

The Pulse Series: 14th Edition



COLLIERS INTERNATIONAL HEALTHCARE VALUATION & ADVISORY SERVICES

Segment Focused

التركيز على الفئات



Mother and Paediatric Care
رعاية الأم والطفل



Rehabilitation / Long-term Care & Home Care
إعادة التأهيل / الرعاية طويلة الأمد والرعاية المنزلية



Cardiology / Pulmonary / Neurology / Nephrology
أمراض القلب / الرئة / الأعصاب / وأمراض الكلى



Liver / Pancreas / Kidney Treatment & Transplant
الكبد / البنكرياس / علاج وزراعة الكلى



In Vitro Fertilisation (IVF)
أطفال الأنابيب



Mental Health
الصحة النفسية



Beauty & Cosmetic and Aesthetic Treatments
التجميل وعلاجات التجميل



Sector Focused

التركيز على القطاعات



Hospitals and Clinics
المستشفيات والعيادات



Pharmaceutical Sector & Medical Consumables
قطاع الأدوية والمستلزمات الطبية



Medical Wellness and Alternative Medicine
الصحة والعافية والطب البديل



Clinical Laboratories, Diagnostic & R&D Centres
المعامل السريرية ومراكز التشخيص والبحث والتطوير



Medical Colleges & Universities
الكليات والجامعات الطبية



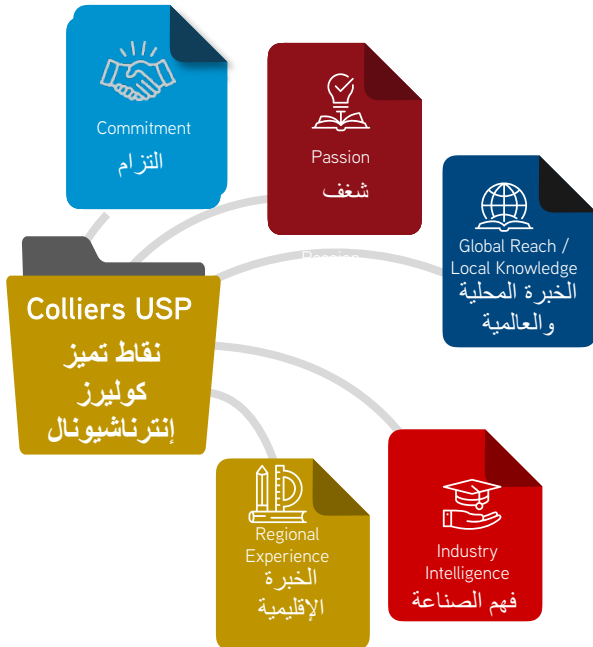
Nursing Colleges & Certification Institutions
كليات التمريض ومراكز التصديق



Allied Health Professional (AHP) Institutions
مؤسسات القطاع الرعاية الصحية

Services Offered by Colliers Healthcare Team

الخدمات المقدمة من قبل فريق الرعاية الصحية لدى كوليرز إنترناشيونال



Colliers International Healthcare Advisory & Valuation Services team is solely focused on healthcare related business (OpCo) and real estate (PropCo), from complex business-related operational advisory to real estate related advisory.

Our group has the expertise and knowledge essential to providing forward thinking solutions to any challenging healthcare related decisions where success is measured in high quality care delivered in a cost-effective way.

- Strategic & Business Planning (التخطيط الاستراتيجي والتجاري)
- Economic Impact Studies (دراسات الأثر الاقتصادي)
- Academic Planning (التخطيط الأكاديمي)
- Market & Competitive Studies (دراسات السوق والتنافسية)
- Catchment Area Analysis (تحليل مناطق الأعمال)
- Market & Financial Feasibility Studies (دراسات الجدوى السوقية والمالية)
- Financial and Business Modelling (إعداد النماذج المالية والتجارية)
- Market & Commercial Due Diligence (إجراء دراسات السوق والأعمال الواجبة)
- Land and Property Valuation (تقييم الأراضي والعقارات)
- Brand and Business Valuation (تقييم العلامة التجارية والأعمال)
- Mergers & Acquisitions Assistance (المساعدة في عمليات الاندماج والاستحواذ)
- Buy Side / Sell Side Advisory (تقديم الاستشارات للشراء / المبيعات)
- Sale & Lease Back Advisory (استشارات البيع والاستئجار)
- Public Private Partnership (PPP) (الشراكة بين القطاعين العام والخاص)
- Privatisation (الخصخصة)
- Operator Search & Selection and Contract Negotiation (البحث عن المشغلين واختيارهم والتفاوض بشأن العقود)
- Site Selection & Land / Property Acquisition (اختيار الموقع أو الأرض / والمساعدة في عملية الاستحواذ)
- Asset Management (إدارة الأصول)
- Performance Management (إدارة الأداء)
- Industry Benchmarking Surveys (إجراء استقصاءات معايير السوق)

يركز فريق كوليرز إنترناشيونال وخدمات الرعاية الصحية فقط على الأعمال المتعلقة بالرعاية الصحية (OpCo) والعقارات (ProCo)، بدءاً من الاستشارات التشغيلية المعقدة المتعلقة بالأعمال التجارية والاستشارات المتعلقة بالعقارات.

تمتلك مجموعتنا الخبرة والمعرفة الضرورية لتوفير الحلول المبتكرة اللازمة لاتخاذ القرارات الصحية في مجال الرعاية الصحية، حيث يتم قياس معايير النجاح بدرجة عالية من الدقة وتقديمها بأقل تكلفة ممكنة.



INTRODUCTION

The Kingdom of Saudi Arabia with a current estimated population of approximately 35 million, as of November 2020, is the largest country in the GCC. Under Vision 2030 the country is going through fundamental structural changes in all the sectors including healthcare.

