KPMG

The essence of extended care

The next level in implementing healthcare transformation in Saudi Arabia

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Table of contents

Strengthening extended care services to create thriving Integrated Care Systems — 03

What is out of hospital care? — 04

Making it practical: Examples of out of hospital services — 06

Case studies — 08

How can hospitals help deliver the vision? — 10

What works? The five building blocks of out of hospital care — 12

Using digital technology to connect and coordinate care — 14

Where to start: Saudi Arabia's health transformation journey — 16

How KPMG can help — 17

Contact — 18

Strengthening extended care services to create thriving Integrated Care Systems

Healthcare systems around the world are working to improve extended care; 'out of hospital' and community-based services to help achieve the quadruple aim of improved outcomes, access, experience and reduced cost. Inappropriate referrals to hospitals could be avoided and lengths of stay reduced by developing out of hospital care and community-based services that are integrated and tailored to the local needs of a population.

Our global experience shows that a range of innovative approaches are being used to scale up out of hospital services depending on different countries' assets and priorities. Integrated Care Systems (ICSs) or Accountable Care Organizations (ACOs) currently sweep the world's health systems from the USA to Western Europe, and even emerging economies such as Mexico, India and Rwanda.

There is mounting evidence that out of hospital care is a key factor separating successful from unsuccessful ICSs. This is because they provide the levers for healthcare providers to deliver care differently, better target high risk groups, and work together to shift patients away from high-cost, low value services. As this report shows, the most successful ICSs go further still – tackling the social determinants of health head on by investing in services with no relationship whatsoever to the traditional medical model.

Saudi Arabia's health system – and the aim for Clusters to move into Integrated Care Systems - show huge potential to benefit from better out of hospital and community-based care models. Over 13 percent of hospital beds are currently occupied by long-stay patients, and average lengths of stay for stroke are almost compared to Western health systems. It is widely known that many Saudi patients could be better cared for through dedicated pre- and post-acute extended services such as community nursing, rehabilitation, long-term and palliative care. The ICS and Model of Care components of the National Healthcare Transformation Strategy are tasked with tackling this and will stand or fall on whether the reforms go beyond organizational restructuring and payment model redesign, to encompass each of the elements of successful integrated care transformation outlined in this report.

The difference is in action, not clever policy design alone: the detailed work of bringing partners together, co-designing services with patients and caregivers, supporting staff to work differently, and investing in the technologies that can link up different professionals and settings.

We hope this report, as a follow up to our previous report on 'The Paradox of Primary Care', provides the next level framework for consideration and debate between Saudi Arabia's main entities, policy-makers and service leaders, as well as investors and communities themselves. We believe that successful global extended care initiatives can guide Saudi Arabia's path to success.

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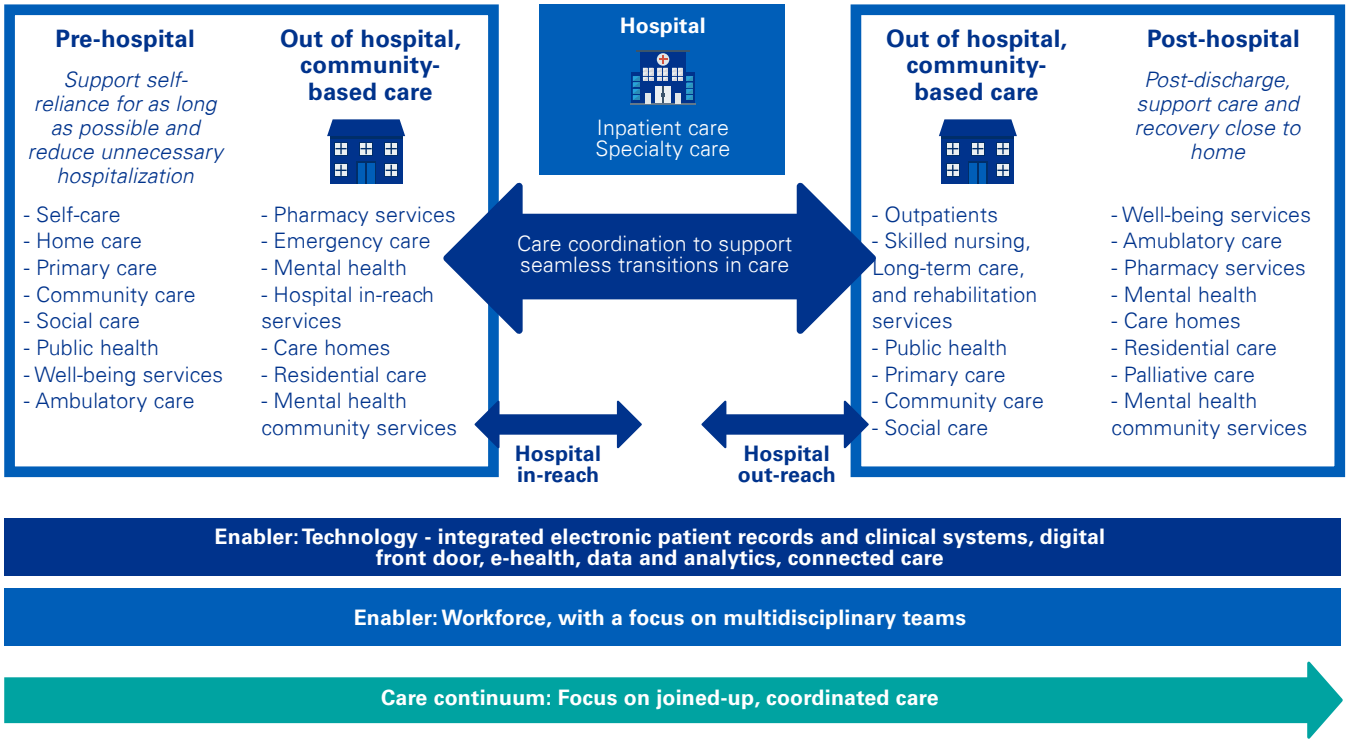
*Throughout this report we use the terms ICS and ACO interchangeably. Although there are differences, the solutions presented apply to both.

