What Works
Paths to population health

Achieving coordinated and accountable care
Mark has a pioneering and global vision of the future of healthcare in both the developed and developing worlds. Mark has a unique level of knowledge and insight and management experience at every level of the system. Drawing on his 20 years of health service experience, Mark advocates that personalization, patient ‘co-production’ and eHealth will be central to the future. Mark believes in the power of putting ideas into action — adhering to a “more brown mud, less blue sky” approach to strategy and transformation. Mark joined KPMG in the UK in 2009 as a partner following a career within the UK’s NHS, grounding his approach in empowering, motivating and inspiring healthcare innovation. He has advised governments and business leaders and has worked in public and private sector organizations. Follow Mark on Twitter @markbritnell.

Mark has direct experience with financial management reporting and key performance indicators, process benchmarking and redesign, product pricing and experience monitoring, actuarial valuations, and analytics supporting provider contracting. He was a participant in KPMG national ACO service line development and Chair, American Academy of Actuaries Health Insurance Exchange Task Force. Mark was also a Partner on the team providing NY Medicaid transformation assistance to various hospital systems, including overseeing analysis of community needs, identifying gaps, transformation project assessment, financial and attribution modeling and facilitating decision making regarding Medicaid strategies and alliance (DSRIP).

Joe is a member of our Healthcare Transformation Leadership team and is responsible for assisting our clients with their transformation efforts in response to regulatory and market driven reform. Joe is responsible for assisting his clients with strategy development, business and care delivery model design, finance transformation, business planning, merger and acquisitions and regulatory compliance matters. His more than 30 years of industry experience is primarily within the Healthcare industry, having worked with both commercial healthcare systems and government sponsored transformation programs including the New York State sponsored Vital Access provider (VAP) and Delivery System Redesign Incentive Program (DSRIP).
Eight steps to move from theory to practice

Health needs are changing fast, but systems are simply not keeping up.

KPMG analyzed these issues and some solutions to them in our report *The Integration Imperative*. KPMG International’s Health and Human Services practice looked at active integration schemes across 22 jurisdictions. We spoke directly to the government leaders spearheading these initiatives as well as a number of thought leaders. It is clear that organizations are struggling to convert theory into practice.

One reason for this inertia is a belief that the systems and drivers that created today’s fragmented services can somehow be used to end that fragmentation.

They cannot.

This report describes the practical steps that organizations need to go through to reshape themselves and their services.

We look at both coordinated care — services strategically designed around the needs of patients — and accountable care — systems designed to achieve coordinated care across a population — the steps to developing both share many common features and lessons. These practical steps are outlined using eight starting questions that we found organizations need to systematically address to achieve coordinated care. The maturity matrix outlined at the end of the report (see page 17) demonstrates how to self-assess your organization. For examples of organizations that are leading the way, they are featured in the accompanied case studies.

---

**Is there a shared understanding for the journey?**
- UK — Maggie and Rose’s story: Islington Clinical Commissioning Group
- Sweden — The Esther project: Jönköping County

**Is the right governance in place?**
- US — CMO to ACO: Bronx Accountable Care Organization

**Has the target population been identified?**
- UK — Supporting patients: The Richmond Group

**Does that population actively support the change?**
- US — ProvenCare: The Geisinger Health System

**Is there strong supporting infrastructure in place?**
- Germany — Bringing the costs down: Healthy Kinzigtal

**Are the incentives aligned and flow of funds understood?**
- Canada — Bridging support cliffs: Nova Scotia cancer care navigators

**Is there a supporting technology platform?**

**Conclusion:** What is to be done?

**Is your organization ready?**

Coordinated care maturity matrix

---

1. KPMG International, 2013, kpmg.com/hss
In systems characterized by powerful professional silos, patient stories can be a powerful way of shifting organizations to a different perspective.

The desire to deliver services that meet all of a patient’s needs — in a way that makes sense to that patient — has captured the imagination of healthcare leaders around the world.

However, because of the different characteristics of the organizations, or the national systems where they operate, what is meant by ‘integrated’ or ‘coordinated’ care varies.

For some, it means ensuring that when health and social services are delivered by separate, discrete providers, the services are delivered seamlessly and without the patient having to navigate the gaps between different organizations.

For others, coordinated or integrated care means creating a single organization which will become accountable for a much broader part of the spectrum of a person’s health and wellbeing needs.

It is crucial to be clear at the outset of your change program which of these models is your end goal.

The creation of a single organization is having its biggest impact in the US with accountable care organizations (ACOs). The distinctive regulatory environment and payment systems in the US allows us to find transferrable lessons that other systems can learn.

The reverse is equally true: organizations in US-style systems can just as easily learn important lessons from other systems.

Is there a shared understanding for the journey?

UK — Maggie and Rose’s story: Islington Clinical Commissioning Group

Sweden — The Esther Project: Jönköping County

There are many inspiring examples around the world of successful patient stories being used to galvanize transformations in care. Some organizations choose to use the example of a real patient — perhaps someone who experienced failures in care — while others design a fictional person typical of their patient population and demographics.

Individual’s powerful stories don’t have to only involve patients. The Islington Clinical Commissioning Group in London, UK developed its story of integration around a staff member, Rose, as well as her patient, Maggie. Working with the Young Foundation, they created an animated video about them — We Care Together. This highlights frustrations felt by staff that want to do more for their older patients with complex problems but don’t have the time, resources or support to do it. After becoming a care coordinator, Rose is able to give Maggie much more joined up and personal care using both healthcare services and local voluntary groups. Maggie’s health improves and Rose says she now feels she is doing “what I came into the job for”.

Watch the three minute animated video at vimeo.com/112496186-Maggie and Rose’s story.

It is important to infuse the narrative throughout every level and stage of the change process. To become crystalized as a symbol for the new ways of working, the story needs to be used often and, over time, be embedded in the culture across the organization.

