



Ops DD – Typical scope of work and plan

March 2024

Summary objectives for Ops DD

- This deck provides a **framework** with **supporting tools and templates** to conduct a **Hospital Ops focused DD**
- The primary aim of the DD is to assess **operational risks, CapEx requirements and near-term upsides** across the value chain, this is **NOT a Commercial DD or a full-scale Value Creation Program**
- Based on the project findings, the aim is to lead to a 6 to 18-month **VCP or Risk Mitigation program** with the client for **priority levers**

Hospital Ops DD Framework – “WHAT” (1/2)

/ KEY QUESTIONS

Red flag Risks



- Do we have the **right medical team and equipment** to deliver the promised care?
- Are our **clinical processes aligned with the best practices**? Do we have the right **governance mechanisms** in place?
- Are our **staffing, equipment & bed management processes optimal** to manage fluctuating demand ensuring **seamless operations**?
- Are we tracking right **metrics** appropriately?
- Do we have **robust SOPs** in place to respond and recover during **business continuity challenges**?

Infrastructure & CapEx



- Is the **CapEx plan** comprehensive across **all essential building & equipment** refurbishments, upgrades and expansions?
- Does the **CapEx plan include technology/data infrastructure** maintenance & upgrades, license renewals and new deployments?

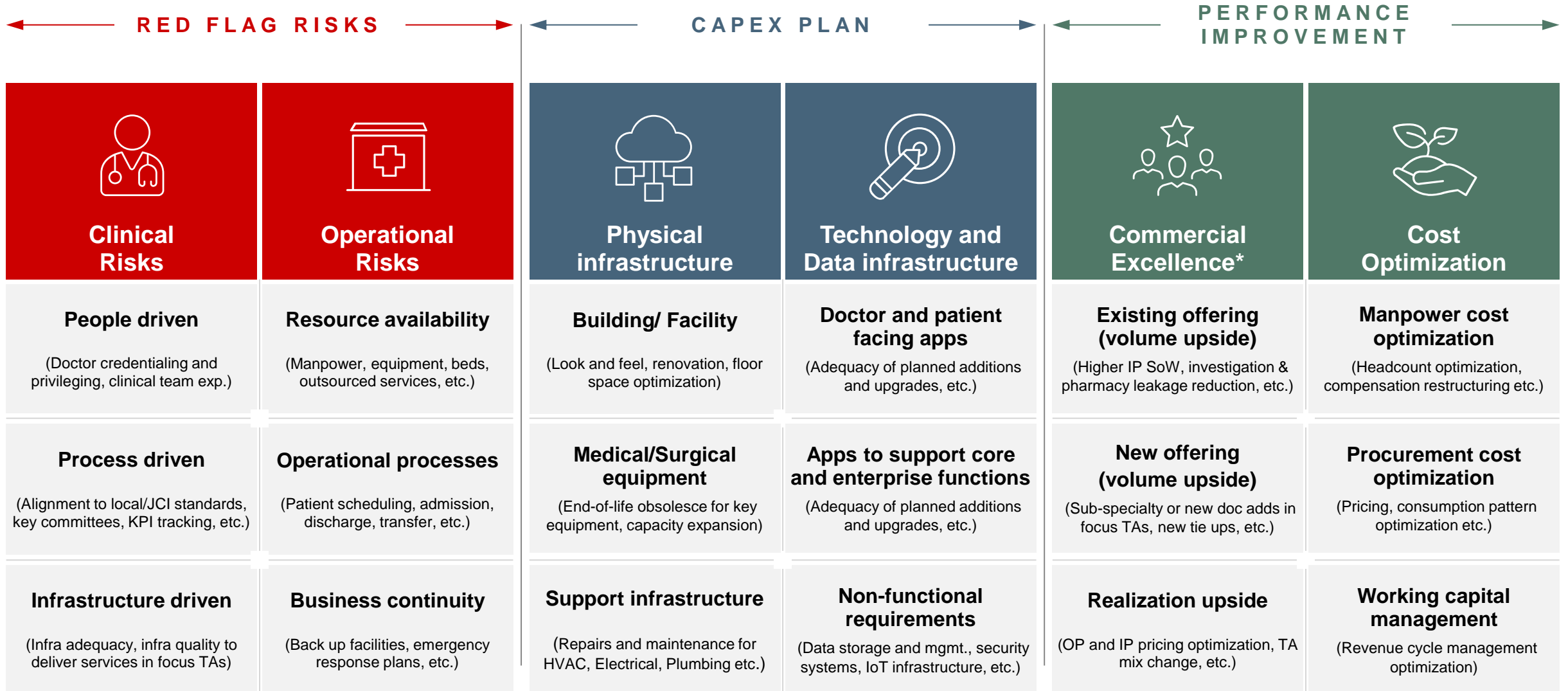
Performance Improvement









- Can we deploy **strategic pricing and value-based packaging** maximizing patient vol.?
- Is there **volume upside** by leveraging current **services/docs** or by adding new ones?
- Is there scope to **optimize manpower costs** (doctors, nurses, staff etc.)?
- Can we rationalize our **procurement costs** in line with industry best practices?
- Can we refine **working capital management** to maximize liquidity and cashflow?

Hospital Ops DD Framework – “WHAT” (2/2)

/ DRAFT



Hospital Ops DD Framework – “HOW”

						Data requests	Joint exercise	/INDICATIVE
Risks		Infrastructure / CapEx		Performance Improvement				
Standard Ops DD								
	Clinical Risks	Operational Risks	Physical infrastructure	Technology and Data infrastructure	Commercial Excellence	Cost		
	Specialty mix	Bed occupancy	Management CapEx plan		Price list	PnL		
	Doctor credentials	Staff utilization	Fixed assets list (with useful life)	Digital assets list	Payor terms/ contracts	Vendor contracts, consumption patterns		
	Clinical SOPs	Equipment utilization			Patient mix & funnel	Salary structures		
	Governance SOPs	Operational SOPs						
	Management interviews (CEO, COO, CFO, Clinical Head / Medical Superintendent, 2/3 key clinicians, CTO, CMO, Procurement Head, etc.)						★	
	Client data analytics...Integrated scorecards						★	
	Industry participant interviews (interviews with former employees of the competitors)						★	
