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Bridging Gaps in Healthcare: The Case for a Tertiary Hospital in Puntland

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Abstract

The healthcare challenges in Somalia are immense. The public healthcare sector struggles with limited resources and depends heavily on external donor support. The private healthcare, while growing, is unregulated and unable to meet the needs of a population seeking care for acute, chronic and complex health conditions. SIDRA Institute sought to examine the enabling and disabling factors of establishing a state-of-the-art private hospital in Puntland State, Somalia.

This research employed a mixed-methods approach, including secondary data analysis, surveys with 106 participants through snowball sampling, and 12 key informant interviews with healthcare practitioners and policymakers. The study mapped the healthcare landscape in Puntland, which is characterized by a fragile public health system and an under-regulated private sector, alongside a growing reliance on costly medical tourism for specialized care.

The study found critical deficiencies in healthcare infrastructure and service delivery, particularly in managing chronic and complex medical conditions. Approximately 31% of surveyed patients reported the unavailability of services locally, while 41% expressed dissatisfaction with the quality of care as a primary motivators for seeking treatment abroad. The economic implications are profound with the average cost of medical tourism exceeding \$8,500 per patient.

The study further highlights inadequacies in diagnostic capabilities and specialized healthcare personnel in Puntland State, underscoring systemic barriers to dissatisfaction and utilization of healthcare. This study proposes the establishment of a private hospital which can bring modern, specialized medical services closer to home, offering an alternative to the costly and emotionally taxing journey abroad with special focus on workforce development, improvement of regulations, and ensuring reliable medical supplies.

The study concludes that a modern, private hospital has the potential to transform healthcare access and quality in Puntland State, an objective which is aligned with Somalia's Health Sector Strategic Policy (HSSP II).

Background

The protracted civil war, disintegration of the Somali State and political polarisation in the aftermath of the ouster of the military regime have taken its toll on basic social services, infrastructure and economic development in the country. Despite recent progress in rebuilding Somalia institutions, Somalia health system remains in critical condition and grapples with huge challenges in terms of infrastructure, resources and capacities in all the components of effective health system (Gele, 2020; Warsame, 2016; Wilson, 2020).

Prior to the civil war, essential healthcare services were provided free of charge at the point of contact by the State. The country had a limited but growing private sector involvement in the healthcare mainly in major cities such as Mogadishu. Since 1991, public health services have been primarily dependent on direct external funding and delivered through programmes such as the Essential Packages of Health Services (EPHS) implemented by the UN and non-governmental organizations (NGOs). These programmes are aimed to improve access for the poor and vulnerable populations to basic health services, such as maternal and child health, immunization, nutrition, and treatment of communicable diseases, among others (Buckley, 2015). However, the scope and coverage of EPHS is limited and does not include critical components such as non-communicable diseases, neurological and musculoskeletal conditions, major surgery, cancers and chronic conditions

that require specialised management and treatment. As a result, people are driven to seek care in the private healthcare sector as it is the only option to get treatment for these conditions.

In response to the growing demands for care and treatment for medical concerns that are not sufficiently addressed in the public healthcare and as the number of people willing to pay for private healthcare increased, investor-owned and for-profit private healthcare has expanded and become the dominant provider of health services across the country (Patouillard, 2007). Studies have shown that private for-profit sector in healthcare is an important source of healthcare provision and could improve quality, efficiency, access and utilisation of healthcare services but their performance is contingent upon factors such as the structure, regulation, capacity and resources of the health system as a whole (Morgan et al 2016; Puntland DHS, 2020). The private healthcare can combine three important objectives; driving entrepreneurial ventures that can develop and implement innovative health solutions with potential payoffs and profitability and sustainability outcomes, improving access to quality and affordable healthcare for all and supporting the efforts to strengthen the health system.

The trend of the thriving private healthcare provision is similar across the country. In Puntland, the latest Health and Demographic Survey (PHDS Nov. 2020) reported that "20 percent of households had visited a government

hospital for advice or treatment compared to 24 percent who had visited private hospitals, clinics, or doctors. Seven percent of households had sought advice or treatment from pharmacies compared to 9 percent from Mother Child Health (MCH) clinics and/or health centres (HC)" (Puntland DHS 2020).

Similarly, there has been a surge in Somali patients travelling overseas for secondary and tertiary medical care, a global phenomenon termed as "medical tourism" or "transnational medical travel" but there is a dearth of evidence about the characteristics of medical travellers from Somalia, conditions, mobility profiles, destinations for medical care, activities and the cost of travel, stay and medical treatment abroad (Sandberg, 2017). Limited care and treatment options for certain medical conditions in the home country and service quality in the destination country are two commonly referred push and pull factors for medical travellers but other motivators play a part in the decisions about which destination to go for medical treatment (John, 2016; Hanefeld, 2015). Medical tourism represents major financial burden of medical expenditure for households in low-income countries as the high cost of medical travel abroad results in catastrophic health spending and loss of revenue from the local economy (Suzana, 2015).

Puntland has a functioning health system but the range of health care services which are delivered by both public and private sectors are not adequate to meet the growing demands in terms of availability, quality, effectiveness,

safety, patient preference, cost and specialized services and treatments for rare and complex conditions.

The demand for the treatment of complex and chronic medical conditions has grown in the State and as a result many people are driven to seek medical treatment in other parts of Somalia or abroad, a trend which is likely to grow if these medical treatments are not made available locally in the State.

SIDRA Institute in collaboration with Amal Bank has conducted two-part research study to explore the potential social, operational and financial viability of a state-of-the-art, well-equipped and purpose-built private hospital in Puntland State. This article presents the findings of the first study on the available data on burden of diseases in the State and existing health services, capacity and human resources and empirical research on patient characteristics, common health conditions and reasons why patients seek medical treatments in other regions of Somalia and abroad.

