is one of the greatest challenges.”
Making population health work requires a dual focus on improving clinical costs and patient outcomes. Many organizations have a high degree of variability in both areas.

In this seventh year of our survey, there was continued modest progress in the management of variation in clinical quality. The proportion of respondents who view their organizations’ ability to manage variation in quality at the physician level as “above average” has now grown by 15% since 2016 – a significant change (see Figure 11).

Figure 11: Respondents believe their organizations are slowly improving in their ability to manage variation in clinical quality at the physician level

<table>
<thead>
<tr>
<th>Year</th>
<th>Below average</th>
<th>Average</th>
<th>Above average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>9%</td>
<td>20%</td>
<td>71%</td>
</tr>
<tr>
<td>2020</td>
<td>13%</td>
<td>18%</td>
<td>70%</td>
</tr>
<tr>
<td>2019</td>
<td>12%</td>
<td>22%</td>
<td>65%</td>
</tr>
<tr>
<td>2018</td>
<td>14%</td>
<td>21%</td>
<td>65%</td>
</tr>
<tr>
<td>2017</td>
<td>10%</td>
<td>28%</td>
<td>60%</td>
</tr>
<tr>
<td>2016</td>
<td>17%</td>
<td>25%</td>
<td>56%</td>
</tr>
</tbody>
</table>

The ability to manage variation in clinical cost at the physician level is a different story. A clear majority of respondents (62%) rated their organization’s ability to manage variation in cost at the physician level as “average” or “worse than average” (see Figure 13). In the context of the past six survey administrations, no progress has been made in this area over time.
Given that physician decision-making is the most significant driver of healthcare spending, organizations serious about managing cost and quality variability must develop mechanisms for administrative leaders to engage with physicians to influence clinical practice patterns. Mechanisms to this effect include developing evidence-based care paths, using order entry systems to flag variation from care paths, providing physicians with comparative cost and quality data, and linking physician compensation to management of cost and quality. However, these mechanisms to hold physicians accountable for cost and quality performance are not being used routinely at most organizations (see Figure 14), despite health systems now employing over half of the nation’s physicians. Our perspective has long been that until this is done, management will continue to struggle to control clinical cost, the fear of financial loss will remain well founded, and revenue at risk will remain the exception rather than the norm.
This year, we tested this hypothesis by exploring the relationship between the mechanisms listed in Figure 14 and other survey responses that indicate organizations’ preparedness for population health. Most interestingly, regression analysis indicated that the routine use of any one of the mechanisms listed in Figure 14 was highly predictive of organizations’ reported preparedness for risk and confidence in ability to manage cost at the physician level.

Certainly, strong support from the highest ranks of leadership is critical to operationalizing any one of these mechanisms. Leadership must define organizations’ vision for population health and ensure staff understand why...
these capabilities are critical to achieving it. This was reflected in one response from a physician leader of a community hospital in the Southeast: “Our President/CEO sees population health as the future and critical to our success. His 100% support (insistence) on moving in that direction is the single biggest factor in our ability to change the culture, invest in population health capabilities, and align physician compensation models.” The lack of such support will stymie progress, as is reported by the Chief Population Officer of a system in the Northeast, who commented, “we struggle most with executive buy in, full board strategic support, and the ability to perform financial modeling.”
Social determinants like poverty, homelessness, behavioral illness, substance abuse, food insecurity, low education, lack of access to transportation, etc. are important drivers of health outcomes. While hospitals and systems can’t be solely responsible for addressing these factors, they can play an important role as a convener of services and a leader of community engagement efforts.

Healthcare systems have increased their commitment to addressing social determinants of health (SDOH) over the last several years. As demonstrated in Figure 15, significant progress has been made by respondents’ organizations to address challenges such as food insecurity, housing, and transportation needs since 2016, with a notable uptick in activity in these areas in 2021. Educational support and/or job placement services were also explored for this first time this year, with 40% of respondents reporting that their organizations have such programs in place.

