Business plan for pediatric ambulatory surgery center

Name xxxx
Mobile Number: xxxxxxxxxxx
E-Mail : xxxxxx

1. Executive Summary

In the following document we will discuss the business case and plan for setting-up an Ambulatory Pediatrics Surgery Center (PSC) in Riyadh, Saudi Arabia. This section summarizes the key findings throughout the document.

1.1. KSA Healthcare Sector Context

- Healthcare is a top priority for KSA, spend reaching USD 71 billion in 2020 where the government is actively exploring private sector participation – private contribution is expected to increase from 25% in 2018 to 40% by 2030

- Local population in KSA is relatively young and expected to grow by ~35% from 2018 to 2050 – of which ~25% are less than 14 years and qualify for pediatric services

- As the government increasingly becomes a regulator, the private sector will expand their role in providing services in the country and drive the shift towards value-based care

- Subsequent increase in disease burden will be tackled by improved access, quality and efficiency through care delivery transformation that advocate the shift of patients to lower acuity setting - such as Day Surgery / Ambulatory Surgery Centers (ASC)

- Development of short-acting anesthetics and new surgical techniques have made day surgeries a high-quality, safe and cost-effective alternative to surgical health care, with higher patient satisfaction rates and increased patient safety

These trends clearly set the stage for great opportunities for private players to enter the pediatric day surgery market in Saudi Arabia.

1.2. Market and Competitive Landscape

- Day surgery activity is considerably low in KSA 8% out of total surgeries, while in mature health systems it ranges from 60% to 90%

- Riyadh had one of the lowest penetration rates for day surgery at 0.7 per 1,000 people but also the highest number of pediatric surgeries in the Kingdom

- There are no stand-alone dedicated day surgery pediatric centers in Riyadh - conducting day surgeries in hospital settings still presents complications in terms of potential hospital acquired infections and higher costs

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- Almost 80% of all pediatric surgeries are elective and can be performed in ambulatory care setting with a market penetration of 33% the total addressable market of 6,500 – 7,000 cases per year from Riyadh and nearby cities

We propose the first dedicated pediatric day surgery center in KSA that has the potential to establish itself as the center of excellence for pediatric surgical procedures

1.3. Business Overview

- The target facility is a standalone Pediatric Ambulatory Surgery Center (ASC) with dedicated 2 state of the art operating rooms, providing same-day surgical care, including diagnostic, curative and preventive procedures

- Located in Riyadh having the largest pediatrics demand, the center will serve primarily patients within the region then target elective pediatric patients the regions of Qassim, Eastern, Mecca, Medina, Aseer and Najran

- Center service portfolio comprises of specialist pediatric day surgery procedures as well a variety of ENT day surgery procedures in the beginning

- Unique value proposition where the focus is on affordability, managing end to end family journey, specialist pediatric care, child-friendly and safe environment customized for children

1.4. Operations and structure

- Centre will be configured as a greenfield project and limited Liability Company (LLC) - governed by a board of directors, headed by a chief executive and heads of clinical services and operations

- Clinical staff will comprise pediatric surgeon consultants (2 FTE), ENT surgeon (1 FTE), pediatric anesthesiologist (2 FTE), pediatric surgical nurses (12) and admin staff (10 FTE across HR, Finance, Supply Chain and Quality)

- Centre capacity will be 3 operating rooms (1 dedicated for Pediatric General Surgery, 1 for ENT (pediatrics), and 1 minor procedure room) while expected demand captured at maturity is estimated at 3,000/day surgery cases per year

- Agreements need to be setup with partner facilities for outsourced diagnostics, critical admissions with capability for pediatric care

1.5. Return and profitability

- Initial investment required for CAPEX ranges between SAR 12 to 14 M (land, construction and equipment costs) and operationalization will require two years

- Yearly revenues have been based off solely day-surgery procedures with appropriate case mix starting in year three with the assumption to reach demand maturity in another three years

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- The center financials were modeled at different scenarios over 10 years and yielded a very promising **IRR range from 22% to 36%**, worse to best case scenarios respectively that incorporates price, discount and other parameters

2. Business Idea and Model

2.1. Business Idea, Market and Customer needs

Healthcare is a top priority for the Kingdom of Saudi Arabia (KSA) government. Given the demographic context and the current state of healthcare ecosystem, this business sector offers enormous opportunities for high growth potential. The Ministry of Health (MOH) is planning to spend nearly USD 71 billion in 2020, in line with the government's Vision 2030 and the National Transformation Program (NTP) (Global Health Exhibition).

To improve efficiencies and outcomes, the government in KSA is actively exploring private sector involvement in developing additional healthcare infrastructure required within the Kingdom. By introducing Public Sector Participation (PSP) through PPP models for healthcare, the government wants to fast-track the healthcare reforms. KSA government plans to increase private sector contribution in total healthcare from 25% in 2018 to 40% by 2030.

These trends together set the stage for a great opportunity for private players to integrate into the day surgery market, and deliver high quality, efficient ambulatory surgical procedures for the population of Saudi Arabia.

"Day surgery" or "Ambulatory surgery", refers to the practice of admitting on the day of surgery carefully-selected and prepared patients for a planned, non-emergency surgical procedure and their discharge within hours of that surgery.

The advantages of day surgery for patients are many, some of which include:

- Reduced wait times
- Increased access to quality-care
- Fewer risks of Healthcare-Associated Infection (HAI)
- Improved patient outcomes
- Individual care improvements due to correct patient partitioning based on admittance parameters
- Near-negligible surgery-related complications and mortality rates post-discharge
- Cost-effective services for higher patient accessibility (25% - 68% reduced rates vs. inpatient instancing)

2.2. Core Business Concept

Pediatric Surgery Center (PSC) in Riyadh will be a freestanding Pediatric Ambulatory Surgery Center with dedicated Operating Rooms, providing same-day surgical care, including diagnostic and preventive procedures (Global Health Exhibition). PSC will be based in Riyadh but will aim to establish itself as a specialist PSC and attract patients from all over the

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Kingdom of Saudi Arabia. PSC brings the expertise of best surgical specialists to a child-centered, convenient, outpatient surgery center in Riyadh. PSC will be experts in outpatient surgery just for children. Every procedure will be staffed by a fellowship trained pediatric anesthesiologist with years of experience providing anesthesia care exclusively for children.