Methodology

This study used a mixed method approach: the existing data (secondary) on health system, services, capacity and human resources as well as burden of diseases in Puntland have been reviewed. Using KoboTool, a survey was conducted with 106 participants to explore the key factors contributing towards the growth of medical tourism among Somali people in Puntland State. Key informant interviews were conducted with 10 healthcare practitioners and policy makers and analyzed to provide further insight into the health care needs

of the Somali people in Puntland State and the viability of a private health center to fill the gaps in health service availability, access and quality.

Using MS Excel, descriptive analysis (Frequency, percentages, averages, etc) was done to summarize data and present it in a meaningful and informative manner. Where necessary data is presented on bar, pie and line charts and other graphs to visualize relationships, patterns or comparisons.

Findings and Discussion

Puntland State Health System

Puntland State has a functioning health system which is split into public and private health care provision. The Essential Packages of Health Services (EPHS) is the main public health service framework in Puntland State which consists of four levels of service provision, ten health programmes and six management components. The framework sets out a range of free health services for all Somalis, including improved maternal, reproductive, neonatal and child health, communicable disease surveillance, treatment of common illnesses as well as the timely provision of preventative and treatment services for HIV, STI and TB. However, the framework does not cover all the areas of the State but has the potential to improve the availability and quality of essential health care for the local communities. The diagram below depicts the structure and programmes of the public health system in the country.

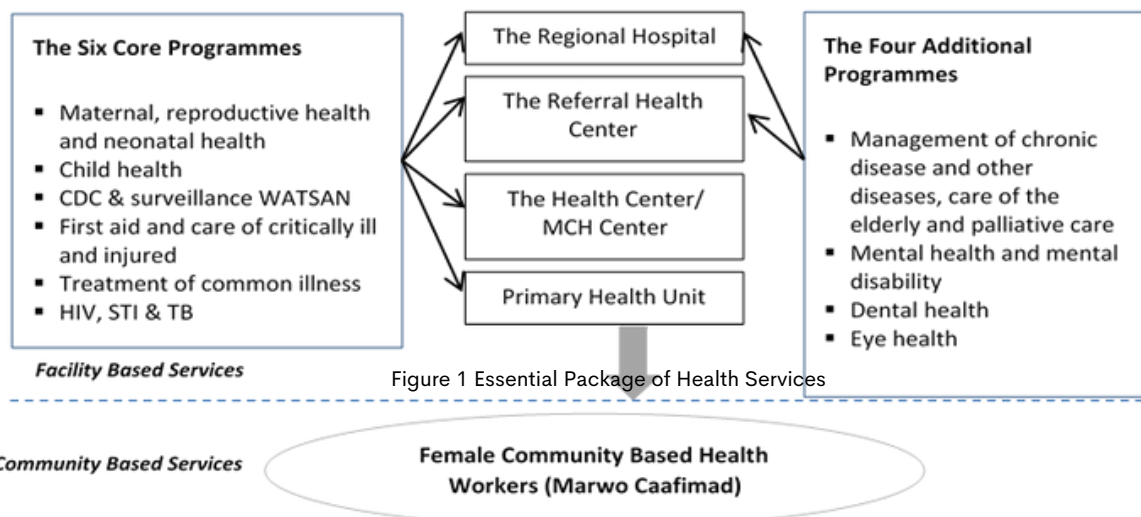


Figure 1 Essential Package of Health Services.

On top of the public health sector, private health facilities (hospitals, clinics, pharmacies, etc.) exist in many urban cities and towns in Puntland State. The health services and medical treatments available in these hospitals and clinics vary; private pharmacies dispensing medicines, clinics providing outpatient care and hospitals offering inpatient diagnostic and treatment services. A 2018 study by Oxford Policy Management commissioned by UNICEF to "assess the capacity of the private health system in Somalia" reported 228 private health facilities in Puntland State which were classified as following (Zaman, 2018).

Puntland State		
Hospital	15	7%
Clinic	89	39%
Diagnostic Centre	7	3%
Pharmacy	117	51%
Total	228	100%

Table 1: Private health facility classification. Source: Rashid Zaman et al. Assessing the capacity of the private health system in Somalia, Oxford Policy Management.

The study found out that only 2% of the private health facilities had the capacity to perform major surgery, 28% offered minor surgery and only 39% of them could provide diagnostic services. The table below highlights the limited capacity of the private health facilities in Puntland State and overall Somalia.

Service type	Puntland State	Overall Somalia	
Dispense drugs	97%	91%	
Diagnostic services	41%	39%	
	Routine lab test	36%	38%
	X-ray	6%	4%
	Ultrasonography	13%	7%
Outpatient care	43%	68%	
Inpatient care	72%	9%	
Immunization	22%	15%	
Minor surgery	6%	21%	
Major Surgery	2%	3%	
24-hr emergency services	28%	26%	
Blood transfusion	4%	5%	
Caesarean section	2%	2%	
ICU	3%	2%	
None	39%	36%	

Table 2: The proportion of private health facilities providing various health care services. Source: Rashid Zaman et al. Assessing the capacity of the private health system in Somalia, Oxford Policy Management.

The latest Puntland Health and Demographic Survey (PHDS, November 2020) reported that "20 percent of households had visited a government hospital for advice or treatment compared to 24 percent who had visited private hospitals, clinics, or doctors. Seven percent of households had sought advice or treatment from pharmacies compared to 9 percent from Mother Child Health (MCH) clinics and/or health centres (HC)"[1]. See the figure 2.

The PHDS data revealed that "28 percent had spent between US\$1 and US\$49 for treatment and health care services during the month before the survey. Similarly, 24 percent of the respondents had spent between US\$50 and US\$99, 22 percent had spent US\$100 - US\$199 and 19 percent had spent US\$300 or more".

