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We Care

Case Study 04: OPERATING ROOMS

# Faster access to surgery



JHAH's five-year Clinical Services Plan  
Transformation Project 3Ci

Project Champion  
Dr. Fahd Al Gurashi



مركز جونز هوبكنز  
أرامكو الطبي  
Johns Hopkins  
Aramco Healthcare



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### Project Details



#### The Objective

- To increase Operating Room (OR) productivity to serve more patients.

#### The Priorities

- To grow activity and undertake 10,000 OR cases annually.
- To optimize access to consistently achieve wait time targets.
- To improve efficiency to treat more patients.

#### The Timeline

- **Project kick-off:** January 2023.
- **Project closure:** Continuing.

#### The Project Team

##### Champion:

- Dr. Fahd Al Gurashi

##### Team members:

- Dr. Abdulaziz Abidi
- Sana Amoudi
- Gerda Koopman
- Hamza Mohammed
- Narmeen Talalwah
- Saad Walah
- Wissam Zein

#### For more information

fahd.gurashi@jhah.com

### About the Clinical Services Plan



Johns Hopkins Aramco Healthcare (JHAH) serves more than 140,000 Aramco employees, their relatives and retirees with a comprehensive range of inpatient and outpatient services. JHAH has carried forward the legacy set by Saudi Aramco of healthcare for all, putting caring for its community at the heart of everything it does.

In 2023, JHAH launched its five-year Clinical Services Plan (CSP). The CSP was developed in response to changing patient expectations and the realization that JHAH must evolve if it is to survive and thrive. The Plan's vision is that JHAH will become the Kingdom's first choice for outstanding integrated healthcare.

The CSP contains 16 strategic objectives to deliver against five goals (service excellence, access, people, sustainability and reliability), and is supported by four delivery principles (accountability, pace, pragmatism and outcomes).

'Operating Rooms' was included under Objective #3 in the CSP.

### Project Background



The Operating Room (OR) service is arguably the most important within any large hospital, handling everything from biopsies to bypasses to cholecystectomies to the removal of carotid artery blockages.

Patients referred for surgical operations may understandably feel stressed and concerned. Long waiting times not only exacerbate this anxiety but can mean underlying medical conditions worsen. For this reason, it is incumbent on any leading hospital provider to do everything in its power to increase capacity and access.

In 2022, emerging from the Covid pandemic, JHAH identified that the number of patients being referred for surgical procedures was rising. This challenge remains evident in hospitals across the world, driven by an

aging population, more proactive clinical care and new treatment technologies.

At JHAH, the pressure on OR is further exacerbated by local factors – firstly, patients being referred back to JHAH from third-party hospitals in its Provider Network, and secondly as the hospital pursues its strategic goal of opening services to the general public, rather than being limited to Aramco employees and their dependents.

JHAH recognized its Operating Room capacity was not keeping pace with patient demand. Without an increase in capacity, this was causing an unacceptable lengthening in backlogs and waiting times.

Dr. Fahd Al Gurashi, Chair of the Department of Anesthesiology and Critical Care, was asked to champion a team that would develop and implement a wide-ranging plan to optimize OR activity, with the long term goal of achieving 10,000 operations each year, from a baseline of around 7,500.

## Project Delivery



The first priority for the project team was to agree a clear scope. Since the vast majority of JHAH procedures take care at its main Dhahran hospital, it was decided to focus the analysis and recommendations at that location, while being alert to any spinoff benefits for the OR service at the company's other major facility at Al Hasa.