Children and families are the primary focus of the care provided. PSC will develop a personalized care plan for the kids and the family, that will maximize the child's comfort and safety every step of the way, from the initial planning stages to a child's time in the recovery room and through their follow-up care at home. The notable advantages of conducting pediatric surgeries in ambulatory care settings are as follows:

- Less time away from home, since the young patients can rest on their own bed during the night of the surgical procedure
- Reduced hospital costs
- Fewer staff required
- Reduced hospital-acquired infections

2.3. Future Plans

Although the PSC will start off as a freestanding single pediatric day surgery center, based on the success of the enterprise, the PSC will pursue following growth avenues in the future:

- Expand horizontally across other service lines (adult day surgery cases) by establishing new adult dedicated day surgery centers
- Expanding geographically by setting up additional PSCs in Jeddah, Dammam, Qassim and other major cities / areas in KSA
- Future expansion plans will likely be funded through an Initial Public Offering (IPO)

3. Market and Competitor Analysis

3.1. Macroeconomic context and trends

World Bank estimates KSA population will reach 45.1 million by 2050 (from an estimated 32.6 million in 2018). Consequently, the growing and aging population will increasingly demand more healthcare services at an exponential rate. Additionally, ~25% of the population is less than 14 years old indicating a very young target demographic within the Kingdom for healthcare services.

To address the expected increase in healthcare burden, the National Transformation Program focused on improving access, quality, efficiency and effectiveness of the healthcare sector. Introduction of mandatory health insurance for private sector employees and planned coverage of public sector employees are two such initiatives to drive outcomes through payer perspective. This is expected to tilt the balance towards private sector as patients increasingly prefer the quality of care, efficiency and reduced lead times offered within private sector facilities. As the government increasingly becomes a regulator, private sector will expand their role in providing healthcare services in the country (Global Health Exhibition). One of the major implications of such a move is the shift towards value-based care, which will be

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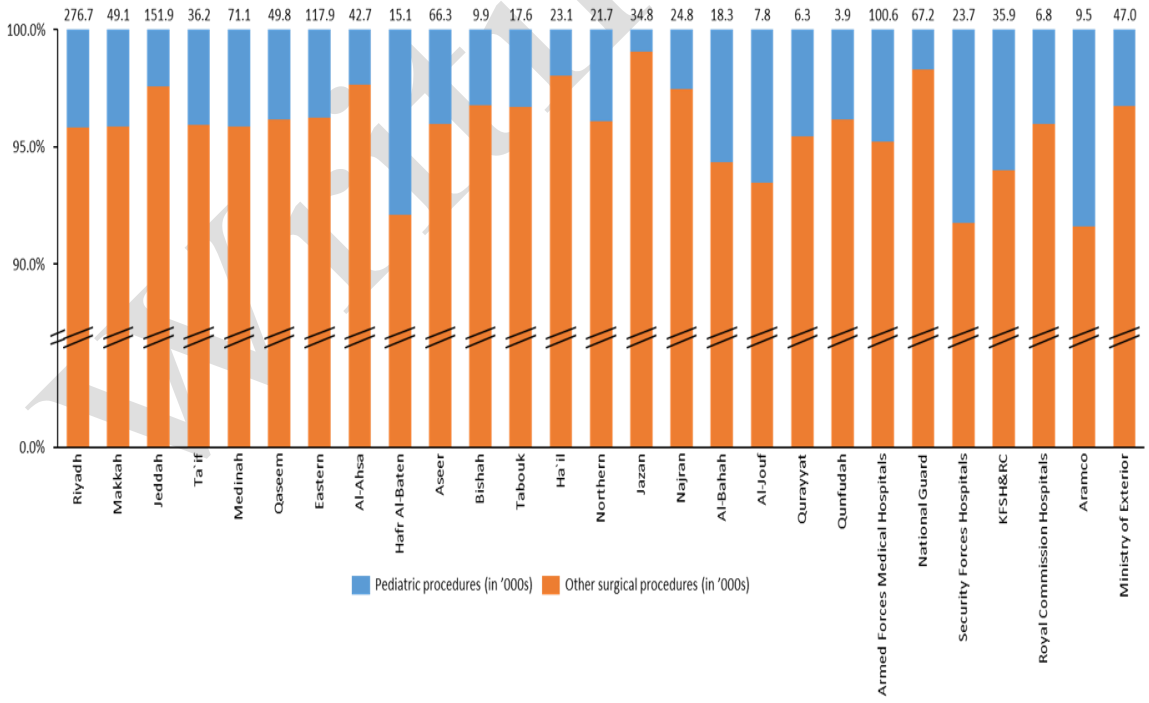
driven by the private sector hospitals and corporatized clusters. Care delivery transformation programs are advocating shifting patients to lower acuity settings such as long-term care wards and Ambulatory Surgery Centers (ASC). Development of short-acting anesthetics and new surgical techniques have made day surgeries a high-quality, safe and cost-effective alternative to surgical health care, with higher patient satisfaction rates and increased patient safety. Globally, day surgeries have become the norm for nearly all elective surgery with countries such as Sweden performing ~90% of procedures in outpatient settings (Global Health Exhibition). KSA too is trying to follow the global trend and is actively trying to encourage growth of day surgery centers. Ministry of Health in Jeddah for example has revealed that the ministry intends to increase the number of outpatient surgery cases[i]. Day surgery centers offer increased throughput of patients, improved surgery scheduling, reductions in staff and hospital costs, and a consequent decrease in waiting lists, thus making them an attractive care setting for Saudi Arabia.

3.2. Market Potential

Saudi Arabia witnessed more than 1.33 million surgical procedures in 2018 across Ministry of Health, other ministerial bodies and private sector facilities. Key points to note:

- Total surgeries performed: 1,335,662 (Advanced Surgical Care).
- Total pediatric surgeries performed: 50,651 (MoH Statistical Yearbook).
- % of pediatric surgeries as total surgeries: 3.8% (MoH Statistical Yearbook).
- Highest number of pediatric surgeries performed was in Riyadh at 11,516 (MoH Statistical Yearbook).
- Total share of pediatric surgeries performed in Riyadh and neighboring region: 26,126 – accounting for 50%+ of the total pediatric surgeries performed (MoH Statistical Yearbook).