A good example of one innovative way of doing this comes from Jönköping County in Sweden. Here, staff not only created the story of Esther, an elderly woman with a chronic illness, they even named parts of the patient pathway after her — most visibly the creation of nursing assistants and others as ‘Esther coaches’ to bring the patient perspective into daily practice.
about delivering coordinated care from others, where collaboration between organizations remains separate.

Whichever model is your destination, it will be vital to develop a clear narrative concerning the transformation. One of the ways that many pioneering organizations have tried to exemplify the big change is by using the example of an individual.

An individual’s story can be a powerful narrative for change, one which simplifies the complex issues that need to be managed and provides a rationale for the transformation that can be applied throughout the process.

Whether seeking to create a single accountable care organization or trying to achieve coordinated care across a whole health system, there will inevitably be a number of different stakeholders involved, each with different priorities. Try to:

— Define a central narrative for change that makes sense to all.
— Focus the narrative around the people for whom you are trying to affect change. This is likely patients, families and caregivers, but where your main challenge is, for example, may be clinicians working remotely and in isolation, you may have to create a separate narrative around them.

— Make this narrative the basis for discussions about service redesign, in order to focus the debate on practical improvement.
Is the right governance in place?

Successfully creating coordinated care delivery requires organizations to work together in new and challenging ways. Even when different aspects of the delivery system — primary and secondary care, for example — are integrated in one organization, the clinical and managerial teams will need to collaborate in new ways.

Good clinical and organizational governance is vital to coordinated care because the same legal and clinical issues that apply within a single organization now apply across a range of organizations.

For example, most individual healthcare organizations recognize the importance of having strong governance that recognizes the organization’s legal fiduciary duty with regard to the money that it raises and spends.

If any organization does not have governance to provide this assurance, the organization fails. If we are creating a set of organizations working across traditional boundaries, that same fiduciary duty applies to the group of organizations as it did to the separate organization in the past.

Not getting the governance right early on is a common cause of failure. The questions that need to be addressed include:

— Is there agreement about the moral purpose?
— What are the rules for performance management?
— What structure of incentives is required — how will risks and rewards be distributed?
— What is the approach to standardization of data, clinical protocols and ways of working?
— Who owns the data collected?
— How are decisions made and how will disagreements be dealt with?

Models of coordinated or integrated care only work if they create a new incentive structure across the entire patient pathway. The incentive structures in place in many health systems today create different incentives for different parts of the system.

For example, a hospital that is remunerated solely for the episodes of care it provides will understandably develop its business model around admitting patients as quickly and efficiently as possible, rather than trying to find alternative, less acute providers who could deliver the same care better.

These systemic incentives also lead to incentive structures within organizations that encourage professionals to focus on doing their part of the pathway, without considering how the local health system as a whole could meet the patients’ needs more effectively and efficiently. As explored in KPMG International’s publication The more I know, the less I sleep, handovers between healthcare professionals are one of the most common areas where providers fall short of coordinated care.²

New incentive structures will need to take into account their effect on clinical governance and behavior, and support an approach that takes the patient’s whole course of care into account.

In some countries, competition regulators take a keen interest in the move to coordinated care — whether it is the merger of organizations or simply contractual collaboration. Regulators want to see evidence that this is in patients’ interests, even in less regulated markets, challenging yourself to demonstrate this direction is a good discipline for patients.

A central lesson is to ensure that the governance group is clear about the moral purpose of the work. Those in charge have to communicate this successfully to the front line staff. This is most powerful when expressed in terms of patient and community benefit. Without this narrative, it is easy for large-scale transformations to ‘run into the sand’.

2. KPMG International, 2013, kpmg.com/clinicalgovernance
Over the last decade Montefiore has developed from a Care Management Organization (CMO) as a for-profit subsidiary of Montefiore Medical Center, to becoming the Bronx Accountable Care Organization. It is the largest healthcare provider in the Bronx, New York’s poorest borough. Originally as a CMO, it had an annual budget of US$850 million which equated to 90 percent of all the insurance premiums paid by patients.

Its objective when it was a CMO remains unchanged: to keep people as healthy as possible and out of hospital. In addition to telemonitoring, their toolkit includes self-education and group classes; home visits and post-discharge outreach; palliative care and coordination of primary care providers, specialists, pharmacists, social workers; and any other resources required to maintain optimal health and functioning.

For its 30,000 patients with largest needs the CMO carried out utilization reviews to ensure any hospital stay is essential and does not last longer than necessary. The nurses who carry out that review are often based in the hospital and can see first-hand what is going on with the patient.

For the next ‘tier’ of people with chronic illness — the functional chronically ill — the CMO provided both education and occasional interventions to prevent their conditions from exacerbating.

Montefiore Medical Centre and all its outpatient departments have an electronic patient record, which ensures all clinicians have access to the same information.

Through these interactions with Montefiore’s patient population — monitoring, coordination, education, patient outreach — the previous CMO became the nucleus of the Bronx Accountable Care Organization.

Outcomes:

— Diabetes admissions decline by 13 percent in 4 years
— Diabetes 30-day readmissions decline by 11 percent in 4 years
— Effective management of diabetes has led to a 12 percent reduction in costs

Adapted from ‘On the Cutting Edge of Accountable Care’ (2012); and outcome figures from slide show by Stephan Rosenthal, COO, Montefiore Contract are Management Organization.
Has the target population been identified?

Attempting from day one to work in a completely different way with an entire patient population is fraught with danger. Therefore, it is essential to identify defined groups to target for particular attention.

A range of predictive models that combine healthcare, social care, prescribing and other data are increasingly used but this technology needs to be complemented with changes in professional practice. For example, getting professionals to better share their knowledge about individual patients.