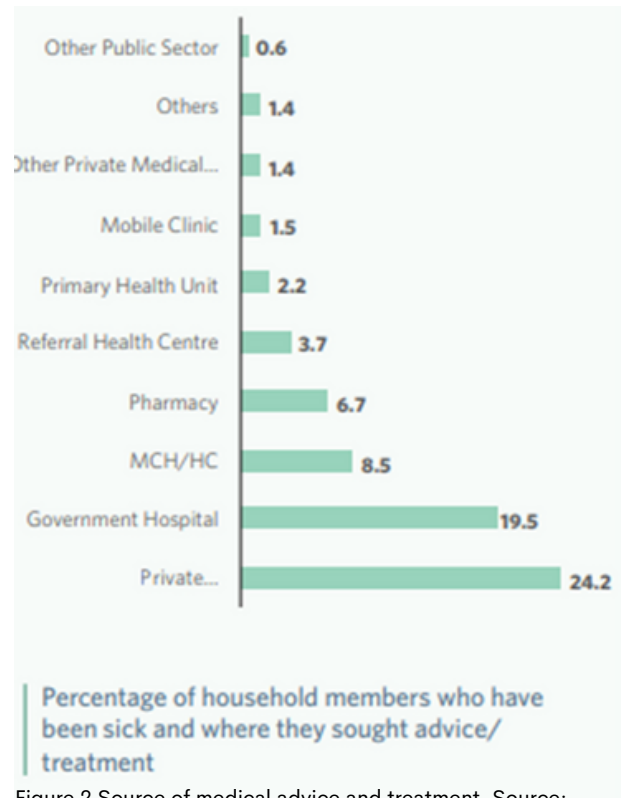


Figure 2 Source of medical advice and treatment. Source: Puntland Health and Demographic Survey (November 2020).

Health Regulatory Mechanisms in Puntland State / Somalia

Due to the weak institutional capacity of Somali health authorities, the regulatory and enforcement framework for both public and private sector healthcare is limited. This includes laws and regulations providing the basis for licensing and accrediting health service providers and premises; export, import and quality control of medicinal products and medical equipment; registering and regulating healthcare professionals; and mandatory health data reporting.

The study found out that although the existing health strategic policies and frameworks are limited, there are ongoing policy development and reforms both at the Federal and State levels to improve and strengthen the health regulations in Somalia. The table below lists some of the important existing and missing health laws and regulations in Puntland State/Somalia.

The table below lists some of the important existing and missing health laws and regulations in Puntland State/ Somalia.

Regulations/ policies	Description	Status (existing or missing)	Level	
			Puntland	Somalia
Health Sector Strategy Plans (HSSPII)	Strategies policies providing directions for the health care sector in Puntland / Somalia	Existing	☒	☒
Health Service Regulations	Laws that regulate the provision of health care services (availability, safety, quality) and the market in the health care (registration, licensing, standards and accreditation, inspections, costs, competition, etc.)	Missing		
Private Sector investment regulations (Private companies)	Laws establishing the bases for business registrations, licensing and operations in general	Existing	☒	☒
Regulations on the import and export of medicines and medical equipment regulations	Laws that specific deal with the import and export of pharmaceutical products and medical appliances	Missing		
Health Data Reporting regulations	<p>Laws regulating health data security and management (health data protection, storage and reporting, confidentially, consent and ethics).</p> <p>There is a national health management information system (HMIS) strategic policy which provide strategic guidance on the collection, processing, storage and use of health data.</p>	Missing		

The Health Sector Strategy Plans (HSSP II) is the main policy governing the health system in Somalia. HSSP II recognizes the crucial role of private health service providers and is very favourable to private investment or public private partner (PPP) in the health sector. While it is difficult to predict the risks that future health reforms might create unfavorable regulatory environment for private investment in the healthcare sector in Puntland State, at the present there are encouraging indications of private sector resilience and business and regulatory mechanisms conducive to private investment which will continue to be an important feature in the future health system of Somalia.

Burden of Diseases and the Medical Conditions People Travel Abroad

The study reviewed the available literature and data about the burden of diseases in Somalia. Data collected and analyzed by the Institute of Health Metrics and Evaluations (IHME) showed that infections, maternal and neonatal health conditions and nutritional deficiencies rank high on the list of diseases that cause ill-health, disability or early death (disability adjusted life years - DALYs) in Somalia (IHME, 2019). Cardiovascular diseases and neoplasms (cancers) feature in the list at positions 7 and 11 respectively. Please see the figures below for the full list of diseases burden in Somalia in 2019.

