HCA Robotic Footprint: *Leveraging our Size & Scale*

Robotic Technology
- 647 total robots
- 157 acute facilities
- 117,000+ cases in '21
- 19 surgical platforms
- 15 surgical specialties

1st in the World
- da Vinci Xi
- Single-site cholecystectomy & hysterectomy
- Robotic stapler
- 100,000+ cases in a single year
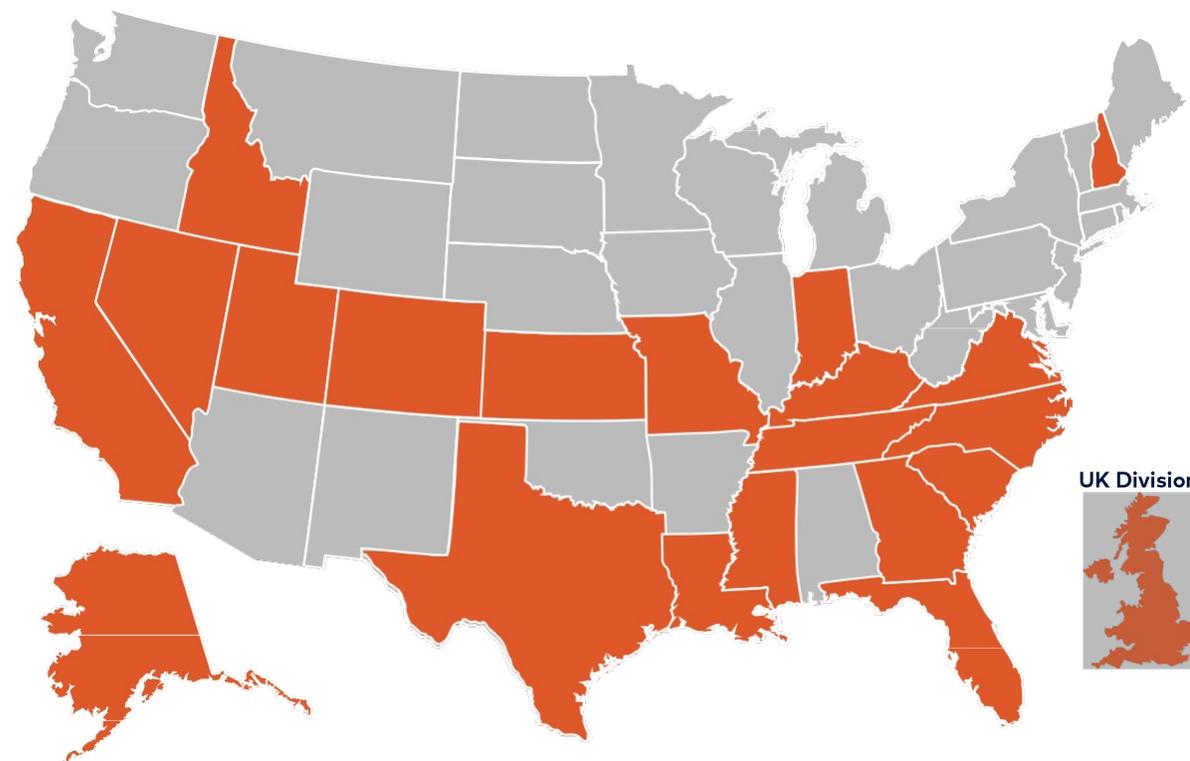
Specialty	Company	System	Qty	Acute	UK	ASC
CV	Corindus	CORPATH	6	6	0	0
Cranial / Neuro	Zimmer	ROSA	2	7	0	0
	Synaptive	MODUS	3			
	Insightec	EXBLATE	2			
Pulmonary	Auris/JNJ	MONARCH	17	35	0	0
	Intuitive	ION	18			
Spine	Medtronic	MAZOR	38	76	1	0
	Globus	EXCELCIUS	24			
	Augmedics	XVISION	14			
	Accelus	REMI	1			
Orthopedics	Stryker	MAKO	79	118	2	5
	S&N	NAVIO/CORI	16			
	Zimmer	ROSA	24			
	J&J/DePuy	VELYS	5			
	Omni	OMNIBOTICS	1			
Multi-Surgical	Intuitive	Xi	388	384	7	2
		SP	5			
Other	Memic	HOMINIS	1	4	0	0
	Procept	AQUABEAM	3			
as of January 2022			647	630	10	7

UK Division

HCA Robotics: *Enterprise Performance*

Robotic-assisted surgery is a **strong growth** driver, especially in **General Surgery** and **Orthopedics**

Enterprise Wide: (2021)

- **+3,900 bps (39%)** advantage in growth & **+1,500bps (15%)** advantage in commercial mix vs. same non-robotic procedures

daVinci (PPY)

- General Surgery remains the largest growth driver at **+75% of total growth**
- **Bariatric surgery** leads at **+92%** growth (IP/OP) with **85% of cases IP**
  - Accounts for 21% of overall GS growth
- Commercial/Managed Care Mix: **59%** robotic vs **42%** non-robotic procedures
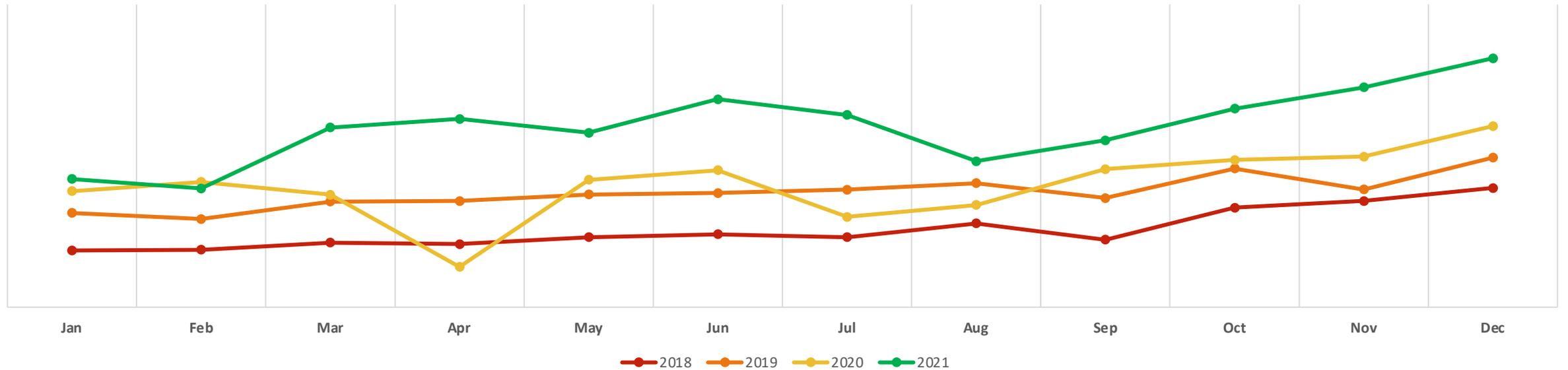
Robotic Surgical Mix (2020)

HCA Gulf Coast Division
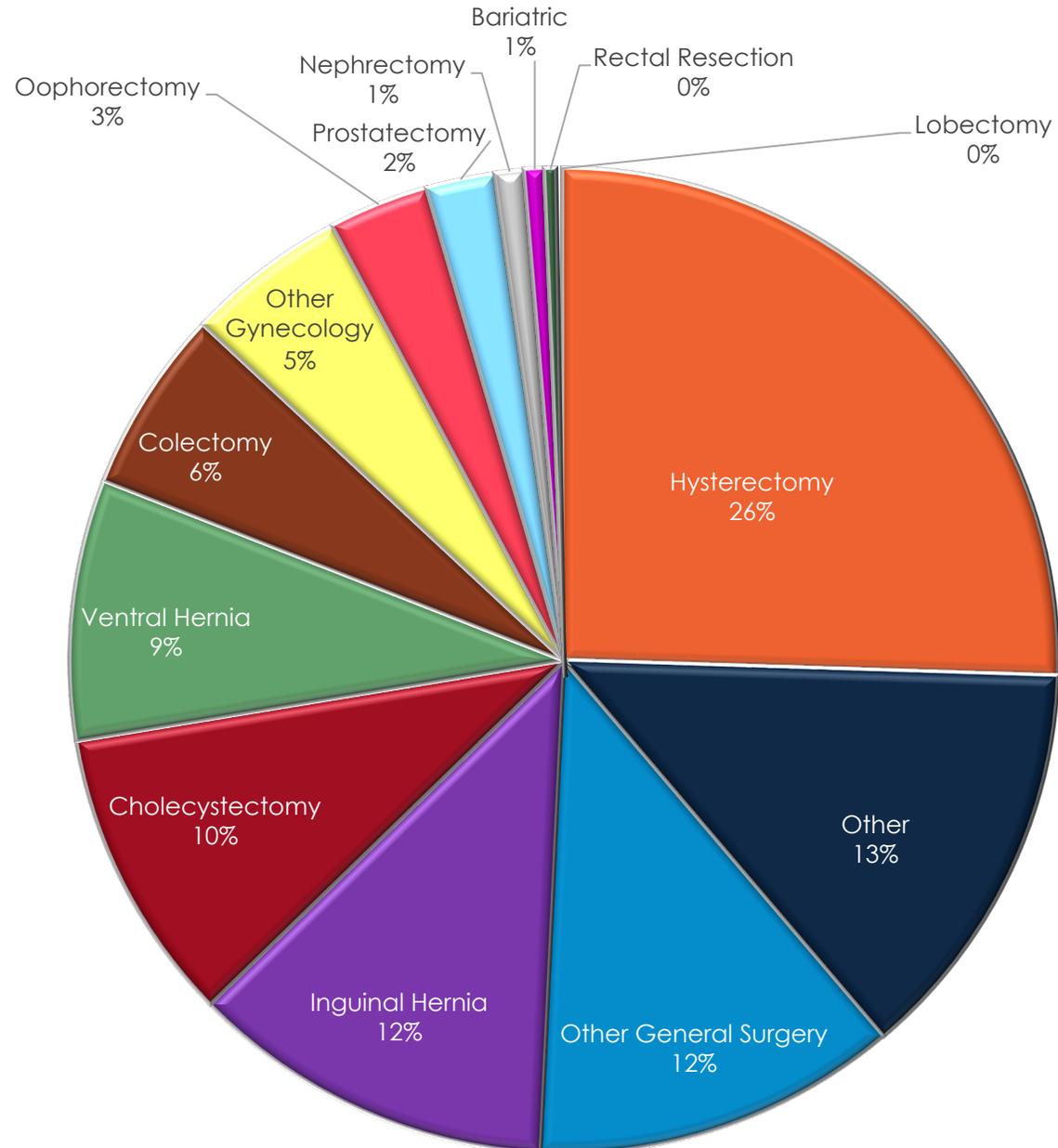
2021 YEAR END PERFORMANCE

KPI		YTD/YTD Variance %
Volume	Volume	▲ 46.7%
Net Revenue	Net Rev - Overall	▲ 52.9%
Cost	Dir Cost per Case	▲ (0.1)%
Contribution Margin	Contrib Marg - Overall	▲ 59.8%
	Contrib Marg per Case	▲ 9.0%