Across the developed world the same ratios seem to emerge from segmentation of different patient groups. Typically, over 40 percent of the combined health and social care cost in a system is driven by the top 5 percent of the population, with the top 0.5 percent often using as much as 10 percent of the total. It is tempting to focus on applying population stratification approaches to these very high users; the numbers are small and the resources are significant. However, such people are typically very ill. Their particular conditions, co-morbidities or the stage of their disease may make the cost of their care unavoidably high. Rather than attempting stratified accountable care approaches for the most complex patients first, being able to identify people most at risk of being in this group in the future is often a more fruitful approach.

Having the analytics and methodology to identify these people early and act quickly is a key step. In developing a deep understanding of the needs of the patient group in question and how these will change over time, is significant to all that follows.

The types of analytics required to do this will have to identify the diagnostics that drive cost and risk as well as match the specific skill sets of healthcare professionals that will be needed to deliver coordinated care for this particular patient group.

When it comes to targeting important patient groups, the growing problem in every jurisdiction is not as simple as the number of patients with chronic conditions, it is the number of people with multiple co-morbidities. For example, in Scotland a mere 14 percent of those that have diabetes, have that condition on its own.\(^3\)

This means that the analysis necessary to underpin truly coordinated care needs to dive into the relationships between the different conditions and give insights into the interventions that will have an impact on each of the conditions. Most chronic diseases, for example, improving the patient’s nutrition and exercise will have a big impact on outcome and will do so across, rather than within, conditions.

Identifying shared characteristics of high-cost patients is not just a matter of clinical indicators. You may define your population by:

- geography
- disease/condition (or even by combination of conditions, such as diabetes and chronic obstructive pulmonary disease, etc.)
- diagnosis-related groups
- payer contract
- demographic.

Whichever approach you decide is best, the important thing is to make a start, even if you begin small and build up the capabilities over time.

---

Figure 1: Prevalence of multiple morbidity by age group

Established services that need radical reshaping to deliver coordinated care are services that patients are relying on, day-in and day-out. Given that the goal of all this disruption to the status quo is to improve patient care, it is important that the patients themselves support service change.

Opposition from patient groups can emerge for all sorts of reasons, including protecting much loved local services, aversion to closing physical facilities for notional ‘quality gains’ and for changes that have been poorly communicated. Regardless, such resistance can significantly undermine the case for service transformation.

One lesson from across several countries when communicating major service changes is to try and offer benefits in the most tangible way possible. Demonstrating improved outcome measures that new arrangements are likely to have may be convincing to a clinical audience, but it is often hard for non-professionals to feel impassioned to fight for changes when articulated in an abstract way.

By far the most successful strategy, is to make sure that patients and caregivers are actively involved in the development of service changes from the start. Preferably, with participation at multiple levels including representation on the key project and decision making groups, as well as broader consultation methods. This often requires some investment in patients’ capacity and knowledge. Some organizations even develop and hire ‘patient consultants’ to represent local people’s views in a more substantial, remunerated basis. See KPMG International’s report, Creating, new value with patients, carers and communities to fully realize the value inherent in better patient involvement and communities to improve care.4

In the UK, major patient representative organizations have formed themselves into a separate coalition to argue for coordinated care — the Richmond Group.

The Richmond Group provides practical support for those parts of the health and social care system that are trying to move towards better coordinated care. This is not an abstract argument for a change in policy but provides real patient support for these changes in practice.

In its report From Vision to Action, The Richmond Group states that:

“Coordinated care is as important for patients following a stroke as it is for someone with diabetes. An older person, a patient with cancer, or a patient with a mental illness will all want to be involved in decisions about their care. Self-management works for patients with heart conditions and for patients with asthma. Being encouraged and supported to live healthy lives is important for everyone and this requires a flexible and responsive system that can diagnose and intervene early. Emotional, psychological and practical support is crucial to better health outcomes for patients with chronic lung disease as is better physical healthcare for patients with severe mental illness. And of course as we age many of us will not only have one condition but several” 5

The Richmond Group is adding capacity and capability to patient groups and providers through better service models that address the real priorities of the local population and ensure those changes gain a wide base of support to make them happen.


---

5. The Richmond Group, From Vision to Action, 2012
Is there strong supporting infrastructure in place?

These new ways of working require a supporting infrastructure so clinicians feel confident they are able to perform the new tasks and roles required of them. This means ensuring the organization can support them through:

— **Population management** — healthcare professionals must have the ability to identify the target population for a given service and stratify it for the different risks that individuals and groups have from those conditions. This requires the ability to link patient data including prescribing, primary care and hospital encounters.

— **Bringing all the data together** — either virtually or in a single repository, is an important step. As well as health information, data about the patient’s social context greatly improves the predictive power of the models.

— **Reaching out to patients** — designing services that help patients manage their own health more efficiently. This could include expert patient programs, condition-specific technology such as apps, proactive visits by staff and better care planning. See the case studies in this report or KPMG International’s previous report *Creating new value with patients, carers and communities* for how this works in practice.⁶

— **Utilization management** — in the context of coordinated care, ensuring that the location and type of care is appropriate for the needs of the patient. Often this forms the foundations of strategies to shift care into patients’ homes.

— **Clinical decision support** — coordination is difficult if clinicians in one part of the coordinated system are uncertain about how other parts of the system manage care. Standardized, evidence-based tools and processes as well as transparency between organizations, will give professionals the confidence to transfer care to other providers. Geisinger’s ProvenCare system, see page 10, is one example of this in practice.

— **Reporting and performance management** — the move away from isolated episodes of care is a particular challenge for many performance management systems, but ways must be found to assess an individual’s contribution in the context of the wider pathway and in terms of patient outcomes.