The Healthcare sector in KSA is undergoing an evolution on the back of rapid advancements in technology and research and development (R&D) in line with global and regional trends. However, COVID-19 has also exposed the vastly diverse structure of healthcare systems and increased the importance of R&D and the provision of specialised healthcare within generalised healthcare.

Long-term care (LTC), rehabilitation and home care (HC) are amongst the main focal points for diversification and enhancement of the healthcare system in KSA. A key driver is the changing demographic profile through a decreased fertility rate and increased life expectancy. As a result, the population above 60 years is expected to increase from 5.5% in 2020 to 11.0% by 2030.

This shift will have a significant impact on disease patterns and the type of healthcare services required. As almost 80% of a person's healthcare requirements typically occur after the age of 60 years this will increase the demand for LTC, rehab and HC. This is especially true in the case of KSA with its high prevalence of lifestyle related diseases including diabetes, coronary and obesity-related illnesses. These are in addition to existing demand from disabilities which also require LTC, rehab and HC.

Public Private Partnership (PPP), is one of the cornerstone policies of Vision 2030. A part of the Saudi government's strategy for transforming and growing the economy by developing the overall healthcare system including the LTC, rehab and HC through PPP.

The Ministry of Health (MoH), Private Sector Participation (PSP) initiatives aim to increase the

share of the private sector in healthcare delivery via Public Private Partnership (PPP). This is focused on enhancing extended care by improving overall provision and quality of the services.

Improvement in the provision of quality long-term care is expected to not only optimise and better utilise the capacity of tertiary care hospital beds but also expected to enhance the quality of post-acute care and home care treatments.

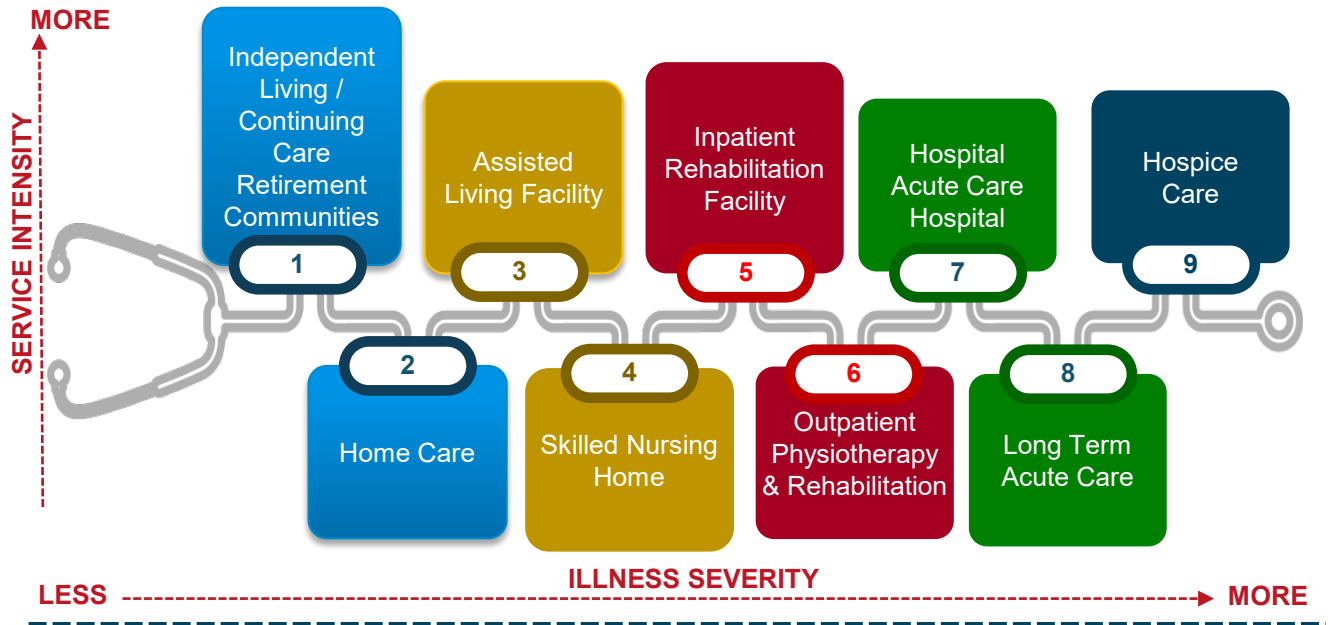
Another emerging trend relating to provision of LTC and Rehab facilities is development of facilities within hospitality developments. Rehabilitation treatment relating to trauma, accident and mental health can be offered within a hospitality environment. This can be achieved through affiliation with the local hospitals where emergency treatment can be provided to rehabilitation patients, if needed.

Introduction of LTC and Rehab facilities within existing hospitality developments will not only reduce the required capital investment to build new LTC and rehab facilities, but also expected to provide sustainability to the hospitality sector in post COVID world as resorts offering such services increase the domestic and international tourists (patients) stay from few weeks to months in hotels instead of few days.