46 Active Robotic Systems (53 total systems)

87% Elective
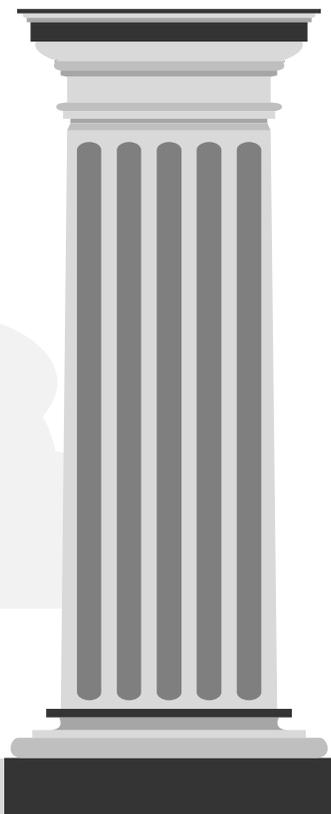
CAGR 30%

- 2018: 3,891
- 2019: 5,464
- 2020: 5,819
- 2021: 8,582

Legend: ● 2018 ● 2019 ● 2020 ● 2021

Months: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
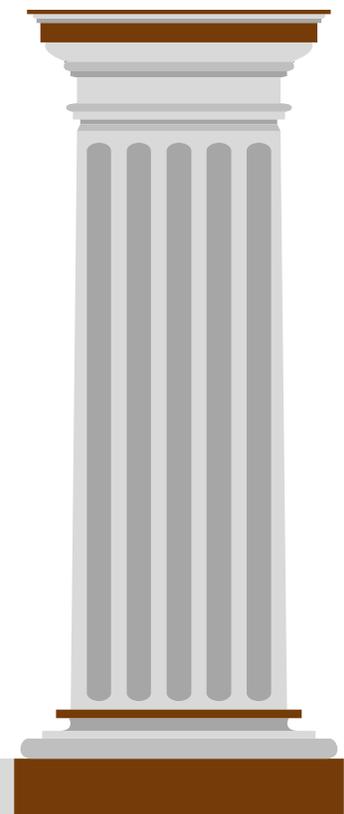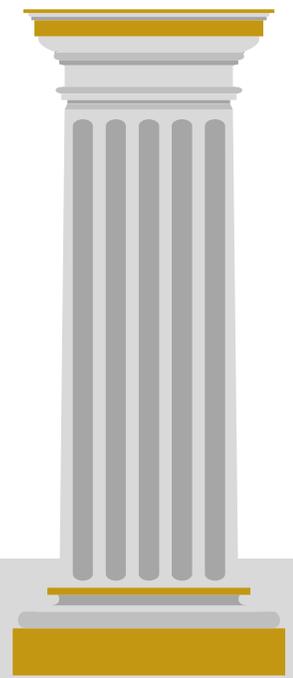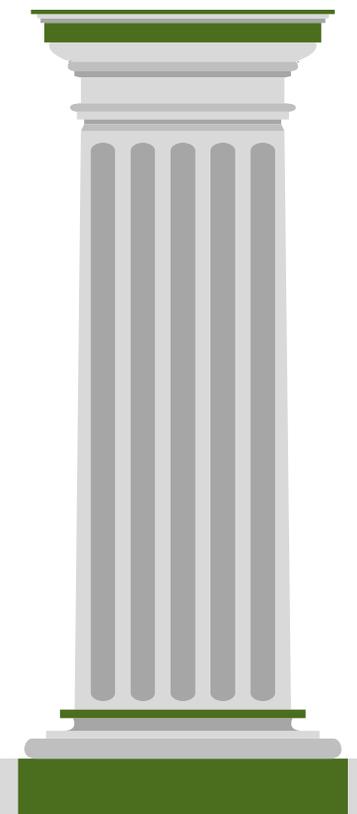
Today's Goals
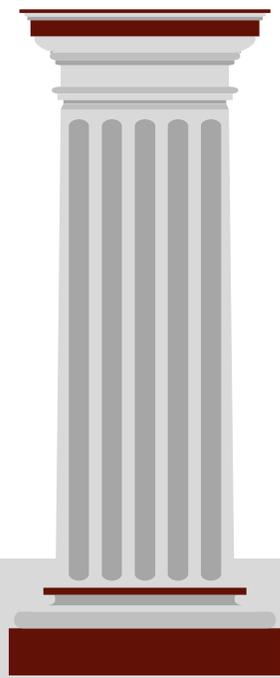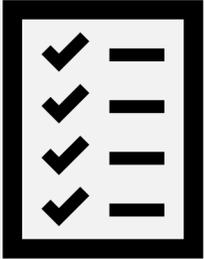
1
- Lay the foundation for the development of the Robotic Service Line at HCA Hospital X
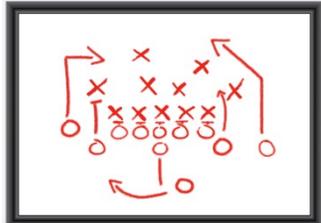
2
- <mark>Introduce and emphasize the importance of the "Playbook"</mark>
- Establish ourselves as a resource for developing structure

3
- Provide initial next step recommendations
- Develop the timeline for delivery of thorough Recommendations for Success plan
- Launch HCA Hospital X on a path to excel within the GCD

Robotic Playbook

Best practice toolkit driven by key pillars proven to drive operational excellence and strategic growth

- **Executive lead** – *identified lead with visibility in robotics council meetings*

- **Robotics Coordinator** – *responsible for operations in all robotic ORs; problem solver, data driven with administrative time allowing for data review & report outs*

- **Surgeon Champion** – *leads by example; engaged in growth of facility robotic program*

- **Ongoing Data Review** –
  - *Robotic utilization*
  - *OR efficiency : FCOTs, Turnaround time, Cut to close*
  - *Volume*
 - *Staff training & touchpoints*

GCD Highest Playbook Compliance and Fastest Growing Robotic Programs

CAGR

★ New robot

16.5%   23.8%   21.1%   20.3%

Hospital 1   Hospital 2   Hospital 3   Hospital 4

■ 2018 ■ 2019 ■ 2020 ■ 2021

Opportunity Programs

CAGR

★ New robot

-4.2%   -1.9%   5.7%   11.4%

Hospital 1   Hospital 2   Hospital 3   Hospital 4

■ 2019 ■ 2020 ■ 2021

Leadership

Executive Sponsor

Surgeon Champion

Robotic Coordinator

OR Director & Anesthesia
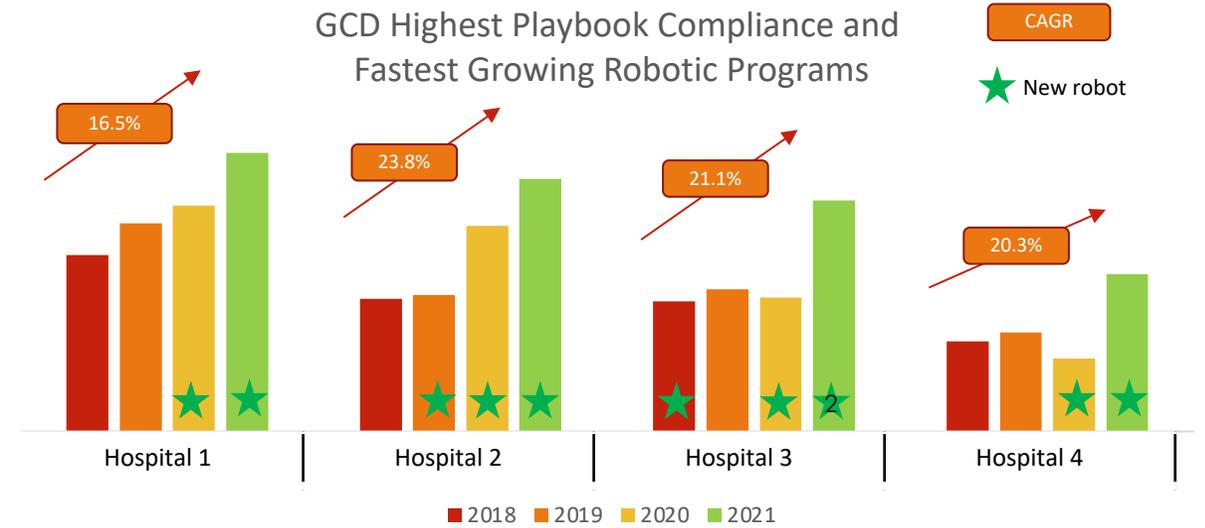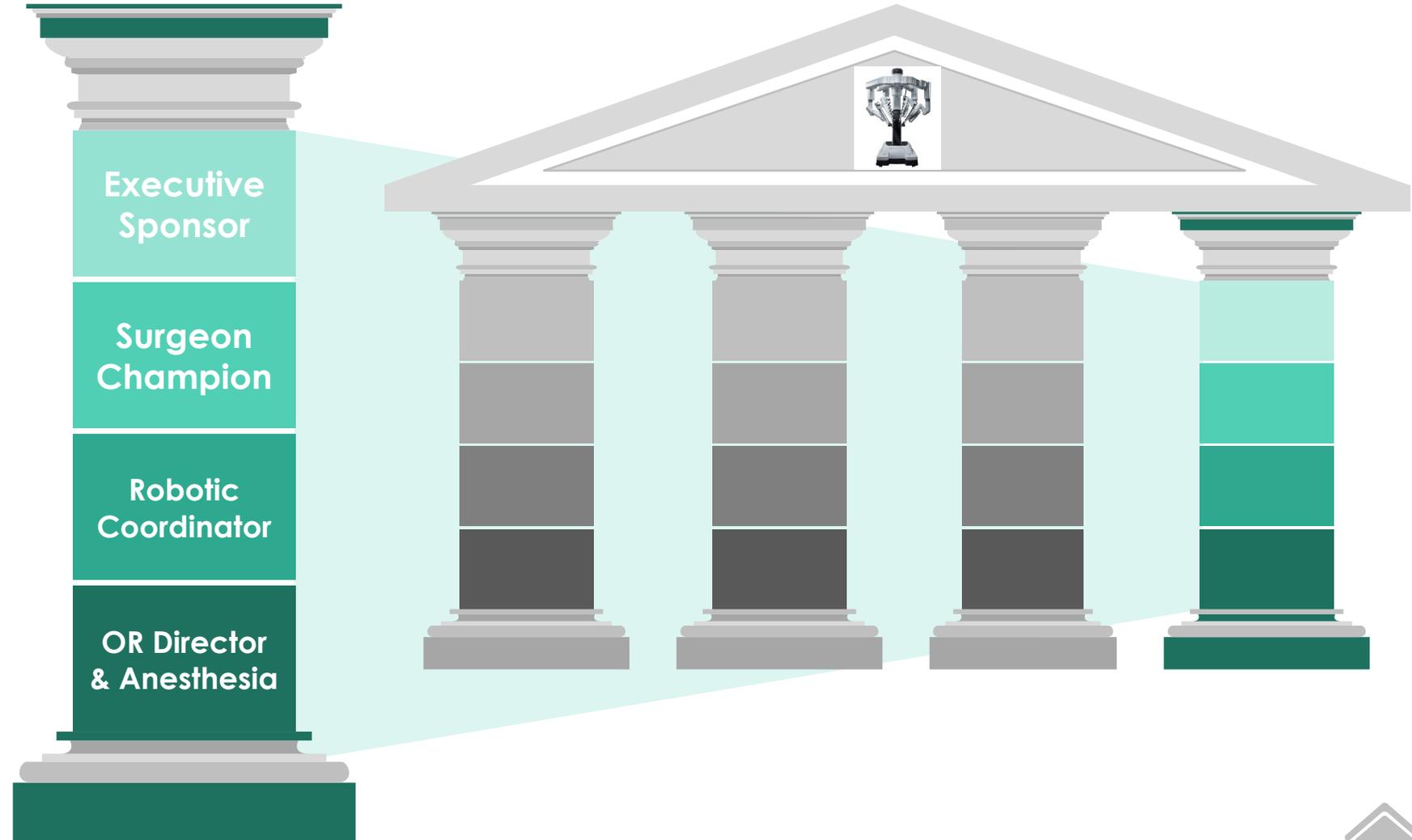
Execute Vision for Success

Be Deliberate

Understand what it take to transform the hospital program

Lean into the program

Create a bold but pragmatic vision

Create a business plan that goes beyond a financial model and vet it out

Find Champions

The more champions the better

Overarching executive champion

Service Line clinical champions

Build Support

Get leadership on board (clinical and non-clinical)

CFO has to understand the why behind the numbers

Have your champions spread the WHY inside and outside of the hospital

WHAT IS A ROBOTIC SURGEON CHAMPION?

