What works: medical cost management
The estimated $2.9 trillion healthcare industry is experiencing rapid momentum toward realigning incentives and improving the quality of healthcare Americans receive. Despite these advances, one historical challenge persists – continual and unsustainable cost escalation.

The changes brought about by the Affordable Care Act (ACA) have placed greater financial risk on health plans than ever before, while simultaneously decreasing margins. As the effects of new legislation are realized and health plans acquire more Medicare, Medicaid and exchange members, the importance of insurer-side medical management is further compounded.

There is hope, however.

Through the systematic and strategic use of data and analytics, health plans can develop more targeted and efficient medical management operations, thus increasing the return on investment while continuing down the path toward value-based healthcare.

This white paper is a result of KPMG’s experience, as well as a survey and interviews conducted with 24 Medical Directors and/or care management leaders from health plans across the United States.
When it comes to Medicaid populations, state governments are also becoming more reliant on health plans to assume financial risk as numbers continue to rise. Medicaid enrollment is increasing— from 72 million in 2013 to an estimated 93 million in 2024. Though these members generate significant revenue for health plans in the form of capitated payments, it is even more important that plans take advantage of state grants that allow them to provide incentives to members who participate in prevention and wellness programs and increase healthy behaviors. Program goals include smoking cessation, weight loss, and better control of cholesterol, glucose levels and blood pressure.

Finally, on top of bearing more risk than ever before, health plans must adapt to ACA provisions that mandate that a certain percentage of premium dollars be used on medical spending (i.e., medical loss ratios). The provisions mandate that any spending over designated thresholds come directly from insurer profits.

### Value-based purchasing doesn’t fully solve the problem

As financial risk shifts, health plans are seeking to re-distribute risk to providers via value-based contracts. Value-based contracting introduces opportunities for providers to gain additional revenue and share cost savings with health plans rather than clashing over declining FFS rates.

For health plans, however, a value-based contract is not a silver bullet. Most contracts are focused on improving quality metrics. Early reports are cautiously optimistic about whether improved quality measures will help achieve the triple aim of reducing costs, improving population health, and elevating patients’ view of the care experience. One significant challenge is the geographic disparity in providers who are willing or able to accept partial-and full-risk contracts and/or successfully manage costs and member health outcomes.

When surveyed by KPMG, 60 percent of medical management leaders stated that they did not believe that value-based contracting would give providers enough incentive to take on increased utilization management (UM) functions. While the Centers for Medicare & Medicaid Services (CMS) recently announced that value-based purchasing would likely shift risk from health plans to providers, it remains to be seen whether such an evolution will take place in FFS-dominated geographies.

A former CMO of a large health plan stated the following:

> While many providers suggest that a large percentage of their payments are based on value-based contracts, only a small portion of the revenue and medical expenses from those contracts are actually value based. Providers remain focused on the greater share of their revenue, which is aligned more with the FFS market.

Given the current state of the American healthcare landscape, health plans cannot rely solely on value-based contracting to solve their medical cost containment issues. Until value-based contracts represent the majority of provider’s revenues, health plans should continue to focus on developing medical management practices to appropriately manage cost-effective care.

**Health plans are seeking to re-distribute risk to providers via value-based contracts.**
The importance of distributing risk

Today’s value-based contracting and pay-for-performance arrangements typically focus on patient care management by primary care physicians, as well as HEDIS and STARS measures focused on wellness, chronic disease management, and readmission prevention. However, until all parties across the continuum of care share member-associated risk, the efficacy of risk arrangements will be limited.

Redefining “medical management”

Traditionally, the primary medical management functions were to help reduce waste, protect the bottom line, and ensure appropriate use of care. However, in a new environment focused on value, it can be used to better understand and minimize variations in care, provider behavior, and regional utilization.

The big question is: How large is the net under an ACO risk-sharing agreement? If only the primary care group takes on risk, there is no engagement by the specialist or hospital, which is where the most money is spent. If we had greater integration in outpatient care, everyone would have a vested interest in keeping the patient out of the hospital, managing care in the outpatient setting, and preventing patients from getting sick in the first place.

Even in an ideal risk state, where providers work collaboratively across the continuum of care with the aligned goal of quality and cost-effective outcomes, there will still be a need for better medical management. In the words of one medical director, “You still need people overlooking all the different sites and patterns of care, as well as a patient’s trajectory through the care system, to see where there are opportunities for improvement.”