In addition, the number of day surgeries conducted in Saudi Arabia is very low compared to other economies. Key statistical indicators:

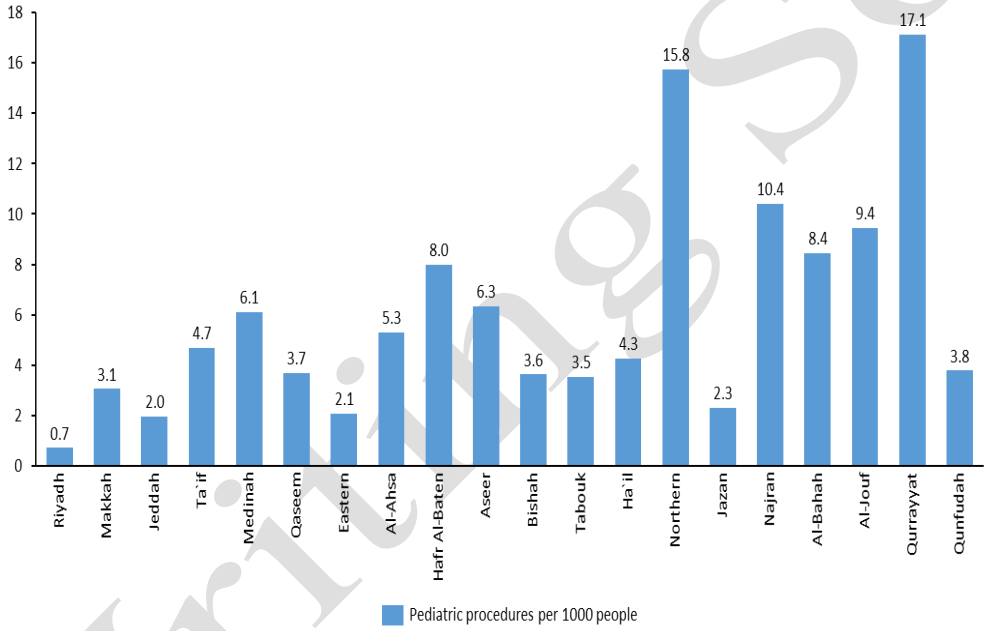
- # of day surgeries per 1,000 people in KSA includes = 3.35 (MoH Statistical Yearbook).

- Benchmark comparison against USA = In 2011, more than 23 million procedures were performed leading to a rate of 7.38 day-surgery procedures per 1,000 people (9Advanced Surgical Care).
- Benchmark comparison against Sweden = In 2018, nearly 112,500procedures were performed leading to a rate of 11.12 day-surgery procedures per 1,000 people (OECD Statistical Database).

- Day surgeries as % of total surgeries conducted in KSA = 7.72%

- Benchmark comparison against USA = 65% of surgical procedures were done in ambulatory setting in 2012 (OECD Statistical Database).
- Benchmark comparison against Sweden = 90%+ surgical procedures were done in ambulatory setting in 2018 (OECD Statistical Database).

- Amongst the day surgery procedures conducted in KSA, nearly 60% were conducted under local anesthesia with the other 40% being conducted under general anesthesia
- Riyadh had one of the lowest penetrations of day surgery cases at 0.7 for 1,000 people due to high proliferation of public and private sector hospitals in the region



Given that ~80% of all pediatric surgeries are elective and can be performed in ambulatory care settings, the KSA market has a total potential of 40,000 day-surgery cases per annum. Assuming a 33% market penetration at the maturity level, Riyadh and neighboring regions will provide a total addressable market of 6,500 – 7,000 cases year (Advancing Surgical Care).

3.3. Competitive Landscape

The competition for PSC comes from three perspectives:

- **Ministry of Health (MoH):** All MoH facilities are either hospitals, outpatient clinics within hospitals or primary healthcare centers (PHCs). MoH has no stand-alone day surgery centers and no pediatric focused day surgery centers. Investments in setting up new day surgery centers will be done through public-private partnerships, which PSC will be well positioned to address for pediatric procedures.

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- **Other governmental entities:** Other governmental healthcare providers are primarily composed of hospitals and PHCs and are targeted towards a captive population / market. It is highly unlikely that these establishments will open pediatric day surgery centers that will be competing within the market with general public.
- **Private healthcare institutions:**
    a. **Dr. Sulaiman Al Habib:** Dr. Sulaiman Al Habib Medical Group currently operates 14 Medical Facilities across Saudi Arabia, UAE and Bahrain, including 7 Hospitals (JCI & CBAHI Accredited) and 6 Medical Centers, developing one of the largest private medical cities in Saudi Arabia. Dr. Sulaiman Al Habib hospital network provides day surgery services in dedicated clinics, but with primary focus on adults. Currently majority of the pediatric surgeries are conducted within the inpatient settings in the hospital (Advancing Surgical Care).
    b. **Dallah Hospital:** Dallah Hospital is member of Dallah health care company, currently operating in the central region. Dallah Hospital has an experience for more than 25 years in the health care industry and focuses on offering comprehensive medical services. Dallah Hospital also does not have any dedicated pediatric surgery centers. They also do not have any ambulatory surgery centers and currently perform procedures in inpatient / outpatient settings within the facility (Advancing Surgical Care)
    c. **Mouwasat Hospital:** Mouwasat Medical Services Company has 6 hospitals in KSA across Dammam, Riyadh, Madinah, Jubail, Qatif and Khobar. In addition, the group also operates dedicated centers for skin care, fertility and obesity (Advancing Surgical Care).

While hospitals conduct some of the surgeries in outpatient settings, there are no stand-alone dedicated day surgery centers, specifically for pediatric cases. Conducting day surgeries in hospital settings still presents complications in terms of potential hospital acquired infections and higher cost settings. In conclusion, PSC will be the first dedicated pediatric day surgery center in KSA and has the potential to establish itself as the center of excellence for pediatric surgical procedures.

3.4. Unique Value Proposition & Market Differentiation

- Access and affordability: Relatively lower prices compared to in-hospital settings and a stand-alone dedicated facility will enable the PSC to provide faster access and higher chances of pre-approval for the elective procedures
- Managing the end to end family journey: The team at PSC will manage everything related to the day surgery procedure. From diagnosis to post-treatment care protocols, our center will provide the children and the patients with all the relevant information and support
- Customized for children: Each step in our process from preoperative assessment, operation, discharge and postoperative support is defined keeping our patient's unique needs in mind
- Specialized care: Every member of the care team would be a pediatric specialist (physician / anesthetist / nurse). This allows us to tailor treatment plans to meet each child's specific needs.
- Child-centered environment: We aim to provide a safe, warm, and reassuring environment for children and their families which includes playful waiting rooms, soothing post-operative support rooms, parent waiting areas, etc. This helps reduce children's fears and prevents psychological trauma

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- Safe environment: As a standalone pediatric day surgery center, our center will be able to reduce the rate of hospital acquired infections and provide a safe, clean environment for the children to get care

3.5. Target Customer Segments

Customer profile: Target customer for PSC will be parents across both expats and local communities, with modestly affluent and affluent backgrounds. End consumer of the services will be children (below 16 years of age, including infants which are less than 1 years old). PSC should also establish payer contracts and pricing schedule with major healthcare insurance providers to have the support of payers to drive traffic to the new center .
Customer Segment by Region: Given that the largest region with pediatric surgeries is Riyadh, the PSC will be based in Riyadh and will target the patients in Riyadh as the primary market. As a secondary focus, the PSC will target pediatric patients requiring elective procedures in the regions of Qassim, Eastern, Mecca, Medina, Aseer and Najran. As a tertiary focus, the PSC will cater to the whole of KSA and treat patients coming to Riyadh from all over the Kingdom.
Customer Segment by type of service[ii]: There are three range of PSC designations available for PSC as per the categories defined by American College of Surgeons in 2014. Based on the target demographic and the maturity levels of ambulatory surgery centers in KSA, it is recommended for PSC to operate as an "Advanced" Pediatric Surgery Center.

