IBM Watson Health™

WHITE PAPER

Population health solutions can help solve the MACRA puzzle

Contents

The Medicare Access and CHIP Reauthorization Act (MACRA) is a complex law. But in essence, the statute and its regulations seek to move healthcare from the fee-for-service payment model to one based on providers taking financial responsibility for care. Whichever MACRA program eligible clinicians qualify for—the Merit-based Incentive Payment System (MIPS) or Advanced Alternative Payment Models (AAPMs)—the government's dual emphasis on cost and quality requires clinicians to improve care delivery in order to succeed financially.

This mandate is expected to lead to big operational changes for Medicare providers, as value-based reimbursement becomes the norm. More care managers will likely be hired to focus on the high-risk patients who generate the majority of health costs; this activity will become an important factor in MIPS in the future and is already crucial for AAPMs. Healthcare organizations will also have to make sure that all patients receive proper preventive and chronic care, and engage with them to improve outcomes and the patient experience. This will not only improve population health, but will also help eligible clinicians do well on MIPS' quality scores.

Healthcare providers enrolled in payment incentive programs have learned the importance of starting interventions that impact reimbursement as soon as possible. For example, within MIPS, providers' quality performance is benchmarked against national peer performance. Starting or enhancing quality efforts to improve performance may outperform the benchmark and result in higher incentive payments from the Centers for Medicare & Medicaid Services (CMS).

Within the MIPS track, quality is the most important of the four measurement categories (which don't include cost in 2017), accounting for 60 percent of the total score that determines whether an eligible clinician gets a bonus or a penalty[1]. Therefore, both solo practitioners and providers in group practices must strive to score as high as possible on quality.

To optimize their quality scores under MIPS, providers can benefit from access to integrated data, automation tools and analytic applications that enable them to close care gaps for patients. For providers who participate in AAPMs, population health management tools, including care management and patient engagement solutions, can be critical to success. Cognitive computing can also help by interpreting and applying data on social determinants of health, behavioral healthcare and other factors that impact health outcomes, particularly in vulnerable populations.

This paper explains how health IT can be leveraged to maximize revenues under MIPS and in two types of AAPMs, including the primary care practices in the Comprehensive Primary Care Plus (CPC+) program and the accountable care organizations (ACOs) that take on enough financial risk to qualify as AAPMs. Participants in either model—or in other kinds of value-based payer contracts—must learn how to apply population health management concepts. Therefore, they need comprehensive, timely, accurate information, coupled with analytics that can supply key intelligence to providers and other care team members. The AAPMs also require financial data to help administrators track how their organizations are performing and where their strategies must be adjusted.

MIPS

MIPS is a pay-for-performance program that consolidates three previous programs—the Electronic Health Record (EHR) Incentive Program (also known as Meaningful Use), the Physicians Quality Reporting System (PQRS) and the Value-Based Payment Modifier. It also adds a fourth performance measurement category for practice improvement activities[2]. Most eligible clinicians (ECs), including physicians and extenders, are expected to choose the MIPS track initially, but CMS anticipates that a growing percentage of physicians and other ECs will graduate to AAPMs over time[3].

In 2017, the weighting of the four categories in an EC's MIPS score is 60 percent for quality; 15 percent for practice improvement activities; 25 percent for the successor to Meaningful Use, known as Advancing Care Information (ACI); and 0 percent for cost/resource use, which CMS will measure with claims data. CMS will start rating ECs on cost and resource utilization in the future, and that factor's percentage of the score will rise in subsequent years[4]. ECs can choose to report data individually or as part of a group[5].

All ECs who are subject to MIPS will see their 2019 Medicare Part B reimbursement adjusted up or down, based on their performance in 2017. The negative or positive adjustment will range up to 4 percent, rising to 9 percent in 2022, with additional bonuses for "exceptional performers[6]." But in an effort to lessen the impact of MIPS on clinicians in 2017, CMS designed a "pick your pace" model.

The "pick your pace" options include:

- Report on one measure for the entire year
- Report fully under MIPS for 90 days

If ECs choose one of the latter alternatives, they have the chance to earn bonuses in 2019[7].