A key challenge will be that the skills to develop and run some of this new infrastructure are scarce. However, not all of these functions need to be provided in-house. Outsourcing, joint ventures with other providers and partnerships with technology companies will play an important role in releasing economies of scale and moving to more sophisticated forms of outcome based finance, HR and data management.

---

⁶ KPMG International, 2014
The Geisinger Health System in Pennsylvania, US is an example of many aspects of coordinated care, including designing internal financial flows to incentivize low-cost, early interventions that prevent emergency admissions over time. They have achieved this by providing incentives to organize all of the interventions from prevention to the quaternary interventions of their own hospitals.

Established 100 years ago, Geisinger has become:

- A nonprofit, physician-led, integrated health system serving a population of 2.6 million people in rural northeastern and central Pennsylvania, through three acute/tertiary/quaternary hospitals and an alcohol/chemical dependency center.
- A multispecialty group practice employing more than 740 physicians on 50 sites, including 40 community clinics.
- A 220,000-member health plan, which contracts with more than 18,000 independent providers including 90 hospitals.
- An organization known for innovation through its Geisinger Center for Health Research.
- A provider organization with medical education programs serving medical students, residents, fellows, and other medical professionals and annual patient volumes of over 40,000 inpatient discharges and 1.5 million outpatient visits.

Geisinger Health System has dramatically increased the use of evidence-based, high quality, efficient healthcare for acute and chronic conditions through its ProvenCare model. This sets out clear care processes to reliably deliver a coordinated bundle of evidence-based (or consensus-based) best practice, reinforced with packaged pricing based on outcome measures.

For example, Geisinger charges a flat fee for its Plan members who need certain surgical procedures. This flat fee covers preoperative care, surgery, and 90 days of follow-up treatment (at a Geisinger facility) including that of any related complications. Pricing the bundle at a discount creates an incentive for efficiency and, in effect, offers a warranty against complications.

ProvenCare has had dramatic results on the community:

- 100 percent lower in-hospital mortality (which decreased from 1.5 percent to zero);
- 21 percent decrease in patients with any complications (from 38 percent of patients to 30 percent) and 45 percent decrease in readmissions within 30 days (from 6.9 percent to 3.8 percent)
- 10 percent increase in patients discharged to their homes
- Financial outcomes also improved, including a 16 percent drop in average length of stay (from 6.3 days to 5.3 days) and 5 percent lower hospital charges.

The ProvenCare product portfolio has been expanded to include angioplasty, hip replacement, cataract surgery, erythropoietin use, bariatric surgery, angioplasty with acute myocardial infarction, and prenatal care.

Geisinger has achieved physician buy-in to this more standardized approach because of three factors:

1) There is significant market stability.
2) Physicians are well equipped to do their jobs.
3) They work in a collaborative environment where they have tangible impact on the health of their community.
Are the incentives aligned and flow of funds understood?

If the purpose of the new system is to ensure that healthcare is coordinated around the person rather than the organization, then money flows will have to be structured with the same end in mind.

That means the old mind-set in which each organization tries to maximize volume and reimbursement, will change to one where the whole financial model drives population health and cost containment.

‘Moving from volume to value’ is a good headline to describe this shift but it fails to capture the extent of the challenge of developing and experimenting with new incentives. In some systems the first steps on this journey will be pay for performance and ‘gain-sharing’, which provide incentives for providers to come together to redesign delivery models.

In other systems, moving towards bundled payments — where there is a single payment for a procedure, care pathway or extended episode of care — may be possible more quickly.

Whatever the approach, this exercise will undoubtedly reveal significant amounts of organizational risk, with hospitals often the most challenged. This is because previous incentives have driven investment in expensive infrastructure, whereas coordinated care often demands a different infrastructure based on care close to or in patients’ homes.

The Boards of these organizations will take some persuading that the new financial incentives are not a threat. Modelling and role play are common techniques for predicting the impact of new incentives and agreeing how gains should be shared.

Even when coordinated care means the amalgamation of different types of care into one single organization — as with an ACO — there are still risks associated with the shift in funding from one division to another. It is unlikely to be as easy to move assets and staff from an acute, curative model of care into primary care and prevention as it is to shift the flow of funds.

When redesigning incentive structures across or within organizations, you can become fixated on the money — forgetting that culture, mindset, motivations and control are also hugely powerful forces at play.

Some healthcare organizations, such as Virginia Mason Medical Center in the US, have had great success by recognizing that incentives are not the same as motivations. Through their Physician Compact, they worked with their clinicians to first articulate their intrinsic motivations for being part of the organization. This has allowed them to have a much broader, real-world conversation about changing ways of working than just focusing on explicit financial incentives.
Gesundes Kinzigtal (Healthy Kinzigtal) is a small but ambitious population-based integrated care project in the Southwest of Germany. Founded by 35 physicians in 2005, it has grown to become one of the flagship coordinated care initiatives in the country.

Responding to government cuts to medical care, the founders made it their goal to develop a new, sustainable model that would bend the cost curve for German healthcare downwards. Their plan was to develop an accountable care arrangement to cover 31,000 state insured people in the region (out of a total population of 60,000 inhabitants).

Having established a management company, they made an agreement with the state insurers that if the care cost margins of the population go down (compared to the start of the scheme), the profit is shared between the management company and the state insurers. If costs rise, however, the management company bears the loss.

After 10 years, Gesundes Kinzigtal now consists of more than two dozen service partners including hospitals and nursing facilities, and 57 corporation partners such as fitness clubs and cultural associations.

The results of these efforts include:

— By 2012, a saving of Euros 4.6 million per year for the costs of care for the 31,000 insured population.
— A significant decrease in overall mortality.
— People in the project needed care at a later age.
— Well-being increased in more than half (51.1 percent) of the population.
— 98.8 percent of the members would recommend it.