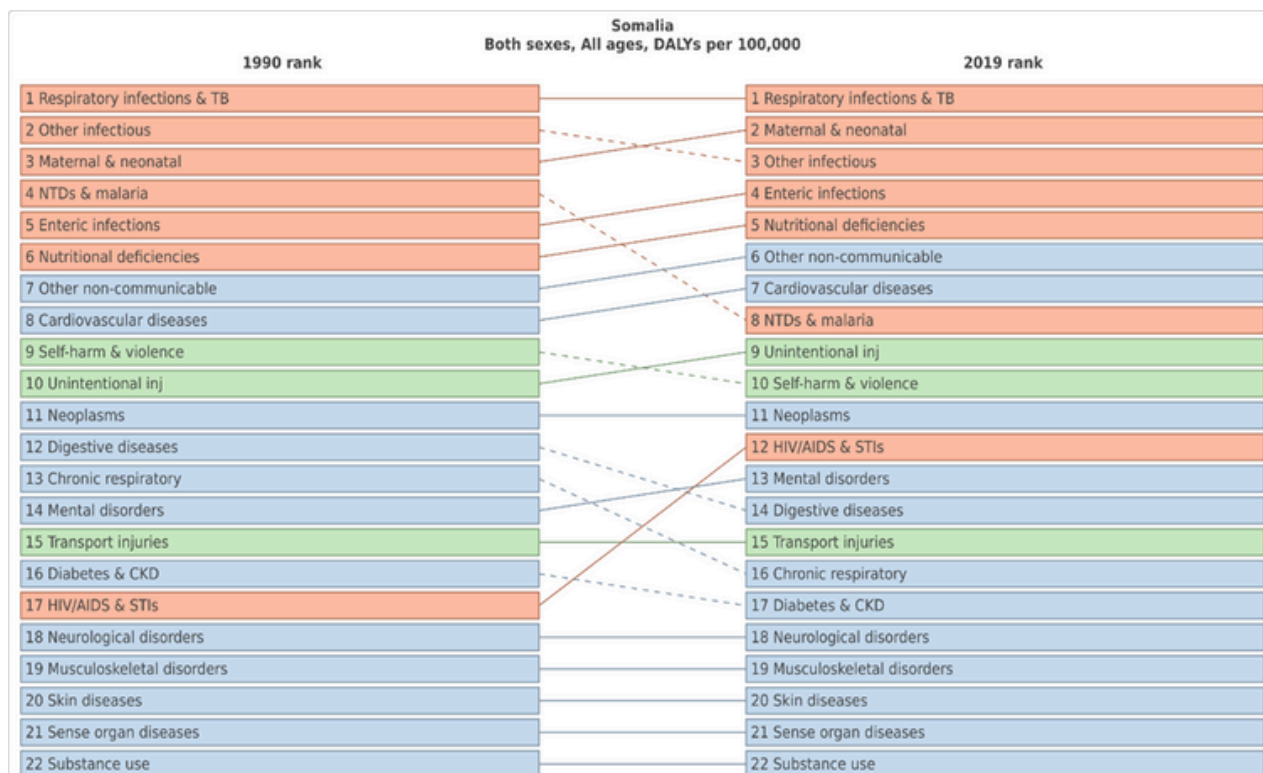


Figure 3: Burden of Diseases for Somalia (2019). Source: Institute of Health Metrics and Evaluations, available at GBD Compare | Viz Hub; Somalia; 2019; <https://vizhub.healthdata.org/gbd-compare/>

Puntland Health and Demographic Survey findings showed that 5% of Puntland household members suffered from at least one chronic disease; this proportion rises with age. It also showed that "the most common chronic diseases were blood pressure anomalies/hypertension (32 percent), diabetes (14 percent), kidney diseases (12 percent), chronic headaches (9 percent), liver disease (9 percent), Asthma (8 percent) and gastritis/ulcers (7 percent)." 49% percent of these households paid their health expenses from their income. The following figure shows the most common chronic conditions and the proportion of the household members who sought advice and treatment from either public or private health service providers. See the figure 4:

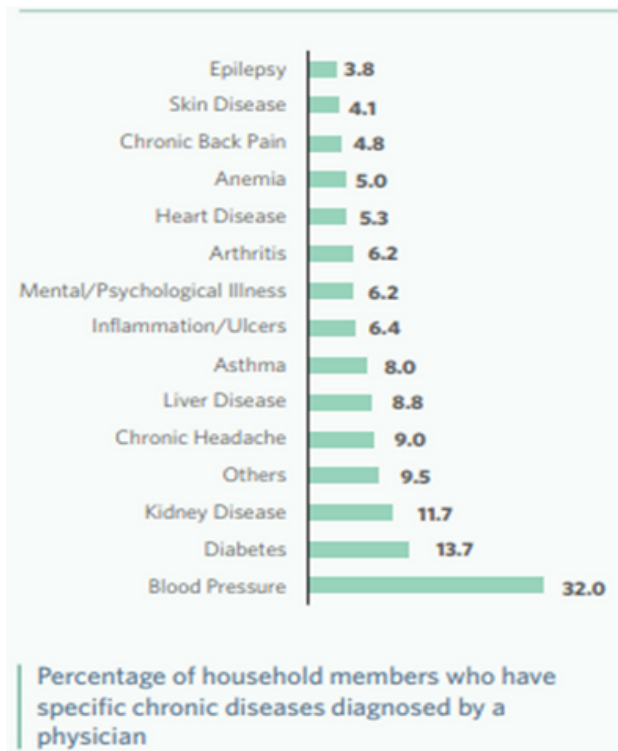


Figure 4: Common Chronic Diseases in Puntland State. Source: Puntland Health and Demographic Survey (November 2020).

No concrete data was found on the number of patients who travel abroad every year for medical treatment from Puntland State. The study utilized a survey conducted by SIDRA in Garowe city to study the range of medical conditions which Somali people in Puntland State travel abroad for treatment in August 2021. While the survey was not intended to measure the magnitude of the medical tourism among Somali people in Puntland State, it forms - together with the key informant interviews - the basis for the evidence to gain better understanding of these conditions, reasons of patient travel and factors that influence their choice of particular destination and the associated out of pocket expenditure on medical treatment.

SIDRA researchers were able to collect data from 106 people who travelled abroad for medical treatment in 30 days from Garowe city alone. The survey has revealed that the main medical complaints for which people sought medical treatment abroad were musculoskeletal conditions (17%), urinary system (16%), neurological conditions (13%), malignant diseases / cancer (8%) and gastrointestinal conditions (8%). Of the total of 106 participants surveyed, 18 people have reported seeking medical services for more than one condition (co-morbidities). The chart below presents the range of medical conditions people from Puntland State sought medical help outside of the country.