Until all parties across the continuum of care share member-associated risk, the efficacy of risk arrangements will be limited.

A former medical director at Kaiser Permanente stated,

The most valuable improvement work is facilitated by analysis of variation. Even within one medical group, there can be significant variations in practice from one practitioner to another. For example, one orthopedic physician might always order an MRI before an arthroscopy, while another might only conduct the test 10 percent of the time. You can use data analytics to mine those variations and have discussions with clinicians about such practice variations. This will ultimately drive out inappropriate and inefficient care.

Regional variations can also be addressed by analyzing the claims experience and looking at patterns of care associated with providers in the same market. “Systems of care vary between hospitals,” said one Medical Director. “This includes social services, discharge planning, outpatient coordination, home health and more. It is imperative that these costly functions are standardized and consistent.”

As health plans begin to understand and remedy variations, they will also improve outcomes over time. According to one Medical Director, “Population variations should not be the basis for specific care models. Clinicians lay claim to demographic and lifestyle variations, when in fact the care model may be insufficient to meet the demands of the population in question.” For example, populations with higher incidents of chronic disease require more disease managers or chronic disease educators to account for higher incident rates. Providers should benchmark such populations against the staffing resources of specific markets to ensure that resources meet demands.

Medical management can be used to better understand and minimize variations in care, provider behavior, and regional utilization.
Part II  Key trends in medical management

Need to Improve Targeting – Traditionally, medical management departments have been heavily process driven and staffed by a large number of clinicians. Three key medical management functions – utilization management (UM), case management (CM), and disease management (DM) – are often applied across provider and member groups regardless of past provider performance or specific member needs. Health plans can leverage analytics to be more targeted in how medical management is applied to improve efficiency, decrease provider administrative burden, and reallocate resources to other roles that might help improve member outcomes, as evidenced by a recent KPMG survey.

One hundred percent of respondents to KPMG’s survey stated that their organizations are using analytics to improve the application of medical management, and 75 percent said that they use algorithms to identify potential members for case management. However, there is no consensus on the effectiveness of using algorithms to target and reach members. One respondent indicated, “[Algorithms] are pretty effective for identifying members, but not very effective for pinpointing which members might engage in case management and what the most effective channel to reach them might be.” Effective member outreach and securing participation in care management programs were listed as two of the major pain points associated with current case management models.

Healthcare organizations are increasing their use of advanced analytics

100%

Respondents who stated that their organizations are using analytics to improve the application of medical management

75%

Respondents who stated that they use algorithms to identify potential members for case management
Key trends in medical management (continued)

**Moving from Episodic Care to Care that Spans the Continuum** – The current state of medical management is heavily focused on individual episodes of care, which keeps the focus on approval of specific procedures or activation of case management in response to specific acute events. Instead, medical management must ensure that providers deliver more efficient and higher-quality care across the patient continuum. Additionally, health plans can now use total-cost-of-care analytics to adjust authorization policies and better understand how to manage high-risk members. They must utilize a flexible approach to building case management models and deploying resources. For example, nurses may need to go beyond simple phone outreach to these members by implementing more proactive techniques such as home or provider office visits. Furthermore, insurers should take steps toward removing departmental silos and fostering collaboration and communication across their UM, CM, and DM functions.

**Redefining Success** – Traditionally, the process-driven nature of medical management has resulted in performance measurement according to efficiency. For example, nurses have been assessed by how many cases they closed and the number of prior authorizations they generated. However, these metrics do not provide a true measure of performance. In fact, they may lead to a lower quality of care, by, for example, lowering the motivation to obtain prior authorization requests or scheduling fewer appointments with providers even when this may be necessary to reduce members’ gaps in care. Health plans can maximize their return on investment by also emphasizing and evaluating the quality of medical management activities rather than solely focusing on efficiency metrics.
The evolving role of UM and the value of precision

For health plans, UM departments have long been a necessary function for managing the use of services provided by physicians in their networks. The primary responsibilities of this function include escalation following disputes between clinicians and UM reviewers, formalized dispute protocols that govern how point-of-care decisions are challenged, and processes to help different reviewers come to a consensus.

Value-based contracting has disrupted the traditional nature of UM functions. As more providers enter into shared- or full-risk value-based arrangements, operational functions that have historically been under the purview of health plans could begin to shift to providers. However, many providers lack the administrative and operational experience that are necessary to launch in-house medical management functions. These providers need to develop specialized technology infrastructures, provider communication platforms, and dedicated clinical staff to conduct reviews. Until these developments materialize, health plans will likely need to continue to rely on their own internal UM functions.