What is out of hospital care?

Figure 1: What is out of hospital care?



Out of hospital care is a simple term for a complex concept, but essentially describes the ecosystem of non-hospital services that typically exist in high-performing health systems. These include a range of pre-acute services such as chronic disease programs, community clinics, pharmacy, patient peer-support networks and social care. Post-acute options include hospital-at-home, care delivered in nursing homes and long-term care facilities, community rehabilitation and palliative care. Primary care continues to play an essential role throughout, offering coordination and a holistic perspective on patient needs.

The diagram above represents KPMG's global model of out of hospital care, developed through our "Healthcare Ecosystem Redesign" and Implementation projects across hundreds of clients in dozens of countries worldwide. It demonstrates the wide array of ways that are available to redress the reactive, hospital-centric imbalance in many care systems, and to move towards more preventative and promotive services that offer better quality and patient experience at lower costs.

Figure 2: Long term care and Rehabilitation bed density

Most of these out of hospital services are targeted at the small proportion of high-need patients who consume as much as 80 percent of many health systems' resources, for whom a shift away from hospital makes the most powerful sense from a cost and quality perspective.[4] In a practical sense. this shift might mean elderly patients receiving care at home or in long-stay geriatric homes instead of hospitals, cancer patients receiving chemotherapy in the community, or people at the end of their lives being cared for in hospices. All of these require significant change to hospitals, which may opt to become increasingly specialized regional centers, or to extend their services beyond their walls into community clinics and patients' homes.

Source: Colliers International, Kingdom of Saudi Arabia Healthcare Overview 2018, Colliers International (2018)

There is strong evidence to suggest that from a structural perspective, healthcare provision in Saudi Arabia is far more skewed towards traditional hospital-based services than the world's best performing health systems. While direct international comparisons are difficult, on average, member countries of the Organisation for Economic Co-operation and Development (OECD) spend around 28 percent of their healthcare resources on inpatient care, compared to 47 percent in Saudi Arabia [5]