	Bain IP / expert inputs (as needed)						★	
Additional Deep-dive	JCI accreditor visit + Ops DD Bain team site visit							
				Tech DD ★ I&D diagnostic	FRWD diagnostic*★	Procurement / spend cube		

*Select digital diagnostic available within BCN PEG offerings

★ BCN PEG Offerings

The Ops DD will entail holistic assessment across red flag risks, management CapEx plan adequacy and short-term commercial improvement levers (1/2)




/ NON-EXHAUSTIVE

↑	Category	Key questions to be evaluated
Red flag risks	Clinical risks	<p>People driven risks: Is there significant risk of providing sub-standard clinical care due to medical team's inadequate experience?</p> <p>Process driven risks: Is there significant risk of adverse patient outcomes due to poorly developed medical policies/protocols and / or ineffective governance mechanisms (vs. best-in-class benchmarks such as JCI standards)?</p>
	Operational risks	<p>Infrastructure driven risks: Is there significant risk of sub-standard clinical care due to insufficient quality/quantity of medical equipment?</p> <p>Resource availability driven risks: Is there significant risk of being unable to cater to spike in demand for key services (Outpatient consults, Surgeries, Diagnostics, etc.) due to lack of infra (consult rooms, equipment, OTs etc.), manpower or adequate backup facilities (e.g. power and utilities systems)?</p> <p>Process efficiency driven risks: Is there significant risk of being unable to cater to spike in demand for key services due to sub-optimal operational processes? Are there key tracked metrics (e.g. appointment adherence, planned vs. delivered OT scheduling, avg. time to discharge; avg. time for admissions, etc.)?</p> <p>Business Continuity planning related risks: Is there risk of significant operational disruptions or reputational damage due to lack of comprehensive SOPs to deal with key disruptions (e.g., high-profile medico-legal cases; environmental disasters – floods, fires; key man loss; etc.)</p>
Capex plan	Physical infra	<p>Building / Facility: Does the Management plan account for renovation/upgradation of various areas as per stated service expansion plan? Does the plan to add new blocks / spaces cover all essential building, facilities and costs towards planning, design, taxes and regulatory approvals?</p> <p>Medical Equipment: Does the Management plan account for replacement of key equipment due to ageing / technology obsolescence? Does the Management plan account for new capacity additions or upgrades to deliver stated volume growth ambitions?</p> <p>Support Infra: Does the Management plan account for renovation/upgradation or capacity enhancements of support infrastructure like cooling systems (HVAC), electrical and plumbing systems; medical gases lines, sewage & water treatment plants, RO/Boilers and Chiller plants, UPS or Solar power, etc?</p>