- Skilled "High Volume" Robotic Surgeon

- Passion for sharing knowledge and an excellent teacher

- Interested in the Overall (non-self-serving) Growth of the Robotic Program

- Ability, willingness, and skills to evaluate the effectiveness of the Robotic Program to detect "what works and what doesn't work"

- Willingness and demeanor to help recruit surgeons, aid in training surgeons, and aid in increasing the Robotic IQ in the OR
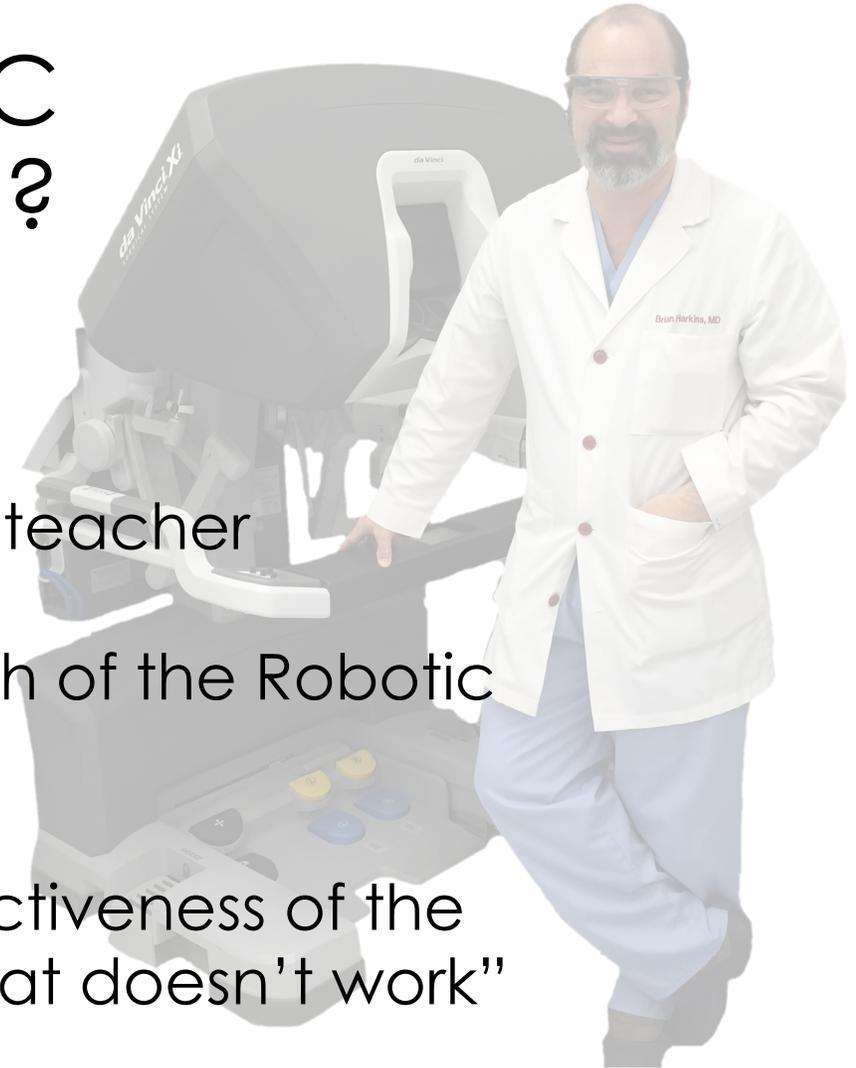
ROBOTIC COORDINATOR

Role

—Cornerstone of the Program

—Works collaboratively with Surgeon Champion and Executive Leadership to build the robotic program for your facility

—Must have Administrative Time for Managing Responsibilities!

Responsibilities

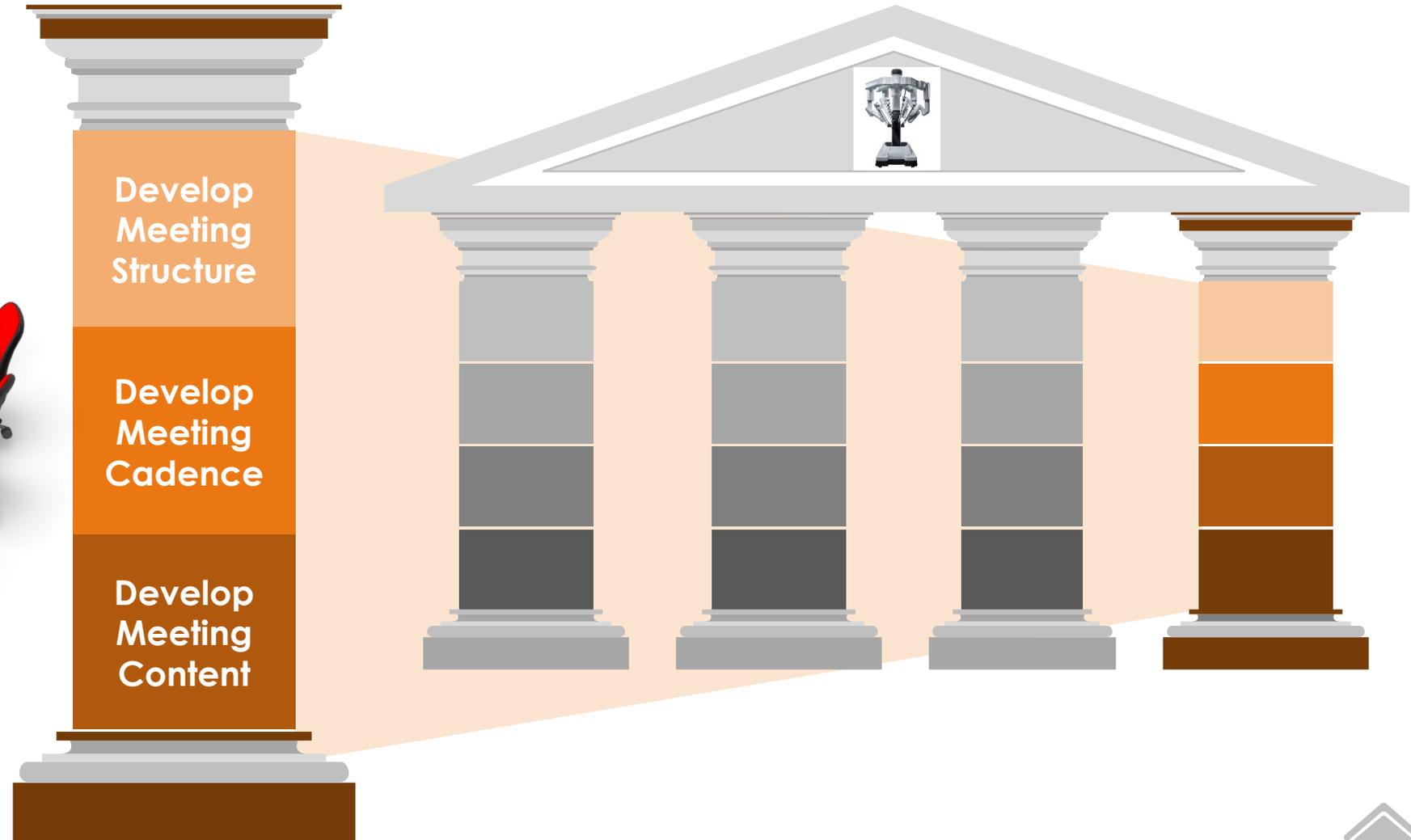| Staff Training Protocol and Ensure "Smooth" Robotic Procedures	% Capacity Calculations	Operational Strategic Agendas and Conduct Meetings	Surgeon Communication Liason	Cost Containment Support

PROTECTED ADMIN TIME 4hrs/wk/Robot

Robotic Coordinator

Governance

Develop Meeting Structure

Develop Meeting Cadence

Develop Meeting Content

Steps to Develop a Robotic Program

Build the Team

Establish the Goals

Baseline the Quality

Identify Committee Members

- Surgeon Lead
- Administration
- Robotic Coordinator
- Lead OR Tech
- Anesthesiologist
- Nursing Leadership
- IT representative
- Hospital Quality
- All Robotic Surgeons

Establish Goals for the Program

- Improve Efficiency
- Improve Quality metrics-LOS, SSI, Blood Utilization, Complications, Readmissions
- Incremental Volume
- Open to MIS Migration
- Decrease Conversions

### Set Meetings and Core Agenda to Drive Goals

- Monthly? Quarterly?
- First Case On time starts
- Turn-Over Time Details
- Close to Cut times
- Quality Metrics
- Volume Breakdown
- Cost Efficiency
- Block Time Utilization Plan
- Process Improvement

SPECIALIZED MEETING STRUCTURE

	Meeting Discussion	Attendees	Owner
Operational and Strategic Excellence Meeting (Bi-Weekly)	**Operational** • Preference Cards, Scheduling, Block Time, Annual Competencies, Materials/Stocking/Ordering, Sterile Processing, Volume, Case Minimum % **Strategic** • Volume and YOY Variance by Program, Physician and Procedure, Credentialing Pipeline, Surgeon Targets and Development	• Executive Sponsor • Robotic Champion • PPR • CNCs • Robotic Coordinator • SPD • Supply Chain • OR Leadership • Intuitive CSR • Credentialing	• Robotic Coordinator aggregates agenda and data • Executive Sponsor initiates and owns the meeting
Clinical Excellence Meeting (Quarterly to Bi-Annually)	Volume, LOS, Quality Data, Complications, Readmission Rate, Close to Cut Time, Cost Per Case, Surgeon Snapshot	• Surgeons • Senior Leadership • OR Management • Marketing	• Robotic Champion • Executive Sponsor • Robotic Coordinator

Surgeon Snapshot

Example:
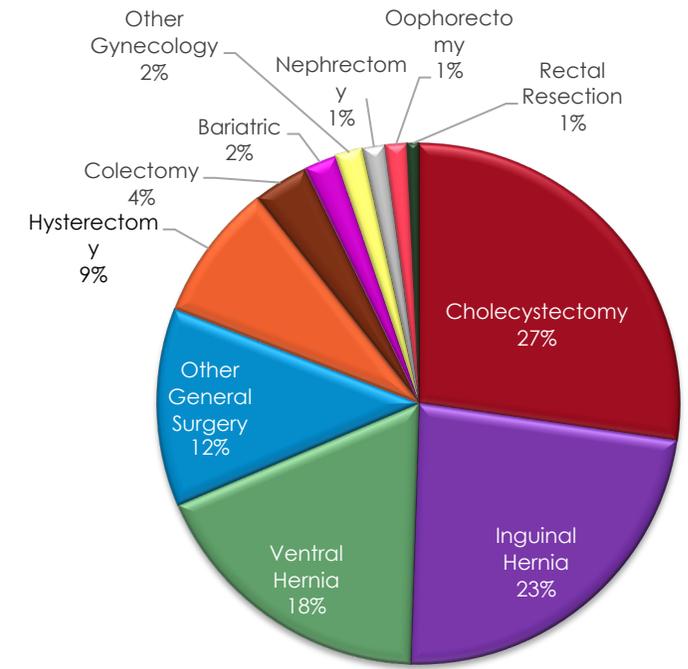
- Facility to individually print and share surgeon snapshot with each surgeon at meeting

