THE NEED FOR INTEGRATED HEALTHCARE
Due to a combination of longer lives and new medical advances, healthcare costs are fast becoming unaffordable. A new and different approach — one that is patient-centric, decentralised, and above all integrated — can help.

THE EVOLVING HEALTHCARE CHALLENGE
Recent improvements in healthcare have brought challenges as well as benefits. While many people are living longer lives, at the same time, several chronic illnesses have become increasingly common. What’s more, treating these illnesses is expensive. So expensive, in fact, that many communities with ageing populations find the burden of healthcare fast becoming unaffordable.

INSTITUTE FOR HEALTHCARE IMPROVEMENT TRIPLE AIM
In response, many healthcare organisations now strive to achieve the three overarching goals defined by the Institute for Healthcare Improvement (IHI), an independent, not-for-profit organisation based in the US:

- Improve the patient experience of care, including quality and satisfaction;
- Improve the health populations;
- Reduce the per-capita cost of healthcare.

With balanced attention on all three goals, IHI says, healthcare organisations can identify and fix problems such as poor coordination of care and overuse of medical services. The IHI’s Triple Aim initiative also aims to help healthcare organisations focus their attention on, and redirect resources to, those activities that have the greatest impact on patient health.

Technology, many hoped, would provide the solution. To be sure, the adoption of new, sophisticated healthcare technology has had a substantial impact, including capturing a great deal of data. But by and large, technology has so far failed to provide the kind of insights that healthcare professionals need for real-time decisions.

INTEGRATING HEALTHCARE
What’s needed now is not more technology, but instead, an overarching, patient-centric view. Taking this approach, healthcare organisations create a single record for each of their patients. This record then follows the patient throughout their treatment. In this way, all caregivers — including physicians, nurses, and pharmacists, as well as social workers, community organisers, and family members — receive an integrated view of the patient’s health and history. The benefits include improvements in health and safety, as well as cost avoidance due to earlier, more proactive treatments.

This new, patient-centric view further helps healthcare organisations more quickly identify at-risk patients; improve the accuracy and speed of medical diagnoses; improve the targeting of treatments; and more accurately track treatment efficacy. The new view also facilitates the integrated flow of patient information from primary-care physicians to those in secondary care. This, in turn, lets healthcare organisations share patient information with the most experienced physicians in their networks.

The need for integrated healthcare is dramatic and urgent. By 2050, it’s predicted; more than one in five people worldwide will be age 60 or older, up from about one in 10 today. With the world population estimated to reach some 9 billion by 2050, that would mean a senior population of nearly 2 billion people. In addition, healthcare spending has been shown to increase with age. (This is especially true in the U.K.) With this larger population of older people, we can also expect to see more cases of expensive-to-treat illnesses, including diabetes, chronic obstructive pulmonary disease (COPD), cardiovascular disease and various forms of dementia. For example, some countries now estimate that up to 17 per cent of their population will soon be diabetic.

IMPROVING ACCURACY, SAFETY AND EFFICACY OF CARE
Integrated healthcare is also needed to simplify treatment. Today, when a patient is diagnosed with an illness, a complicated and often confusing process is triggered: batteries of tests; counsel, dietary and otherwise; and medications that need to be prescribed, monitored, and managed. Each step of this process may be conducted by a different provider, leaving the patient responsible for managing all the steps and sharing their information with their various caregivers. The current process is inefficient, ineffective, and expensive.
Globally, healthcare providers have responded by investing heavily in technology. Yet these investments have so far failed to improve patient outcomes as much as anticipated. Mainly, that’s because very little has been done to integrate care-chain pathways on a patient-centric basis. As a result, many patients are not treated until their illnesses reach clinical or acute stages. But by then, treatment becomes exponentially more expensive; research shows that the final two to three weeks of treatment in a patient’s life are by far the most costly.

What’s more, despite highly publicised advances in medical technology, the healthcare industry actually spends less on IT than other data-dependent industries. For example, while the average hospital spends only about 2 per cent of its total operating budget on IT, the typical bank spends as much as 10 per cent.

Integrated care is also needed to fight costly and common errors. International evidence suggests that one in 10 hospital patients suffer harm as a result of errors in their care. These errors range from incorrect prescriptions all the way to operations on wrong limbs. Consider:

- Fully 80 per cent of all medication errors can be attributed to process complexity, everything from ordering to transcription to dispensing and administration.
- Many healthcare errors are due to lack of experience. For example, the discrepancy rate between residents and experienced neuroradiologists reaches 33 per cent. That means as many as one in three X-rays or other diagnostic tests are read incorrectly by a resident. The impact on patients can be massive.

Healthcare organisations are also plagued by gross inefficiencies. For example, in a typical hospital, only 20 per cent of staff time is actually dedicated to providing care. The remaining 80 per cent of staff time goes to administration, back-office functions, waiting, documentation, transportation, and more. That’s a tremendous amount of non-value-adding activity.