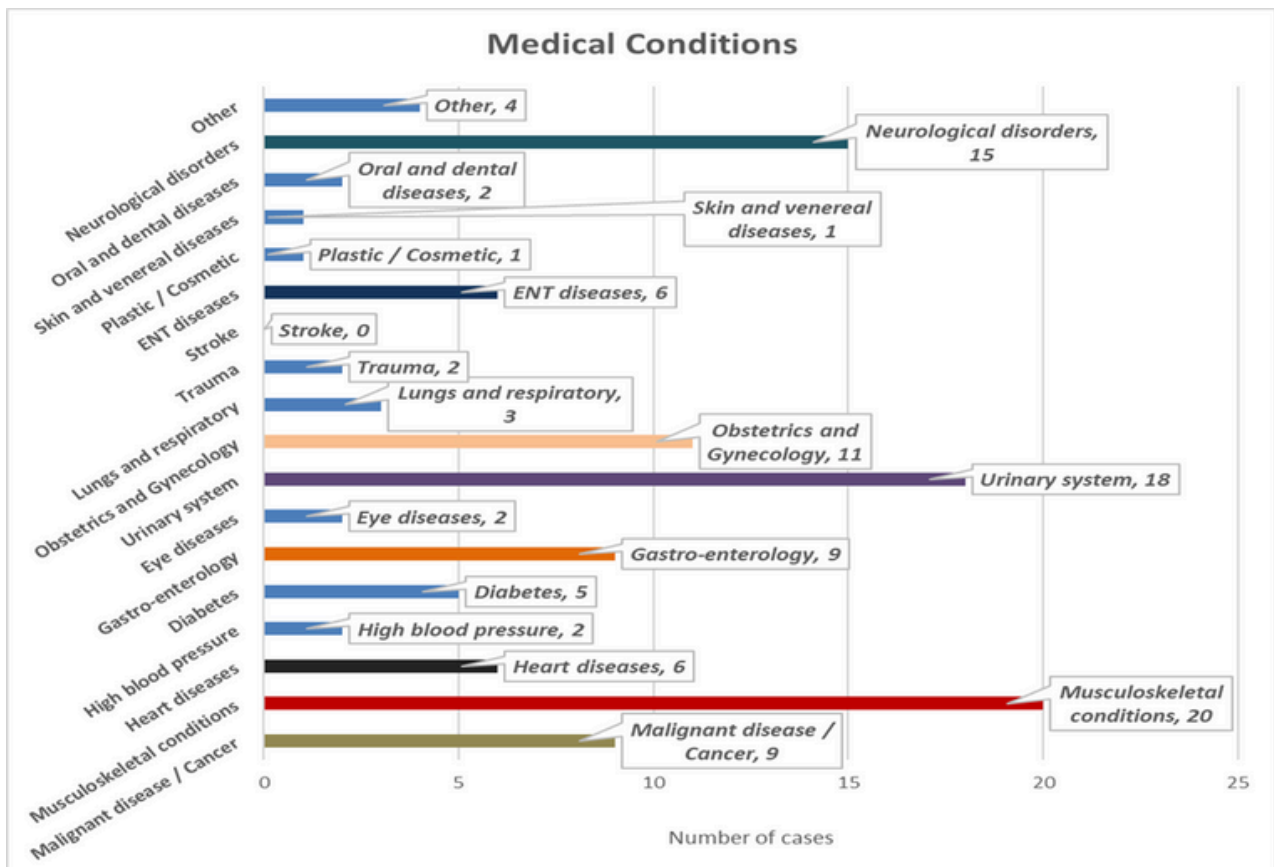


Figure 5: Common medical conditions that people sought medical treatment abroad, SIDRA Survey September 2021.

While the above numbers are aggregates of disease categories, the increasing incidence and prevalence of certain conditions such as diabetes, cardiovascular diseases, chronic kidney failure, liver and bowel disorders, autoimmune and inflammatory conditions and cancers have been repeatedly noted in the key informant interviews. Healthcare practitioners confirmed the growing prevalence of these conditions and the lack of modern diagnostic and treatment facilities.

The survey also found out that the main reasons patients travelled abroad for treatment were the unavailability of required medical services and treatments in Puntland State / Somalia and dissatisfaction with the quality of medical services patients received in Puntland State / Somalia (31% and 41% respectively).