Physicians and other ECs, such as nurse practitioners and physician assistants, must achieve high scores on quality measures to generate extra income and avoid penalties under MIPS. To get bonuses, they must perform better than average on national peer benchmarks on six of the 271 MIPS quality measures. Providers can increase their chance of success by selecting measures on which they already excel (unless those metrics have "topped out," with most ECs doing well on them). Health IT solutions oriented to quality improvement and population health management can also help ECs succeed.

Watson Health supports MIPS

Quality dashboards and automated outreach

IBM® Watson Health™ tools and solutions can help ECs manage the requirements of the MIPS reporting system and achieve excellence across each of the categories of the composite score. From a quality improvement perspective, the key component Watson Health supplies is a quality dashboard. Based on a robust registry of integrated data, the quality dashboard provides insights into the organization's performance on specific quality measures, individual provider performance and the care gaps that need to be addressed for individual patients. The scorecard allows quality managers to compare performance across the organization, relative to targets and benchmarks. It also gives providers the ability to access relevant patient lists and underlying clinical data, so they can take action to improve their quality metrics.

Watson Health currently supports more than 60 MIPS measures. Providers can use the dashboard to compare their data with their historical performance, as well as by comparing themselves with peers within their organization.

The same registry that underlies the quality dashboard can also be combined with a variety of population health management tools to increase patient engagement. For example, by applying evidence-based clinical guidelines to registry data, one analytic solution can trigger automated phone calls, emails and/or texts to patients who are overdue for necessary preventive and/or chronic disease care. The messages alert patients that they should make an appointment with their provider. By bringing in patients who would not otherwise see their provider, the organization can increase the percentage of individuals who receive the care called for in quality measures.

Other MIPS categories

ECs or practices must engage in at least four medium-weighted or two high-weighted practice improvement activities under MIPS. (Small practices must engage in only one high-weighted or two medium-weighted activities.) Watson Health helps support many of the 92 improvement activities, which include such things as empanelment (assigning responsibility for individual patients to care teams), proactive management of preventive and chronic conditions, and establishing care plans for patients[9]. If a practice or provider is recognized as a patient-centered medical home (PCMH), that entity automatically receives full credit in this category[10]. The National Committee on Quality Assurance (NCQA), which accredits the bulk of PCMHs, gives providers auto-credit for using certain Watson Health population health management solutions[11].

The cost category, as mentioned earlier, will increase from 0 to 30 percent of the total MIPS score in 2021. So physician practices will likely need to find ways to work more efficiently.

The Watson Health perspective

Watson Health has an integrated solution that allows administrators to quickly identify high-risk patients who need care management. This enables the organization to see how it is spending its money, which providers are utilizing the most resources and which patients are most likely to visit the emergency department (ED) or be hospitalized. By helping practices and healthcare systems get a handle on costs, these tools can also help ECs optimize their cost scores.

Two key focus areas for population health management include patient engagement and performance management. Patient engagements need to be individualized for optimum efficacy as well as tracked. Performance management efforts need to be centered on monitoring, measuring and benchmarking current performance of various value-based care initiatives and help project future performance so that adjustments can be made to meet incentives.

Integrated data and quality improvement

Observers and users of health IT typically agree that clinicians and care teams could provide better care if providers had more of the data available on a patient at any given time in an action-driving format. Unfortunately, most clinicians are reliant only on their EHR and/or billing data, so they lack access to comprehensive, timely data.

The Watson Health perspective

For purposes of population health management and quality improvement, what is likely needed is a combination of claims data and clinical data from a variety of sources, including multiple EHRs; operational measures; risk assessments; and data on social determinants of health. Watson Health can assemble those kinds of data in a data lake, which is an advanced enterprise data warehouse (EDW) that uses cloud-based computer clusters. The data lake stores every type of data, identifying each bit with a metadata tag. The data is mapped to standard codes and terms so that it can be pulled up and analyzed in near-real time when needed.

The use of integrated data can have a major impact on ECs' ability to succeed under both MIPS and AAPMs. To start with, integrated data can help reduce redundant visits and tests. Also, physicians and other ECs could be wasting time when they try to diagnose a patient without complete information on that person. So integrated data supports both the quality and the cost components of MIPS, while helping providers in AAPMs manage financial risk.