A major challenge in taking on medical management is the fact that UM departments tend to vary based on the place of service, creating additional complexity and variation in the categorization of levels. For example, health maintenance organizations with a gatekeeper model usually require an additional step for primary care physicians to make referrals to specialists. Three models follow:

- **In professional settings** reviews tend to be automated and analyzed retrospectively by monitoring occurrence rates of appropriate referrals and benefit limitations.

- **Outpatient requests** can vary in complexity depending on whether they involve procedures such as surgery, advanced imaging, or rehabilitative care. As complexity and/or cost of care increases, more prospective reviews should occur.

- **Inpatient reviews** require that extensive documentation be provided to justify admission to the hospital. These cases tend to be more patient-centered and are usually handled by highly trained case managers.
Health plans take an analytical approach

By utilizing an analytical, evidence-based approach, health plans can isolate variables in the UM process and, thereby, enhance the systematic review process to determine when manual clinical reviews are necessary. There are three main methods that can be used to improve the sophistication and precision of UM departments: CPT code pairings, provider “gold carding,” and increased automation.

CPT Code Pairings – Most organizations do not take diagnoses into consideration when selecting CPT codes that need manual prior authorization. Insurers can analyze historical claims experience in order to stratify diagnosis code pairings based on the level of review required. By scaling this effort across the spectrum of services, organizations can develop a more precise review process that differentiates requests that truly necessitate review from those that can be automated. Predictive models have been created to take this process further by incorporating the place of service codes and specific providers. Taking the process to a greater level of specificity allows for more actionable metrics and health plan assessment of provider readiness for value-based contracting.

Provider “Gold Carding” – From a UM perspective, health plans tend to treat providers equally, regardless of historical experience and quality of outcomes. By conducting analysis at the provider level, health plans can identify high-quality providers based on their denial rates. These providers could potentially be “gold card” candidates, meaning that their requests for service would be automatically approved and their utilization would only be monitored retroactively by analyzing claims data. Using this approach, health plans would further alleviate their UM processes by diverting manual reviews to critical cases. In addition, health plans could improve provider relationships by easing their administrative burden, while simultaneously gauging potential preferred provider relationships and the capacity of providers to deliver on value-based arrangements.

Many health plans have already began offering auto-authorizations to select provider groups. Sixty percent of medical management professionals surveyed by KPMG stated that their organizations have begun issuing auto-authorizations, and 58 percent of those providing auto-authorizations were doing so to reward providers’ historical performance.

Increased Automation – Utilization managers are often judged on the number of cases they review rather than the quality of their reviews. Health plans can simplify the medical necessity review process through automation, which will allow nurses to focus on reviewing more complex and critical cases. As insurers continue to grow by adding new lines of business, this approach will become increasingly critical.
Discharge planning has become a core function of UM due to the high risk of complications after discharge from the hospital. Discharge planning involves the review of inpatient requests for patient care into the post-acute care setting. Diagnostic related groups (DRGs) have served to capitate the inpatient cost of care and standardize treatment plans. However, post-acute care spending and level of care tends to vary greatly by comparison. As members are discharged to places of service that range from rehabilitation centers, to skilled nursing facilities (SNFs), to outpatient therapy, to home healthcare, there is greater variability in quality, cost, and intensity of care.

Health plans have a significant amount of member, provider, and utilization data that can empower discharge planners to make more educated and evidence-based decisions. Analytics can then inform what types of step-down facilities will produce the best outcomes for members while simultaneously decreasing the cost of care. Currently, health plan medical review does not always provide guidance to nurses and case managers regarding post-acute place of service. By providing additional analytics-based findings showing cost of care and predicted outcomes, health plans could empower nurses and medical directors to make better-informed decisions.

Furthermore, there tends to be variation across states in the use of home health and skilled nursing facilities, as well as in the readmission rates associated with these facilities. The intensity and length of treatment have been shown to play a critical role in determining cost and quality. There is a point of diminishing return in the number of days a patient spends in an SNF or getting home health (HH) treatment, and there is also a minimum intensity of care needed to prevent abrupt readmissions.
Controlling for the variations that decrease quality and increase the total cost of care, a health plan can identify an ideal care pathway for discharge planners to collaborate with members, hospital case managers, and physicians to determine the ideal level and intensity of care for the member.