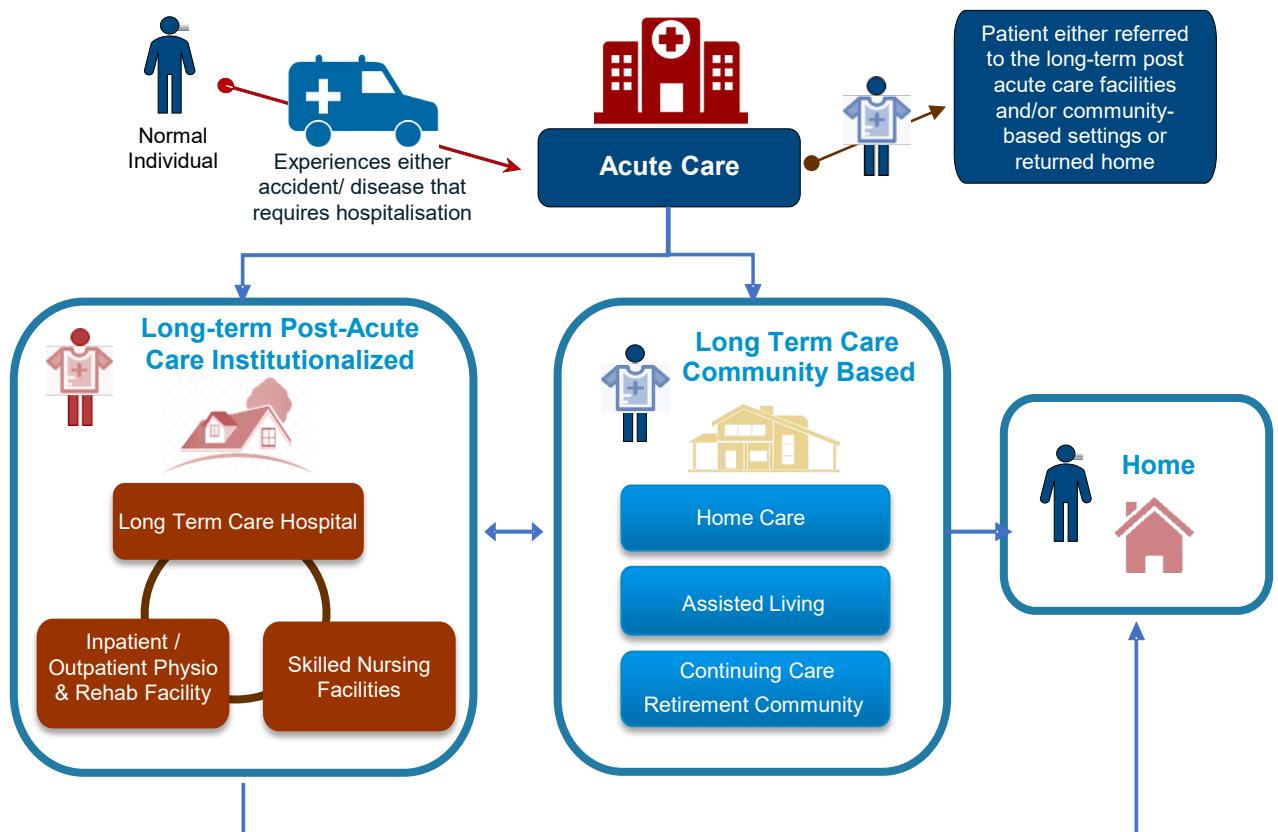
This paper on Long-term Care, Rehabilitation & Home Care in KSA is focused on highlighting how the development of this sector can act as a change catalyst to the healthcare sector from elderly to acute care. Though a gradual shifting of bed-bound patients from hospitals to specialised LTC and Rehab facilities and ultimately treating them at home, thus reducing the pressure on both acute care and LTC and rehabilitation hospitals.

Based on Colliers estimates, KSA would require additional 20,000 – 22,000 Long Term Care and Rehabilitative beds by 2030 and to achieve OECD average standards, the country would require 28,000 to 30,000 additional beds by 2030.

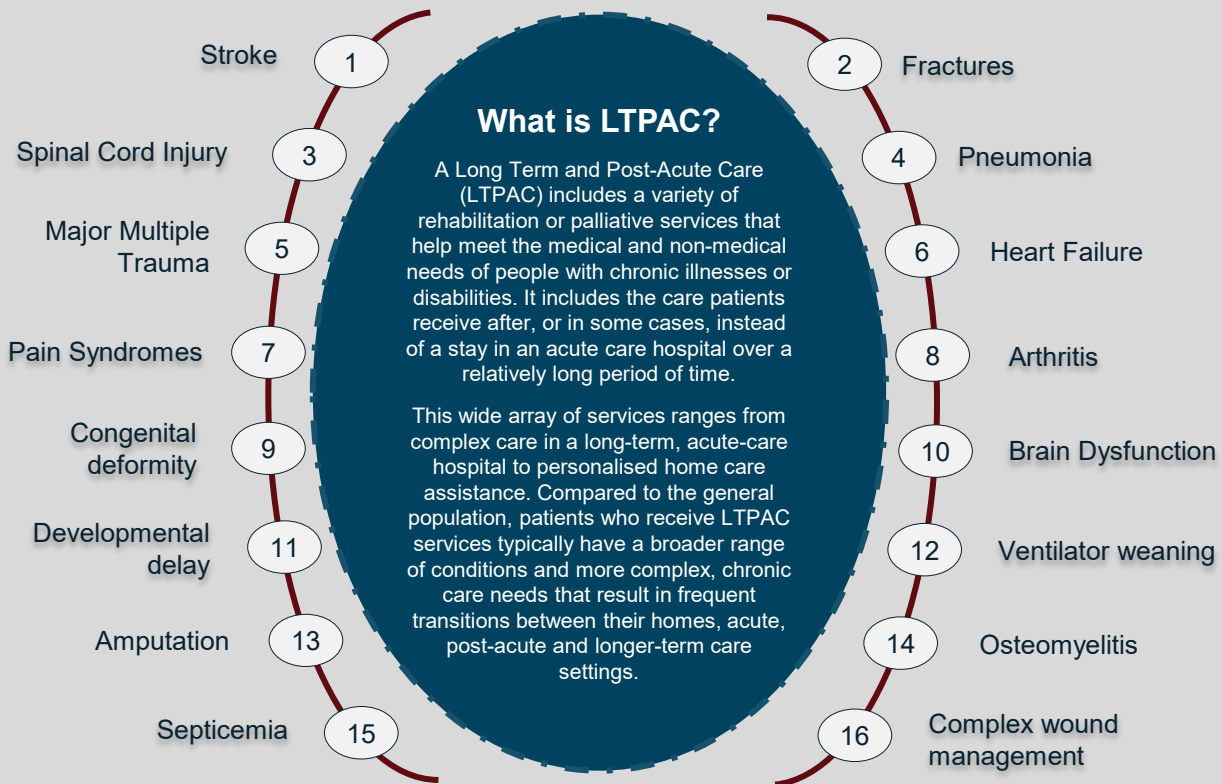
LONG TERM AND POST-ACUTE CARE (LTPAC) CONTINUUM OF CARE