Note: (*) - HVAC - Heating, Ventilation, and Air Conditioning

The Ops DD will entail holistic assessment across red flag risks, management CapEx plan adequacy and short-term commercial improvement levers (2/2)

/ NON-EXHAUSTIVE

Category	Key questions to be evaluated
<div>Capex plan</div> <div>Technology and data infra</div> 	<p>Coverage of right Tech stack elements: Does the Management plan comprehensively account for the below?</p> <ul style="list-style-type: none"> • Capability addition/maintenance/performance upgrades for existing apps and non-functional requirements (such as data storage, security, infrastructure, etc.) • Addition of new apps (patient facing / telemedicine; doctor facing; admin interfaces and business analytics) and non-functional requirements <p>Right quality of planned additions: Does the Management plan adequately provision for key capability/features additions, maintenance, or performance upgrades of existing apps and non-functional requirements – so as to be able to deliver stated service delivery ambitions or local regulatory requirements?</p> <p>Right buy vs. build / lease decision: Does the Management plan strategically account for the right buy vs. build / lease decisions for key Technology additions?</p>
<div>Performance improvement</div> <div>Commercial excellence</div> 	<p>Existing offering (Volume upside): What is short term (1-2 years) volume upside from current focus doctors and TAs? [Key levers to be evaluated include Share of wallet of existing doctors / Investigation & Pharmacy leakages / Referral funnel and Sales optimization / Upcountry or Medical tourism S&M expansion]</p> <p>New offering (Volume upside): What is short term (1-2 years) volume upside from planned Mgmt. additions? [Key levers to be evaluated include Volume growth from new doctor adds/ Key sub-specialty builds (e.g. Liver Transplant, TAVI/TAVR) / New insurance tie-ups]</p> <p>Realization upside: What is potential realization upside versus current Management plan? [Key levers to be evaluated include Like for like pricing increase (for key components and surgeries) / Case mix or sub-specialty level change impact in Top 2 TAs / Overall TA mix change impact / Impact of new packages]</p>
<div>Cost optimization</div> 	<p>Key Manpower costs: Is there scope to rationalize doctor payouts in key TAs? Is there potential to rationalize key staffing ratios, rostering and average compensation payouts for Nurses, Paramedical staff and Administrative staff?</p> <p>Procurement costs: Is there likely upside on purchase prices of key injectables, consumables and implants? Is there upside from optimizing consumption patterns (brand choices and quantities consumed) for key high contribution surgeries?</p> <p>Working capital: Is there potential to improve Revenue cycle management processes and unlock working capital efficiencies? Is there scope to optimize tied-up capital?</p>

Red Flag Risks: Illustrative clinical risk assessment & mitigation planning driven by people, processes & infra