Gesundes Kinzigtal shows that a better coordination of healthcare and enhanced self-management capabilities of patients in combination with more intensive health promotion and preventive programs will lead — at least in the medium and long term — to significant savings and improved wellbeing compared to typical care.

Sources: http://www.gesundes-kinzigtal.de/
Are new approaches to care delivery in place?

When patients have a number of comorbidities and have several exacerbations per year, we know a great deal about their healthcare use. However, we are typically not utilizing this information to its fullest potential. For people who are very ill, with several co-morbidities, expensive emergencies do not happen out of the blue and an analysis will demonstrate that there are usage patterns. If we can better understand these patterns, we can intervene before, rather than after things get worse.

This anticipatory or proactive care approach means working with patients and their caregivers to establish how they can deliver some aspects of care in their home. Patients are likely to respond well to an intervention that limits the medical emergencies that makes their lives feel fragile. This is not only about preventing the exacerbations of a chronic condition, it is also about giving power back to the patient and helping them regain the sense of control that is often lost when trying to manage multiple conditions.

For coordinated care around the person to become a reality, people with multiple co-morbidities will need direct support. At the core of this will be a clear, coherent care plan that is worked out with the patient and their caregiver, placing a single, nominated care coordinator alongside the patient, above the individual specialists.

Patients and caregivers already do a lot of care delivery themselves. It is important that any model of coordinated care formalizes this and makes this more effective by establishing goal-based care, shared decision making, a focus on wellness and health literacy. This is likely to improve outcomes and reduce the use of resources. Another report in the What Works series, Creating new value with patients, carers and communities, explores these issues in more detail.7

---

**Canada — Bridging support cliffs: Nova Scotia cancer care navigators**

In 2014, KPMG International commissioned research that engaged with patient groups in six countries, across a number of different diseases.

One of the key messages from this study was that there are critical points along a typical care pathway where patients feel 'abandoned', and health outcomes may suffer as a result.

One example is the point immediately after diagnosis of a long term condition — before the patient is likely to have had fairly intensive contact with health professionals, but after which there is often a sudden drop off in support and advice. This is a particular issue for elderly patients, those with dementia and other mental health problems, and patients with complex co-morbidities.

One system that is trying to bridge these support cliffs is the province of Nova Scotia in Canada, where the day after someone is diagnosed with cancer, a trained patient navigator is in touch. The navigators are oncological nurses working in the community to provide a single point of contact to help guide, educate and advocate people through the experience of cancer. The navigators help people to understand their condition, establish their priorities, make decisions and cope with the workload often involved in being a cancer patient or caregiver.
Successfully delivering an anticipatory model of care will require providers to use the wealth of information they have about patients’ health patterns to its fullest potential. To do this, they need the right information technology platform. This will involve new ways of collecting and using information, different methods for billing and costing and new approaches to record management.

There are typically three stages through which technology and better use of data can support coordinated care: capturing, aggregating and using.

**Capturing information:** To support strong governance, organizations will need technologies that effectively enable information that has previously been separate, to be captured by a coordinated system. In the recent past this would have needed a large-scale reworking of technologies, but now this can be developed in a way that leaves much of the old repositories of data in place.

**Aggregating information:** A coordinated care pathway requires aggregated data from each stage of care to flow between organizations, following the patient. Having all of the available data aggregated in one place and accessible at once is crucial if clinicians are to use it to improve the efficiency and quality of care.

**Making it personal**

There are a number of activities in each of these three stages that an information system must deliver in a coordinated model of care.

For example, to obtain the right information and to get the most out of their relationship with patients and the public, it is essential to develop a single patient portal where patients can interact with their healthcare provider (or insurer) in an individualized way. In other industries, most notably retail and distribution, customer portals provide a central means by which individuals and organizations learn about each other’s preferences and personal needs. The same approach can easily be applied to a person’s health insurance portal.

There is a strong incentive for healthcare organizations to use that portal for more and more functions: the more a person uses the portal, the more the organization knows about that individual and his or her lifestyle and wellness patterns.

Most health systems are just beginning their journey to build a technology infrastructure that fully supports coordinated care. Some of the early challenges to address include:

— Instituting a patient identification — a ‘master’ patient index must be in place to ensure that patients can be correctly identified and tracked across all care settings.

— Enhancing the ‘liquidity’ of data — all the participants in the care continuum hold unique data assets that are valuable to other caregivers. Sharing this data will enhance the ability to identify patterns of behavior and wellness, develop appropriate interventions and track patient outcomes.

— Understanding how to analyze the massive amounts of clinical data that will be available if the previous two stages are achieved.
Incremental steps, with experimentation along the journey, is the way to move towards delivering coordinated care for a population. But where do you start? The order in which you take the steps outlined in this paper will depend on your organization’s starting point and the particular needs of your population. However, there are some logical steps to take early on, to set the foundations for the rest of the journey.

First

— Articulate a clear moral purpose for delivering coordinated care, with alignment across payers and providers.
— For each aspect of this journey, define where you want to end up (for example, do you eventually want to use capitated payment, or is this not possible in your system?)
— Place all the changes within a narrative that make sense to staff and patients.
— Make sure that the relevant patient groups are a part of your coalition for change.
— Ensure there is an overall governance structure that will support and manage the long-term changes.

Second

— Select a target population to begin the process.
— Ensure that your population understands and supports the move to coordinated care.
— Create new approaches to providing care across multiple professionals and services.

Third

— Align the financial and other incentives in your organization with the new form of coordinated care.
— Ensure you have new supporting technology and infrastructure in place.
To make the journey from idea to delivery it is important to start with a realistic assessment of the current capabilities of the organization or health system and an understanding of the steps required to build capacity.

The most important lesson globally is that, given the scale and the diversity of the changes required, the development of a truly coordinated system, focused on population health, cannot be a single ‘big bang’ change project. It involves new skills, new ways of being paid and a new dynamic between physicians and patients. It is a journey that requires skilled change management, experimentation and development across a wide range of activities over considerable time.