Security and privacy measures with healthcare organisations can be an issue, as well. For example, in Australia, data thieves recently hacked into a regional medical centre’s healthcare records and encrypted the files, rendering them useless. The hackers then demanded a ransom payment from the medical centre to unencrypt the data.
A better way forward is needed. Fortunately, a new healthcare paradigm is evolving, one that displays four main movements:

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<th>FROM</th>
<th>To population health</th>
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<tr>
<td>Treatment of patients</td>
<td>To patient-centric</td>
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<tr>
<td>Provider-centric</td>
<td>To lifetime treatment of chronic diseases</td>
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<tr>
<td>Episodic and curative treatments</td>
<td>To decentralised and community-based</td>
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In turn, this new healthcare paradigm has three overarching goals: clinical relevance, a focus on core competency, and truly integrated care.

**CLINICAL RELEVANCE:** This is the real prize in healthcare transformation. Advances in medical technology are producing a surge of new information and data, much of it from a growing number of sub-specialities. Yet many healthcare organisations find themselves unable to deal with all this new information.

What they need instead is for the right information to converge at the right place, at the right time, for optimal clinical decisions. That’s vital, because physicians need all the information available to make the best possible diagnosis and plan for treatment. To control costs, healthcare needs to focus on the truly ill, not just the worried well. For example, an X-ray should be able to be read by an experienced radiologist working anywhere in the world, connected by collaborative cloud network, and with a turnaround time of just 30 minutes.

Coordination is increasingly important, too, among not only healthcare professionals, but also social-welfare workers, family members, local political officers, and others. This breadth of coordination improves patient outcomes while also lowering the consumption of costly hospital resources.

**FOCUS ON CORE COMPETENCY:** Compared with many other industries, healthcare is highly inefficient. Forty pence of every pound of major healthcare organisations’ budgets are spent on a combination of waiting for information and errors due to corrupt or missing information. Hospitals need to remove the tremendous amount of non-value-added activity they currently undertake, outsource as much as possible to partners, and focus more of their time and other resources on patient care. In other words, focusing more on providing care, and less on managing the IT infrastructure and workflow. Doing so will reduce these organisations’ overall cost burden and dramatically increase their efficiency. To ensure that this occurs, many healthcare organisation will want to create a new role and job position, that of the Care Coordinator.

**INTEGRATED CARE:** To deliver consumer-centric healthcare, hospitals need to design patient-centric pathways across the boundaries of their healthcare systems. This means managing not just patients, but entire at-risk populations, such as diabetes patients, the elderly, and those with mental-health conditions. Also needed is greater focus on early detection, rather than late treatment. This will deliver better outcomes for patients and lower costs for hospitals.
For healthcare organisations to implement these and other, related changes, they will need new supporting frameworks and infrastructures. Support from the top of the organisation is essential, as implementing these changes is neither simple nor quick. Yet the benefits can be impressive.
The overall IT platform is a good place to start. Healthcare organisations can examine their IT infrastructure, administrative processes, and electronic patient records, looking for inefficiencies and new, more efficient ways of operating. For example, when physicians are more willing to share patient information, patient outcomes can improve. Patients, too, must change their behaviour in ways that can help deliver better outcomes at lower costs.

In fact, collaboration throughout the healthcare organisation is essential. Hospitals need to review their workflow and critical pathways to provide truly integrated care. New links may be needed among departments. For example, some hospitals have found it beneficial to move Radiology closer to Pathology. A collaborative work environment also allows for predictive analytics to automatically trigger specific activities at the right times.

Of course, all this must be done within highly secure environments. Cybersecurity systems are required to protect patient privacy, secure vital medical records, protect healthcare systems and networks against malicious attacks, and comply with both industry and government rules, regulations, and laws.

Change management may not be a typical skillset for most healthcare organisations, but it’s one they need now to manage the journey to integrated care. Change management involves identifying what’s core to a healthcare organisation’s mission, as well as what’s not core. Transferring the non-core activities to a partner can result in reduced costs and added efficiencies.

CSC is a change agent. We help healthcare organisations achieve clinical relevance; focus on their core competencies by redeploying less-efficient activities and designing patient-centric pathways across healthcare systems.
Worldwide CSC Headquarters

The Americas
3170 Fairview Park Drive
Falls Church, Virginia 22042
United States
+1.703.876.1000

Asia
20 Anson Road #11-01
Twenty Anson
Singapore 079912
Republic of Singapore
+65.6221.9095

Australia
Level 6/Tower B
26 Talavera Road
Macquarie Park,
NSW 2113
Sydney, Australia
+61(0)2.9034.3000

Europe, Middle East, Africa
Royal Pavilion
Wellesley Road
Aldershot, Hampshire
GU11 1PZ
United Kingdom
+44(0)1252.534000

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