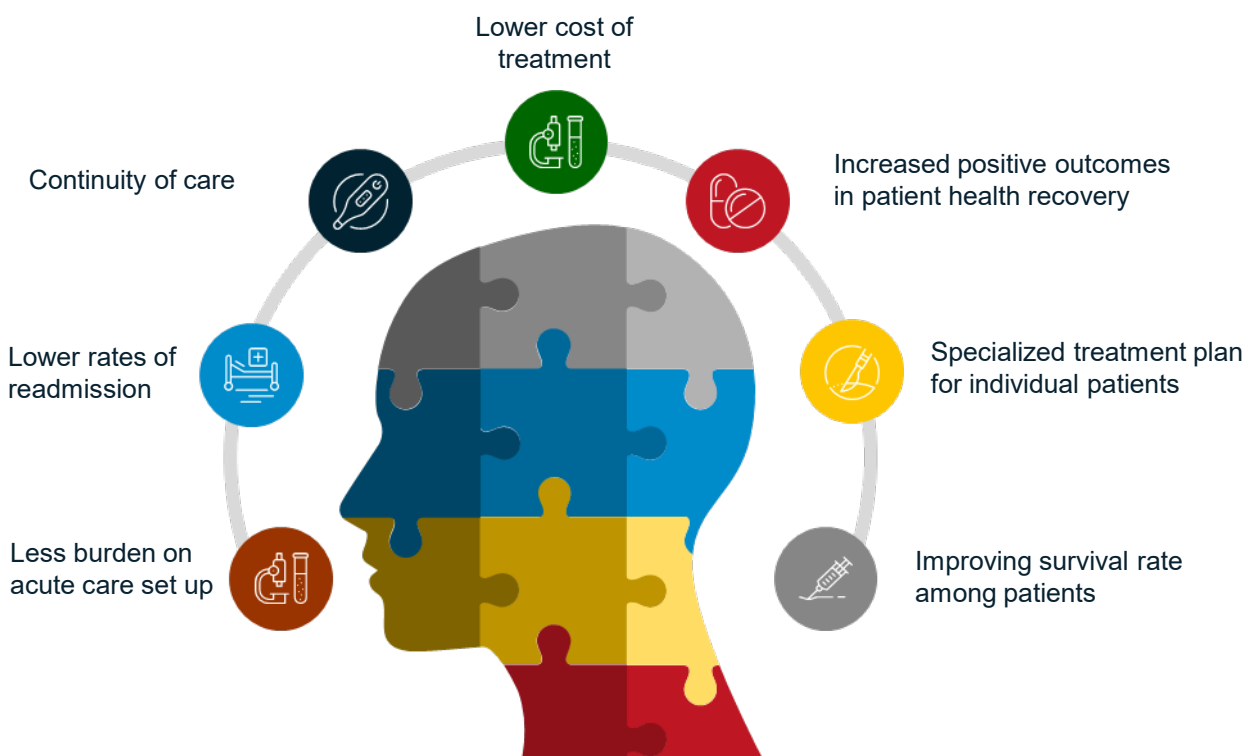
In order to understand the demand for long-term, one needs to understand the complete patient care management process beginning at discharge from acute care to rehabilitation through to Long Term & Post-Acute Care facilities, as presented below



Key Indications / Diseases requiring Long-term Care & Rehabilitation



Benefits of Transitioning a Patient to Post-Acute Care



PUBLIC PRIVATE PARTNERSHIP (PPP)