McClellan M et al have devised the maturity matrix on the following page to describe the progression towards coordinated care in five key areas: population health; measuring outcomes; metrics and learning; payments and incentives; and coordinated delivery. Agreement about where you are on this journey and what your goals are in these domains may be helpful for health systems seeking to develop the necessary capabilities, infrastructure and relationships with their stakeholders and patients.

The maturity matrix shows how, if you want to move towards delivering coordinated care, you will need to tackle a number of different issues at the same time, but that progress can be staged and visualized. For example, a health system might start from a position of not identifying a population at all, then begin to define and stratify its population through individual key morbidities and, eventually, reach the point of being able to identify groups of patients with specific combinations of conditions and design services accordingly.

Is your organization ready?

Agreement about where you are on this journey and what your goals are in these domains may be helpful for health systems seeking to develop the necessary capabilities...
# Coordinated care maturity matrix

(5=high; 0=low)

<table>
<thead>
<tr>
<th>Maturity level</th>
<th>Population health</th>
<th>Measuring outcomes</th>
<th>Metrics and learning</th>
<th>Payments and incentives</th>
<th>Coordinated delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Intersections accounted for (ie. co-morbidities)</td>
<td>Outcomes that matter to people; prioritized based on individual goals</td>
<td>Aggregated longitudinal data made public in cross-provider consistent format</td>
<td>Full capitation with guard rails on quality; differential payments for outcomes</td>
<td>Clinical and data integration of provider network; patients co-design care</td>
</tr>
<tr>
<td>4</td>
<td>At-risk individuals identified, using all available sources</td>
<td>Focus on prevention and wellness; goals adjusted based on patient risk level</td>
<td>Results shared with people in usable form; monitoring built into clinical work flow</td>
<td>Upside and downside shared savings; strong professional competition</td>
<td>Patients empowered to self-care; care plan and managed transitions</td>
</tr>
<tr>
<td>3</td>
<td>Registry of population integrated with EHR</td>
<td>Comparable with other providers and aligned with global best practice</td>
<td>Real-time and summary learning; results shared with payer and clinicians</td>
<td>Upside-only shared savings and risk for whole health; bonuses to staff</td>
<td>Clinicians empowered to adjust interventions to improve outcomes</td>
</tr>
<tr>
<td>2</td>
<td>Defined population (eg., morbidity, age geography, payer)</td>
<td>Incorporation of patient experience into targets</td>
<td>Leading clinical indicators with evidence link to outcomes</td>
<td>Bundled payments with quality controls for episodes of care</td>
<td>Multi-disciplinary meetings; all team members used to maximum potential</td>
</tr>
<tr>
<td>1</td>
<td>Holistic view of existing funding and providers</td>
<td>Basic clinical outcomes decided at local level</td>
<td>Admin-based measures: limited transparency; summary evaluation only</td>
<td>Pay-for-performance bonuses on top of fee-for-service or block payments</td>
<td>Basic electronic data-sharing across providers</td>
</tr>
<tr>
<td>0</td>
<td>No identified population</td>
<td>No target outcomes</td>
<td>No metrics nor learning</td>
<td>Payments for activity only</td>
<td>Uncoordinated provision of elements of care</td>
</tr>
</tbody>
</table>

---

8. From McClellan M et al (2014) Accountable care around the world: a framework to guide reform strategies, in Health Affairs, 33 (9) 1507
How KPMG can help

As organizations and health systems around the world seek to deliver integrated, coordinated care, KPMG’s dedicated network of healthcare professionals are working with organizations and health systems to help them tackle this complex change journey. Our teams are working with member firm clients in a number of different ways, including:

**Helping to define a strategic vision**
Coordinated care means different things to different people, depending on the issue they are trying to address and the environment they are in. KPMG member firms are working with payers, providers, governments and patient groups to help them understand and define the optimal model to help meet the needs of populations. KPMG member firms are helping them then to define in detail what a functional, sustainable future state would look like across their health economy.

**Helping organizations and health systems assess their readiness for accountable care**
Any transition of this scale has the potential to disrupt the operation of the day-to-day business of delivering care. Our healthcare teams are working with member firm clients to help understand and mitigate those risks. KPMG Healthcare practice has a deep, practical knowledge of every aspect of the healthcare industry, which allows us to assess the impact of a transformation, not only on the operational and technical processes, but also on the people and supporting activities.

**Identifying strategic options and alternatives**
With a consistent focus on delivering better outcomes and lower costs, KPMG Healthcare practice is working with our clients’ senior leaders to identify and work through the key choices and trade-offs they will need to make along this change journey — whether they are questions of sustainable financial flows, interoperable technology, operational collaboration or clinical and corporate governance. Our teams are then ideally in place to support clients in developing a robust financial and business case for their chosen direction.

**Develop a path forward**
KPMG Healthcare practice is helping organizations develop systematic implementation strategies that take into account other improvement initiatives and consider the key interactions among partners and stakeholders. Once a clear strategic direction has been defined, we are assisting our clients in managing and delivering the complex portfolio of projects and the range of partner organizations that are involved in, achieving the vision they have set out.
Liz Forsyth, Partner, KPMG in Australia
Liz has 13 years experience in the public sector, 6 years of which were in a range of senior positions within both State and Commonwealth Departments. She has had extensive experience in consultation, disability, child and family services, community services, homelessness, performance management, evaluation and review.
Prior to KPMG, Liz held senior and executive positions in the Commonwealth Department of Community Services and Health, the NSW Department of Transport and the NSW Department of Community Services.