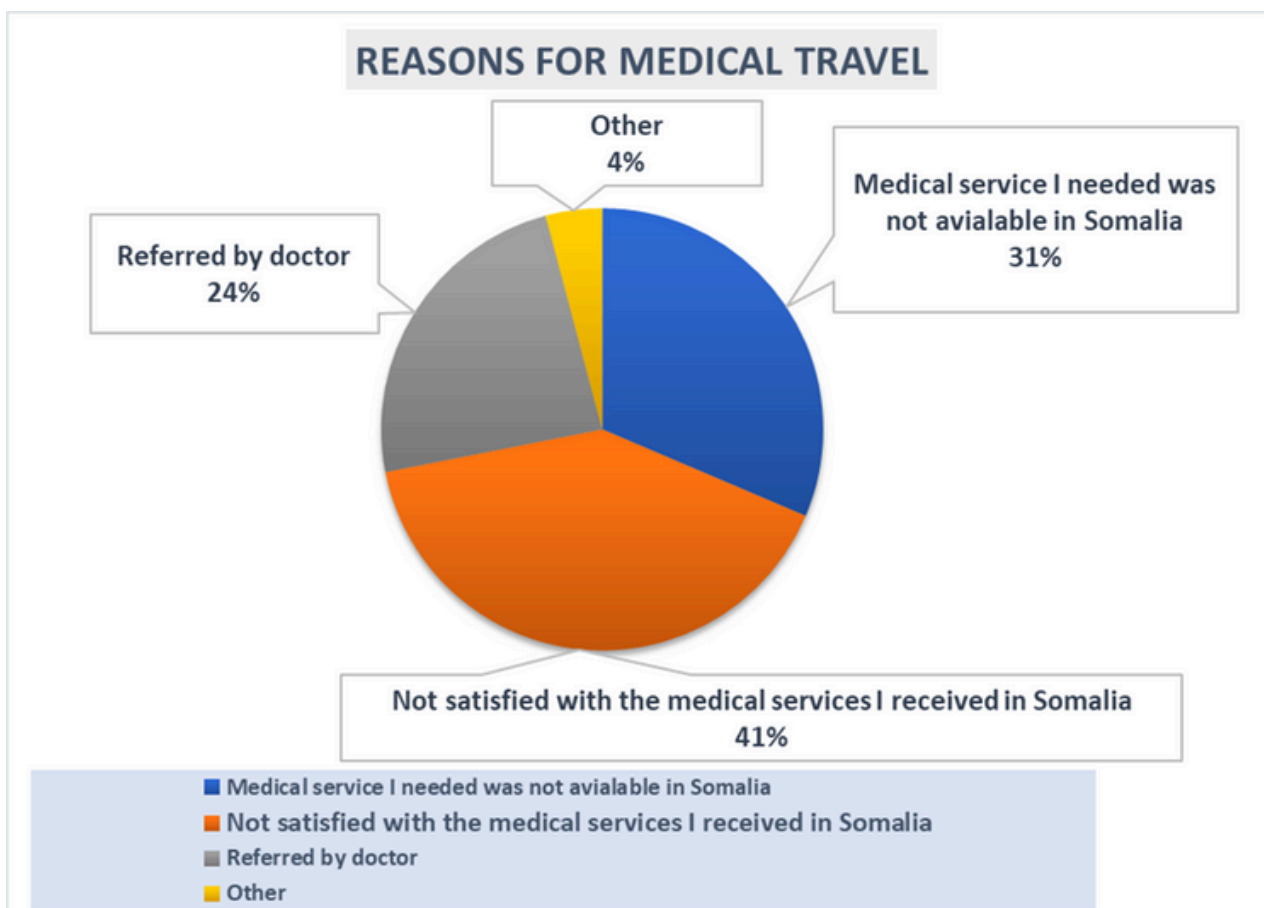


Figure 6: Reasons patients travelled abroad for medical treatment, SIDRA Survey September 2021.

In the key informant interviews, the majority of the respondents (70%) pointed to the paucity of fully functioning nephrology, neurology, orthopaedics, gastroenterology and oncology departments as well as hospitals offering dialysis, renal replacement therapy (RRT) and chemo - radiation therapy. Many cancers remain undiagnosed due to lack of effective screening and diagnostic services and equipment such as CT and PET scans, scintigraphy and MRI scans as well as blood and tissue analysis (hematology and pathology).

SIDRA survey data also showed that India, Malaysia and Turkey were the three most popular destinations for patients (35%, 19% and 16% respectively). A significant number of patients (26%) also travelled to the neighbouring countries of Kenya and Ethiopia for medical treatments.

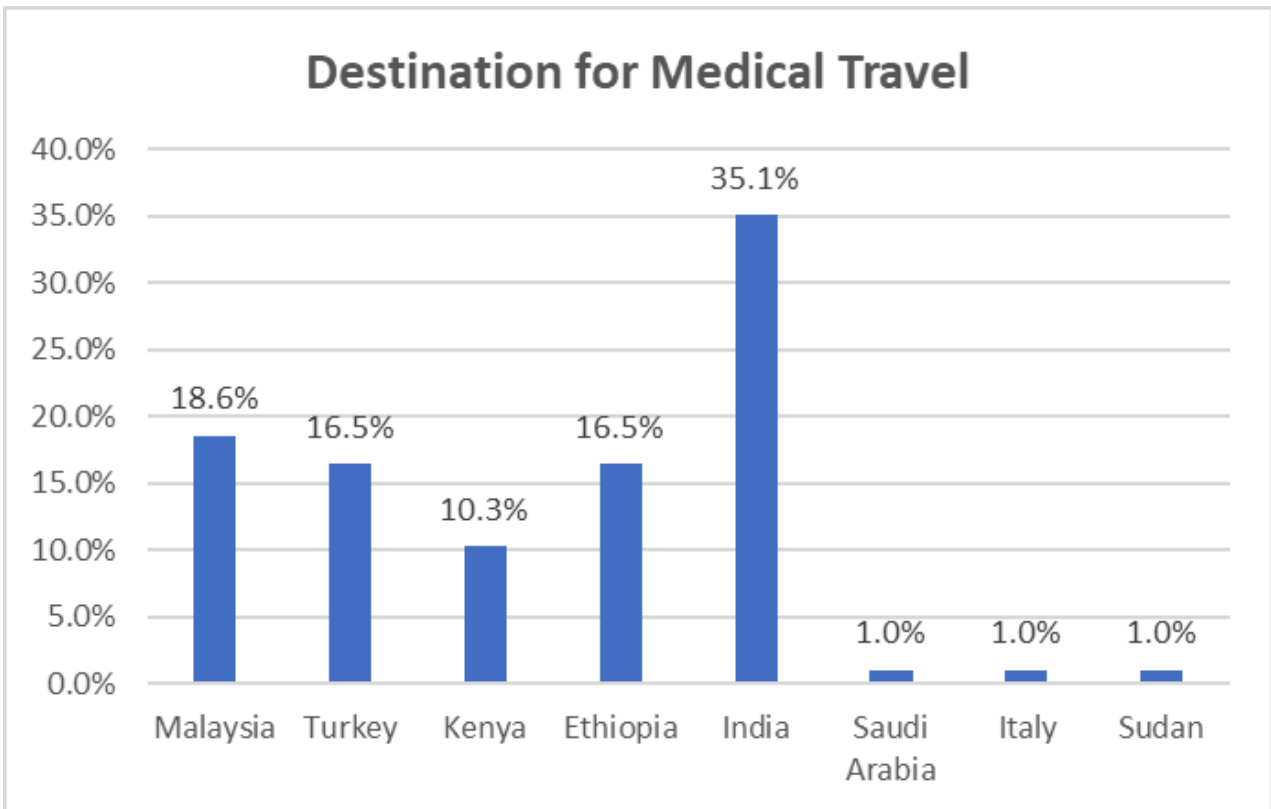


Figure 7: Destinations for medical travel, SIDRA Survey September 2021.