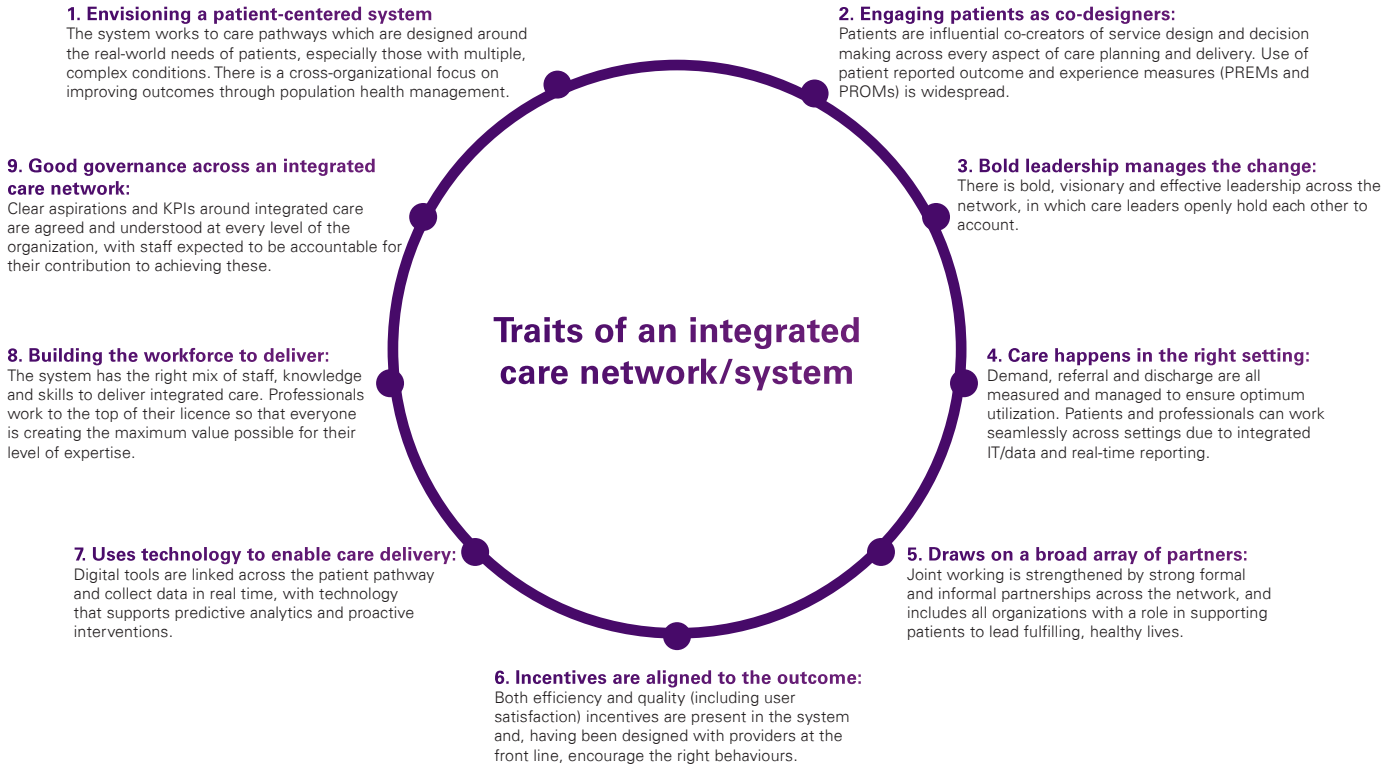
A practical example of this is the capacity of long-term care and rehabilitation facilities, where Saudi Arabia currently has just a fraction of dedicated beds compared to other OECD countries such as Turkey, the UK and Germany (see Figure 2).[7] While primary care settings are the first point of contact with the healthcare system and are key for providing out of hospital services, the current capacity does not meet the demand of patients in the Kingdom. In fact, the number of primary healthcare settings in Saudi Arabia is lower compared to other OECD countries and are located disproportionally in urban areas leaving many rural areas underserved.[8] Similar comparisons could equally be made with the capacity of home nursing service, community rehabilitation clinics and hospices – suggesting Saudi Arabia will need to 'invest to save'.

Saudi Arabia acknowledges the need to shift towards out of hospital care – in line with this shift, the National Transformation Program (NTP) 2020 outlined a strategic objective to "improve the quality of life and healthcare service provided to patients outside hospitals".[9] The Kingdom's Vision 2030 identifies a major role for private sector providers in addressing this strategic objective,closing gaps in services, and catalysing service change.[10] Major investments are already underway from, however, with an estimated need for 12,000 – 15,000 long term care beds, only 2,000 of which are planned to be met through public private partnerships by 2022; as such, many more efforts are still needed to bridge the gap.[11]

In parallel, the public sector has identified key initiatives to move towards out of hospital services. A key initiative of the NTP 2020 is to "improve the performance of primary healthcare centers in the Ministry of Health" in order to decrease inappropriate hospital referrals and increase the number of patients enrolled in primary healthcare centers.[viii] Another initiative outlined in the NTP 2020 and related to out of hospital services is the development of a comprehensive pre-hospital care system which entails unifying the emergency system and developing the skills of first-responders.[viii] As other systems have learned, however, simply investing in service capacity of out of hospital care is not enough to create real change in patient flow needed. To make a meaningful impact, both public and private sector initiatives that seek to develop and deliver out of hospital services should consider how the whole network or system of providers work together. To enable this system thinking approach, KPMG has conducted global research across its healthcare teams in more than 50 countries to identify the traits that hold cohesive networks of providers together and enable them to successfully deliver integrated care. This is not a theoretical framework, but a practical tool used with a multitude of national, regional and local health systems to improve the integration of out of hospital services and real-world care.

Figure 3: Traits of an integrated care network/system

Ecosystem redesign integrated care network/systems



Making it practical: Examples of out of hospital services as the foundation for successful integrated care systems

For all the hype around ICSs (more widely used in Western Europe) and ACOs (US) as a remedy for aligning health providers towards better care at lower cost, the early evidence of their success at scale is mixed. Studies on the early years of US ACOs, where the concept has been trialled most widely, found that savings were negligible in most ACOs.[12]

A key issue is that too much faith is often placed in the ability of providers to effectively respond to the new financial incentives created by integration of care. This is not a given in most health systems, as it requires:

- **Complex adjustments to payment models to filter down into the everyday decisions of clinical teams**
- **Provider organizations to have an accurate understanding of their cost base such that they can determine which changes in activity will result in financial rewards**
- **Changes in the workforce and training to be enacted to reach critical mass**
- **The ability to extract future savings from fixed services, such as emergency departments, to reinvest in the community**

Throughout the integration process, it is critical to keep the focus not just on payment reform but on a coherent vision of the practical changes to service delivery that with the reform is intended to create. It is clear from the US evidence that these efforts should be targeted towards upfront investments in alternative forms of care for high-need patients who are at the greatest risk of being admitted to hospital.[13]