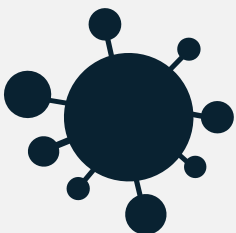
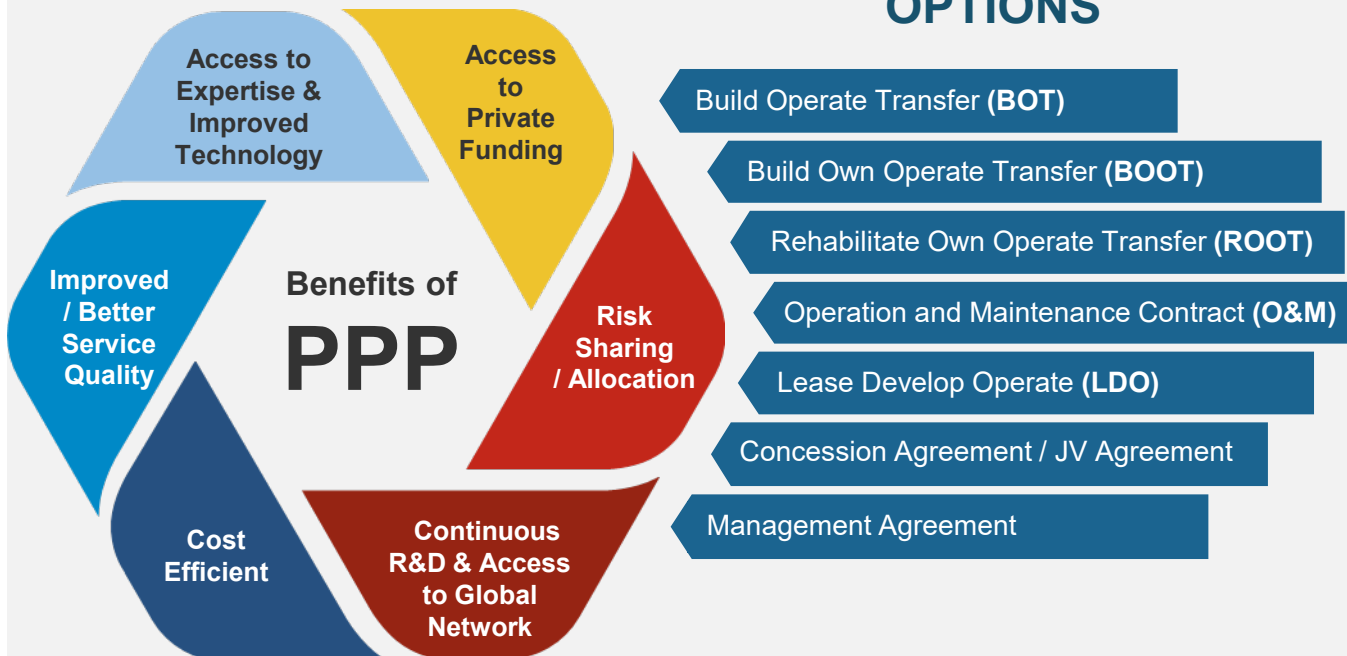
Healthcare remains a top priority for the government of Saudi Arabia as it explores private sector participation in healthcare infrastructure growth. Public-private partnership (PPP) and privatisation is one of the cornerstone policies of Vision 2030, the Saudi government's strategy for transforming and growing the economy. In line with the government's Vision 2030 and the National Transformation Program (NTP), the Ministry of Health (MoH) is expected to spend close to US\$71 billion over five-years ending in 2020. By incorporating Public Private Participation (PPP) models for healthcare, the government is aiming to unlock value in the health system and fast-tracking the change of healthcare with plans to lift the overall private sector contribution in total healthcare spending to 35% by 2020. In the interim, innovation remains a center factor in overhauling the KSA healthcare market in the coming years with information technology playing a pivotal role in offering solutions related to cost, quality, access and resources.

NTP targets for the Ministry of Health for 2020 include:

- Increasing private healthcare expenditure from 25% to 35% of total healthcare expenditure
- Increasing the number of licensed medical facilities from 40 to 100
- Increasing the number of internationally accredited hospitals
- Doubling the number of primary healthcare visits per capita from two to four
- Decreasing the percentage of smoking and obesity incidence by 2% and 1% from baseline respectively
- Doubling the percentage of patients who receive healthcare after critical care and long-term hospitalisation within four weeks from 25% to 50%
- Focusing on improving the quality of preventive and therapeutic healthcare services.
- Increasing focus on digital healthcare innovations

Options Available – Public Private Partnership

OPTIONS



As many emerging markets face uncertain prospects and economic pressures as a result of the global pandemic, Saudi Arabia offers a large market, economic and financial strength and a growing track record of successful PPPs and privatisations' momentum has continued into 2020, despite the constraints imposed around the world by the Covid-19 pandemic.

KEY CREDENTIALS 2020

Colliers International dedicated Healthcare team currently working with number of owners / operators / developers to establish new healthcare facilities and assist in expansion of existing healthcare facilities. Some of key credentials are presented below

200-bed Long-term care & Rehabilitation Hospital located in King Saud Hospital Complex in Riyadh

Market & Financial Feasibility / Development Recommendations and Operator Search & Selection

200-bed Long-term care & Rehabilitation Hospital focusing on Pulmonary Care in Riyadh

Market & Financial Feasibility / Development Recommendations and Operator Search & Selection

400-bed General & Maternity & Paediatric Care Hospital in North Riyadh

Market & Financial Feasibility / Development Recommendations and Operator Search & Selection

200-bed General Hospital located in King Saud Hospital Complex in Riyadh

Market & Financial Feasibility / Development Recommendations and Business Plan

Home Care (HC) facility in public sector as part of Potential Public Private Partnership (PPP)

Cost Analysis and Market Benchmarking Study to assess efficiency level against Private Sector

Merger of Two Leading Hospital Group in the KSA

Valuation and Market Competition Assessment (as a requirement for the General Authority for Competition)

Long-term Care & Rehabilitation Hospital and Wellness Resort in Taif

Market & Financial Feasibility Study / Development Recommendations

Women only Beauty & Cosmetic & Wellness Centre & Medical Spa in Riyadh

Market and Financial Feasibility Study/ Development Recommendations / Business Plan

Medical / Nursing / Allied Health Professional (APH) College in Jeddah

Market and Financial Feasibility Study/ Development Recommendations

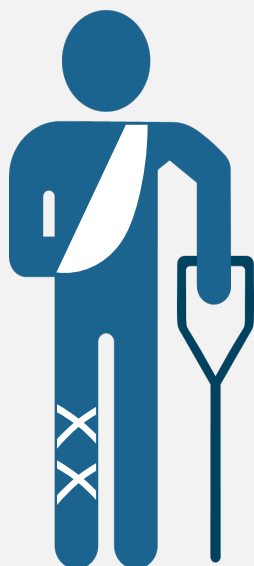
MINISTRY OF HEALTH (MOH)

PRIVATE SECTOR PARTICIPATION (PSP) 1/2

The Ministry of Health (MoH), Private Sector Participation (PSP) initiative aims to increase the share of the private sector in healthcare delivery via **Public Private Partnership (PPP)** and is focused on enhancing extended care by improving the overall provision and quality of the services. The key challenges are identified below

Long-term Care

1. The Long-term care (LTC) bed capacity is below requirements.
2. A large number of acute care treatment beds in hospitals are occupied by LTC patients, creating a burden on availability of beds.
3. Some patients who occupy LTC beds can be provided home care, resulting in a significant cost reduction and greater overall utilisation.
4. There is shortage of advanced medical capabilities such as mechanical ventilation in many LTC facilities



Rehabilitation

1. The inpatient rehabilitation capacity listed below shows the requirement in KSA.
2. There is a shortage of rehabilitation physicians and specialized allied healthcare personnel.