● Limited risk ● Neutral ● High risk

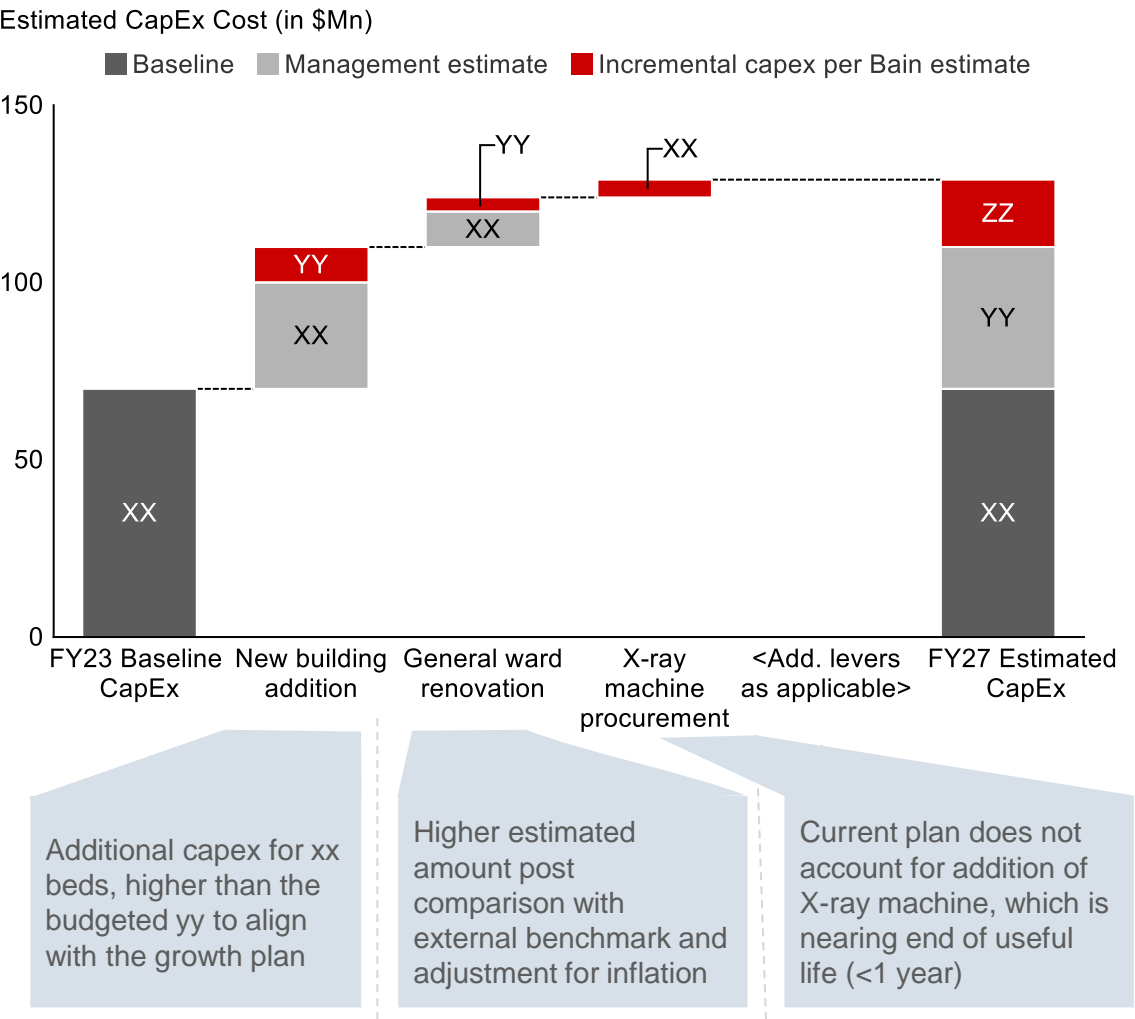
/ ILLUSTRATIVE

Lever	Sub-lever	Observations	Assessment	Risk Mitigating Actions
People driven	Is there a risk of providing sub-standard care due to inadequate credentialing and privileging systems ?	<ul style="list-style-type: none"> Credentialing and privileging systems are as per JCI standards; privileging is at sub-specialty level No undesirable trend in patient outcomes observed for doctors in focus TAs (cardio and onco) 		
	Is there a risk of providing sub-standard clinical care due to inadequate experience of nurses ?	<ul style="list-style-type: none"> 10% of OT nurses rostered for CTVS have limited experience with Cardiac surgeries Advanced Practice Registered Nurse (APRN) is not present in oncology, but present in other focus TAs 		<ul style="list-style-type: none"> Onboard specialized nurses in focus TAs Develop nurse fellowship programs in focus TAs to upskill existing nurses
	Is there a risk of providing sub-standard clinical care due to inadequate experience of technicians ?	<ul style="list-style-type: none"> >80% of laboratory technicians have a master's degree, higher than benchmark (xx%) >10 years of experience for 50% laboratory technicians, higher than benchmark (xx%) 		
Process driven	Are we at a risk of adverse patient outcomes due to poorly developed policies per JCI standards?	<ul style="list-style-type: none"> No clear documentation on storage conditions of medications under medication mgmt. policy 		<ul style="list-style-type: none"> Include medication storage under policy and validate with an expert; Track adherence