One major study that examined 20 of the best-performing ACOs in the US (out of a field of more than 800) found that their most prominent differentiating features were the introduction of more community-focused care models, including "embedding care managers in community practices for in-person patient management" and "telephonic care coordination". [13] [14]

Where ACOs truly grasp the possibilities created by their new payment arrangements, the changes created can be much more radical. Given that as much as 40 percent of healthcare outcomes are driven by the social determinants of health – such as housing, education and nutrition – it is perhaps unsurprising that the most pioneering ACOs in the US have begun investing in these areas well beyond traditional medical care.[15]

On the next pages, we share global examples of how various countries have addressed their health challenges through the implementation of.

Case studies

Rehabilitation: Creating an integrated community rehabilitation service (UK)

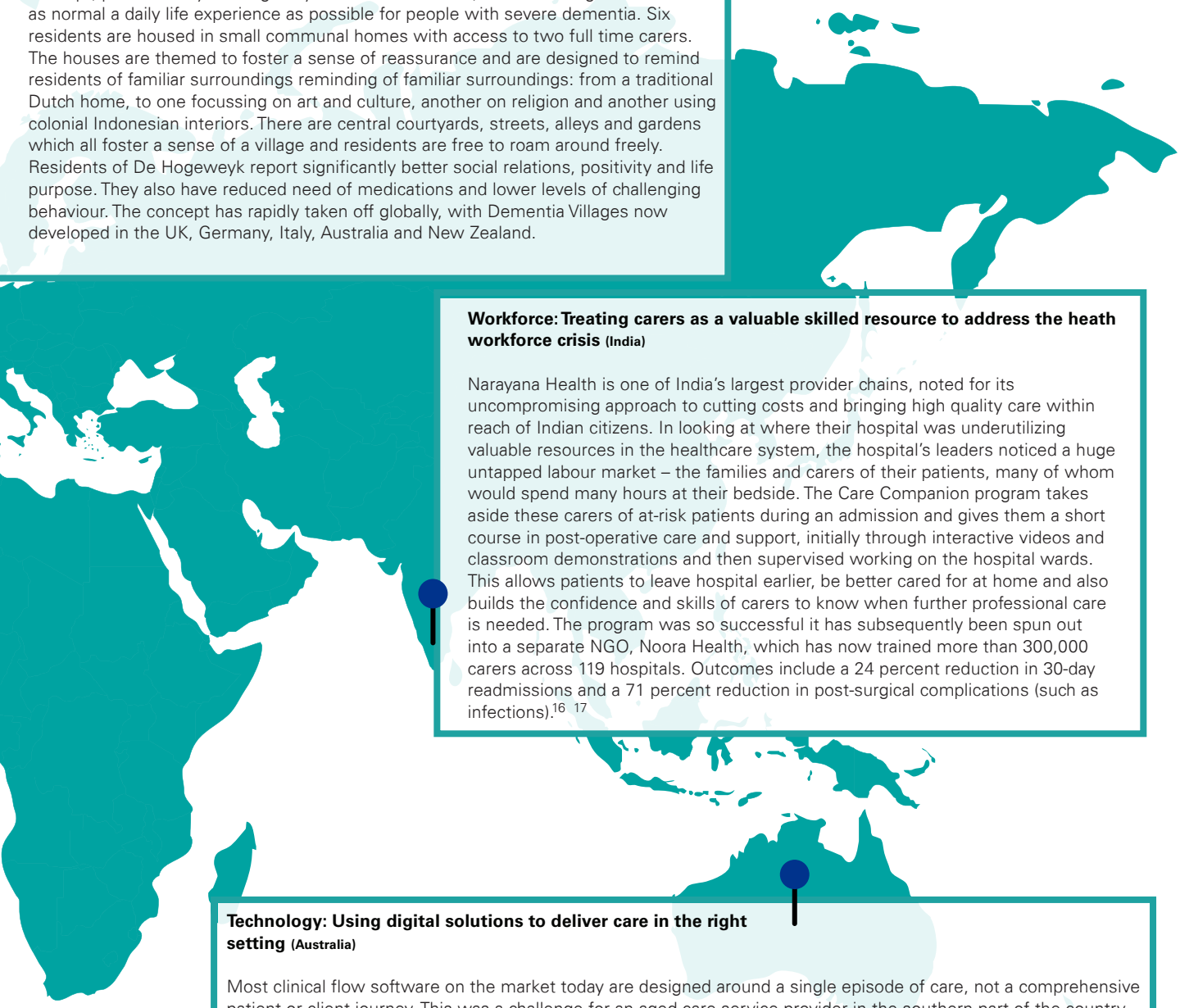
Sandwell and West Birmingham is a healthcare region populated by approximately half a million people, based in a relatively deprived area of the UK with many complex needs. In 2012, the healthcare system had begun to be put under significant pressure, with particular difficulties accessing community rehabilitation services that were essential to keeping the rest of the system functioning efficiently (particularly the local hospitals). As waiting times exceeded 40 days from referral to start of treatment, local commissioners and service users decided that something needed to be done. The Integrated Care Services (ICARES) service was designed as a single point of access for all of the three different teams which previously ran these services in the area (long-term conditions, admissions avoidance and community rehabilitation). This brought together around 120 specialist and generalist staff including nurses, physiotherapists, occupational therapists, speech and language therapists and health assistance personnel to manage the more than 10,000 referrals per year. The service redesign involved intensive steps to ensure involvement of local staff and service users, with key features of the eventual model including all staff having access to both the acute and community-based IT systems, and using the ICARES as a further gateway into intermediate care facilities as well as community rehabilitation. The reform was done at a net zero cost and resulted in 93% admissions avoidance in terms of referrals that would otherwise have been sent to or stayed in hospital, and strong user satisfaction scores.[18]