Surgeon Key Performance Indicators: Med Supplies Cost per Case
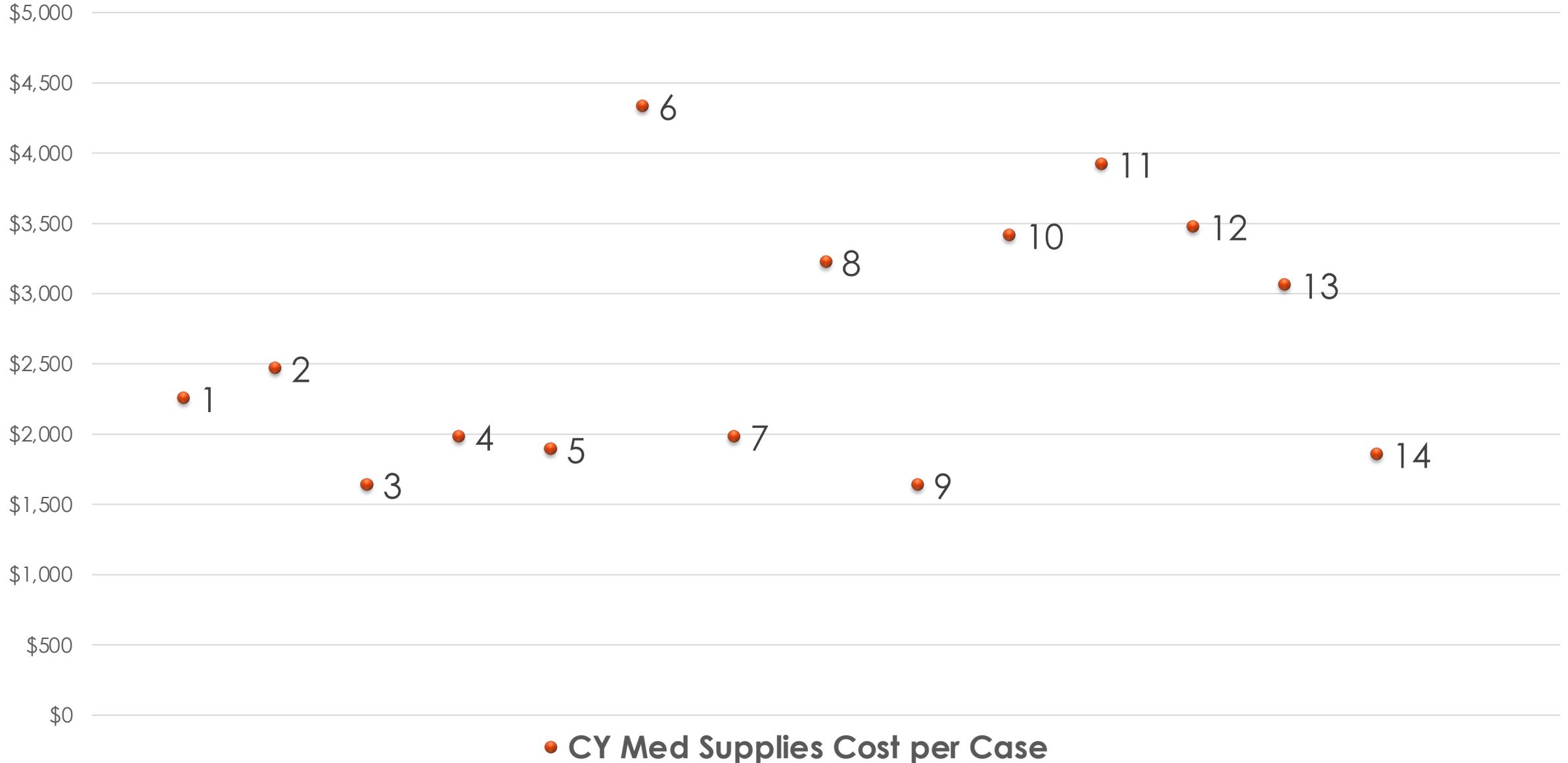
Surgeon Key Performance Indicators: Contribution Margin per Case

Training and Education

Steps to Develop a Robotic Program

Clarify Scope of Practice

Training Plan

Credentialing Criteria

Review Scope of Practice
Genesis Review

- Educate teams and SURGEONS on responsibilities and limitations of team members
- Room Set-up and Back Table Efficiency

Establish Training Plan for Existing and New Hires

- Online Modules
- Frequency threshold for competency
- In Services on Equipment
- Competency In-Services for Basic Skills i.e. Docking, Loading Instruments, Safety Feature Awareness

Review Credentialing Criteria

- Criteria for Residency Trained, Trained and Credentialed from Outside Facility, Newly Trained Practicing Surgeon, Previously Trained Same/Different System
- Allied Health Professional Credentialing Criteria

WHERE?

WHO?

WHAT?

WHY?

WHEN?

HOW?

Robotics
How to go From the Basics to World Class

AST Guidelines for Best Practices on the Perioperative Role and Duties of the Surgical Technologist During Robotic Surgical Procedures

https://www.ast.org/uploadedFiles/Main_Site/Content/About_Us/ASTGuidelinesRoboticSurgicalProcedures.pdf

AST
Association of Surgical Technologists

AST Guidelines for Best Practices on the Perioperative Role and Duties of the Surgical Technologist During Robotic Surgical Procedures

Introduction

The following Guidelines for Best Practices were researched and authored by the AST Education and Professional Standards Committee, and are AST approved.

AST developed the guidelines to support healthcare delivery organizations (HDO) reinforce best practices in the role and duties of the surgical technologist during robotic surgical procedures as related to the role and duties of the Certified Surgical Technologist (CST®), the credential conferred by the National Board of Surgical Technology and Surgical Assisting. The purpose of the guidelines is to provide information OR supervisors, risk management, and surgical team members can use in the development and implementation of policies and procedures for the role and duties of the CST during robotic surgical procedures in the surgery department. The guidelines are presented with the understanding that it is the responsibility of the HDO to develop, approve, and establish policies and procedures for the surgery department regarding the role and duties of the CST during robotic surgical procedures practices per HDO protocols.

Rationale

Robotic surgery is defined as a surgical procedure or technology that adds a computer-assisted electromechanical device to the interaction between the surgeon and the patient.[6] Examples include micromanipulators, remotely-controlled endoscopes, and console-manipulated devices.[6] These devices enhance the surgeon's vision, tissue manipulation, and tissue-sensing which alter the traditional surgeon-surgical wound direct contact. Robotic surgery devices have developed well beyond the investigational stage and their use in the OR has become an accepted method for performing minimally invasive surgery (MIS) in most surgical specialties on a routine basis.

Small healthcare to large research facilities are purchasing surgical robots and training their surgical personnel in the use of the robots. The surgical robot continues to evolve in development (first generation surgical robots had two manipulators (arms) and the current generation has four; henceforth, the layman term "arms" will be used throughout the document), and surgical applications; additionally, in anticipation that they become more economical to purchase their usage is anticipated to continue to increase. The most well-known robotic system is the da Vinci®; the most recent generations are the *da Vinci S HD*, *da Vinci Si*, and *da Vinci Xi* that are hi-definition, 3-dimensional vision systems that consist of the patient cart, surgeons console with foot pedals, and vision cart that contains the camera, focus controller, light source, electrosurgical unit, and equipment.[1, 15] Additionally, specially designed EndoWrist® instruments that provide a full range of motion and precision are used by the surgeon.

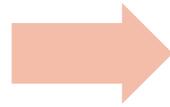# Steps to Develop a Robotic Program

Clarify Scope of Practice

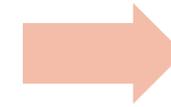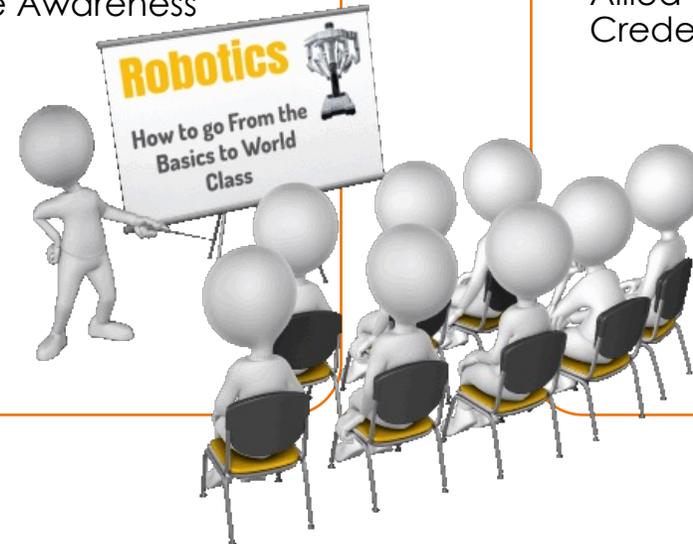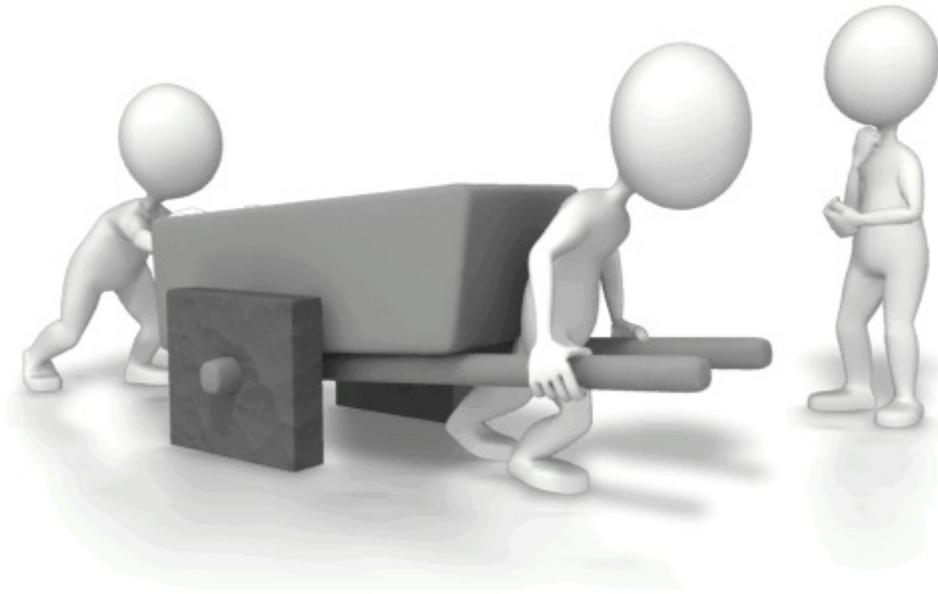**Training Plan**

Credentialing Criteria

Review Scope of Practice
Genesis Review

- Educate teams and SURGEONS on responsibilities and limitations of team members
- Room Set-up and Back Table Efficiency

Establish Training Plan for Existing and New Hires

- Online Modules
- Frequency threshold for competency
- In Services on Equipment
- Competency In-Services for Basic Skills ie Docking, Loading Instruments, Safety Feature Awareness

Review Credentialing Criteria

- Criteria for Residency Trained, Trained and Credentialed from Outside Facility, Newly Trained Practicing Surgeon, Previously Trained Same/Different System
- Allied Health Professional Credentialing Criteria

Xi Competency Checklist

Accomplished periodically and reinforced with in-services every third month.