Patients cited more advanced medical care (38%) and accessibility / affordability of medical visa (30%) as the main reasons for choosing the overseas country for medical travel. Affordability of medical treatment was only a reason for 14% of the patients while another 14% reported that destination proximity was a factor in deciding which overseas country to go for medical treatment. The following chart presents the destinations and the factors influencing patient’s choice.



Figure 8: Reasons for choosing which overseas country to travel for medical treatment, SIDRA Survey September 2021.

The myriad of medical conditions in almost of all the body systems which could not be treated in Puntland State underscore the sheer breadth of health needs and the lack of capacity in both public and private health sectors and provide evidence to support the scientific, social and economic rationale to establish state of the art private tertiary hospital in the State.

The Economic Burden of Medical Tourism

SIDRA survey data shows that the average cost of seeking medical treatment abroad was USD 8,543. The highest accommodation cost recorded was as high as USD 30,000 and some healthcare expenditure soaring to USD 40,000 depending on the length of stay and the type of medical treatment or procedures. The table below outlines the minimum, maximum and average cost of medical treatment abroad and other associated expenses.

	Visa (USD)	Ticket/Travel (USD)	Accommodation (USD)	Health Care Cost (USD)	Total Expenses (USD)
Minimum	30	100	50	200	380
Maximum	1,400	7,990	30,000	40,000	79,390
Average	398	1,291	1,995	5,983	8,543

Table 3: Survey data about the out-of-pocket expenditure on visa, travel, accommodation, health care and other costs

The survey did not collect data on the other economic impact of seeking medical treatment overseas such as loss of revenue from the local economy, quality-of-life impact and other socio-economic variables (household income lost due to travel, work hours lost, time away from family and friends, etc). Similarly, no data was collected to examine catastrophic health expenditure in the country.

The survey presented the financial sources patients use to cover the cost of medical treatment abroad. Only 5% of the patients sold assets in order to meet the cost of their medical treatment abroad. The majority of patients (43%) reported that they received financial support from family, relatives and friends while 20% and 17% used current income and savings respectively. The chart below highlights the different financial sources of patients going abroad for medical treatment.

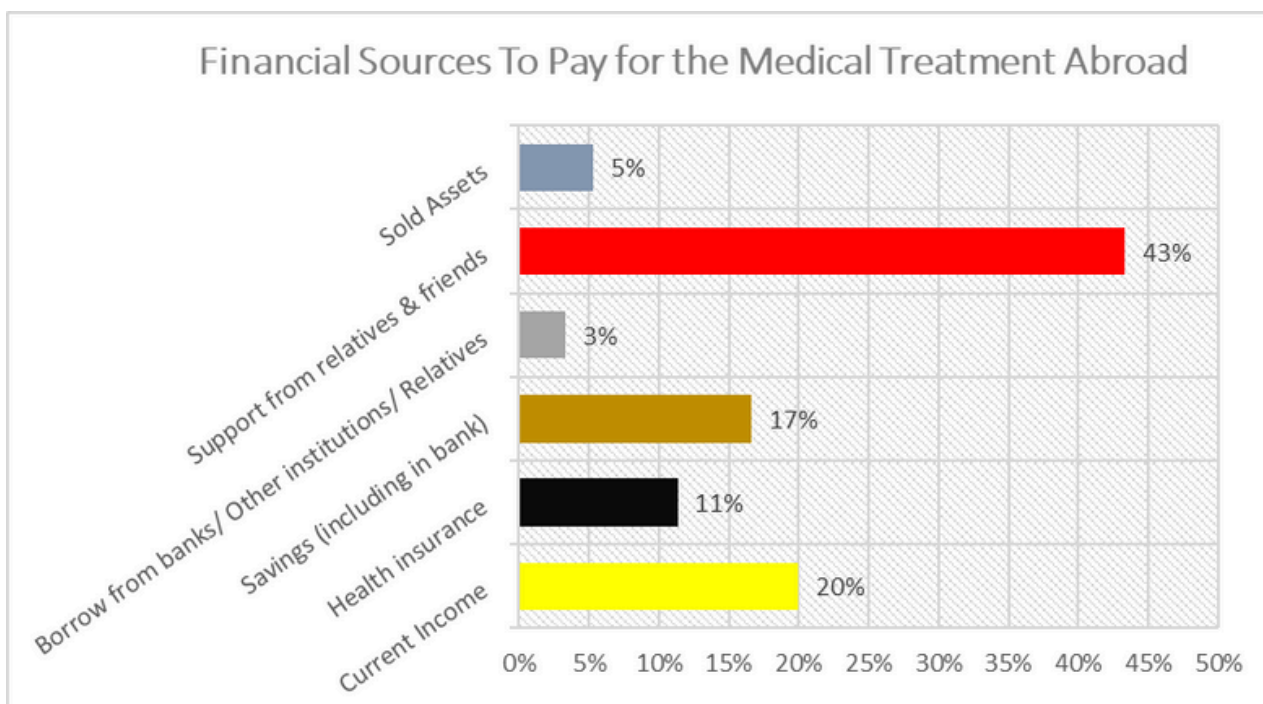


Figure 9: Survey data about the sources of finances to cover medical treatment abroad.