Type of PSC	**Basic**	**Advanced**	**Comprehensive**
Age	Older than 1 y	Any	Any
ASA classification	1-2	1-3	1-5
Multidisciplinary management of comorbidities	None	Typically, single surgical specialties; neonatology; pediatric anesthesia	Multiple medical and surgical specialties; pediatric anesthesia
Operations	Common, low-risk procedures typically performed by a single specialty	Common anomalies and diseases typically treated by most pediatric surgical specialists and that do not require substantial multispecialty coordination	Major congenital anomalies and complex disease, including those that are uncommon or require substantial multidisciplinary coordination

Ambulatory	ASA 1 - 2 Age older than 1 year	Full-term and preterm infants can be cared for as ambulatory patients based on written guidelines established by the pediatric anesthesiologist in charge of perioperative care. Institutional guidelines generally require full-term infants younger than 4 weeks or preterm infants younger than 50 post-conceptual weeks to be monitored for at least 12 h postoperativel	Full-term and preterm infants can be cared for as ambulatory patients based on written guidelines established by the pediatric anesthesiologist in charge of perioperative care. Institutional guidelines generally require full-term infants younger than 4 weeks or preterm infants younger than 50 post-conceptual weeks to be monitored for at least 12 h postoperatively

3.6. SWOT analysis summary

3.7. Marketing and Sales Strategy

3.7.1. Product and Pricing Strategy

Design	▪ PSG is designed to be kid friendly environment with bright colors, soothing ambience, play areas and comfortable waiting rooms for the parents. The entire experience is curated to provide an easy, relaxed journey for the children and patients to generate word of mouth referrals
Technology	▪ Latest technological equipment and devices are used to ensure procedures are minimally invasive, thus improving outcomes and patient safety (EMR)
Perceived Convenience	▪ The community has easy access to high quality care for non-emergencies and ensured access to specialty care for emergency / complex conditions
Perceived Quality	▪ One of the key elements driving quality perception of the PSC would be the quality of the physicians – PSC would aim to recruit the best available talent in the region to make PSC synonymous with high quality care
Packaging	▪ PSC offers an integrated package not only in terms of experience, managing the end to end process for the patients, but also in terms of pricing, simplifying the process enormously for insurance providers and paying customers
Skimming Pricing	▪ Comfortable upgraded rooms with state of the art facilities, courteous treatment and friendly staff are all elements which help PSC target the high value patient segments such as – high net worth individuals, individuals with premium insurance policies
Value based pricing	▪ In addition, PSC will also target value based customers due to its lower cost base compared to hospital settings, which will allow the facility to perform the procedures at a significant discount

3.7.2. Marketing / Promotion Strategy

Advertisements	▪ Awareness campaigns, billboards, flyers and pamphlets to create awareness about the unique benefits of the PSC for routine procedures for children ▪ Advertisements will also focus on the quality offered by the PSC by virtue of the noted / celebrated pediatric surgeons who will be working at the PSC
Peer to peer	▪ Peer to peer / word of mouth communication is one of the most impactful channels for the PSC to propagate value proposition related to quality and ease of experience ▪ Thus, it is vital for the PSC to ensure the best possible patient care experience across all touch points of the patient for EVERY patient

Direct Marketing	▪ Direct marketing to insurance companies to ensure coverage within their network and to demonstrate the value offered by the PSC compared to inpatient settings

3.7.3. Collaboration and Partnering

Partnership with MoH (public) Facilities	▪ PSC should consider entering into a "Private Sector Participation" agreement with the MoH / Central clusters to drive potential outpatient pediatric procedures from within their hospitals to the PSC ▪ MoH hospitals would be able to address their current high levels of occupancy rates and long waiting times for procedures ▪ Given the ambition of MoH health systems to move care outside of the hospital and to the private sector, this could be a potentially significant source of customers for the PSC
Partnership with Global Institutions / Global Experts	▪ Partnership with world renowned clinics to bring in their expertise and skills to the PSC would help not only in branding, but also in delivering a much more superior experience and quality to the customers compared to the competition.

3.7.4. Market Entry Barriers

Regulatory barriers	▪ Some regulators do not allow some of the procedures to be performed in outpatient settings, which might especially be the case with pediatric procedures in KSA ▪ Obtaining a license to perform procedures on pediatric patients in outpatient settings is a high risk proposition which will limit the number of licenses that will be issued by the regulator
Market size barriers	▪ Competitors such as Sulaiman al Habib would find more attractive and lucrative markets in addressing adult outpatient procedures and will not invest considerably to corner the niche pediatric surgery market

3.8. Company Description

3.8.1. Vision, Mission and Objectives

Vision:
Become #1 specialized pediatric day surgery center in Middle East region and be known as the center of excellence for providing pediatric care in a personalized and compassionate manner.
Mission:

Provide effective, high quality, safe day surgery experience for the children and the parents that is affordable and delivers a relatively enhanced experience compared to traditional care settings.

3.8.2. Legal framework

PSC will be setup as a Limited Liability Corporation (LLC). The shareholders of the company will be liable for the debts of the facility only to the extent of their respective interests in the shares of the company.
In KSA, an LLC requires a minimum capital investment of SAR 500,000 (USD 138,000). Setting up an LLC company in Saudi Arabia must have a minimum of two and no more than fifty shareholders and is managed and represented by one or more managers. There is no necessity for any manager to be a Saudi national (Omnia Health).

3.8.3. Ownership

Given the requirements of the LLC formation in Saudi Arabia, the ownership of the PSC will be held by three individuals from the family of Abdullah Alduraibi, including the abovementioned person.
Dr. Abdullah Alduraibi will retain 51% of the ownership of the organization and will fund 51% of the total capital expenditure required to setup the facility. Additional shareholders will have shares within the 49% in proportion to their contribution to the capital expenditure involved in setting up the facility.