Integrated data can also help increase ECs' quality scores directly. For example, if a patient has received services that fall under a particular quality measure outside the practice, that care could count toward the percentage of patients who received the desired service if the provider knew about it. (Think of flu shots received at CVS, for example.) The only catch is that the data must be recorded in the EC's EHR in order to be used in reporting on quality measures.

Data integration is still in an early phase of development. As mentioned, electronic data from some kinds of providers is hard to access. Also, healthcare is in the initial phase of collecting and using relevant non-medical data from social services, behavioral health, and other public and private sources. Social determinants of health have more of an impact on a person's health than medical care does, so organizations involved in population health management are starting to take a hard look at working with community resources such as social services, housing and environmental agencies. Watson Health is using cognitive technologies to understand how to help care managers quickly and easily identify community services specific to individual needs, among other things.

Cleanup and unstructured data

Whether a healthcare organization uses a single EHR or multiple EHRs, and whether it has access to integrated data or not, it must clean up the data in its EDW or data lake before it can be reported to CMS. While this task is simpler if everyone in an organization is using the same EHR, it is difficult to do right. Data is often recorded in the wrong EHR field or included in free text. It may be entered inaccurately or simply be missing. As a result, practice staff may have to spend many hours searching for and documenting quality data for various reporting programs.

The Watson Health perspective

By adopting a data lake solution like that of Watson Health, healthcare organizations can get a bonus: The data must be cleaned up in the process of mapping and normalizing it. So outside experts perform this task, lifting a burden off of the clinical staff.

Watson's ability to extract structured concepts from unstructured data enables deeper insights. Including dictated notes and letters, outside reports, and images, unstructured data forms about 80 percent of an EHR's database.[12] Natural language processing, another type of cognitive computing, can extract key medical concepts from this data and add it to the structured data in the EHR. Our goal is to integrate these types of cognitive technology to assist in decision making and automate as much of the documentation and reporting processes as possible so eligible clinicians can spend more time with their patients.

Advanced APMs: CPC+

CMS defines several models of care delivery and provider payment as AAPMs. Eligible clinicians who have a significant degree of participation in one of these models are not subject to MIPS and could receive a 5 percent annual bonus for up to five years, starting in 2019. The required degree of participation in an AAPM starts at 25 percent of Medicare payments in 2017, rising to 75 percent in 2021. Alternatively, ECs can also qualify by having 20 percent of their Medicare patients in an AAPM in 2017, which will increase to 50 percent in 2021[13].

One of the models that CMS classifies as an AAPM is CPC+. Launched in January 2017, this five-year, multi-payer demonstration project—including commercial plans as well as Medicare and Medicaid—is "an advanced primary care medical home model that rewards value and quality by offering an innovative payment structure to support delivery of comprehensive primary care," according to a CMS fact sheet[14].

CMS does not require a CPC+ participant to be a recognized PCMH. But the capabilities that the NCQA requires to recognize a practice as a PCMH are similar to the five core primary care functions that define CPC+: access and continuity, care management, comprehensiveness and coordination, patient and caregiver engagement, and planned care and population health[15].

Nearly 3,000 practices in 14 regions are participating in the first round of the program, which commenced Jan. 1, 2017. In the second round of CPC+, CMS identified four additional multi-payer regions, and more primary care practices will come onboard in 2018[16].

How CPC+ works

CPC+, a new Medicare demonstration project for PCMHs, includes two tracks that differ in the amount of financial risk and care delivery reform they require. CMS and other payers provide prospective monthly care management fees to both track 1 and track 2 practices, with the fees calibrated to the health risk of each Medicare patient. The practices are supposed to use these extra payments to support augmented staffing and training for care delivery transformation.

Track 1 practices continue to bill for and receive fee-for-service payments. In track 2, they receive a percentage of their expected payments in the form of flat per capita fees, along with reduced fee for service reimbursement. In both tracks, they get performance-based incentive payments (more in track 2 than track 1). If the practices do not meet thresholds for quality, patient experience and utilization, payers may recoup all or a portion of these payments[17].

CPC+ participants have to use certified health IT and must report on electronic clinical quality measures. In addition, track 2 practices need a memorandum of understanding from their vendor that commits that company to support these practices in the demonstration project[18]. Watson Health has provided such memoranda to some of its customers, along with the required letters accompanying their applications to CPC+.