	Are we at a risk of sub-standard care due to absence of key committees or lack of their operational adherence to standards set by JCI?	<ul style="list-style-type: none"> No formal system in place to check for operational adherence to BDPs for Infection Control Committee 		<ul style="list-style-type: none"> Check BDP adherence by tracking KPIs such as incident closure rate, % goals achieved etc.
	Is there a risk of delayed issue identification due to incomprehensive clinical quality dashboards ?	<ul style="list-style-type: none"> Readmission rate, patient fall rate and surgical site infection rate not being tracked on dashboard Insights from dashboards are discussed monthly vs. fortnightly per best practice 		<ul style="list-style-type: none"> Add the KPIs on dashboard for monitoring, analysing and addressing any undesirable trend Establish fortnightly cadence for discussion on critical KPIs, while retaining monthly for rest
Infra driven	Is there a risk of sub-standard clinical care due to insufficient quality/quantity of medical equipment ?	<ul style="list-style-type: none"> Older model of CT Scanner is in use leading to sub-par imaging quality and high radiation exposure X-ray machine has broken down 5 times over the last 6 months against historical average of 1 		<ul style="list-style-type: none"> Procure a new CT scanner with specification per industry standard Conduct root cause analysis to identify reasons for failure; repair/replace accordingly

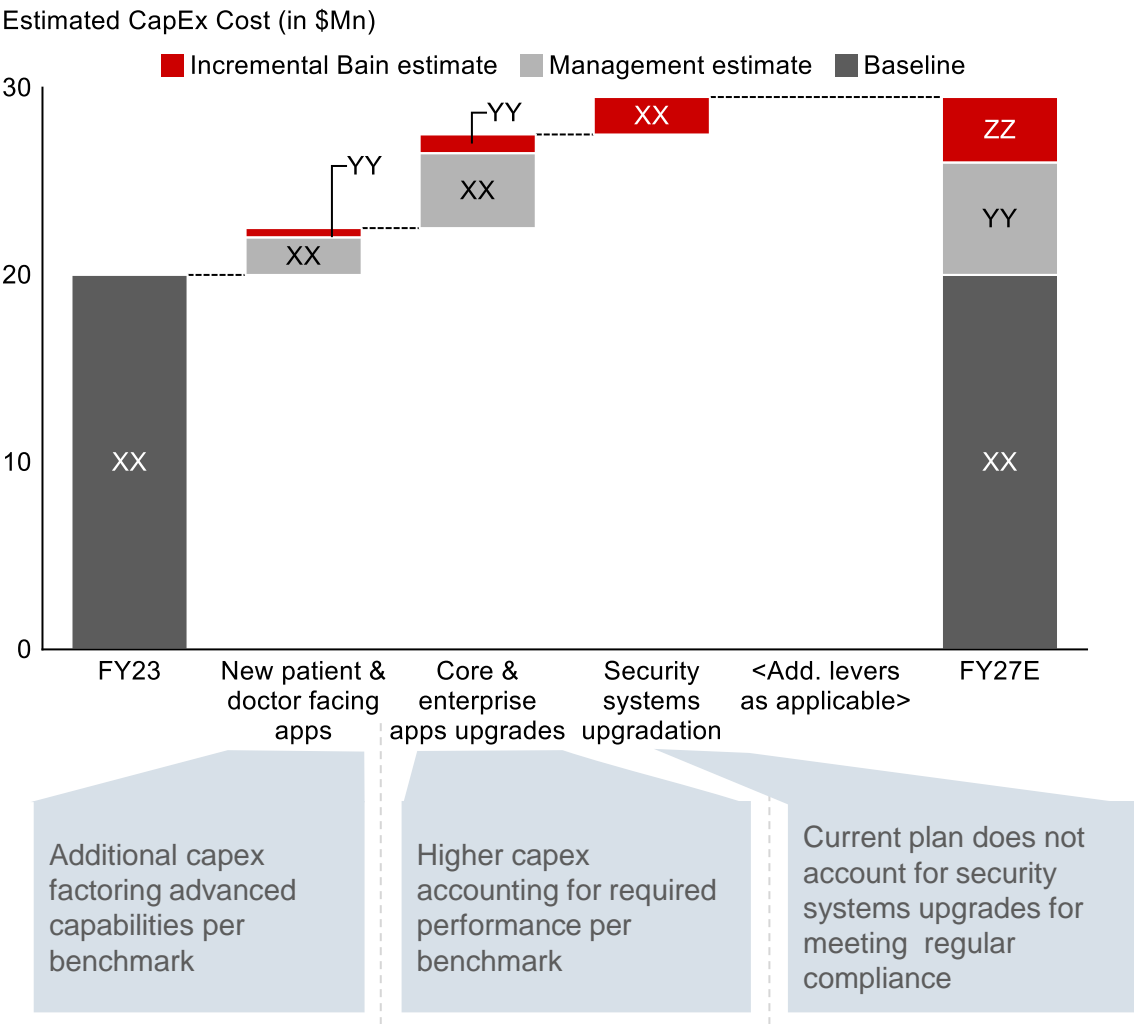
Near-term critical CapEx: We have a requirement of \$ XX Mn of investment across physical and technology infrastructure to meet our growth plan