3.8.4. Board of Governors

The governing board will be configured to reflect the PSC's ownership. The Board will consist of the following members:

- Abdullah Alduraibi (owner) – has 51% voting rights
- Family members (shareholders) – have collective voting rights for 49%
- Independent Governors (from leadership of other hospital groups)
- CEO (management representative)
- Head of Operations (Secretary)

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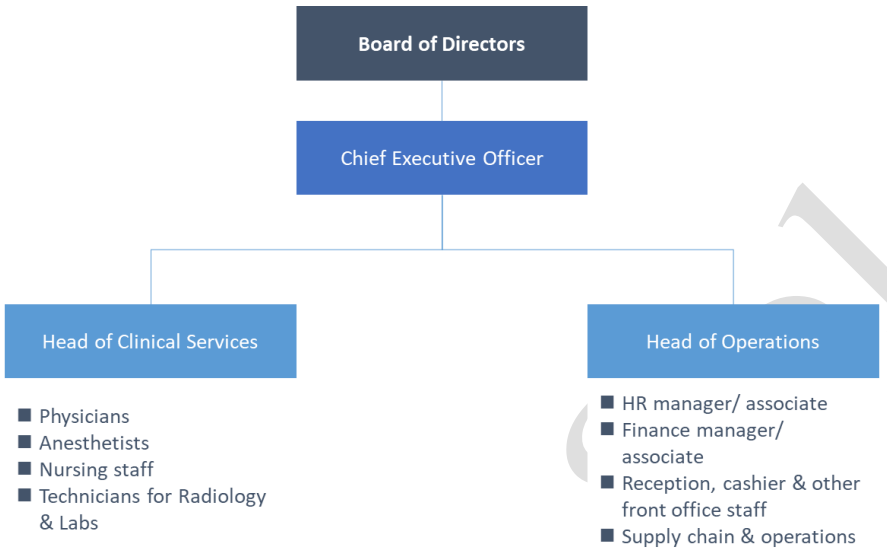
3.8.5. Location and Facilities

3.9. Organization and Management

3.9.1. Organization Structure



3.9.2. Resourcing Requirements

Key resource requirements:

Types of resources required	PSC resourcing strategy
Pediatric surgery consultant	Surgeons are offered choice to take fixed contract for lower salary or flexible contract for higher per case salary
Pediatric anesthesiologist	Full-time hire (3 FTEs)
Pediatric surgical nursing expertise	Nursing resources hired on full-time basis (scaled gradually with # of cases)
Pediatric radiologist consultant	Initially outsourced and hence are not required
Radiology and lab technicians	
Administrative staff	Covering all admin functions including HR, Finance, Supply Chain, Quality, etc. led by the Head of Admin Operations

Additional resources required:

- 1 ICU bed with capability for pediatric care
- Ambulance service to transport critical cases to nearest hospital (Contract)
- Pediatric resuscitation in all areas
- HIS / EMR software for clinical functions and cloud-based subscription for admin / operational functions.

3.10. Service Portfolio

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3.10.1. Procedures covered

(General Surgery) Day Surgery procedures	(ENT) Day Surgery procedures
Inguinal hernia Repair	Adenectomy
Bilateral Inguinal hernia Repair	Tonsillectomy
Orchidopexy (Open)	Tonsillectomy and Adenectomy
Bilateral Orchidopexy (Open)	Myringotomy with Tube Insertion
Laparoscopic Orchidopexy	Myringoplasty and Tympanoplasty
Glandular Hypospadias	Functional Endoscopic Sinus Surgery
Distal Hypospadias	Nasal Endoscopy with cautery
Circumcision (< 3-month-old or > 3-month-old)	Nasal Endoscopy with culture
Hydrocoele Repair	
Varicocelectomy (Open or Laparoscopic)	
Superficial lymphadenectomy Biopsy	
Laparoscopic cholecystectomy	
Abscesses (Superficial, perianal and pilonidal cyst)	
Excision of Branchial sinuses, cysts and fistulas	
Thyroglossal cyst excision	
Simple Mass or Lump Excision	
Non complicated Appendectomies	
Ankyloglossia (Tongue-tie)	
Ranula	

3.10.2. Core Competence

Our Pediatric Surgery Center will be designed to meet both emotional and medical needs of children and their families before, during and after the day surgery procedure. We will focus on the overall environment of the facility to reduce a child's anxiety and help them recover faster. The stand-alone facility will also help reduce medical complications and psychological trauma. Starting with the cheerful decor and child-sized surroundings going all way up to specially trained staff of pediatric surgeons & nurses to family-friendly policies on visitation, the PSC will be a reflection of the commitment to providing the best possible environment for the physical, social and psychological well-being of the child and its family.

What makes our PSC different?

- Entire staff specializing in pediatric care, including pediatric CPR

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- Family waiting room that allows parents to wait, relax, and recharge with the ability to tack their child
- "No ouch" policy meaning all IVs, injections and shots being done after administration of general anesthesia
- 0% infection rate
- Allowance for children to wear their own clothes and shoes during the procedure
- Faster and more efficient discharge process with follow-up care protocols at home

PSC will be a self-contained day surgery center away from the site of an inpatient and will be "free-standing". With appropriate systems in place, PSC will be able to undertake the same range of surgery as those on hospital sites. Compared to a self-contained unit on a hospital site, free-standing PSC will:

- Pose fewer risks of hospital-acquired infection
- Ensure a faster turnaround of cases
- Deliver higher patient satisfaction

However, compared with on-site hospital facilities, it will require stand-alone infrastructure including larger storage space, own sterilizing facilities and sterilized laparotomy and thoracotomy sets for immediate use in case of an emergency. It must also have immediate access to beds in an inpatient hospital and transport (with portable ventilator and resuscitation equipment) that can move seriously ill patients to them.

3.11. Financials

3.11.1. Revenue and cost assumptions

The following assumptions were considered to develop the business plan for the French-Saudi Pediatric Surgery Center, across revenue, cost, manpower and valuation related parameters.