Chronic Diseases: New ways of tackling the diabetes crisis through health determinants (USA)

Geisinger Health System is an integrated payer-provider healthcare organization caring for over three million people across some of the most deprived parts of Pennsylvania and New Jersey. Recognising that type 2 diabetes, which affects around 11 percent of their population, is one of the key drivers of high costs, and that the primary causes of this are poor diets, in 2016 a new approach was piloted: Geisinger Fresh Food Farmacy. The Farmacy aimed to "provide healthy food as if it were a drug", identifying adults with poorly controlled diabetes who also experienced food insecurity (as this group was found to be as much as three times more likely to develop the disease). These patients were then given access to free, healthy food alongside nutrition and cooking classes and other support. Incredibly, the initial pilot led to participants' HbA1c levels falling from an average of 9.6 percent to 7.5 percent within 18 months – well beyond the expected efficacy of putting these patients on two to three medications and equating to a drop in care costs of around 80 percent. Two more such Farmacies were opened in 2019, serving many hundreds more patients and their families each week, and a randomized controlled trial is now underway to evaluate the program's cost-effectiveness.

Estate: The Dementia Village inspires new care (Netherlands)

With the globally ageing population, it is predicted that 82 million people worldwide will be living with dementia by 2030, and over 150 million by 2050. With medical interventions severely limited in terms of their effectiveness, many countries are in urgent need of alternative service delivery models. Dementia Villages are one such concept, pioneered by De Hogeweyk in the Netherlands, which is designed to create as normal a daily life experience as possible for people with severe dementia. Six residents are housed in small communal homes with access to two full time carers. The houses are themed to foster a sense of reassurance and are designed to remind residents of familiar surroundings reminding of familiar surroundings: from a traditional Dutch home, to one focussing on art and culture, another on religion and another using colonial Indonesian interiors. There are central courtyards, streets, alleys and gardens which all foster a sense of a village and residents are free to roam around freely. Residents of De Hogeweyk report significantly better social relations, positivity and life purpose. They also have reduced need of medications and lower levels of challenging behaviour. The concept has rapidly taken off globally, with Dementia Villages now developed in the UK, Germany, Italy, Australia and New Zealand.



Workforce: Treating carers as a valuable skilled resource to address the heath workforce crisis (India)

Narayana Health is one of India's largest provider chains, noted for its uncompromising approach to cutting costs and bringing high quality care within reach of Indian citizens. In looking at where their hospital was underutilizing valuable resources in the healthcare system, the hospital's leaders noticed a huge untapped labour market – the families and carers of their patients, many of whom would spend many hours at their bedside. The Care Companion program takes aside these carers of at-risk patients during an admission and gives them a short course in post-operative care and support, initially through interactive videos and classroom demonstrations and then supervised working on the hospital wards. This allows patients to leave hospital earlier, be better cared for at home and also builds the confidence and skills of carers to know when further professional care is needed. The program was so successful it has subsequently been spun out into a separate NGO, Noora Health, which has now trained more than 300,000 carers across 119 hospitals. Outcomes include a 24 percent reduction in 30-day readmissions and a 71 percent reduction in post-surgical complications (such as infections).[16] [17]

Technology: Using digital solutions to deliver care in the right setting (Australia)

Most clinical flow software on the market today are designed around a single episode of care, not a comprehensive patient or client journey. This was a challenge for an aged care service provider in the southern part of the country that has a focus on delivering care to people in their homes for as long as possible, necessitating a sophisticated clinical care approach. As part of this goal, the provider purchased an 80-bed hospital with the intention to convert it to a short-stay, out of hospital care environment. KPMG also worked with them to design an end-to-end client relationship solution capable of capturing long-term or even perpetual care needs of high-need patients in the real world. This required a system where different organisations could effortlessly share data, all working to a common and evolving set of outcomes and goals to ensure quality across the continuum of care. The strategy and specifications for this end-to-end solution are now set, with build-out of the new system underway. Anticipated capabilities and benefits include a single, proactive system for management of enquiries, integrated assessments and referrals built around a Single Care Plan and Client View, integrated workforce management (including demand forecasting and employee-centric rostering), and a range of tools for service delivery and simplified billing.