The pandemic’s disproportionate impact on less affluent populations underscored the health disparities that exist across our society and made it impossible for those serious about population health to ignore the
socioeconomic factors that contribute to them. Accordingly, one respondent commented, "we need to focus not just on the medical needs of our community members but also their socioeconomic needs so that inequality in these areas do not drive health inequalities." Others were aligned, including a Vice President of Population Health who emphasized the need for flexible delivery models to address SDOH. Making progress in this regard requires partnership with community organizations that are equipped to address SDOH needs. These organizations must be engaged in a systematic way to ensure their interventions are delivered to the right people, at the right time, and in the right setting with success metrics in place to measure and optimize impact. To this end, a vice president explained her organizations’ efforts to form joint ventures with community partners with mechanisms in place to ensure close connectivity to hospital operations: “we have members of our executive team sitting on various joint venture boards so they can ensure we have the right relationships in place with appropriate accountability for quality and financial outcomes."
Achieving lower costs and better health outcomes requires ensuring that patients get the right care, at the right time, and at the right place in a given patient’s care journey. Recognizing this, many hospitals and health systems have acquired or partnered with organizations that provide services at various points in the continuum (see Figure 16).

Figure 15: Coverage across the continuum through partnerships and acquisitions: 2021

- **Telehealth programs**: 6% No written agreement, 10% Partnership without financial risk, 45% Partnerships with financial risk, 80% Owned by my organization
- **Urgent care centers**: 15% No written agreement, 7% Partnership without financial risk, 10% Partnerships with financial risk, 69% Owned by my organization
- **Preventative care/wellness programs**: 11% No written agreement, 12% Partnership without financial risk, 5% Partnerships with financial risk, 72% Owned by my organization
- **Home health services**: 17% No written agreement, 13% Partnership without financial risk, 11% Partnerships with financial risk, 58% Owned by my organization
- **Ambulatory surgery centers (ASCs)**: 20% No written agreement, 3% Partnership without financial risk, 18% Partnerships with financial risk, 59% Owned by my organization
- **Rehab facilities**: 19% No written agreement, 16% Partnership without financial risk, 12% Partnerships with financial risk, 53% Owned by my organization
- **Hospice services**: 16% No written agreement, 28% Partnership without financial risk, 6% Partnerships with financial risk, 52% Owned by my organization
- **Skilled nursing facilities (SNFs)**: 28% No written agreement, 30% Partnership without financial risk, 10% Partnerships with financial risk, 33% Owned by my organization
- **Retail clinics**: 57% No written agreement, 8% Partnership without financial risk, 4% Partnerships with financial risk, 31% Owned by my organization
- **Long-term care facilities (LTCs)**: 35% No written agreement, 32% Partnership without financial risk, 11% Partnerships with financial risk, 22% Owned by my organization
After reported involvement across the continuum remained relatively stable in the early years of this survey, significant changes occurred in 2020. Increased ownership of telehealth programs, preventative care/wellness programs, home health services, and retail clinics were all reported. As noted in Figure 17, these changes have by and large been sustained in 2021. Reported ownership of or partnerships with retail clinics fell by 5% in 2021, while preventative care/wellness programs increased from 82% to 89%. Involvement with telehealth programs and home health services was mostly unchanged.

Covid-19 is undoubtedly a main driver of these changes, especially with regards to telehealth and home health services – capabilities that have been critical to reaching and treating patients, and also cost-effective services that stand to play a significant role in population health. Their continued use in the second year since the onset of the pandemic is an encouraging sign, but by no means a guarantee that these services are here to stay.

Well before Covid-19 came on the scene, telehealth providers had positioned telehealth technology as a cost-effective care delivery and population health platform. Despite those claims, adoption among healthcare providers prior to the pandemic had been relatively low. Constrained by complex regulation and reimbursed at far less than in-office visits, the technology generated limited provider interest. Outside of a small segment of early adopters and
organizations with a meaningful financial commitment to value-based delivery models, utilization was marginal.

This all changed when in-person visits were shut down at the onset of the pandemic. As a means to maintain access to care, many telehealth regulatory restrictions were waived and reimbursement for virtual services was increased to parity with in-office visits. These changes, in combination with a newfound receptivity by providers, paved the way for an unprecedented spike in utilization. Across the country, virtual visits took the place of office visits and as a result, healthcare leaders and patients alike couldn’t help but notice the value it unlocked.