DaVinci Xi Robotic Competency Checklist

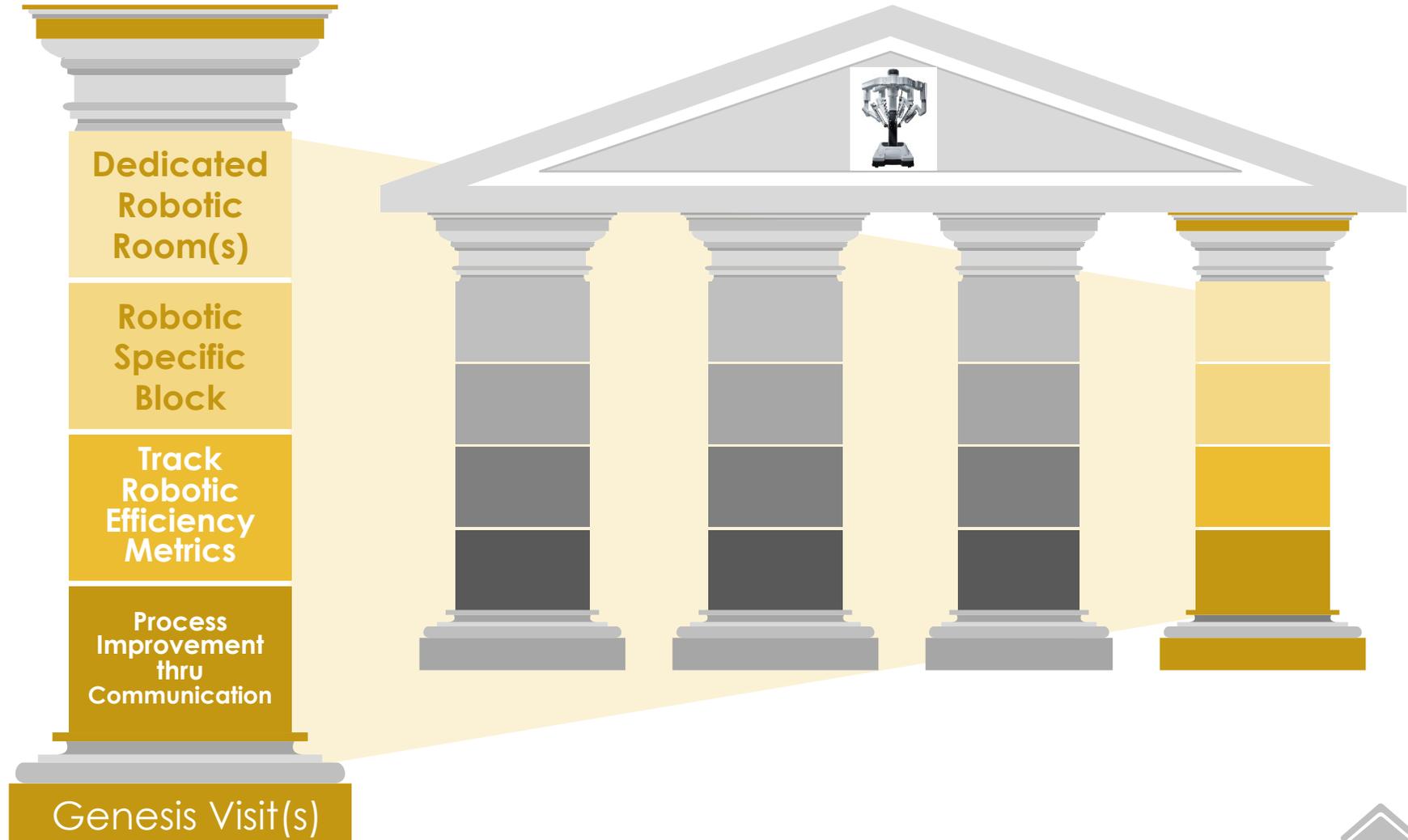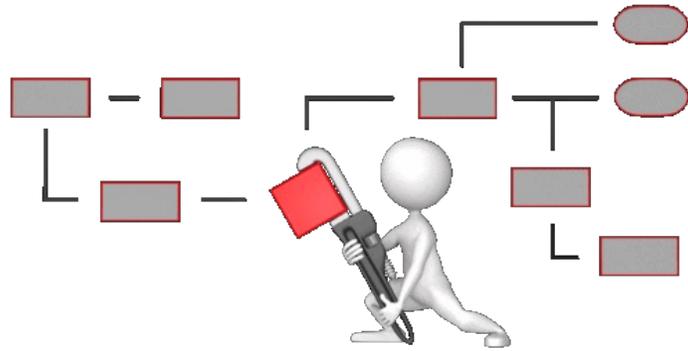| Status ✔ ✘	Clinical/Technical Competency	Evaluation
	Demonstrate the clean sweep of the OR with the removal of equipment not utilized and insertion and set-up of equipment necessary for the procedures	☐ Check O2 tanks and exchange as needed ☐ Pairing with the Trumpf Bed ☐ Postioning devices for robotic cases ☐ USB insertion for photos
	Trainer / Date	
	Demonstrate the ability to locate robotic supplies that are needed for procedures	☐ In the OR Core ☐ In the Sterile Supply Room ☐ In the Non-Sterile Supply room
	Trainer / Date	
	Demonstrate knowledge of the robotic components location, monitor location, and bed orientation for specific cases.	Discuss room set-up considerations for the following types of procedures: ☐ Bariatric ☐ Hiatal Hernia ☐ Right Colon ☐ Left Colon Rectal ☐ Cholecystectomy ☐ Inguinal Hernia ☐ Ventral Hernia ☐ Hysterectomy/Gyn ☐ Thoracic ☐ Urology Pelvic ☐ Renal ☐ Other
	Trainer / Date	
	Demonstrate the ability to power on the robotic system and discuss battery back up	☐ Power on system ☐ Power off system routine and "emergency" ☐ Verbalize battery backup power time limit
	Trainer / Date	
	Demonstrate an Understanding of the Surgeon Console and Touchpad functions	☐ Add/select Surgeon Profile ☐ Adjust ergonomic settings and save to Profile ☐ Turn on/off FireFly Finger Switch activation ☐ Navigate to energy settings ☐ Verbalize basic foot pedal functions ☐ Verbalize basic master manipulator functions
	Trainer / Date	
	Demonstrate the Ability to Properly Drape	☐ Properly drape the robotic arms and the robotic column
	Trainer / Date	
	Demonstrate an understanding of the movement of the Xi Patient Cart and of the touch screen function of the Xi Patient Cart	☐ Drive robot in powered mode to a target ☐ Locate neutral lever for non powered mode ☐ Deploy the boom to a requested configuration ☐ Use boom control lever to adjust boom position
	Trainer / Date	
	Demonstrate the proper management of the Erbe generator power source and cords necessary for the robotic and accessory energized devices	☐ Proper grounding technique ☐ Proper grounding technique for Single Site ☐ Connect monopolar and bipolar device ☐ Connect vessel sealer and harmonic scalpel ☐ Adjust power settings and verbalize understanding of differences ☐ Connect non-DaVinci instrument and foot pedal
	Trainer / Date	

DaVinci Xi Robotic Competency Checklist

Status ✔ ✘	Clinical/Technical Competency	Evaluation
	Demonstrate the ability to move and connect to the robotic arms of the Xi Patient Cart	Identify and demonstrate use of the following: ☐ Port clutch button ☐ Instrument clutch button ☐ Patient clearance button ☐ Boom adjust button on the robotic arm ☐ Connect a robotic arm to a robotic cannula ☐ Raise/lower boom using robotic arm
	Trainer / Date	
	Demonstrate an Understanding of the Touch Screen Function of the Xi Vision Cart	☐ Navigate to instrument inventory screen ☐ Navigate to audio adjustment screen ☐ Turn on/off "graphics" option ☐ Switch between right and left "eye" video feed
	Trainer / Date	
	Verbalize Understanding and the Use of Advanced Robotic Instruments	☐ Preparation of the Robotic Stapler ☐ Preparation of the Suction Irrigator ☐ Preparation of the Vessel Sealer ☐ Preparation of the Harmonic Scalpel
	Trainer / Date	
	Verbalize the differences between the procedural Instrumentation	☐ Number of lives before disposal for select instruments, ie. Cadiere, Vessel Sealer, Clip Applier, SS Clip Applier, Stapler 45 mm, Stapler 60 mm ☐ Effect of emergency release tool on remaining lives
	Trainer / Date	
	Demonstrate the ability to manage emergency situations and troubleshoot energy, insufflation, and instruments	☐ Create an Emergency Recoverable Fault ☐ Locate the Emergency Release Tool ☐ Proper use of the emergency release tool ☐ Verbalize causes for energy unresponsiveness ☐ Verbalize causes for loss of insufflation ☐ Verbalize causes for instrument unresponsive ☐ Knowledge of how to access emergency suport from DV Stat
	Trainer / Date	
	Demonstrate the Ability to Properly Disassemble all Xi Robotic System components	☐ Undrape the robot with proper disposal of drapes ☐ Collapse the arms properly ☐ Stow system properly
	Trainer / Date	
		☐ ☐ ☐ ☐
	Trainer / Date	

Revised 3 Feb 2019

Key Operational Efficiency Elements

Dedicated Robotic Room(s)

Robotic Specific Block

Track Robotic Efficiency Metrics

Process Improvement thru Communication

Genesis Visit(s)

Our mission statement
We believe that minimally invasive care is life-enhancing care. Through ingenuity and intelligent technology, we expand the potential of physicians to heal without constraints.

QUANTIFIED PERFORMANCE

UNIFIED ECOSYSTEM TO ENABLE MIS

- Patients, surgeons, and hospitals
- Systems
- Learning
- Services

INTEGRATED INTELLIGENCE

Learning — Preoperative planning
Outcomes — Intraoperative guidance
Efficiency — Postoperative analytics

Experience meets performance

Nearly three decades, and more than 10 million procedures in collaboration with surgeons, care teams, and hospitals with the goal to help consistently deliver better, more predictable outcomes.

Spectrum of procedures and programs

Innovation for today and the future with four generations of da Vinci® surgical systems, learning, and services, all united in one ecosystem to help surgeons, care teams, and hospitals achieve robotics total practice* and program excellence.

Actionable digital insights across the care continuum

Digitally connected ecosystem providing enhanced capabilities, intraoperative guidance, decision support, and personalized learning, with the goal to help improve outcomes and efficiency.

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*Total da Vinci Practice refers to the transferable value of robotic-assisted surgery with a da Vinci system across procedures in a surgeon's minimally invasive practice. It is at the surgeon's discretion to determine when a patient is a candidate for minimally invasive surgery and whether robotic-assisted surgery with a da Vinci system is an option.

For important safety information, please refer to www.intuitive.com/safety. For a product's intended use and/or indications for use, risks, full cautions and warnings, please refer to the associated User Manual(s).