How can hospitals help deliver the vision?

Hospitals face significant challenges. With rising demand for their services, and the changing needs of their population, they can no longer work alone. Instead, hospital executives need to embrace a system-wide perspective and collaborate closely with primary care, community services, social care, mental health services and others.

Moving care closer to home does not mean the end of hospital-based care. At this time, however, it is difficult to see how many hospitals can carry on in their current form. Given the current intense focus on the future shape and function of hospitals, healthcare systems should consider the most appropriate structure of their hospitals so that their clinical services are fit for purpose, sustainable, accessible and can deliver the best possible care.

The trend of decentralizing care looks set to continue, with patients who were once treated in a hospital now seen in alternative settings. Examples of this are:

- **Elderly patients previously cared for on long-stay geriatric wards**
- **Cancer patients who no longer need to receive chemotherapy in hospital**
- **Hip and knee replacement patients who can be seen in ambulatory clinics**
- **Mothers who select home births or who give birth in alternative, non-acute settings**

Internationally, hospitals are responding to the decentralization of care in a number of ways. Some examples include:

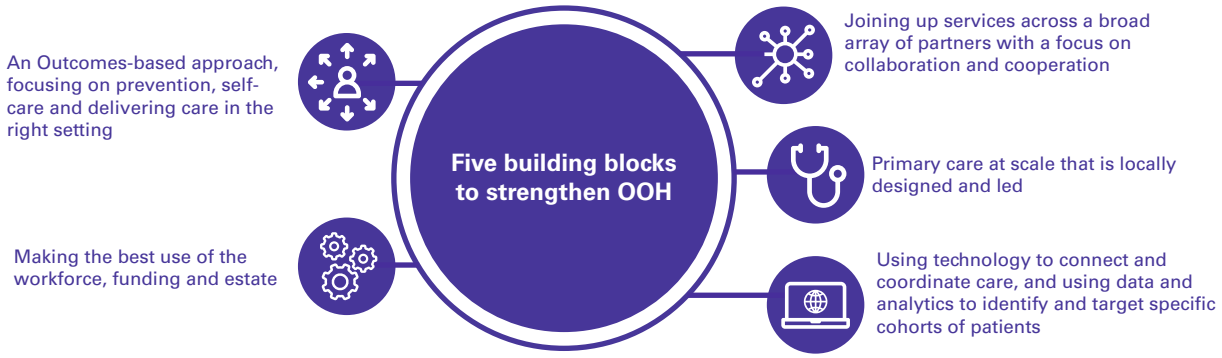
- **Becoming regional centers with a greater focus on specialized services**
- **Taking the lead in bringing together the various out of hospital care stakeholders to redesign health, care and well-being services and pathways, with an aim to reduce demand from frequent and high-cost users of healthcare services**
- **Developing 'hospital at home' services, which have proven effective in reducing hospitalizations and readmissions, while delivering better patient care**
- **Working with post-acute care (PAC) partners to provide coordinated care**

What works? The five building blocks of out of hospital care

So how should healthcare leaders decide which out of hospital care models to invest in? The Nuffield Trust in the UK has written a report which highlights 27 initiatives that have been demonstrated to reduce hospital activity across England.[19] The successful schemes targeted particular groups of patients (such as those in care homes), actively involved patients in their care, supported and trained staff, and focused on gaps in services. Although all yielded quality of care benefits, only seven interventions were proven to save money. These included additional support to people in nursing homes, better support at the end of life, and giving primary care better access to specialist expertise such as dermatologists.

Extending the question of 'what works' to other healthcare systems, KPMG has identified five building blocks of strong out of hospital care systems which are critical to health systems health systems that are undertaking major reforms in Saudi Arabia.

Figure 4: Five building blocks to strengthen out of hospital care



1. Primary care at scale

Strong primary care is the foundation for almost all the world's most affordable, sustainable and high-quality healthcare systems.[20] These services need to operate at a far greater scope and scale if they are to meet the needs of increasingly complex elderly patients, as well as rising expectations of convenience and consumer-centricity. As argued in KPMG Saudi Arabia's recent report "The Paradox of Primary Care: How Saudi Arabia can Leapfrog World Class Primary Care Systems", improvements in primary care need to be locally designed and led. Saudi Arabia is well positioned to develop a world-class primary care system, but the speed and scale of wider change must be managed in such a way that does not stifle ownership, innovation, and buy in from frontline staff and communities. Informed by international best practices and learnings, the report further outlines design principles and enablers that can guide the Kingdom into a successful primary care transformation.

2. Joining up with partners

Given that patients are increasingly requiring care from various health providers and caregivers across both traditional and non-traditional medical settings, it is important to ensure that these organizations and health institutions are collaboratively working to provide a seamless patient experience throughout the continuum of care. Many health systems have implemented joint working arrangements between hospital and community-based care providers, whether through formal mergers into vertical provider organizations, or looser network arrangements.