/ ILLUSTRATIVE




Physical Infrastructure



Technology and Data Infrastructure



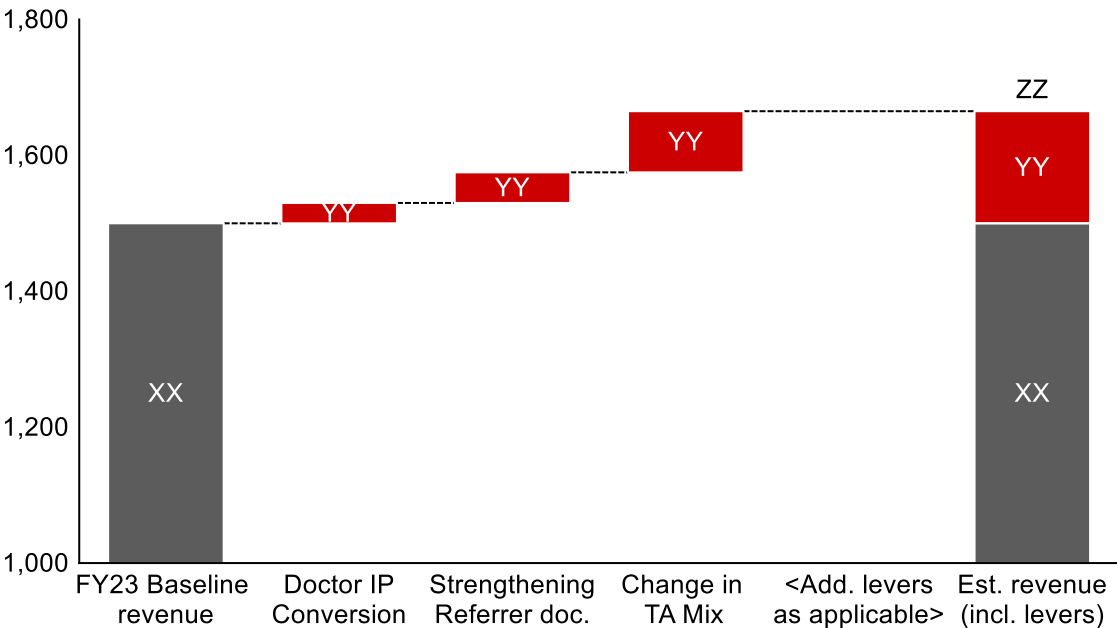
Size of Prize: Potential impact of \$XX Mn to the bottom line through progress led by levers across commercial excellence & cost optimization