Delivery organizations’ rapid implementation of virtual care capabilities was both impressive and an encouraging step towards population health management. However, the extent that these capabilities will contribute to long-term impact on the cost and quality of care remains an open question, especially in light of our Telehealth Report finding that telehealth utilization dropped to less than 25% of visits after reopening, compared to nearly 80% during the shutdown.

Last year, when asked their agreement with the statement, “Post-Covid, we will use telehealth delivery more frequently than we did pre-Covid,” 95% of respondents at least “somewhat agreed”. That number remained mostly unchanged this year. On the one hand, this, coupled with our finding that 94% of respondents’ organizations own or partner with a virtual care platform, is an encouraging sign that virtual care does indeed have staying power. On the other hand, this finding isn’t surprising, given CMS’ extended coverage for telehealth services that were given temporary reimbursement at the onset of the pandemic. What happens once CMS makes a final ruling on telehealth reimbursement will be more indicative of the future of telehealth services.

64% of respondents in last year’s survey agreed their organizations were likely to make home health services a larger component of the care that they provide post-Covid (see Figure 18). This year, there was an even stronger consensus, with 78% now in agreement.
The fate of services like telehealth or home health that rose to prominence during the pandemic likely depends on two factors: 1) the extent that they will be reimbursed at parity with traditional forms of care (e.g., in-person visits, acute care stays); and 2) the willingness of healthcare leaders to extricate themselves from transactional reimbursement by adopting risk-based models where assets across the continuum may support profitability. The following perspective shared by the Chief Operating Office of an East Coast health system provides some encouragement that healthcare leaders are indeed willing to make this jump: “we’re trying to build a discipline around capital planning to ensure our assets will support margins over the long-term as we evolve our business model.”
The pandemic has made an indelible mark on nearly all industries, but perhaps none more so than healthcare. This notion is widely recognized, but the implications of it are less clear. As noted above, respondents are mixed regarding the extent to which revenue at risk or the use of capitated models will accelerate post-Covid (see Figures 7 and 8), although they were found to be more receptive to such models than last year. Relatedly, nearly 80% of respondents said implementing more joint efforts with payers to apply population health practices was at least somewhat probable for their organizations post-Covid, up from 70% last year (see Figure 18). Similarly, there appears to be an increased willingness to engage in more direct-to-employer (DTE) contracts post-Covid, although respondents were slightly less bullish on such contracts this year, with only 60% reporting these contracts to be “more probable” (see Figure 19).

Figure 18: Post-Covid, organizations hope to implement more joint efforts with payers to apply population health practices
Key Research Findings

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Figure 19: Post-Covid, organizations hope to engage in more direct-to-employer contracts that include population health components

![Bar chart showing the percentage of payers willing to engage in risk-based contracts]

Obviously, joint ventures require not only willingness from the provider side, but payers as well. We’ve explored payers perceived willingness to engage in risk-based contracts since the onset of this survey without any notable changes from 2016-2020. However, 2021 revealed a 10% increase in payers being reported as “very” or “completely” willing to enter into agreements with payments tied to outcomes.

Figure 20: Increase in reported payer williness to engage in risk-based agreements

![Bar chart showing the increase in reported payer williness]

Not at all or minimally willing  Slightly, somewhat, or moderately willing  Very or completely willing
While this is a statistically significant improvement, payers continue to be reported as no better than “moderately willing” to engage in risk-based contracts more often than not. This disconnect between payers and providers was often cited as a barrier to progress in our free response questions, illustrated by the following statements from the President/CEO of a regional system in the South and the Chief Operating Officer of an East Coast organization:

“Current insurance companies and insurance rules are barriers to creating a population health business environment. It is very difficult to get good data, especially outpatient data from organizations that we do not own.”

“The jury is still out as to how payers will react post-covid regarding contracting.”
Accelerating the Journey

The purpose of this research is to formally explore the progress that’s been made by provider organizations toward population health management. From our perspective, population health represents a real opportunity for providers to improve not only the health and well-being of those they serve, but also their own financial health. However, and despite general agreement with our outlook among survey respondents, our findings suggest most providers have yet to commit themselves to a new model.