> Saudi Arabia would benefit from joint working arrangements to reduce redundancy, reduce medical errors, improve quality of care, and increase patient satisfaction. For example, once clusters are established, it would be beneficial for each cluster to scan the region for all relevant organizations that may be instrumental in providing patient care. Establishing communication channels between these entities would ensure that important information is being shared which would in turn, inform individualized services that should be provided to each patient. Importantly, establishing public-private partnerships (PPP) for the common objective of improved patient care is a priority focus area for the Kingdom. The country recognizes the role that the private sector plays in providing healthcare services and reducing the burden on the public sector. In fact, the PPP scheme incentivizes foreign investments to improve the economic outlook of the country. The public and private sectors should combine efforts and complement their respective strengths in order to provide patients with the right care, by the right provider, and at the right time.

3. Using technology

Legacy digital systems can often be one of the key barriers to integrated working across providers inside and out of the hospital; however, it can also be a rapid enabler if designed around the real needs of patients and providers. While patient needs should inform the types of technologies that should be adopted, it is equally important to ensure that providers find the technology useful. Failing to account for providers' input in technology adoption will result in frustrated providers who are unwilling to use the technology that has been implemented. New technologies should be reducing administrative burden on providers and improving quality care. This brings us back to the importance of using a participatory approach for designing systems that are both provider-led and patient-centric.

Saudi Arabia has a huge potential to leverage technology to improve integration and out of hospital care: home monitoring, telemedicine, patient networks and decision support for community workers to name just a few. Perhaps the greatest untapped resource currently is health data which Saudi Arabia, like many health systems, is not currently using to its full potential. However, the Kingdom has made eHealth a key initiative in the NTP 2020 as well as a key enabler for improving quality and efficiency of healthcare services. The strategic objective entails improving the patient experience by enhancing a patient-centered healthcare culture and increasing patient involvement via technology.[9] As patients start taking ownership of their health, data collected through wearables, symptom checkers, and consumer-oriented information technologies can be valuable for providing a more comprehensive understanding of a patient's overall health status. By collecting data from patient devices, it will be possible to stratify patients based on risk in real-time and target resources out of hospitals. In a high-performing system, patients with a heart condition would share their heart rate data in real time with their primary care provider who can in turn, identify any abnormal activities and coordinate community services to prevent any adverse health outcomes.

4. Making the best use of the workforce

By 2030, the world will be short of approximately 18 million health workers – a fifth of the required workforce needed to keep healthcare systems going.[21] Saudi Arabia is facing as great a challenge as any developed health system, with issues around both the quantity of healthcare workers and whether the supply of skills is matched to the needs of the shift towards greater use of out of hospital care models. Some of the most important areas of focus to make the best use of the workforce to drive these changes include:

- Creating multidisciplinary teams of professionals from different disciplines in primary, community, social care, and mental health services, to work together to plan and coordinate patients' care, supported by specialist input where necessary.
- Making data and intelligence available to front line professionals that enable them to target specific patient and groups who are high risk and need support.
- Training, educating and investing in staff to give them flexibility and adaptability. Raise their motivation and performance with a focus on leadership development.
- Treating communities, volunteers and families as part of the workforce – they already provide most of the care in society.
- Empowering professionals to practice at the upper limits of their clinical license (encouraged by regulators) and harness professional development, task shifting and technology.

The health workforce is another initiative in the NTP2020 and seeks to facilitate access to health services.[9] Beyond the key important areas mentioned above, the Kingdom wants to develop prediction tools that will inform the number and types of health professionals required in a certain region. These tools are critical for capacity planning and can be adjusted through inputs. For example, if a decision-maker is interested in identifying the number and types of health professionals required in a region to provide quality care, they should be able to input information regarding the population and other key parameters in an interactive dashboard which would in turn, provide valuable information regarding the workforce. This would help in planning and deploying health professionals where they are most needed.

5. An outcomes-based approach

Even the best designed healthcare reorganizations and payment reforms risk individual organizations seeking to maximize their own narrow performance metrics at the expense of the whole patient and whole system of care. Aligning services to be health promoting and to focus on the outcomes that are most important to patients is as much a cultural challenge as a technical one. Importantly, systems need to move away from fee-for-service structures which have been shown to promote unnecessary care and services resulting in patient harm and high healthcare costs. Rather, services should focus on prevention and upstream determinants of health such as housing, nutrition, and socio-economic status.