Dedicated Robotic Room

Blocktime Utilization Policy

- Sample used to provide basic policy
- Used 75% instead of 70%
- Specialty Specific release instead of 2 weeks for all
- Strict block time utilization enforcement improves access for incremental volume growth strategy

HCA Houston Healthcare℠
Tomball

HCA Surgical Services

Sample Block Scheduling Policy

PURPOSE:

To provide a guide for successful management and scheduling of block surgical time to ensure that (1) operating rooms are utilized in an efficient and patient-centered manner; and (2) the personnel who staff those units are utilized as efficiently as possible; and (3) dedicated time in the OR enriches physician experience.

POLICY:

Block scheduling of operating rooms is appropriate to facilitate the efficient use of facility resources, and should never be used in any overt or implied manner to reward, penalize or punish physician utilization of facility resources. Block time will not be based on physician referral practices; or the volume or value of any direct or indirect referrals. The Procedures stated below must be in place with regular, on-going review and administrative support to enforce the established rules guiding block schedules by each participant.

PROCEDURE:

A. **Block Scheduling Requirements**

1) Requests for block time should be in writing, dated and delivered to the surgical services director for consideration by the Surgical Services Advisory Committee. Hospital leadership maintains final decision making for block allocations taking into consideration the input of the Surgical Services Advisory Committee. Blocks will be allocated based on date of request, and equipment needs. The service line focus of the Facility will also be taken into consideration when allocating block times.

2) Once assigned a block, the surgeon or service is expected to maintain a *70%* utilization rate of the block. (This number can be adjusted according to recommendations from the Surgical Services Advisory Committee.)

3) Because longer blocks of time increase efficient utilization of the operating room, a minimum of four hours per block is desired to be considered for the initial block allocation. Other options may be available at a later date.

4) It is the block holder's responsibility to notify the OR scheduling clerks *at least* two weeks in advance of when block time will not be needed, as determined by the block holder. Valid reasons for timely release of block time (that will not be counted as "unused") may include vacation, personal time, and conferences. Release notification includes calling 281-401-7828 or using other technology to

Steps to Develop a Robotic Program

Data Benchmarking

Process Improvement

Marketing

- Meetings review of data
- Group and Individual data sharing for cost and utilization
- Group and Individual data sharing for quality metrics

- Revise Paperwork and Electronic Data Collection if needed for improved data collection
- Offer mentoring/proctoring or training for quality issues
  Promote surgeon experience

Benchmark then Ongoing Analysis of Data

Identify and Correct Outliers and Quality Issues

Develop Surgeon Experience

Market Strategy to Continue Program Growth

Monitor Outcomes and Efficiency Improvement and Celebrate Successes

- Market to Public
- Market to Surgeons
- Market to Referring Doctors

- Reinforce Successes by Showcasing to Staff and Public
- Reward Efforts of High Performers
- Adjust Block Time Based on Utilization Plan

OR Flow Tracking Sheet

- Initially a manual process
- Insightful info came from evaluation of first data analysis

Date | | | | | | Surgeon | | |

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Operating Room Number								
Surgeon ID in Preop (Time)		Preop, Anesthesia, OR Nurse and Tech						
Patient in the OR (Time Wheels In)		Anesthesia						
Intubation (Time)								
Foley Catheter Y or N		OR Nurse						
Position Supine/Prone/Lithotomy								
Other Intervention Lines etc.								
Draping Complete (Time)		Surgeon						
First Incision (Cut Time)								
Console Start (Time)		Surgeon, First Assist, OR Nurse and Tech						
Intraoperative Console Stop (Time or NA)		Surgeon First Assist, OR Nurse and Tech						
Planned Y or N								
Intraoperative Console Restart (Time or NA)								
Console Stop (Time)		Surgeon, First Assist						
Final Incision Closed (Close Time)		Anesthesia						
Extubation (Time)								
Patient Out of Room (Time Wheels Out)		OR Nurse						
Room Ready to open ie "cleaned" (Time)		"Turnover Team"						
Room Ready for Patient (Time)		OR Nurse and Tech, Anesthesia						

OR EFFICIENCY

Procedural Steps	Avg. Time (minutes)
Wheels In to Intubation	7
Intubation to Draped	20
Draped to Cut Skin	5
Cut to Console On	14
Console on to Console Off	54
Console Off to Close Skin	27
Close Skin to Extubation	6
Extubation to Wheels Out	6
Total Avg Case Time	139

Intubation to Drape
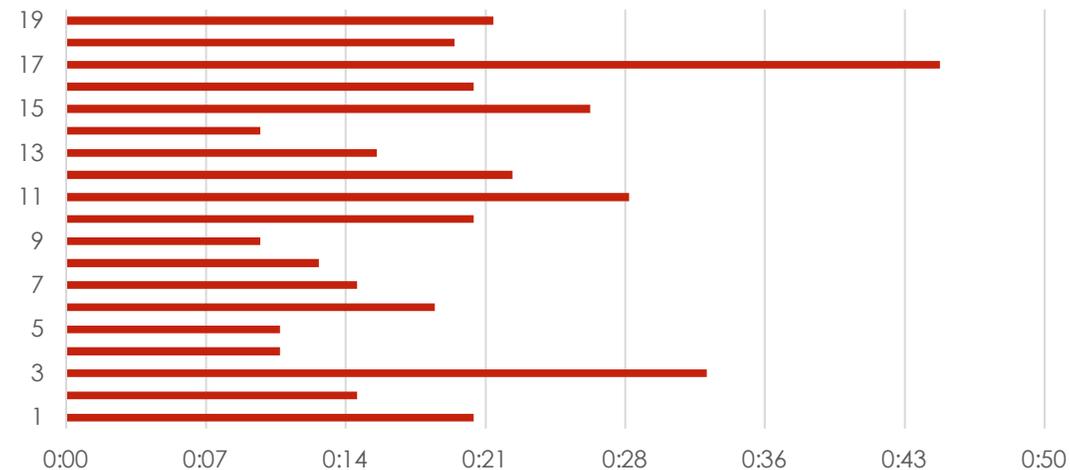
Extubation to Wheels Out
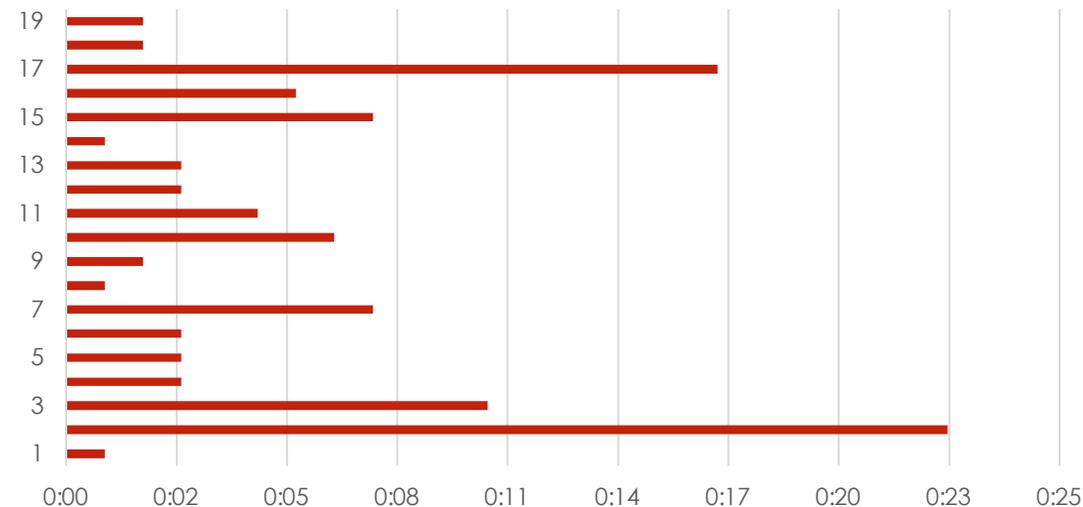
| DATE: 11/01/18	Room: 8	Room: 9	Room: 8	Room: 9	Room:	Room:	Room:
Surgeon: HARKINS	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Case (lap chole, hernia, etc.)	lap chole	inguinal	lap chole	ventral			
Surgeon ID in Preop (Time)	0712						
Patient in the OR (Time Wheels In)	0732	0820	1011	1116			
Intubation (Time)	0739	0828	1018	1127			
Foley Catheter or Lines	Ø	—	—	—			
Position Supine/Prone/Lithotomy	supine	supine	supine	S			
Draping Complete (Time)	0749	0844	1037	1142			
First Incision (Cut Time)	0751	0849	1039	1153			
Console Start (Time)	0803	0856	1046	1158			
Intraoperative Console Stop (Time or NA)							
Planned Y or N							
Intraoperative Console Restart (Time or NA)							
Console Stop (Time)	0814	1016	1102	1216			
Final Incision Closed (Close Time)	0822	1026	1116	1230			
Extubation (Time)	0836	1029		1236			
Patient Out of Room (Wheels Out)	0840	1033	1130	1256			
Ready to "Open" (Time)							

PARALLEL PROCESSING

Key Operational Efficiency Elements

http://www.surgerymanagement.com/presentations/rapid-operating-room-turnover1.php

https://www.aorn.org/outpatient-surgery/articles/outpatient-surgery-magazine/2013/november/secrets-to-speedier-room-turnover
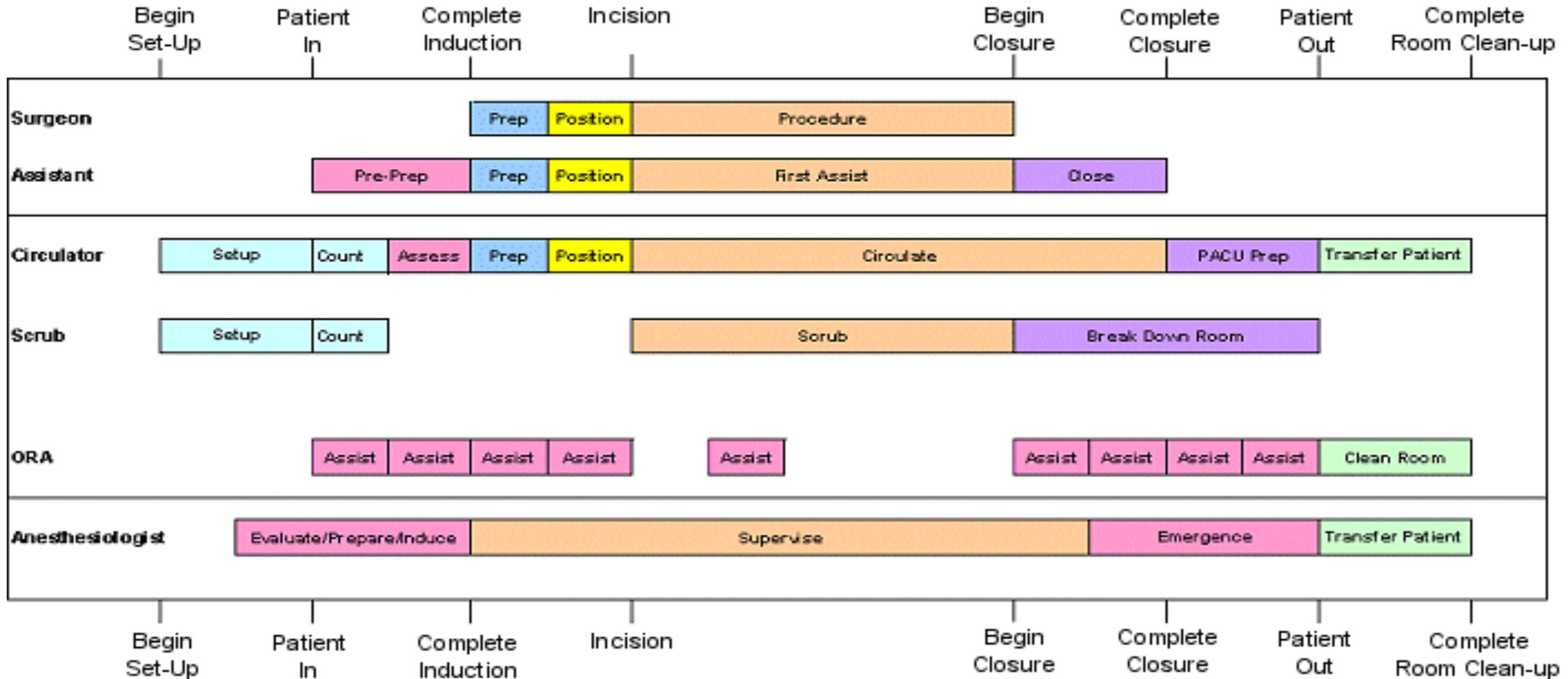
KEYS TO PARALLEL PROCESSING SUCCESS