How data and analytics help

CPC+ includes two tracks that differ in the amount of financial risk and care delivery reform they require (see previous section). Whichever CPC+ track a practice is selected into, its providers and staff must implement PCMH concepts. Watson Health's health IT solutions can help in a number of areas, including:

- Care gap identification and automated outreach to patients who need care
- Automated approaches that support care teams in contacting patients after hospital discharge and transitioning them to primary care
- Dashboards that help providers improve quality and efficiency with drill-down capabilities to the patient level
- "Huddle reports" that help care teams prepare to meet patients' preventive and chronic care needs during scheduled visits
- Support for care managers through risk stratification, efficient development and communication of care plans, medication reconciliation and more.

Watson Health supports the requirements of the five core CPC+ functions. In the category of access and continuity, for example, the required care teams benefit from the integrated data and communication platform of Watson Health. Supported care management functions include risk stratification, preprogrammed content and branching logic for patient interviews, intervention triggers, and care planning. Planned care includes the semi-automation of care plan development and the ability to share plans online among care team members. In addition, providers are able to view their scores on specific quality measures and receive continuous feedback on what those mean, so they can take action to improve them.

For practices in track 2, the requirements grow more complex. For example, the practice will integrate behavioral health into care and develop comprehensive strategies to systematically assess, support and meet their patients' psychosocial needs using evidence-based tools, community resources and effective coordination of care. Watson Health supports practices in both of these areas. To help improve patient and caregiver experience, Watson Health offers support for patient self-management, including online educational materials and health coaching. Practices must also be able to assess patients' psychosocial needs systematically and make inventories of community resources to meet those needs. Watson Health will soon offer these capabilities.

Practices must also be able to document and track patient-reported outcomes by administering surveys, and storing and analyzing the responses. Patient-focused care plans should be developed using evidence-based protocols. These care plans should be regularly updated, should incorporate relevant care management triggers and should be made available to patients. Watson Health can help practices in many of these areas.

ACOs

The ACO portion of the AAPM program is all about assuming progressively greater levels of financial risk. Therefore, the participating ACOs need the ability to analyze the costs of providing healthcare. (See the section titled "Which ACOs qualify as AAPMs" for information on the types of ACOs that qualify for this program.)

The Watson Health perspective

Watson Health acquired Truven Health Analytics® in 2016. In addition to decades of experience helping providers and payers manage costs and quality with data-based strategies, Truven Health has a vast store of information on healthcare utilization and costs from employers, health plans and government agencies. The longitudinal claims data encompasses more than 200 million individuals with employer-sponsored insurance, and includes medical and prescription claims, eligibility and other health-related data. Truven Health has the advanced analytics and tools required to analyze Medicare claims data, which are available to ACOs that take part in the Medicare Shared Savings Program (MSSP). By analyzing the health costs of a particular ACO, Watson Health can help pinpoint areas of waste, so an ACO can manage its budget.

ACOs in AAPMs should also engage in population health management. Ideally, they should use integrated data that comes from the diverse EHRs of their participating practices and hospitals, along with claims data. Watson Health can both provide the requisite data integration and deliver action-driving data quickly to the point of care.

Augmented intelligence

Technology is not a substitute for the physician-patient relationship, which underlies patient engagement with care teams to improve health. But because population health management is labor-intensive, tools that can partly or wholly automate routine tasks are typically required to make this care delivery model cost-effective. Moreover, as medical care becomes more complex, and as the ability to personalize care grows, it will not be possible to provide high-quality care without health IT.

Cognitive computing will also be needed to understand how the myriad patterns of data about a particular patient fit together in near real time. Traditional analytics, based on preprogrammed rules, will not be able to keep up with the velocity, volume and variety of data that describe the patient's health status, health risks, medical history, psychosocial profile and social determinants of health. But cognitive computing can because of its power and learning capabilities.

For ACOs to thrive in the new value-based environment, they will likely need integrated data and cognitive-based analytics that can support their providers and care managers in a fast-paced environment that values low cost, high-quality and a positive patient experience. Watson Health is focused on developing and evolving solutions that will enable ACOs to succeed in this new environment.