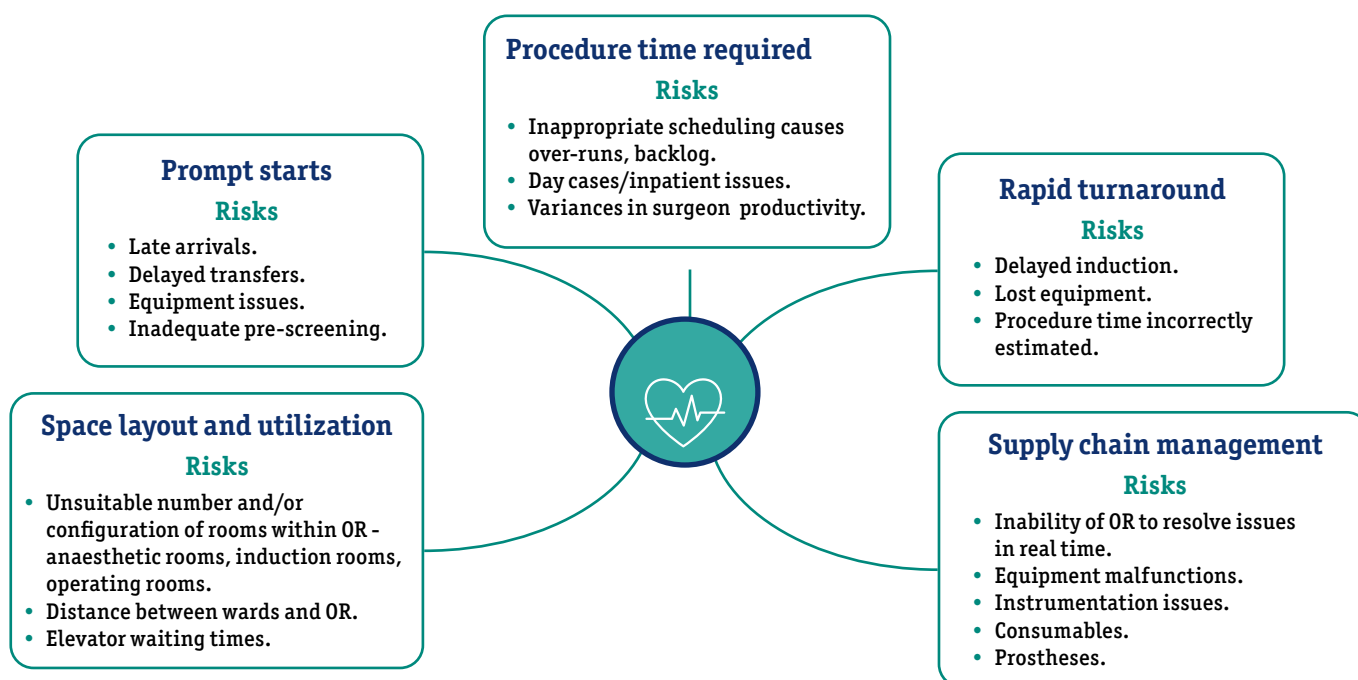
In Dhahran, the key elements of the service are:

- Ten operating theaters, with an 11th reserved for emergencies.
- Some 85 percent of its caseload is elective surgery, with 15 percent being emergency surgery.
- A wide range of procedures, from high-risk surgeries to elective procedures, and covering orthopedics, cardiovascular, ENT, neurosurgery, ophthalmology, cosmetic surgery, pediatrics, dental, oncology, colorectal, urology, gynecology and bariatric surgery.
- Deployment of the DaVinci robotic surgical system.

After being appointed project champion, Dr. Fahd Al Gurashi created a collaborative, multidisciplinary team. This team comprised nursing and other healthcare providers, operations staff and administrative personnel.

The next tasks were to assemble an evidence base of performance data, and to map the patient journey from booking, to scheduling, to the day of surgery and then the post-op pathways. Johns Hopkins Medicine (JHM) was another valuable source of ideas for new or different practices. The JHAH perioperative service took part in the Knowledge Transfer Program with JHM that involved an on-site assessment and monthly video conferences – leading to a series of recommendations about block scheduling, efficiency, and material and cost management. Each of the key success factors in driving OR efficiency were objectively assessed and benchmarked (see Figure One).

Figure One: Key success factors in OR efficiency



Source: Greybeard Healthcare OR efficiency report.



Options were assessed for how each stage of the process could be streamlined – in particular, turnaround times and surgeon scheduling. It was quickly realized that punctuality and capacity were vital levers in optimizing activity. After assessing the impact on capacity, workforce planning and cost, these options were translated into practical recommendations.

## The Change



A 12-month change program was developed and improved. The enablers included:

- Morning and weekly huddles to resolve short-term issues including patient lateness; prior day calls to patients were instituted as ‘gentle reminders’.
- A dashboard was built to track the throughput of the operating rooms and the activities of the staff in real-time.
- The dashboard information was shared on daily and monthly OR scorecards as well as displayed prominently on a screen for full visibility by all OR staff.

To achieve these changes, the team worked closely with numerous departments, including clinical informatics, human resources, finance and supply chain.

Whenever a monthly target was met, the team hosted a pizza lunch for OR staff, attended by the Chief of Staff and Chief Nursing Officer. In addition, gift cards and certificates were awarded to anyone who had made a meaningful contribution to meeting targets. In a high pressure environment, small measures such as these made a big difference in boosting morale and maintaining momentum.