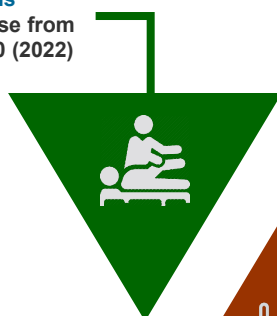


Home Care

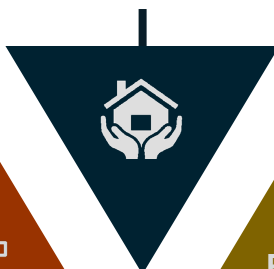
1. The provision of capabilities, resources, and efficiency in home care (HC) vary across different cities in KSA.
2. There is limited availability of medical devices and consumables.
3. Due to lack of efficient operational procedures and information systems utilisation of home care personnel remains low.



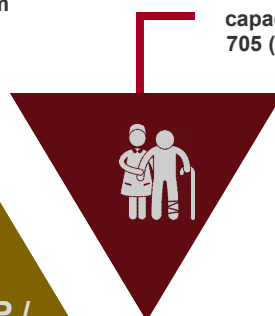
Rehabilitation Beds
capacity to increase from
235 (2017) to 3,190 (2022)



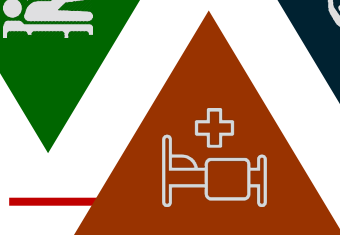
Home Care Coverage (Population Reached Annually) to increase from
40,090 (2017) to 90,300 (2022)



Long-term Care Beds
capacity to increase from
705 (2017) to 3,155 (2022)



93 Extended Care Facilities to be established by 2022



14 Rehabilitation Centres to be transferred to **Private Sector** & **285 new homecare units** to be deployed via **PSP***

Source: Ministry of Health (MoH), KSA, Colliers International Healthcare Analysis 2020

* Complete transfer of operations may take longer as this wave depends on medical cities and hospital commissioning.

MINISTRY OF HEALTH (MOH)

PRIVATE SECTOR PARTICIPATION (PSP) 2/2

Objectives of PSP Model:

1. Increase extended care capacity
2. Free up the acute hospital beds which are being occupied by the long-term care patients
3. Increase utilisation of human resources (e.g., daily rate of home care visits per team from 3.2 to 7.5)
4. Recruit qualified workforce
5. Increase the qualification of existing extended personnel care via training

Target for PSP Model (2022) - DFBOT (Design, Finance, Build, Operate and Transfer)

1. **Rehabilitation:** to build 1,000 beds by 2022, Increasing the number of rehabilitation beds from 0.77 per 100,000 population to global benchmark level of 10 per 100,000.
2. **Long-term care (LTC):** to build 1,000 beds by 2022, freeing up the acute hospital beds which are being occupied by the long-term care patients.
3. **Home Care (HC):** to recruit 20,000 patients by 2022, freeing up the acute hospital beds which are being occupied by the home care patients

Payment Model: PPP

project that is based on guaranteed offtake agreement which will be structured according to the prices provided by the transaction advisors and bidders

- Availability of finance for the construction, renovation and furnishing activities
- Service payments for the provided services based on a DRG-based fee for service approach
- Per diem service payments for long-term care services
- Per visit service payments for home care services
- Per-day/per-visit fees will change across care packages.

PSP Model Salient Features

PSP Operating Model:

1. Post-acute rehabilitation services will be provided in rehabilitation hospitals and rehabilitation centers.
2. 100-150 bed rehabilitation hospitals will provide comprehensive services to multiple regions.
3. 20-100 bed rehabilitation centers will provide essential rehabilitation services and will be distributed across the Kingdom.
4. Long-term care (LTC) facilities will provide three levels of services based on the medical complexity.
5. Home care (HC) services will be provided by general HC units and specialized HC units.
6. The core of the HC organisation will be the general home care units. Specialised HC units will be composed of general units and specialised personnel for provision of specialty services at home.

Responsibilities of the Private Sector Partner

Construction/Renovation and Equipping of the Facilities

- Construction, furnishing and equipping of new facilities
- Equipping and renovation of existing facilities

Information Systems

- Establishment of information systems
- Compliance of the information systems with common communication protocols

Support Services

- The provision of laboratory, radiology and pharmacy services

(received from other regional PSP-type companies)

Others

- All personnel will be employed by the private partner.
- Buildings and infrastructure constructed by the private partner will be leased to the MoH and transferred to the MoH at the end of contract period.
- The facilities that are transferred to the private partner for operation will remain the property of the MoH.
- New equipment will be purchased and owned by the private partner.
- Existing equipment will be owned by MoH and will be given to the private partner for operations.

FURTHER OPPORTUNITIES



Medical Tourism

Low availability and quality of specialised healthcare facilities remains one of the major reasons for outbound medical treatment in the GCC. Both national and expatriate patients prefer going overseas for medical treatments mainly in Germany, UK, US, Canada and Asian countries. This includes treatments relating to long-term care and rehabilitation.