Assumptions	Units	Value	Sources / Comments
Revenue assumptions:			
No. of operating rooms	#	3	Two operating rooms + 1 procedural room
# of day surgery cases per year per operating room	#	1,000	Based on benchmarks published by Becker's Hospital Review
Total # of procedures per year at maturity	#	3,000	
Average price of a day surgery procedure in KSA	SAR	7,153	Based on case mix and average price in KSA for different day surgeries
Price discount compared to a hospital	%	20%	Price discount applied by payers for surgeries done in outpatient settings
Bad payments	%	5%	
No. of years to full capacity		2	
CAPEX assumptions:			
Total square footage required per operating room	sq. m.	371	Based on ASC guidelines
Land cost per sq. m.	SAR	3,750	Based on price quotations from vendors
Construction cost per sq. m.	SAR	1,000	Based on price quotations from vendors
Estimated equipment cost (medical + non-medical)	SAR M	8.0	Based on price quotations from vendors

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Total construction cost	SAR M	12.62

OPEX assumptions:

			FTEs	
Pediatric surgery consultant salary	SAR/y	500,000	3	Or outsourced / on contract basis with best pediatric consultants for case margin share of 50%
Pediatric Anesthesiologist salary	SAR/y	420,000	2	
Certified registered nurse anesthetist	SAR/y	-	0	
Registered nurse	SAR/y	72,000	12	
Admin staff (receptionist, HR, Finance, Store)	SAR/y	96,000	10	
Head of Admin Staff	SAR/y	150,000	1	
Cost of medical consumables and supplies	%	20%		Becker's Hospital Review benchmarks - as % of revenue

Valuation assumptions:

WACC	%	15%	
Debt/Equity ratio	#	0	Completely self-financed (no debt raises)

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3.11.2. Summary Financial Statements

Income statement:

P&L Statement	Units	Assumption	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
# of day surgery cases per year	#		-	-	750	1,500	2,250	3,000	3,000	3,000	3,000	3,000
Inflation rate	%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Average price per day surgery case	SAR		6,294	6,420	6,549	6,680	6,813	6,949	7,088	7,230	7,375	7,522
Gross Revenue	SAR M		-	-	4.91	10.02	15.33	20.85	21.27	21.69	22.12	22.57
Bad payments / claims rejections	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Revenue leakage	SAR M		-	-	-	-	-	-	-	-	-	-
Net Revenue	**SAR M**		**-**	**-**	**4.91**	**10.02**	**15.33**	**20.85**	**21.27**	**21.69**	**22.12**	**22.57**
Labor cost	SAR M		-	-	2.09	2.84	2.89	2.95	3.01	3.07	3.13	3.19
Anesthetist cost	SAR M	0.80	-	-	0.62	0.85	0.86	0.88	0.90	0.92	0.93	0.95
Nurse cost	SAR M	0.82	-	-	0.64	0.87	0.89	0.91	0.92	0.94	0.96	0.98
Administrator cost	SAR M	0.14	-	-	0.11	0.15	0.15	0.16	0.16	0.16	0.17	0.17
Administration cost (G&A, sales, marketing)	SAR M	0.91	-	-	0.71	0.97	0.99	1.01	1.03	1.05	1.07	1.09
Cost of supplies	SAR M	15%	-	-	0.74	1.50	2.30	3.13	3.19	3.25	3.32	3.39
Cost of sles (except physician cost)	**SAR M**		**-**	**-**	**2.82**	**4.34**	**5.19**	**6.08**	**6.20**	**6.32**	**6.45**	**6.58**
Operating profit	**SAR M**		**-**	**-**	**2.09**	**5.68**	**10.14**	**14.77**	**15.06**	**15.37**	**15.67**	**15.99**
Operating margin (EBITDA)	**%**				**42.5%**	**56.7%**	**66.1%**	**70.8%**	**70.8%**	**70.8%**	**70.8%**	**70.8%**
Depreciation cost	SAR M	10	-	0.95	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26
EBIT	**SAR M**		**-**	**- 0.95**	**0.83**	**4.42**	**8.87**	**13.51**	**13.80**	**14.10**	**14.41**	**14.72**
EBIT margin	**%**				**16.8%**	**44.1%**	**57.9%**	**64.8%**	**64.9%**	**65.0%**	**65.1%**	**65.2%**
Interest cost	SAR M	-	-	-	-	-	-	-	-	-	-	-
Tax (Zakat)	SAR M	2.5%	-	-	0.02	0.11	0.22	0.34	0.35	0.35	0.36	0.37
Profit per case	SAR				1,074	2,871	3,846	4,390	4,486	4,584	4,684	4,786
Share of case margin for pediatric surgeons (per case)	SAR	50%			537	1,436	1,923	2,195	2,243	2,292	2,342	2,393
Cost of pediatric surgeons	SAR M				1.50	2.15	4.33	6.58	6.73	6.88	7.03	7.18
Net profit	**SAR M**		**-**	**- 0.95**	**- 0.69**	**2.15**	**4.33**	**6.58**	**6.73**	**6.88**	**7.03**	**7.18**
Net margin	**%**				**-14%**	**21%**	**28%**	**32%**	**32%**	**32%**	**32%**	**32%**

Pro-forma Income statement for the business for the period of 2021 to 2020 with the following key assumptions:

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- Years 1 and 2 are the years of construction and Year 3 is the first year of commissioning of the new facility
- Scale of the facility is ramped up gradually until steady state is reached in Year 6 with all 3 operating rooms at capacity
- Resources are always considered as discrete units – added in discrete numbers as the case volume grows

Cashflows and NPV calculation:

Cash flows & NPV

Cash flow from operations	SAR M		-	-	0.57	3.42	5.59	7.85	7.99	8.14	8.29	8.44
Terminal value	SAR M											64.93
Capital investment in infrastructure	SAR M		- 12.62									
Free Cash Flows	SAR M		- 12.62	-	0.57	3.42	5.59	7.85	7.99	8.14	8.29	73.37
Discount value			1.00	0.87	0.76	0.66	0.57	0.50	0.43	0.38	0.33	0.28

PV of cash flow operations	SAR M	21.39
PV of terminal value	SAR M	18.46
Total Net Present Value	**SAR M**	**27.23**

WACC	SAR M	15%	Opportunity cost of investing in healthcare provider organization
Growth rate	%	2.0%	
IRR	%	35.8%	

- NPV for the French-Saudi Pediatric Surgery Center is estimated at SAR 27.2M based on a high discount rate of 15% (based on comparable returns for private healthcare organization owners in KSA)
- Terminal cash flows calculated based on the growth in the cash flows once the steady state operations are reached
- The resulting cashflows incorporating time value of terminal value and capex investments yield a very promising IRR of 35.8% for the PSC in the base case scenario

Scenarios Defined:

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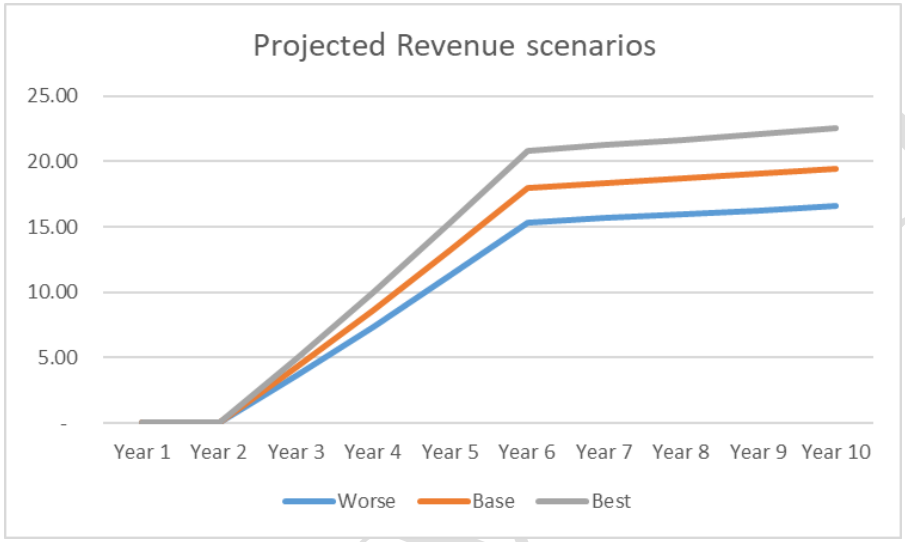
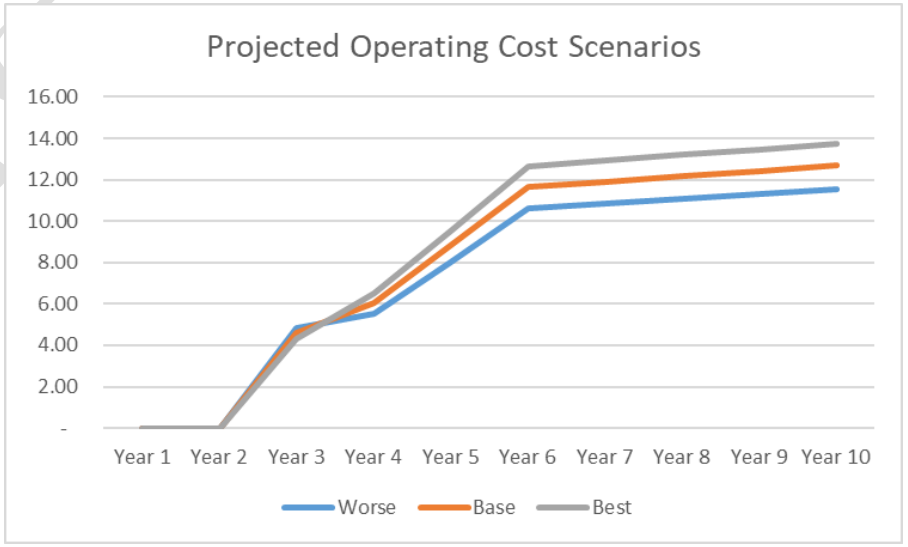
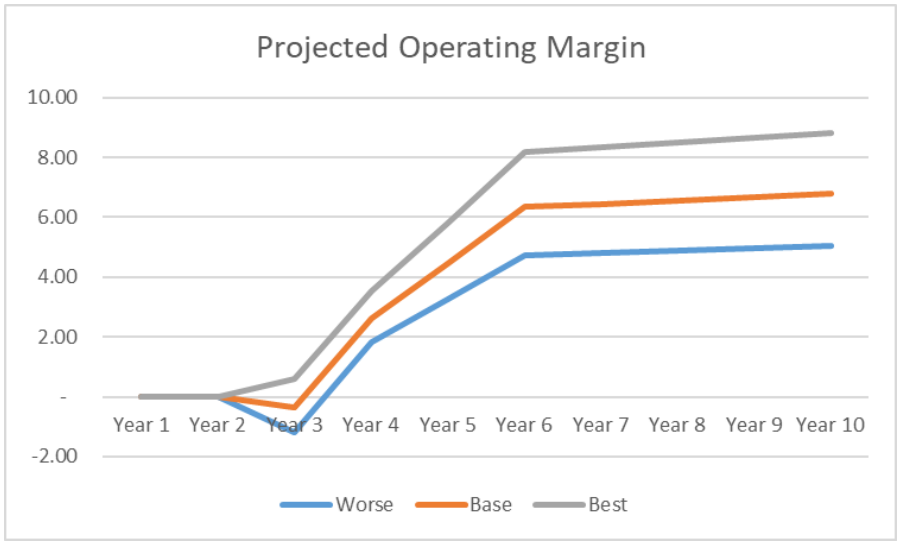
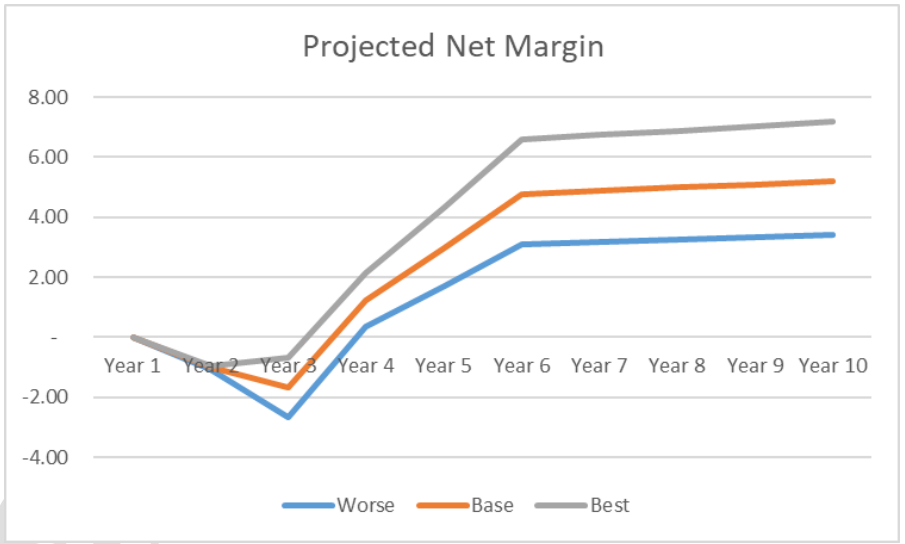
Scenario Analysis				
Scenario Description	**Selected**	**Worse**	**Base**	**Best**
Average price for day surgery	10%	-10%	0%	10%
Price discount applied by payers	0%	10%	0%	-10%
Bad payments	0%	10%	5%	0%
Salary costs	-5%	5%	0%	-5%
Supplies costs	-5%	5%	0%	-5%
Construction cost	-5%	10%	0%	-5%