- Each team member has clear and defined role and responsibility

- Define Trigger points and train teams on the right time to start tasks

- Benchmark turnover times based on specific types of cases

- Track your turnover times and analyze, then celebrate success or fix failures
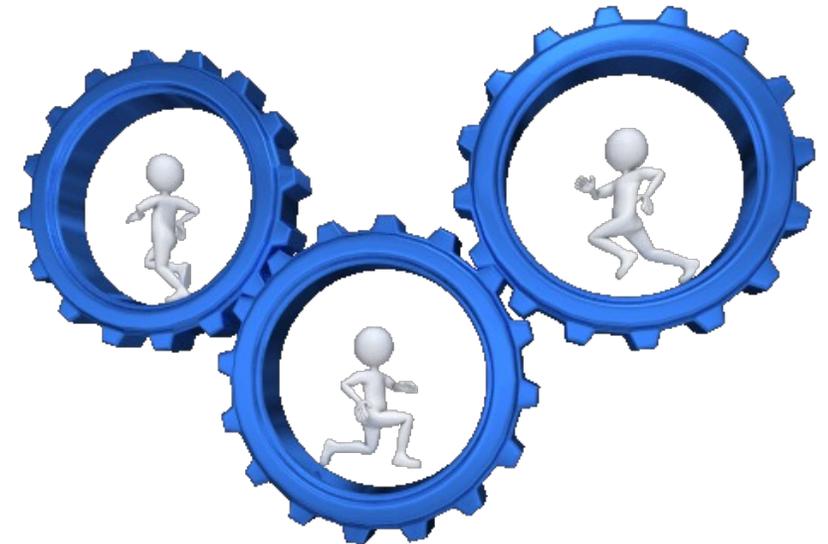
Develop A Communication Pathway

What: Case summary sheet for surgeons to complete following any robotics case

Who: Everyone is involved with resolving the issue

Impact: Allows for immediate recognition and correction of OR efficiency concerns

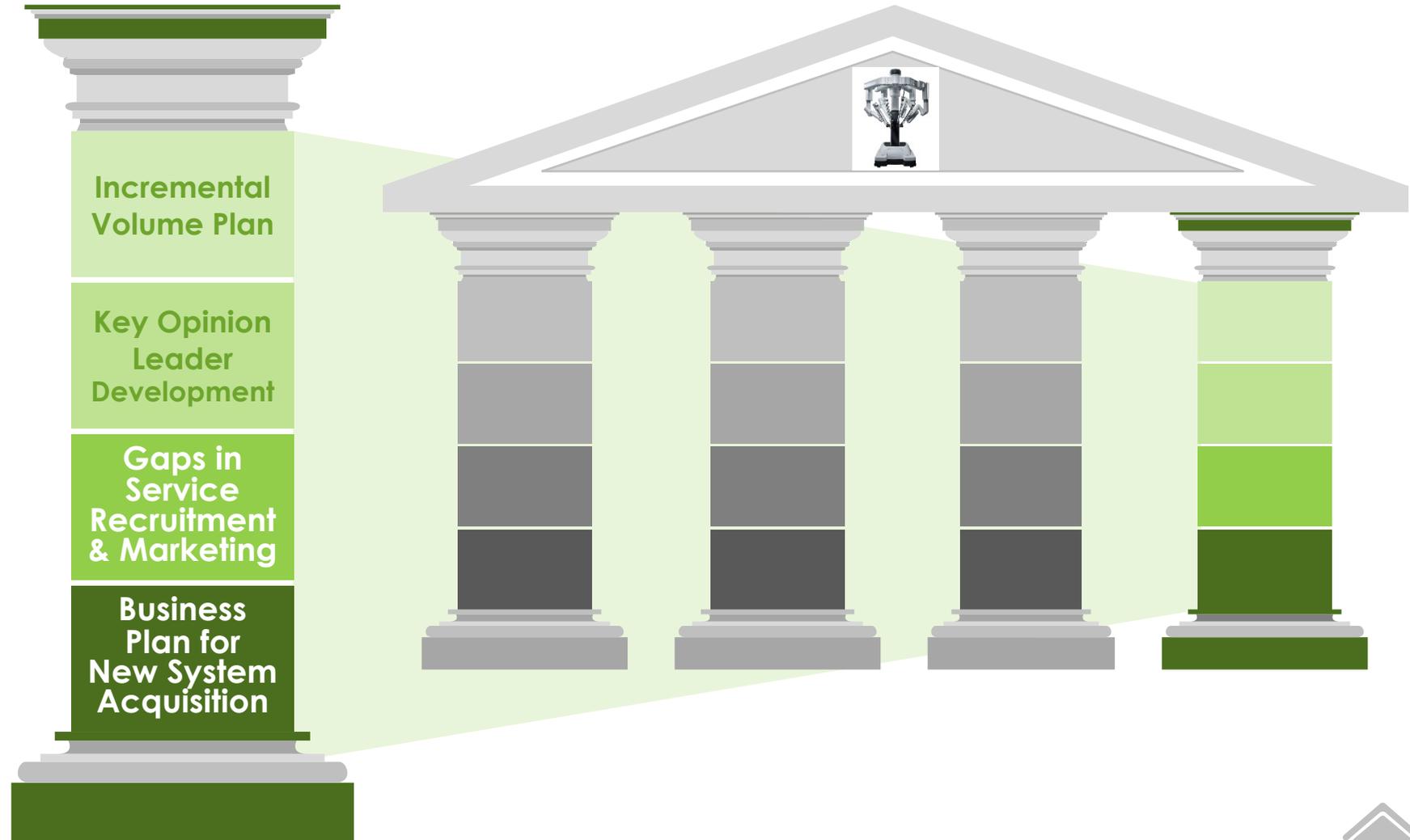**Goal:** No repeat problems by developing better processes!

HCA Houston Healthcare Robotic
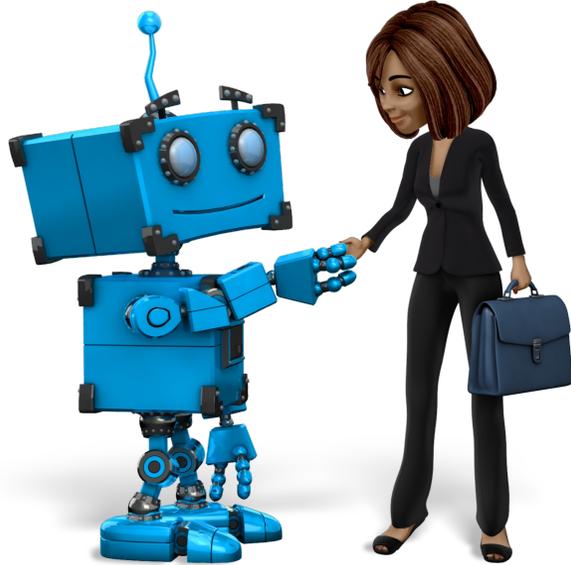Case Summary Sheet

Place Patient Sticker Here

Dear Surgeon,
Please provide details about your experience.
WE WANT TO HEAR FROM YOU!

Changes needed to Preference Cards	☐ Yes ☐ No	If Yes, Please Explain:	Coordinator Verified: ☐ Date Change Made:
Items missing from case cart	☐ Yes ☐ No	If Yes, What Items:	
ToT > 30 Min?	☐ Yes ☐ No	If yes, Explain Barriers:	N/A (No Turnover Involved) Check Box ☐
Stocked items missing from room	☐ Yes ☐ No	If yes, Explain:	
Expired DV instruments in tray?	☐ Yes ☐ No	If yes, Explain:	
Any missing, wrong, or damaged equipment in tray?	☐ Yes ☐ No	If yes, Explain:	

Strategic Growth Plan

Incremental Volume Plan

Key Opinion Leader Development

Gaps in Service Recruitment & Marketing

Business Plan for New System Acquisition

Is your Intuitive rep providing you with what you need?

- Training Support?

- Meeting Attendance?

- Benchmarking Quality Support?

- Physician Outreach Programs?

- Physician Development Programs?

- Market Intel

Make them EARN a seat at your table

How can you improve access in your robotic program?

3

Add Additional Systems

- Must meet utilization criteria first

- Must have a business plan that outlines reasonable growth expectations

- Be Proactive Based on Data and your Growth Plan

2

Add Extended Hours

- Needs trained staff available always

- Surgeon Satisfier

- Reap robotic benefits for after hours and weekend cases – including acute care!!!

1

Get more efficient at doing cases!

- Parallel Processing

- Strict Block Time

- Dedicated room

24/7

CREATING A CULTURE OF EFFICIENCY & PROFITABILITY

Look at Robotics as its own service line

Invest in your OR team by utilizing training resources

Standardization of room, trays and preference cards - reduce variable costs

Optimize data to take your program to next level of efficiency and profitability

CENTER OF EXCELLENCE IN ROBOTIC SURGERY

SRC
CENTER OF EXCELLENCE
ROBOTIC SURGERY

FIRST full service, acute care hospital in the Houston area to achieve this designation