The findings show that the economic burden of medical tourism on individuals, communities and the State is huge. They also underline the willingness and ability of patients to use their income and savings or secure financial support from family, relatives and friends to pay their medical treatment.

Procurement and supply of pharmaceutical products and equipment

The smooth flow of trade particularly the import of medicines and medical equipment into Puntland State is a very significant condition for the investment as well as the provision of high-quality health care services. There is an enabling environment for frictionless trade with other regions of Somalia and outside world driven by a vibrant free market and viable transport infrastructure such as Bosaso port on the Gulf of Aden and the nearly completed Garacad port on the Indian Ocean as well as Bosaso, Garowe and Galkacyo airports which could provide reliable routes for the import of pharmaceutical products and medical equipment. Supplies are also sourced from Mogadishu and Hargeisa and countries as diverse as Turkey, India, Bangladesh, China, UEA, Ethiopia, Kenya, Italy and other European Counties.

Local importers of pharmaceutical products are located in the major cities in Puntland State. While the prices of pharmaceutical products and medical equipment varies between counties of origin (relative to cost of transport; distance, route of transport, cargo size, etc), there is no big price variations locally. Interviews with local pharmacy managers revealed that branded medicines and medicines imported from Europe were more expensive than the generic medicines made elsewhere in the world.

The inconsistent, unreliable and unregulated supply of medicines is a major concern for healthcare practitioners in Puntland State. Interviews with pharmacy managers and other healthcare practitioners show that disruptions to the supply and shortages of many important medicines are common. Many patients who are treated abroad cannot find their prescribed medicines in Puntland State and have to order these medicines from countries like India.

Qualified health care personnel

Human resource for health is a key component of an effective health system. The feasibility study reviewed the available literature and data on the number, fields, skills and specialties of healthcare professionals in Puntland State and Somalia as a whole. There is very limited data on the number, qualifications, specialties and distribution of healthcare professionals in the Puntland State. The Oxford Policy Management study found out that “the density of health workers in private health facilities in Somalia was 4.89 health workers per 10,000 population which falls short of the 23 health workers per 10,000 population regarded as a minimum requirement by the WHO”(Zaman, 2015). The following table presents the proportion of private health facilities with various types of health care staff.

Staff type	Puntland State	Overall Somalia
Doctors (qualified)	34%	34%
Clinical officers (qualified)	23%	23%
Nurses/midwives (qualified)	51%	45%
Pharmacists (qualified)	56%	66%
Other staff (qualified)	51%	33%
Qualified medical staff (exc. pharm)	66%	67%

Table 4: Proportion of private health facilities with various types of health workers. Source: Rashid Zaman et al. Assessing the capacity of the private health system in Somalia, Oxford Policy Management.

This study could not assess the availability of consultants and qualified doctors with specialties such as surgery and oncology because of time, resource and geographical scope constraints. The limited data on health workers and supporting staff in Puntland State could make it difficult to develop tangible plans to source adequate health workforce for private health service.

There are a number of colleges and universities in Puntland State which offer nursing, midwifery and medical degree programmes. Four universities offer MBBS programmes; East Africa University, Bosaso Campus; University of Health Science, Bosaso; Global University, Galkacio; and University of Bosaso, Garowe Campus, however, there is no data available to appraise whether these academic institutions can offer specialized education and training and produce sufficient number of doctors to fill the skills shortage in the health sector. The shortage of qualified health care personnel is not confined to doctors and consultants but medical engineers and technicians are short supply as well. Amal Bank will need to undertake an intensive and sustained recruitment drive to attract highly qualified consultants, doctors, biomedical and clinical scientists and engineers to ensure the private health center can provide the health services people overwhelmingly need. This will necessitate the sourcing of some of these skilled health workers and certain specialties from overseas.

Study Limitation

This study has not covered several areas, especially the energy sector in Puntland. We recommend further studies on the availability, reliability, and safety of water, electricity, and gas for the establishment of this kind of mega project (Hospital).

Conclusions

The Somali people in Puntland State are in great need of wide range of health care services. The public health sector is largely supported logistically and financially by the UN and International NGOs. At present there is a growing, unregulated, private health sector driven by the free-market forces.

Many patients travel abroad for a range of medical services and incur huge costs of travel, accommodation and treatments because the services are not available in the country. Although this study did not examine the rate of catastrophic health spending for these patients, many households incur undue financial hardship when they travel abroad for medical treatment. Nevertheless, the high demand for health services which are not available in the country coupled with patients who are willing and can raise the resources to pay for their treatments support the vision to set up a modern private hospital which can offer a comprehensive range of health services in Puntland State.

The existing health policies, while limited, are conducive to private sector involvement in the health care. The Health Sector Strategic Policy (HSSP II) provides the legal, institutional and administrative frameworks for the health sector. Despite the existence of this health policy, it is apparent that improved health regulations could influence private sector activities (operating, financing and delivery of health services) and ensure standardisation, accreditation and accountability.

Additionally, strong regulatory system is needed to enforce the regulations and scrutinize the management, performance and service quality of public and private healthcare provision across Somalia. It is equally important to highlight that while there are no indications that improved health regulations will pose risk to private investment in the health sector, excessive regulation can sometimes create formidable barriers to the private healthcare to bring innovative ideas and set up and operate private hospitals and clinics.

The biggest challenges to private health care come from shortage of qualified and competent healthcare staff. While it will be inevitable to recruit qualified staff overseas, many roles such as nursing could be easily filled with domestic health care staff. Therefore, short and long-term plans are necessary to ensure hospital workforce that is capable of delivering greater volume and high-quality services.

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Amal Bank

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