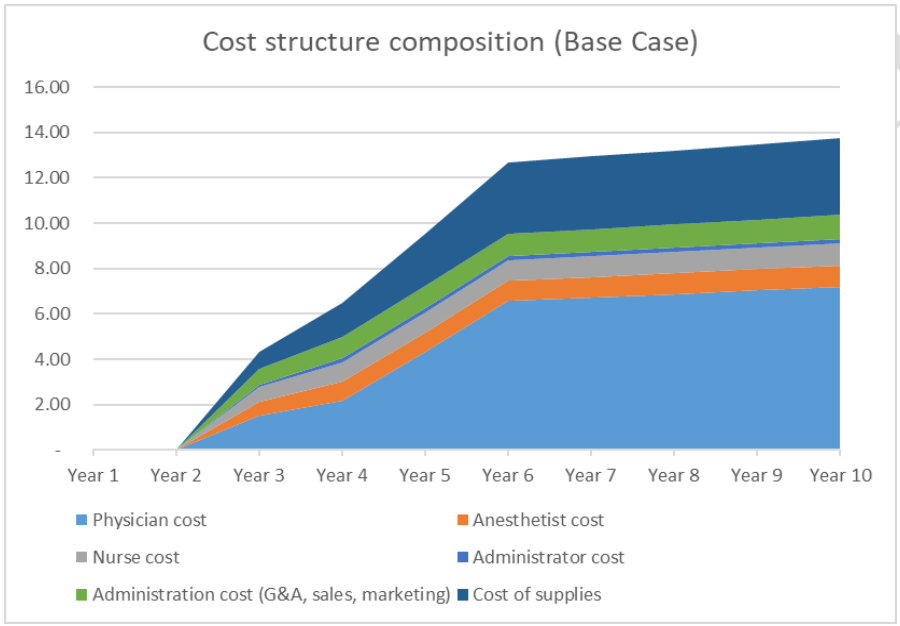
3.11.3. Key charts

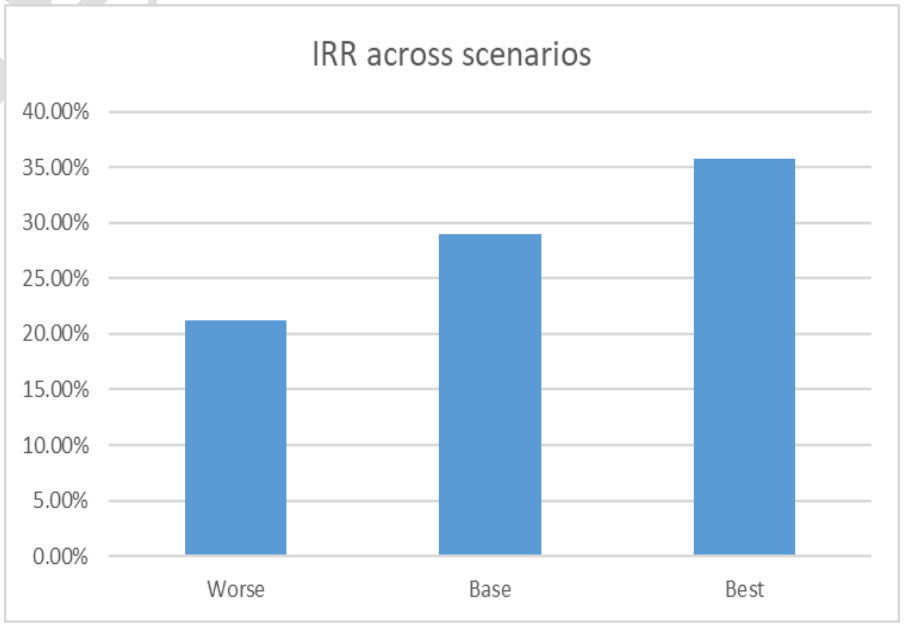





Projected Operating Margin
10.00
8.00
6.00
4.00
2.00
-
-2.00
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year 9
Year 10
Worse
Base
Best


Projected Net Margin
8.00
6.00
4.00
2.00
-
-2.00
-4.00
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year 9
Year 10
Worse
Base
Best


Cost structure composition (Base Case)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
-
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year 9
Year 10
Physician cost
Anesthetist cost
Nurse cost
Administrator cost
Administration cost (G&A, sales, marketing)
Cost of supplies


IRR across scenarios
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
Worse
Base
Best

3.12. Risks

3.12.1. Key Risks and Mitigation Measures

Type of risk	Risk Description	Mitigation Measure
Market	Inability to effectively recruit the right number of surgeons and cases	Built around a core group of physicians and/or hospitals
Resources	Inability to obtain appropriate commitments from partner surgeons	Provide attractive and supportive work environment, e.g. paying good incentives and respect
Competition	Competition and client brand fidelity	Market demand analysis and client reward schemes
Financial	Resource expenditure, frontload investment and overbuilding	Accounting and realistic budget values
Technology	Firmware and software infrastructure and network restraints	Dedicated IT specialist for set-up and maintenance
HR	Overstaffing and interpersonal relations and management	Full staff integration and selective hiring policies
Legal	Defense for litigation and government-sanctioned practice licenses	Legal representation assets and ISO certificates
Reimbursement	Poor billing and collection practices	Assure that the project is well-managed and well-thought out

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Appendix

Ministry of Health Data on Surgical Procedures conducted in hospitals in 2018:

Region	Pediatric surgery	Other surgeries	Total surgeries
Riyadh	11,516	265,215	276,731
Makkah	2,027	47,114	49,141
Jeddah	3,702	148,162	151,864
Ta`if	1,462	34,691	36,153
Medinah	2,929	68,142	71,071
Qaseem	1,917	47,905	49,822
Eastern	4,445	113,449	117,894
Al-Ahsa	1,004	41,716	42,720
Hafr Al-Baten	1,190	13,872	15,062
Aseer	2,664	63,621	66,285
Bishah	319	9,606	9,925
Tabouk	582	17,025	17,607
Ha`il	455	22,635	23,090
Northern	851	20,859	21,710
Jazan	325	34,487	34,812
Najran	628	24,125	24,753
Al-Bahah	1,038	17,311	18,349
Al-Jouf	508	7,288	7,796
Qurayyat	286	6,006	6,292
Qunfudah	150	3,760	3,910
Armed Forces Medical Hospitals	4,804	95,789	100,593
National Guard	1,142	66,043	67,185
Security Forces Hospitals	1,956	21,763	23,719
KFSH&RC	2,148	33,723	35,871
Royal Commission Hospitals	275	6,538	6,813
Aramco	795	8,667	9,462
Ministry of Exterior	1,533	45,499	47,032
Total	**50,651**	**1,285,011**	**1,335,662**

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