The graphic below illustrates the variation in post-acute care for a cohort of patients that had the same joint replacement procedure performed through code DRG 470. There is varying distribution between SNFs, HH, home with no care, and rehabilitation facilities. Standardizing the post-acute care patterns to align with higher quality outcomes at the condition-specific level can create significant improvements in readmission rates and reduce the total cost of care.
Faced with the addition of government-sponsored members and an increased pool of high-risk members, case management departments have been rapidly evolving.

Historically, as care coordination among providers has lagged across the country, insurers have used case management as a tool to reduce readmission rates for members who suffered an acute event and to provide coordinated follow-up after hospital discharge. The traditional method of outreach was telephonic case management. This allowed nurses to call members on a routine basis to monitor health, schedule provider appointments, and ensure that adequate follow-up care was occurring. Further, they could efficiently manage panels of 60+ members at a time.

As insurers have acquired higher-risk government-sponsored members, the telephonic model of case management is not meeting member needs. For example, up to 49% of disabled Medicaid beneficiaries also have behavioral health issues. These members can often be difficult to reach by phone or at times may not possess a telephone number at all. Additionally, the episodic nature of short-term case management does not provide the proper intensity or longevity of care coordination that would allow chronically ill and high-risk patients to break the cycle of frequent emergency room visits and hospital admissions.

Due to these challenges, insurers have been increasing their funding and capacity for complex case management. This involves systematic coordination and assessment services provided to members who have experienced a critical event or diagnosis. Such cases often require extensive use of resources, and patients often need assistance navigating the system. Complex case managers may work in teams with multi-specialty clinicians and have much lower member panels. They are able to spend a greater amount of time interacting with members and providers in order to improve the quality and coordination of care they receive. [see sidebar]
In Part VI, we explore the challenges and opportunities that arise with effective case management models and modes of patient engagement.

### Case Management (continued)

Although there are many benefits of utilizing multiple case management models and modes of patient engagement, these models also create significant complexity, including:

**Difficulty Stratifying Members** - A pressing issue for health plans is how to precisely match members to the correct case management models. Many insurers rely on algorithms that analyze claims utilization patterns to identify members in need of case management and assign them a risk score. Though these algorithms can be effective tools, they do not always provide enough information about a member to accurately source them to the correct case management model with the proper mode of engagement. For instance, a member may be identified as in need of case management based on utilization history and assigned to telephonic complex case management. However, if the member is homeless, there is no chance the health plan will be able to contact him or her via phone. The difficulty of maintaining consistent contact with high-acuity members who require CM is especially problematic for health plans with large Medicaid populations. These members tend to have less reliable contact information, lack phones, and run a higher risk of homelessness.

Finally, it is important to identify the time of day that member outreach will be successful. For example, a member with a full-time job should not be called at home every morning by a case manager. Social and health needs vary greatly from member to member, and precision to the appropriate case management model, mode of communication, and timing of outreach all have implications for response and compliance rates.

Problems associated with effective outreach are not exclusive to the healthcare industry. KPMG has utilized demographic analysis with non-healthcare companies to reduce call center outsourcing by 12 percent, and increase contact volume by 21 percent without adding more call representatives or increasing the number of call attempts. [See sidebar] Health plans have ample opportunity to apply this practice to their own efforts, thus improving member outreach and maximizing the value of the time being spent by CM and DM functions. A recent KPMG study indicated that 37 percent of cases result in “unproductive outreach” calls and that nurses spend up to 59 percent of their time performing documentation related to outreach attempts.

The increased value of stratifying populations is becoming clearer as health plans continue wrestling with the mandates to control costs, demonstrate value to government partners, and submit competitive bids for government plans.

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**Virtual** – telemedicine

**Field-Based** – at members' homes or in the hospital

**Telephonic** (traditional)

**Embedded** – in provider offices and acute-care settings, primarily those engaged in value-based contracts

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**Part VI With opportunities come challenges**

**Does your organization utilize field-based case management?**

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*KPMG survey*
Need to Effectively Operationalize Models—Telephonic case management models required relatively straightforward management by health insurers. By contrast, complex case management—where members’ health needs and intensity of care vary greatly based on health status and social determinants of health—is more complicated. For example, there can be endless interventions conducted for a super-utilizer of care. Additionally, the effort it takes to engage members at their homes or on-site with a provider can be vastly different in rural areas.