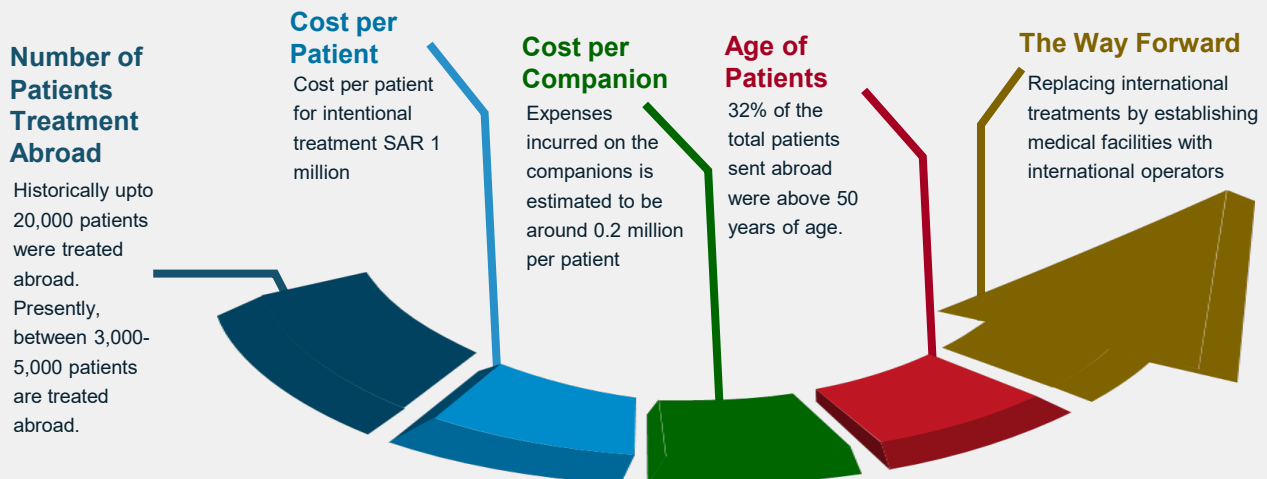
It is estimated that 3,000 - 5,000 Saudi patients are treated abroad for various treatment at government's expense. In the past, these numbers were as high as 20,000 patients being sent abroad every year.

However, with the government introducing Public Private Participation (PPP) models for healthcare and by encouraging both local and international investments numbers have fallen in recent years.

The plan now is that unless treatment is not available in Saudi Arabia the state will no longer pay for overseas treatment.

In the GCC, especially in the UAE, there has also been an improvement in quality of healthcare service provision. The emergence of a number of reputed indigenous brands and the opening of internationally recognized hospitals (such as Kings College Hospital, Mediclinic, Cleveland Clinic) is expected to lead to a further decline in outbound medical tourism.

Establishing quality LTC and Rehab facilities with home based international operators can act as catalyst to reduce expenditure on outbound treatments whilst simultaneously growing a new service sector.



FURTHER OPPORTUNITIES

Medical Wellness & Preventative Healthcare

In the MENA region the prevalence of diabetes and obesity is one of the highest in the world, with almost 55 million people aged 20 to 79 years suffering from diabetes. This number is expected to double by 2045.

Eight Middle Eastern countries; Kuwait, Qatar, Egypt, KSA, Bahrain, UAE, Jordan and Lebanon have the highest ratio of obesity among adults globally with 27% to 40% of the total population affected. The prevalence of overweight and obesity in these countries ranges from 74% to 86% in women and 69% to 77% in men.

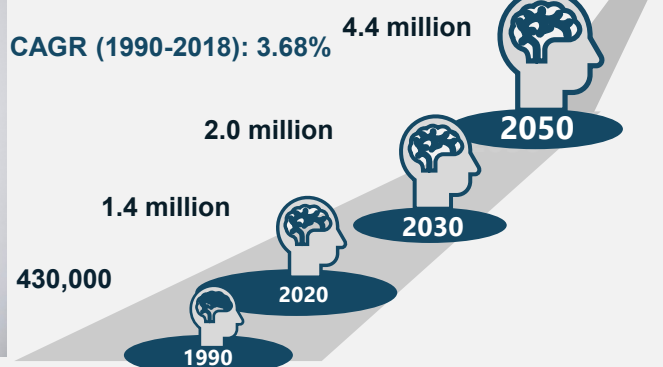
The GCC countries have one of the highest level of lifestyle diseases in the world and in line with global trends there is need to focus on more preventive rehabilitation care by the establishment of medical wellness treatment centers.

Projects are being developed in lifestyle retreat settings where recovery is in a relaxed and comfortable environment rather than a typical hospital setting. Colliers has also been engaged in various projects including waterfront hospitality where health and medical wellness components are incorporated within the resorts. These projects are expected to have a positive impact in the long-term by reducing the demand for both acute care hospitals and post-acute care long-term and rehabilitation facilities.

Within KSA the Red Sea Project, Qiddiya Entertainment City and Amaala Red Sea Riviera projects could be ideal locations to develop medical wellness and preventive healthcare facilities.