At a macro level, the persistence of the status quo is not that hard to explain. Healthcare organizations, in general, like fee-for-service. They understand it, and have evolved their management and operational infrastructure to optimize margins within it. Institutionally, most don’t understand what it takes to be transparent, truly patient-centric, and financially accountable for cost and quality because these ideas don’t easily fit into a fee-for-service framework. At the same time, health care leaders have been forced to focus on operational challenges brought by the pandemic, making a long-term, strategic transition to population health that much more challenging. As a result, most organizations have done little more than experiment with population health.

At the same time, calls for greater healthcare value have not slowed. Frustrated with the intractable rise of premiums and deductibles, consumers and employers are pressuring payers to moderate costs. However, consolidation of provider organizations across the country has enhanced the bargaining position of survivors, making it much more difficult for payers to push provider organizations to do that which they don’t want to do. With no clear solutions coming from the market’s traditional players, new players are getting involved, ranging from innovative startups with focused solutions, to massive entities with robust capabilities such as Amazon and Apple. At the same time, politicians are taking action: the passing of the Inflation Reduction Act is sure to spur change, but whether or not it benefits consumers as its authors have promised remains to be seen.

With this context, the critical question is, ‘How can this gridlock be fixed?’ From our perspective, the greatest burden falls on CMS, given its immense market and regulatory power.

As the largest payer in the country and the responsible authority for about half of the insured lives in the country, CMS has the biggest stake in improving quality and lowering the cost of care. This unique positioning allows CMS to
push the industry for concessions without fear of competitive backlash, something commercial payers rarely can do.

But CMS is constrained by politics. Healthcare organizations across the country are often among the largest employers in their state, with a substantial voice in state and national policy. Further, the AMA, AHA, and other representatives of the healthcare industry have made it clear that if political pressure isn’t enough, they will use the courts and whatever other means necessary to block efforts to change the rules of the game, just as they’ve done with price transparency.

Therefore, CMS has shied away from actively driving the industry towards value and has instead taken a passive approach. CMS has allowed healthcare inflation to outpace reimbursement increases for costly inpatient services and has introduced specific policies such as site-neutral payment practices to motivate providers to evolve. While this strategy has resulted in cost and/or quality improvements in select areas, there has yet to be any clear indication of a fundamental change in the way healthcare is delivered in this country. Rather, CMS’s approach has resulted in mere cost shifting, where delivery organizations, leaning on their enhanced bargaining power, force higher prices upon commercial payers. And in turn, payers pass these costs on to consumers and employers in the form of higher premiums, deductibles, and cost sharing, resulting in even louder calls for change from consumers.

As demonstrated by the rise of new entrants to the industry both large and small, these calls are being heard by leaders outside of traditional healthcare delivery. However, the entrenched fee-for-service model has proven too much of a barrier for any of these innovative companies to convince incumbents to give up the status quo. And until CMS is willing to demonstrate decisive leadership and disrupt this status quo, little is likely to change, and the ultimate losers will continue to be consumers.

In the wake of the pandemic, there’s never been a better time for CMS to step up to the plate. Indeed, Covid-19 has taught many lessons, but the two most relevant to population health are: 1) The society at large is as vulnerable as the most vulnerable subgroup within it; and 2) When you sell what you make on a per-unit basis, if customers can’t or won’t buy, your revenue is zero.

Those with chronic disease and multiple co-morbidities have borne the brunt of the infection. Disadvantaged populations and many “essential workers” have had a disproportionate share of infections and deaths. And these subpopulations made it that much harder to bring Covid-19 under control.
Had a population health approach been the organizing principle across the industry, we would all have been better prepared to weather this onslaught.

With the suspension of elective procedures, hospitals across the country suffered a grievous blow to their balance sheets. Without government bailouts, many organizations would have been forced to shut their doors at a time when their services were most needed. On the other hand, those few institutions with significant capitated contracts were able to rely on predictable revenue independent of demand to remain solvent, but these organizations were few and far between.

For years, healthcare organizations have given a cold shoulder to the wisdom that every other business understands – that predictable recurring revenues are superior to transactional revenues. This neglect has been enabled by a lack of leadership from CMS, which has chosen political expediency over the well-being of the population in its approach to regulating the industry.

Covid-19 is not the first pandemic to strike our society, nor will it be the last. Will this experience be enough to convince leaders to embrace a population health approach?

Time will tell …
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