Which ACOs qualify as AAPMs

Three types of ACOs can qualify as AAPMs in 2017: participants in CMS' Next Generation ACO Model and ACOs that have entered track 2 or track 3 of the MSSP[19]. In 2018, CMS will launch track 1+ of the MSSP. This new track will allow ACOs with less risk tolerance than that of their counterparts in tracks 2 and 3 to qualify as AAPMs[20].

The Next Generation ACO Model is similar to the Pioneer ACO program, which was designed for healthcare organizations with extensive experience in managed care. Under the new model, CMS partners with ACOs that are experienced in coordinating care for patient populations and ready to assume higher levels of financial risk and reward. Twenty-one ACOs participated in this program in 2016[21].

Most of the 438 ACOs that participated in the MSSP in 2016 chose track 1[22], in which ACOs take only upside risk; that is, they can share any savings they create for Medicare above a certain threshold if they achieve quality goals, but they don't have to share losses with CMS. In contrast, track 2 and track 3 ACOs share both gains and losses. The same will be true in track 1+, but the potential losses will be lower in track 1+ than in the higher tracks[23].

Conclusion

MACRA is designed to pull healthcare organizations out of fee-for-service payment models and establish value-based reimbursement as the primary method of financing healthcare. As a result, the statute effectively requires clinicians and hospitals to change how they deliver care. Instead of simply diagnosing and treating sick patients, they must keep all of their patients healthy to do well under MACRA or any value-based contract with a private health plan.

We believe that the further an organization moves into value-based care and financial risk, the more it needs data and analytics, so that its providers can deliver high-quality care at a moderate cost. Even in the low-risk MIPS program, ECs must figure out how to score higher than their peers in order to get bonuses and avoid penalties. At the opposite end of the spectrum, where ACOs are taking significant amounts of financial risk, these organizations must manage population health effectively to generate savings. In both cases, data is the key to success. Comprehensive, timely, action-driving data, served to providers in a form they can use, is what they need to provide better care.

References

1 Centers for Medicare & Medicaid Services (CMS), Quality Payment Program Fact Sheet
2 Ibid.
3 CMS, Quality Payment Program Executive Summary, 2016
4 bid.
5 CMS, Quality Payment Program Fact Sheet
6 CMS, "Quality Payment Program," home page
7 *Health Affairs* blog, "MACRA Final Rule: CMS Strikes a Balance; Will Docs Hang On?" 2016
8 CMS, "The Merit-based Incentive Payment System: Quality and Cost Performance Categories," 2017
9 CMS, "Quality Payment Program: Improvement Activities"
10 Ibid.
11 Watson Health news release, "Phytel Population Health Platform First to Achieve NCQA 2014 Patient-Centered Medical Home Auto-Credit"
12 *HIT Consultant*, "Why Unstructured Data Holds the Key to Intelligent Healthcare Systems"
13 CMS, Quality Payment Program Fact Sheet
14 CMS, "Comprehensive Primary Care Plus (CPC+) Fact Sheet"
15 Ibid.
16 Ibid.
17 CMS, "Comprehensive Primary Care Plus (CPC+) Fact Sheet"
18 Ibid.
19 CMS, "Quality Payment Program: What are Alternative Payment Models (APMs)?"
20 CMS, "The Quality Payment Program Overview Fact Sheet"
21 CMS, "Next Generation Accountable Care Organization Model," 2016
22 CMS, "Fast Facts: Medicare Shared Savings Program"
23 CMS, "Advancing Care Coordination through Episode Payment Models (Cardiac and Orthopedic Bundled Payment Models) Final Rule and Medicare ACO Track 1+ Model," 2016

IBM Corporation
Software Group
Route 100
Somers, NY 10589

Produced in the United States of America September 2017

Statement of Good Security Practices: IT system security involves protecting systems and information through prevention, detection and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed or misappropriated or can result in damage to or misuse of your systems, including to attack others.

No IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

Note: Statistics and testing provided by the Explorys Analytics Team and Definitive Healthcare, which provides powerful intelligence on hospitals, physicians, and healthcare providers; http://www.definitivehc.com/.

PROV 18118 0917

IBM Watson Health™