Legend:  Quick win  Req. focused build  Realize in med. term with investments

/ ILLUSTRATIVE

Commercial Excellence

Estimated Size of Prize from FY23 Baseline (in \$Mn)



Improved SoW for PTCAs, Lap Choles and Hernia surg. from Top 15 visiting docs.; offer slot priority, X% patient discounts

Drive higher SoW with Top 20 ref. docs; redeploy Sales FTEs to focus more on A, B catchments

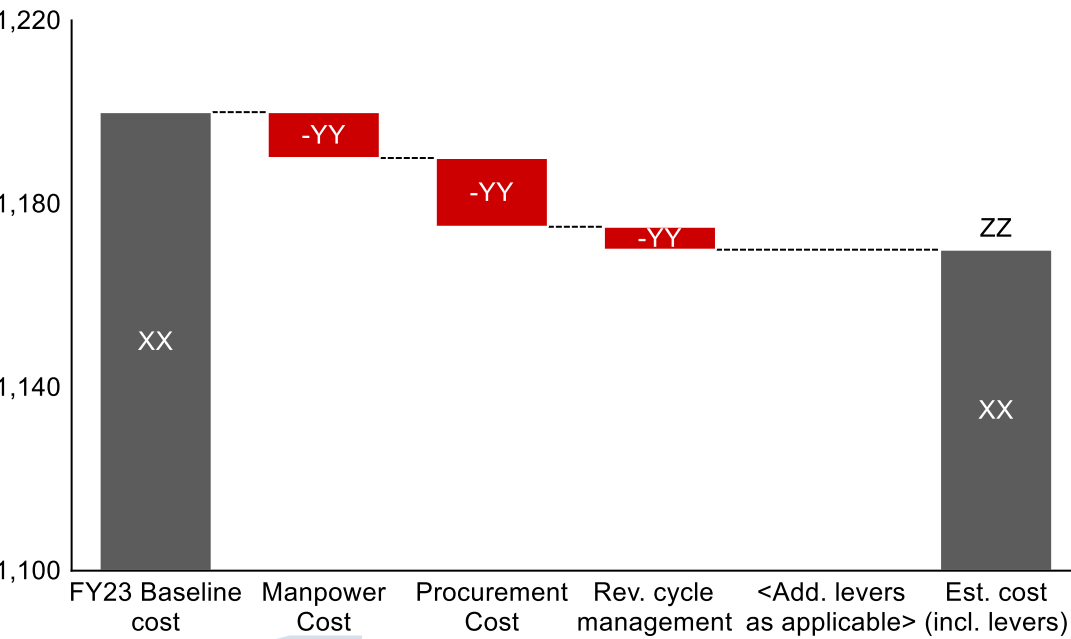
Driving growth in TAVI/TAVR and MICS within Cardiac; opportunity to strengthen COE

Feasibility: 



Cost Optimization

Estimated Size of Prize from FY23 Baseline (in \$Mn)



Rationalizing Nurse manning in Wards & ICUs by Y%; better rostering to deliver X% optimization

Switching to different brand with low cost for top 5 injectables & alternate vendors for top 4 implants

Working capital optimization by red. In insurance denial rate & # of inventory days



Bain resources and commercial terms

Scope	<ul style="list-style-type: none">• Ops DD for top 1-2 hospitals
Duration	<ul style="list-style-type: none">• Phase 1: Ops diligence and identification of risks, interventions and upside – 4 weeks• Phase 2: VCP or Risk Mitigation program with the client for priority levers - 6 to 18 months
Resourcing	<ul style="list-style-type: none">• Bain Leadership: Alex Boulton, Dhruv Sukhrani/Monika Sood, Akshay Ravi; we will leverage additional India and Global healthcare experts as required• External expert: JCI Assessor• Working team comprising a Manager, 3 FTEs (Bain Capability Network)
Bain Fees	<ul style="list-style-type: none">• For the above scope of work for Phase 1, our standard fee is USD 300K• Given the priority of the account, and with the understanding that Bain will continue to be the partner of choice for the full project, we are happy to offer a discounted rate of USD 265K
Terms	<ul style="list-style-type: none">• Invoicing: Per agreed schedule; payments to be made within 30 days of invoice receipt• Expenses: Variable out-of-pocket/ travelling expenses that will be charged as incurred at a fixed rate, capped up to 15% of fee; no detailed breakup of expenses and supporting invoices will be provided• Taxes: Professional fees excludes local applicable taxes and surcharges that will be charged above the fees