While field-based case management can be an effective health-management tool for patients who are hard to engage or need intensive management, it is also significantly more expensive than telephonic case management. The panel size of nurses and field-based models can often be so small that return on investment is limited. For this reason, plans need to be highly selective about which members receive field-based care. “There is a tendency to overuse field-based case management,” said one Medical Director. “The decision needs assessment by a specialist.”

Attempting to Create a Hybrid Model—While health plans usually source case management internally, vendors offer an alternative that can reduce management strain and fixed costs. For health plans that are trying to manage a wide spectrum of different health needs across member cohorts, building and operationalizing condition-specific or field-based models often become burdensome. In recent years, vendors have begun offering specialized case management services together with a variety of engagement models. Health plans can allow these vendors to manage specific populations autonomously or utilize them as field-based extensions of in-house telephonic case managers. Particularly in rural areas with low member concentration, field-based vendors may represent a viable alternative to hiring additional case managers.

One Medical Director has had great success using home health agencies to perform in-home assessments and services on behalf of telephonic case managers working with members. “Home health provides a great service,” he said. “Particularly when you pair it with the work of complex case managers, it works very well.”

A pressing issue for health plans is how to precisely match members to the correct case management models.
With opportunities come challenges (continued)

**Chasing Elusive ROIs** – How to quantify ROI from case management programs is proving to be a subject of much debate. As one Medical Director put it, “At its fundamental level, you are measuring something that actually occurred against something that will never occur.”

Health plans often spend large sums of money employing case management nurses. Therefore, it seems reasonable to assume that their work would result in medical cost savings by preventing acute events or facilitating more efficient utilization of care in less expensive, non-hospital settings. However, because contracts vary and members are complex people with different demographic and medical conditions, it can be difficult to measure ROI. In fact, in KPMG’s survey of Medical Directors, most reported that they had an “unclear” ROI or no ROI at all from short-term medical costs. And most said this topic was controversial within their organizations.

Because of the subjective nature of calculating the dollar amounts of events “that will never occur,” many medical directors feel simpler methodologies are better for calculating ROIs. These methods may be as simple as quantifying reductions in admissions, readmissions and ER utilization by members engaged in case management.

According to one Medical Director,

To a degree, there has to be an acceptance, philosophically, that managing the right kind of patients at the right time can reduce costs that would otherwise be incurred absent management.

Though it is difficult to measure ROIs, some health plans and vendors believe they have been able to show a short-term utilization ROI from case management intervention. While there have been claims that 7 to 1+ ROIs have been achieved, more modest ROIs seem to be more realistic. One Medical Director said, “We hope for a 3 to 1. That’s what a lot of vendors will promise, and some are now holding their own fees at risk for that.”

At its fundamental level, you are measuring something that actually occurred against something that will never occur.

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5 Medicaid Incentives for the Prevention of Chronic Diseases Model, CMS.gov.
How can KPMG help?

As medical costs continue to grow at an unsustainable rate, KPMG’s dedicated network of healthcare professionals is helping health plans become more proactive in addressing medical cost variance and identifying the factors behind increased medical costs. By utilizing our operational and strategy experience, proprietary claims datasets, benchmarking methodologies, and data analytics, our teams can help health plans quickly, efficiently, and sustainably achieve immediate, near-, and long-term medical cost reductions.

Our teams are working with member firm clients in a number of different ways, including:

Helping to Define a Strategic Vision – A tactically focused care management operating model is essential to effectively and efficiently manage member health. KPMG member firms work with health plans to develop actionable steps to accomplish care management goals in a constantly evolving healthcare landscape. In addition, KPMG is helping its clients define in detail what a functional and sustainable future state would look like across their healthcare economy.

Performing Advanced Analysis – Data and analytics have become a critical component of effectively managing medical costs. KPMG’s healthcare teams assist both health plans and providers with advanced data analysis, while simultaneously developing analytics-based solutions to improve and streamline operations. By enriching existing claims data with external sources of demographic data, KPMG can help clients build analytics-based solutions, including enhanced case management identification algorithms, improved discharge planning guidance, and streamlined utilization management operations.

Developing and Implementing Operational Solutions – Health plans can achieve significant organizational improvements by performing root cause analyses based on hypotheses from data-based reviews. KPMG’s healthcare professionals work with clients to perform studies of existing medical management functions to identify inefficiencies, deliver improved outcomes, and ultimately reduce medical costs.
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