## Lessons Learned



The OR transformation has been a valuable journey, with the team taking inspiration from multiple sources.

One of the most significant lessons involved employee engagement; the team was determined to be on the front foot in communicating the changes, explaining the benefits and addressing any concerns.

Dr. Al Gurashi acknowledges that initial resistance was to be expected. “It’s important to address concerns by engaging with people and openly sharing the information that’s being used to make changes. Celebrating successes helped keep everyone energized.” These changes required the commitment of the entire department and could not

have been accomplished if the project team had worked in isolation.

The team recognized they had to earn trust not demand it; it was vital to continually stress ‘why’ changes were being made, as well as ‘what’ and ‘how’.

“You need to roll your sleeves up and people will follow. You cannot do this from the office and order people to do it,” explains Dr. Al Gurashi.

Underpinning all these experiences was that success breeds success. Dr. Al Gurashi adds: “As people saw positive results from the early efforts, they were more willing to contribute their own ideas for how we could take the changes a step further.”

## The Outcome

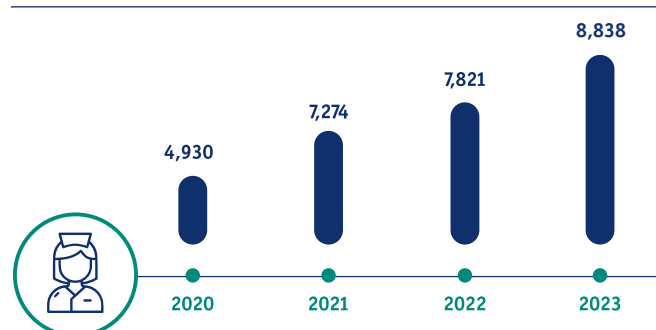


The volume of operations increased rapidly, reaching a record high within one month of the changes being implemented. Importantly, this was achieved without any detriment to the quality of care or patient outcomes.

Since January 2023, the team has consistently beaten its target of 720 operations every month (except during Ramadan and Eid Al-Fitr), with a record number of 897 operations being conducted in October 2023 (the growth rate since 2020 is shown in Figure Two). The same month also saw the service achieve its ‘start on time’ target of 90 percent, a level that has been sustained ever since.

The final element has been a reduction in turnaround times (from 23 to 20 minutes), achieved through clearer responsibilities and processes.

Figure Two: Operating Room procedures



JHAH’s goal is to continue treating more patients by driving world-class OR productivity. Having optimized the detailed processes, the team is currently modelling the impact of further capacity enhancements – including an increase in the number of OR rooms from ten to 12 within the next 18 months.



## About the Project Champion



### **Dr. Fahd Al Gurashi**

Dr. Al Gurashi is an Anesthesia Consultant, Chair of the Department of Anesthesia and Critical Care at Johns Hopkins Aramco Healthcare.

He was educated at King Abdulaziz University, Jeddah (Bachelor of Medicine and Bachelor of Surgery), Royal College of Physician and Surgeon of Canada Anesthesia Residency Program, University of Manitoba and the College of Business Administration, The University of Tennessee (Physician Executive MBA Program).

Before joining JHAH, he was Medical Director of the Obstetric Anesthesia Fellowship Program, Manager of the Obstetric Anesthesia Division at the Department of Anesthesia at the University of Manitoba, Winnipeg, Canada.



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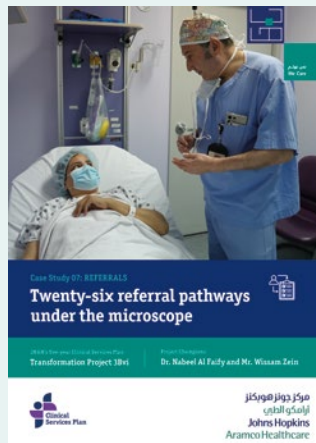
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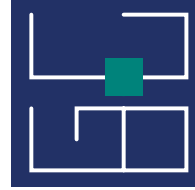


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**Note:** Additional CSP case studies are constantly under development. Please email or call your JHAH contact for information on future editions.

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This case study is one in a series that showcases stories from implementation of the JHAH Clinical Services Plan (CSP). The JHAH Board approved the CSP in June 2022. It is an ambitious multiyear program to enhance and modernize a wide range of clinical activities. For more information about the CSP or any projects included in the program, contact the CSP Program Management Office: pmo@jyah.com.



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