Understanding patient barriers to improving health and providing support for mitigating these barriers, can make behavioural change more realistic and improve health outcomes. Moreover, by holistically understanding a patient's health profile and circumstances, it is more likely that patients will be engaged in their plan of care – this is critical for successful health interventions. The Kingdom has placed an emphasis on prevention and health outcomes by putting forth an initiative that focuses on the establishment and activation of nutrition clinics – this initiative aims to facilitate community access to nutrition across the country and to reduce malnutrition as well as prominent and costly nutrition-related diseases such as obesity and type 2 diabetes.[9]

Using digital technology to connect and coordinate care

Staff working to improve integrated care across hospitals and the community frequently cite fragmented technology platforms as among the biggest barriers to improving out of hospital care services and better managing patient transitions. Better digital tools are clearly a solution to joining up care, but can be challenging to implement – especially when these changes are left to technologists alone rather than shared with health professionals. However, the medium- to long-term benefits can be substantial, including:

- **Facilitating care coordination and the exchange of information**
- **Integrating health information across multiple providers, and allow easy access to patient records**
- **Enabling self-care whereby citizens can manage their sickness and their health independently (e.g. e-health and remote health monitoring)**
- **Anticipating needs and prompt early interventions based on advanced data and analytics and population risk profiles**

Saudi Arabia's Ministry of Health (MOH) has itself developed an ambitious eHealth strategy that seeks to connect all levels of care digitally, alongside a five-year implementation plan. This represents a major investment in healthcare technology, as well as a significant clinical, operational and cultural challenges. Managing a program of this nature, which affects tens of thousands of physicians, nurses, pharmacists and other system users, as well as the millions of Saudi citizens and residents served by MOH, will require a highly organized governance structure, as well as flexibility to change as new technological tools become available during the period of implementation.

The importance of foundational technology and capabilities in connecting care

Connected care aims to link every aspect of healthcare, giving professionals and individuals access to all the information they need. The World Health Organization (WHO) criticizes fragmented health systems and highlights how there is a mismatch between performance and rising expectations of service users, which is putting pressure on health system leaders and politicians. By encouraging patients to be involved in their own care, through continued health monitoring, it is possible to intervene before an issue becomes acute, resulting in fewer people requiring hospitalization and expensive interventions. Investing in the right foundational capabilities is an important first step.

The now and the nearly of digital tools to enhance out of hospital care

Care guidance

Platforms that arm patients with relevant information and reminders at key points in their interaction with the healthcare system

Connected medical devices/ wearables

Wearable technologies that help patients track and manage existing conditions and enable prevenative approaches

Remote telemedicine

The remote diagnosis and treatment of patients using video conferencing over mobile device or a web portal, allowing them to access physicians, specialists or care professionals from their home

Home healthrobots

Machines programmed to provide 24-hour home care, especially to aged patients

Artificial intelligence (AI)

A platform that utilizes AI to analyze multiple data points, including home environment, behaviors and biometric readings, and predicts changes in an individual's health

Patient networks

Health networks that help people find new treatments, connect with others and take action to improve their health outcomes

Remote monitoring

Continuous, automatic and remote monitoring of users via sensors, to enable people to continue living in their own homes

Embedded vital monitors

Small and flexible wearable sensors that collect and stream biometric data to physicians and nurses

Where to start: Saudi Arabia's health transformation journey

Strengthening out of hospital services is critical to fulfilling the aims of Saudi Arabia's 2030 Healthcare Transformation Strategy, but how can this major change be achieved at the same time as so many other reforms? We know that every health transformation journey is unique and should be guided by each region's contextual factors, health challenges, and priorities. As such, we propose a cluster-based approach in which each region designs their services based on the local needs of their respective populations.

01

Create and agree on the vision based on population needs
Widespread engagement across health systems to create the understanding that things could be different and establish a momentum for user and staff led change. A key part of this is pathway benchmarking – qualitative and quantitative comparison of patient journeys currently versus global best practice and demand capacity planning to understand the needs of the system.

02

Agree on measures and outcomes
Co-produce the specific outcomes and measures that will be agreed upon as goals, as well as how these will be monitored.

03

Outline governance and accountability arrangements
Define responsibilities and the stakeholder responsible for each element of the process. This should include both fiduciary and legal accountabilities as well as empowering user and staff champions. The focus should be on empowering better joined-up work across providers and professionals to support prevention and self-care.

04

Create partnerships
Approach external partners (e.g. technology or retail companies) to invite ideas and secure participation in testing new care models.

05

Co-produce services and solutions
Field test alternative service delivery models, moving swiftly from conceptual designs to practical testing with patients and staff. Collect data on cost, quality, and experience to assess impact and make changes as needed.

06

Implement
Review the evidence and facts to combine the most powerful interventions into a coherent model. Move to a more formal change management process to scale these up, putting the experiences of patients, staff and partners front and center so as to overcome inertia in the rest of the system.

07

Scale and sustain
Collect feedback on impact and successes – it will help to build and maintain momentum.

How KPMG can help

KPMG is uniquely situated to support Saudi Arabia to reorient its health system away from hospitals, drawing on our local knowledge and global expertise working with many of the countries and organizations described in this report. Some of the services we offer include:

- **Detailed design and implementation of out of hospital care, community-based models, and user-cetered pathway design**
- **Population health assessments to determine high impact pre- and post-acute interventions and build a case for change**
- **Assistance writing a case for change or strategic blueprint for pre- and post-acute strategy**
- **Multi-stakeholder alignment and service user focused stakeholder engagement, to enable decision-making and buy-in**
- **Workforce redesign**
- **Implementation of population segmentation and risk stratification systems**
- **Development of new contracting methods that incentivize improvement of outcomes**

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