West Johnson, Principal, Advisory, KPMG in the US
West is a Principal with KPMG’s Healthcare Advisory and is responsible for KPMG’s Healthcare & Life Sciences Transformation Consulting practice. He has for more than 29 years of experience advising clients on strategic, financial, and operational matters. Prior to joining KPMG, West was Vice President of Revenue Consulting and led the Clinical Operations Performance Improvement practice for a national consulting company.
West guided the clinical operations performance improvement effort as part of broader comprehensive performance improvement engagement for a hospital system. Measureable improvements in length of stay and clinical efficiency along with overall improvements in labor productivity and non-labor (supply chain, purchased services, etc.) were achieved.

Keiichi Ohwari, Partner, KPMG in Japan
Keiichi has led KPMG in Japan’s healthcare division since 2000. He was concurrently working for the Strategic Business Solutions Division of KPMG Consulting to assist various sector clients in developing business strategy. The industries he has worked for are not limited to the healthcare sector, but also automotive, high-tech and finance. He has advised on various clients’ initiatives such as business strategy development, revenue enhancement and operational efficiency, M&A, finance and business/financial restructuring.
The clients he has served include leading medical and other healthcare service providers, such as public and private hospitals, aged care, senior living operators, and related sector companies such as pharmaceutical and medical device companies, medical outsourcing companies, financial institutions, private equity funds, real estate investors, construction companies, trading houses and others.

Volker Penter, Partner, Head of Healthcare, KPMG in Germany
Volker has 18 years of audit and tax experience and additional experience in business management. He is an honorary professor at the business school of Technische Universität Dresden and university lecturer at Dresden International University in healthcare and economics. In addition, he has extensive experience in audit and advisory services for healthcare organizations, as well as organizations of public welfare work. He is also an author of numerous specialist publications.
Volker has a degree in Industrial Engineering, as well, he is a Certified Public Accountant (Germany) and a Certified Tax Advisor (Germany).

Dion P. Sheidy, Partner, KPMG in the US
Dion leads KPMG’s Advisory Healthcare Risk Consulting practice and is a member of KPMG’s Healthcare Leadership Team. Dion has 25 years of experience delivering high-value business advisory and assurance solutions to healthcare provider and payer clients nationwide.
Dion’s prior engagements include providing services to integrated healthcare delivery systems, commercial health plans, health maintenance organizations, dental maintenance organizations, indemnity insurers, fiscal intermediaries, Medicare Advantage Plans, provider based healthcare institutions, and case management and utilization review companies.

Contributors

© 2015 KPMG International Cooperative (“KPMG International”). KPMG International provides no client services and is a Swiss entity with which the independent member firms of the KPMG network are affiliated.
The need for change in healthcare is well understood. There is also an increasing consensus about what needs to be done to address these challenges:

— a focus on quality, safety, controlling costs and improving population health
— a move from the emphasis being on the volume of treatment toward ensuring high-value care
— activist payers working with patients and providers to reshape the system
— the development of new models of delivery including increasing convergence between healthcare payers, providers and the life sciences industry
— reaching out to patients and communities in new ways.

The question is how to make these changes happen. We argue that there are a number of changes of both mind-set and capability that are required across a number of areas. These include:

— creating systems to drive clinical and operational excellence
— creating new partnerships and networks
— growing the ability to contract for value
— developing new models for coordinated care and population health.

This report looks at the last of these and makes a strong case that there is a long journey for some healthcare organizations to become true coordinated healthcare systems.

For more information, or to reserve your copy of future What Works reports, please contact your national partner, see back cover, or email: healthcare@kpmg.com or visit kpmg.com/whatworks for the latest report.

What Works: Creating new value with patients, carers and communities
Globally some parts of healthcare are beginning to make the changes that will involve patients, carers and communities more fully in their own healthcare. Using our experience across the world, this report outlines the answers that you need to fully realize the value inherent in better patient involvement and communities to improve care.

kpmg.com/patientvalue

What Works: Partnerships, networks and alliances
As hospitals and healthcare organizations around the world struggle to address growing volumes of patients, reduce per capita costs, and improve the patient experience of quality and satisfaction, consolidation in healthcare has accelerated significantly. This report highlights six practical tips that together help organizations realize long-term success.

kpmg.com/partnerships

What Works: As strong as the weakest link — Creating value-based healthcare organizations
Organizing care to deliver value for patients requires change in five main areas. Start with a clear vision and understanding of what value means and focus energy on cohesive action across all the areas. This report focuses on the different lessons drawn from work done with clients and discussions with providers from all over the world.

kpmg.com/valuebasedcare

What Works: Staying Power — Success stories in global healthcare
KPMG gathered together 65 healthcare leaders from 30 countries across 6 continents to discuss effective strategies for successful transformation. These discussions were centered around 7 key themes ranging from population health and accountable care to clinical and operational excellence. This report summarizes the insights shared between organizations, cultures and countries.

kpmg.com/stayingpower
Global Healthcare

Thought Leadership

We invite you to visit KPMG Global Healthcare (kpmg.com/healthcare) to access our global thought leadership. Here you can gain valuable insights on a range of topics that we hope add to the global dialogue on healthcare. Should you prefer a printed copy of the publication, please email us at healthcare@kpmg.com.