Existing & Projected Mental Health Patients in the KSA

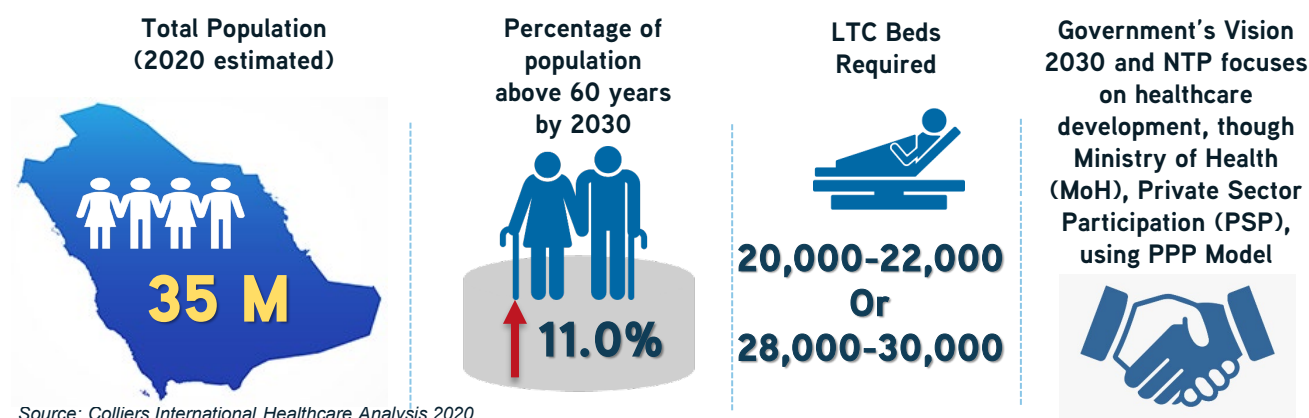


Mental Healthcare

According to World Health Organisation (WHO) report on mental health in 2019, one-in-four people in the world will be affected by mental or neurological disorders at some point in their lives. Around 450 million people currently suffer from such conditions, placing mental disorders among the leading causes of ill-health and disability worldwide. A significant percentage of mental health issues are age related and can be accommodated through long-term care / rehabilitation facilities or even as part of home care.

Mental Health & COVID-19: COVID-19 pandemic has also exacerbated mental health issues through additional life stress and isolation. This has

Opportunities: Offering mental health in LTC / Rehab facilities or as part of Home Care, can significantly reduce the capital and operating expenditure and free up beds and resources in acute care hospitals and family clinics.



THE GAP ANALYSIS & CONCLUSIONS

Due to the shortage of long-term care, rehabilitation and home care services in KSA, patients in need of long-term care utilise acute care facilities, creating a burden on acute care facilities.

Based on various reports and discussions with hospital operators, patients who could be better served in LTC and Rehab facilities occupy an estimated 20% to 30% of public hospital beds in the KSA. Research shows that Average Length of Stay

The cost of patients who need LTC and Rehab but are instead treated in general hospitals is significantly higher compared to a long-term care facility. This is a crucial issue; all government budgets are under pressure while demand for healthcare continues to rise. Capital and operating costs of setting up LTC and Rehab facilities is up to 30% or more lower when compared to an acute care hospital.

The need for infrastructure to support the provision of LTC and Rehab facilities is one of the main policy drivers for various governments in the GCC. For example, Dubai has prioritized investments in setting up LTC and Rehab patient services under its latest Investment Guide. As part of the privatisation process in KSA, the Ministry of Health is seeking to engage operators for LTC and Rehab facilities and Home Care.

So, what is the Gap?

As per Colliers estimates, **KSA, by 2030** would require additional **20,000 – 22,000** Long-term Care (LTC) and Rehabilitative beds. However, to achieve **OECD average standards**, the country would require **28,000 to 30,000** additional beds by **2030**.

An important aspect will be improving **Home Care (HC)** services. Presently the capabilities, resources, and efficiency in home care vary across regions with limited service provided. Due to a lack of efficient operational procedures and proper information systems, the utilisation of home care personnel remains low. An improved home care provision will reduce the pressure on both acute care and LTC and rehabilitation hospitals. The target under the PSP initiative is to increase **home care coverage annually from 40,090 (2017) to 90,300 (2022)**.

In November 2020, the Ministry of Human Resources and Social Development (MHRSD) announced the implementation of a uniform model for elderly care in KSA in collaboration with the private and non-profit sectors. In Colliers' opinion this initiative is expected to improve the efficiency and quality of services provided to elderly in the Kingdom with better utilisation of tertiary care, LTC and rehab facilities.

The greatest challenge lies in the shortage of manpower as the number of physicians and specialized nurses and allied healthcare personnel for rehabilitation is insufficient. With new hospital developments underway the competition to hire experienced and skilled physicians, nurses and allied workforce is further set to intensify.

Currently, the market is in its nascent stage and many existing LTC, Rehab and HC facilities lack advanced medical capabilities. As the market matures, more centers providing specialised comprehensive rehabilitation such as neurorehabilitation, cardiopulmonary, pediatric and musculoskeletal rehabilitation will enter the market.

Colliers International healthcare team is actively working with several local, regional and international investors and operators to facilitate entry and/or expansion in KSA's lucrative LTC, Rehab and HC sector.

FOR MORE INFORMATION

MANSOOR AHMED

Director | Development Solutions

Healthcare Education & PPP

Middle East & North Africa

+971 55 899 6091

mansoor.ahmed@colliers.com

IMAD DAMRAH

Managing Director

Kingdom of Saudi Arabia

+966 50 417 2178

imad.damrah@colliers.com

About Colliers International

Colliers International is a global leader in commercial real estate services, with over 18,000 professionals operating in 68 countries. Colliers International delivers a full range of services to real estate users, owners and investors worldwide, including global corporate solutions, brokerage, property and asset management, hotel investment sales and consulting, valuation, consulting and appraisal services and insightful research. The latest annual survey by the Lipsey Company ranked Colliers International as the second-most recognised commercial real estate firm in the world. In MENA, Colliers International has provided leading advisory services through its regional offices since 1996.

Disclaimer

The information contained in this report has been obtained from sources deemed reliable. Any information on projects, financial or otherwise, are intended only to illustrate particular points of argument and do not constitute forecast of actual performance. While every reasonable effort has been made to ensure the accuracy of the information, we provide no warranty or guarantee as to the accuracy or completeness of the information in this report and Colliers International assumes no liability whatsoever in relation to the forecast, figures or conclusions contained herein. Any statements or opinions must not be treated as investment or valuation advice and must not be relied on for investment or any other purposes. Readers are encouraged to consult their professional advisors prior to acting on any of the material contained in this report.

Colliers
INTERNATIONAL