Recognized by Surgical Review Corporation

HCA Houston Healthcare
Tomball

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

2018   2019   2020   2021
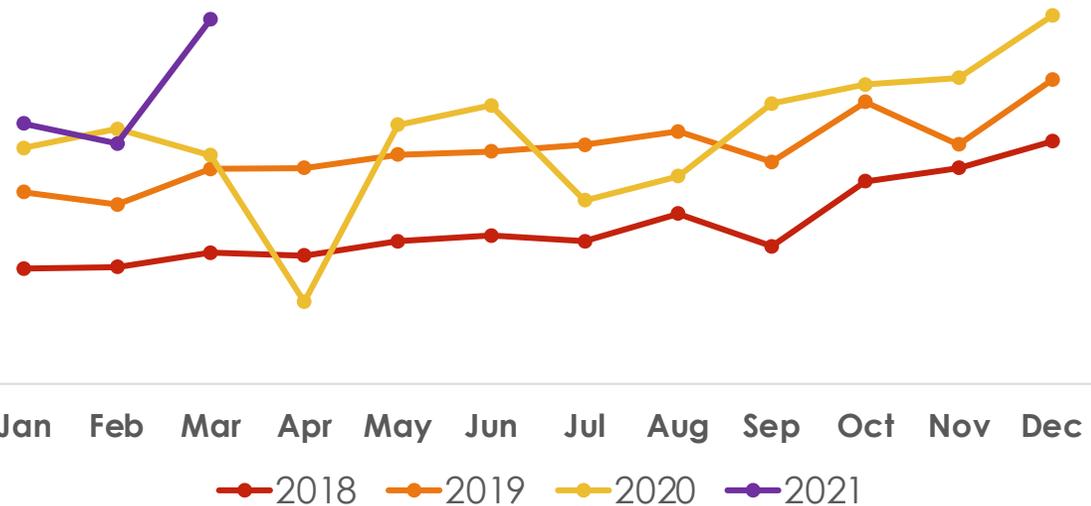
Change your robot from a tool into a platform that delivers quality patient care in a profitable and highly efficient manner!
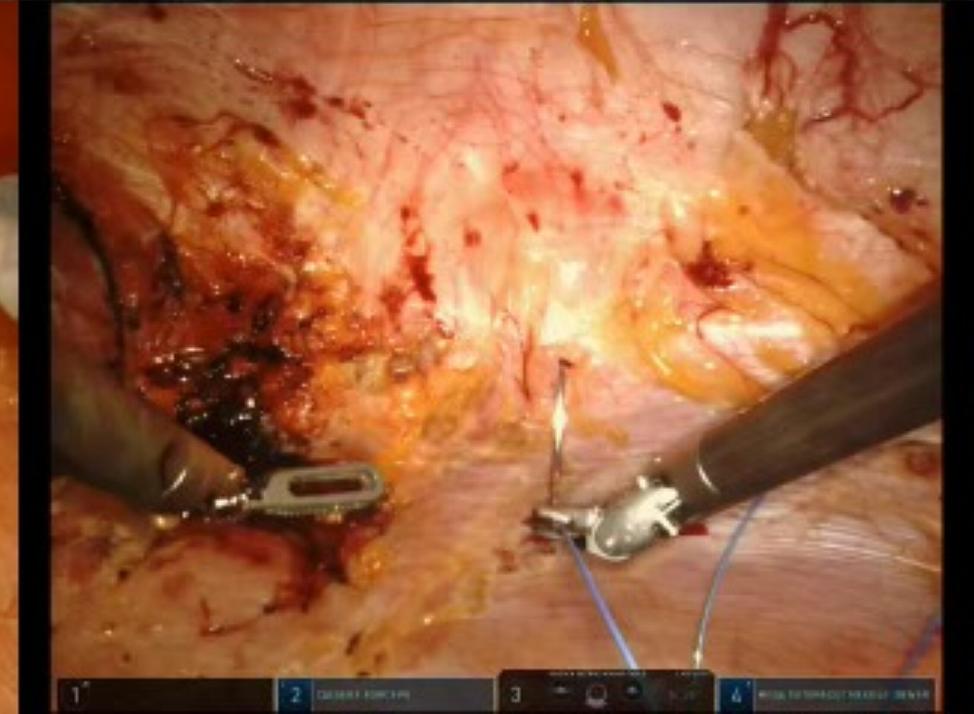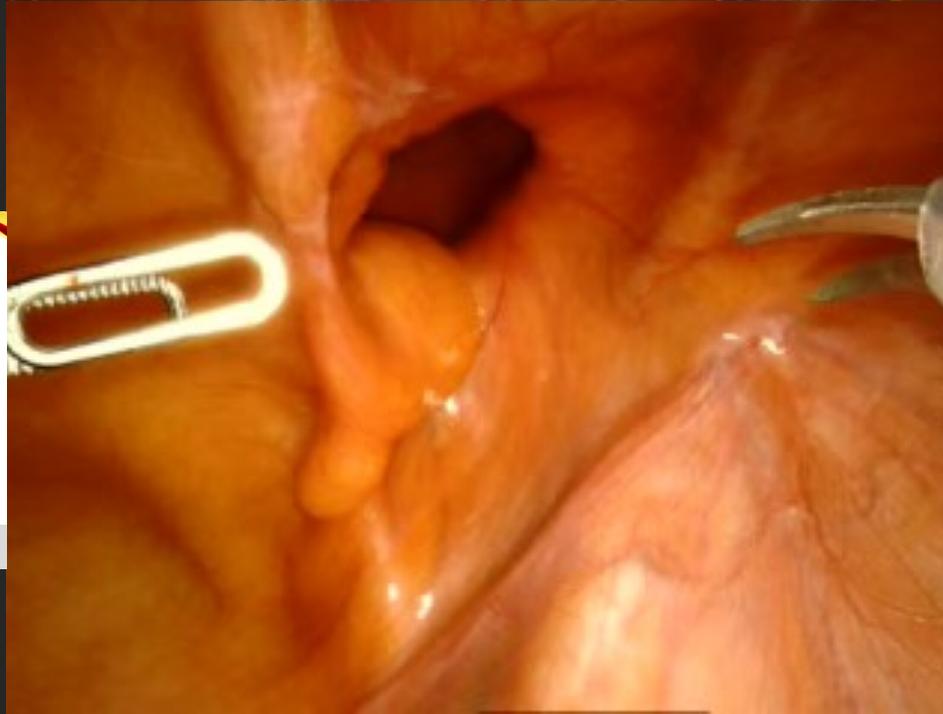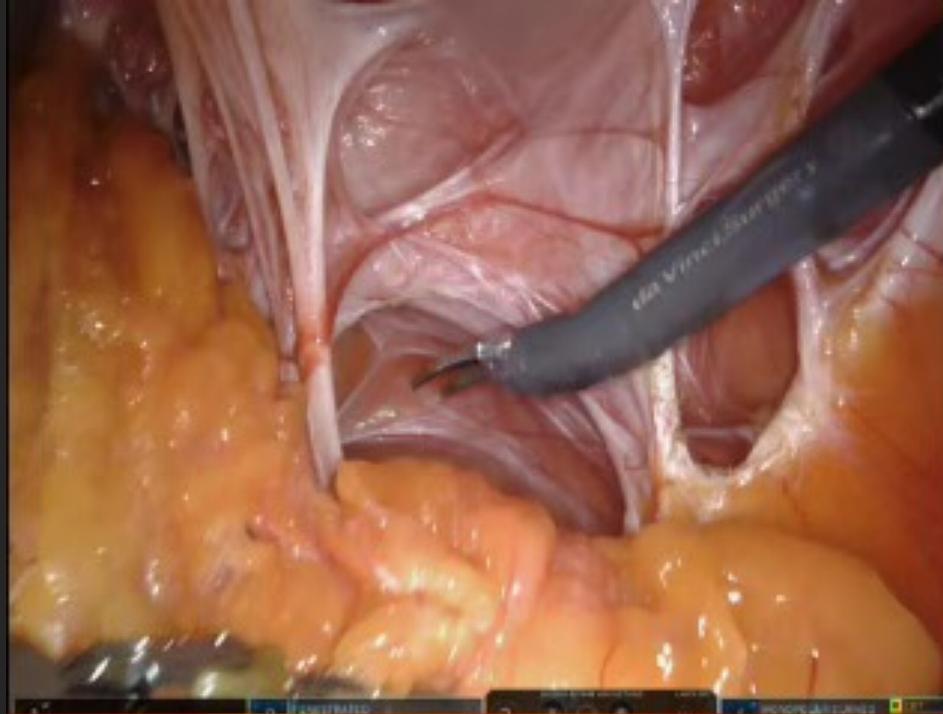
INTUITIVE

IMPORTANT INFORMATION

Financial Disclosure

This material has been developed with, reviewed and approved by an independent surgeon(s) who is not an Intuitive employee. This independent surgeon(s) has received compensation from Intuitive for consulting and/or educational services.

Limitations of Marketing Guidance

The implementation of a da Vinci Surgery program is practice and hospital specific. Results may vary. Past customer experience does not imply any guarantee of results in practice or program success.

When considering cost-effectiveness of an advanced technology like Intuitive products, we recommend that hospitals perform a full cost-benefit analysis, considering not just the operating room costs but the costs associated with hospital stays, procedure-related complications and hospital re-admissions.

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Da Vinci Systems

Depending on an individual hospital's decision for using da Vinci® products, some presented information may refer to unapproved uses (procedures) for the da Vinci systems. For a list of current On Label procedures, refer to the respective da Vinci System User Manual(s).

Da Vinci Xi/X System

The demonstration of safety and effectiveness for the specific procedure(s) discussed in this material was based on evaluation of the device as a surgical tool and did not include evaluation of outcomes related to the treatment of cancer (overall survival, disease-free survival, local recurrence) or treatment of the patient's underlying disease/condition. Device usage in all surgical procedures should be guided by the clinical judgment of an adequately trained surgeon.

Da Vinci SP System (TORS and URO)

The safety and effectiveness of this device for use in the performance of general laparoscopic surgery procedures have not been established. This device is only intended to be used for single port urological procedures and for transoral otolaryngology surgical procedures in the oropharynx for benign tumors and malignant tumors classified as T1 and T2 with the da Vinci EndoWrist SP Instruments and the da Vinci SP surgical system (SP1098).

Da Vinci Instrument & Accessory Care

It is the responsibility of the owner of the da Vinci surgical system to properly train and supervise its personnel to ensure that the instruments and accessories are properly cleaned, disinfected and sterilized as required by the User's Manual. The da Vinci products should not be used in a clinical setting unless the institution has verified that these products are properly processed in accordance with the da Vinci System User's Manual.

Important Safety Information

Serious complications may occur in any surgery, including da Vinci Surgery, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain.

Risks specific to minimally invasive surgery, including da Vinci Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; a longer operative time, the need to convert to an open approach, or the need for additional or larger incision sites. Converting the procedure could result in a longer operative time, a longer time under anesthesia, and could lead to increased complications. Contraindications applicable to the use of conventional endoscopic instruments also apply to the use of all da Vinci instruments.

For Important Safety Information, indications for use, risks, full cautions and warnings, please also refer to www.intuitive.com/safety.

Individual outcomes may depend on a number of factors, including but not limited to patient characteristics, disease characteristics and/or surgeon experience.

Information Disclosure

The material presented represents the views and opinions of independent surgeons based on their practice and personal experience performing surgery with the da Vinci surgical system. Their experience may or may not be reproducible and is not generalizable.

Ion System

Ion is for sale in the US.

Outside of the US, Ion is not CE Marked and not for human use. Ion cannot be placed on the market or put into service. Ion may not have regulatory approvals in all markets. Please check with your local Intuitive representative.

Important Safety Information

Risks associated with bronchoscopy through an endotracheal tube and under general anesthesia are infrequent and typically minor, and may include but are not limited to: sore throat, hoarseness, respiratory complications including dyspnea or hypoxemia, airway injury, bronchospasm, laryngospasm, fever, hemoptysis, chest or lung infection including pneumonia, lung abscess or an adverse reaction to anesthesia. Although rare, the following complications may also occur: bleeding, pneumothorax (collapsed lung), cardiac related complications, respiratory failure, air embolism, or death. As with other medical procedures, there may be additional risks associated with the use of general anesthesia and/or endotracheal intubation which are not listed above; you should consult a health care professional regarding these and other potential risks.

Procedures using the Ion Endoluminal System may be associated with longer procedure and/or longer anesthesia time.

Information Disclosure

The material that will be presented represents the views and opinions of independent physicians based on their practice and personal experience using the Ion Endoluminal System. The data that will be presented is single physician experiences. The results may or may not be reproducible and are not generalizable.