Something to Teach, Something to Learn — Global perspectives on healthcare
The root causes of sub-optimal healthcare and outlines three core principles that — taken together — can deliver a clear path to driving value for patients, providers and payers.
kpmg.com/teachlearn

Necessity: The mother of innovation — Low-cost, high-quality healthcare
This report explores how emerging health economies are challenging traditional models of care and succeeding with innovative, low-cost alternatives.
kpmg.com/healthcareinnovation

The more I know, the less I sleep — Global perspectives on clinical governance
This report explores best practices to provide oversight and assurance, govern, as well as measure and monitor quality and safety.
kpmg.com/clinicalgovernance

An uncertain age — Reimagining long term care in the 21st century
This report brings together expert commentary and global insights from 46 long-term care thought leaders on the current state and future impacts of eldercare.
kpmg.com/anuncertainage

Contracting value: Shifting paradigms
This report explores how payers, providers and policy-makers are coping with the combined challenge of rising costs, demand and patient expectations.
kpmg.com/value

Value walks — Successful habits for improving workforce motivation and productivity
This report examines the potential for supportive public policy measures and identifies five key attributes that have proven to help health systems successfully manage the workforce challenge.
kpmg.com/valuewalks
Contacts for healthcare services

Czech Republic
Vlastimil Cerny
T: +420 22 212 3389
E: vcerny@kpmg.cz

Denmark
Jakob Blicher-Hansen
T: +455 215 0129
E: jabhansen@kpmg.com

France
Benoit Pericard
T: +33 1 55 68 86 66
E: benoitpericard@kpmg.fr

Germany
Volker Penter
T: +49 30 2068 4740
E: vpenter@kpmg.com

Hong Kong
Marcello de Guisa
T: +852 228 685 7337
E: marcello.deguisa@kpmg.com

Hungary
Andrea Nestor
T: +361 887 7479
E: andrea.nestor@kpmg.hu

Iceland
Svanbjorn Thoroddsen
T: +354 545 6220
E: sthoroddsen@kpmg.is

India
Nilaya Varma
T: +91 98 100 85997
E: nilaya@kpmg.com

Indonesia
Tohana Widjaja
T: +62 21 574 2333
E: tohana.widjaja@kpmg.co.id

Ireland
Frank O’Donnell
T: +35 31 700 4493
E: frank.odonnell@kpmg.ie

Israel
Haggit Philo
T: +972 3 684 8000
E: hphilo@kpmg.com

Italy
Alberto De Negri
T: +39 02 674 3606
E: adenegri@kpmg.it

Japan
Keiichi Ohwari
T: +81 3 5218 6451
E: keiichi.ohwari@jp.kpmg.com

Luxembourg
Patrick Wies
T: +352 22 51 51 6305
E: patrick.wies@kpmg.lu

Malaysia
Yeekong Lee
T: +60 3 7721 3388
E: leeyk@kpmg.com.my

Mexico
Andrés Aldama Zúñiga
T: +01 55 5246 8589
E: aaldama@kpmg.com.mx

Netherlands
Anna van Poucke
T: +31 20 656 8955
E: vanpoucke.anna@kpmg.nl

New Zealand
Richard Catto
T: +64 4 816 4851
E: rcatto@kpmg.co.nz

Nigeria
Kunle Elebute
T: +23 41 280 9267
E: kunle.elebute@ng.kpmg.com

Norway
Wendke van der Meijden
T: +47 406 23945
E: wendke.vandermeijden@kpmg.no

Philippines
Emmanuel P. Bonoan
T: +63 2 885 7000
E: ebonoan@kpmg.com

Portugal
Jorge Santos
T: +35 121 011 0037
E: jorgesantos@kpmg.com

Romania
Maria Elisei
T: +40 37 237 7800
E: melisei@kpmg.com

Russia
Victoria Samsonova
T: +74 95 937 4444
E: vsamsonova@kpmg.ru

Saudi Arabia
Khalid Yasin
T: +96 611 874 8500
E: kyasin@kpmg.com

Singapore
Wah Yeow Tan
T: +65 641 18338
E: wahyeowtan@kpmg.com.sg

South Africa
Anuschka Coovadia
T: +27 82 719 2813
E: anuschka.coovadia@kpmg.co.za

South Korea
Kyung Soo Park
T: +82 2 2112 6710
E: kyungsoopark@kr.kpmg.com

Spain
Candido Perez Serrano
T: +34 914 513091
E: candidoperez@kpmg.es

Sweden
Andreas Endredi
T: +46 8 723 9743
E: andreas.endredi@kpmg.se

Switzerland
Michael Herzog
T: +41 44 249 31 53
E: michaelherzog@kpmg.com

Taiwan
Eric K. J. Tsao
T: +88 628 101 6666
E: erictsao@kpmg.com.tw

Thailand
Chotpairoonpun Boonsri
T: +66 2 677 2113
E: boonsri@kpmg.co.th

Turkey
Raymond Timmer
T: +90 216 681 9000
E: raymond.timmer@kpmg.com

UK
Jason Parker
T: +44 207 311 1549
E: jason.parker@kpmg.co.uk

US
Ed Giniat
T: +1 312 665 2073
E: eginiat@kpmg.com

Vietnam and Cambodia
Cong Ai Nguyen
T: +84 83 821 9266
E: acnguyen@kpmg.com.vn

Chile
Santiago Barba
T: +562 2 798 1507
E: santiago.barba@kpmg.com

Australia
Liz Forsyth
T: +61 2 9335 8233
E: lizforsyth@kpmg.com.au

Austria
Johann Essl
T: +43 732 6938 2238
E: jessal@kpmg.at

Belgium
Emmanuel De Moyer
T: +32 2 708 4486
E: edemoyer@kpmg.com

Brazil
Marcos A. Boscolo
T: +55 11 2183 3128
E: mboscolo@kpmg.com.br

Bulgaria
Iva Todorova
T: +35 95 269 9650
E: itodorova@kpmg.com

Canada
Georgina Black
T: +1 416 777 3032
E: gblack@kpmg.ca

Central/Eastern Europe
Miroslaw Prpppe
T: +48 604 496 390
E: mpropppe@kpmg.pl

China
Jenny Yao
T: +86 108 508 7074
E: jenny.yao@kpmg.com

Chile
Santiago Barba
T: +562 2 798 1507
E: santiago.barba@kpmg.com

kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2015 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.

Designed by Evalueserve.
Publication name: Paths to population health
Publication number: 132965a-G