Overall Scorecard

● No risk ● Neutral ● High risk

/ ILLUSTRATIVE

	Category	Assessment	Current state	Actions
Red-flag Risks	Clinical Risks	<div>{Sample}</div> <ul style="list-style-type: none">• Doctor privileging is at sub-specialty level in cardiology and oncology• CT Scanner and X-ray machine are nearing end of life	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	<div>{Sample}</div> <ul style="list-style-type: none">• Procure new CT Scanner and X-ray machine with specifications per industry standard
	Operational Risks	Assessment for other pillars to be filled as applicable	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	Implication for other pillars to be filled as applicable
Near term critical CapEx	Physical Infrastructure		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	
	Technology and Data Infrastructure		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	
Near term opportunities	Commercial Excellence		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	
	Cost Optimization		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	

Red Flag Risks: Illustrative clinical risk assessment & mitigation planning driven by people, processes & infra

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/ ILLUSTRATIVE

Lever	Sub-lever	Observations	Assessment	Risk Mitigating Actions
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	Is there a risk of providing sub-standard clinical care due to inadequate experience of nurses ?	<ul style="list-style-type: none"> 10% of OT nurses rostered for CTVS have limited experience with Cardiac surgeries Advanced Practice Registered Nurse (APRN) is not present in oncology, but present in other focus TAs 		<ul style="list-style-type: none"> Onboard specialized nurses in focus TAs Develop nurse fellowship programs in focus TAs to upskill existing nurses
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Sample output: There exist multiple committees with proper governance mechanisms which enable superior quality of care at a hospital

CLINICAL RISKS			/ ILLUSTRATIVE / ILLUSTRATIVE		
Committee Name	Present (Y / N)	Properly Staffed* (Y / N)	Governance		Comments
			Meeting Cadence	Adherence to BDPs	
Quality assurance / improvement committee	Y	Y	Monthly	Y	Review performance metrics , update on new initiatives , deliberate on new policies & revisions to existing protocols , document MoM along with action planning
Safety committee	Y	N	..	N	
Infection control committee	Y	
Pharma & Therapeutic / Drugs committee	Weekly	..	
Grievance redressal & disciplinary action committee	
Disaster and emergency preparedness committee (includes Code Blue committee)	
Ethics committee	
Internal complaints committee (includes anti-sexual harassment)	
Clinical committee	
...	
...	

Note: *Assessed based on whether committee includes members with diverse & relevant expertise, even distribution of tasks & responsibilities & evaluating the effectiveness & timelines of the committee's outcomes to determine if current staffing meets operational needs

Red Flag Risks: Illustrative operational risk assessment & mitigation planning across resource availability, process efficiency & business continuity planning

● Limited risk ● Neutral ● High risk



/ ILLUSTRATIVE

Lever	Sub-lever	Observations	Assessment	Risk Mitigating Actions
Resource availability	Is there risk of being unable to cater to spike in demand due to lack of non-clinical manpower ?	<ul style="list-style-type: none"> 1 front desk personnel per 15 patients to take care of registration, lower than benchmark (xx) 		<ul style="list-style-type: none"> Onboard xx more front desk personnel so as to be able to cater to the peak demand
	Is there risk of being unable to cater to spike in demand due to insufficient infrastructure ?	<ul style="list-style-type: none"> 5 delayed cardiology surgeries past month due to OT unavailability, higher than benchmark (xx) 70% bed utilization rate for beds meant to cater to cardiology patients, lower than benchmark (xx%) 		<ul style="list-style-type: none"> Plan on adding an OT if future projection shows elevated cardiac patient influx Adequate buffer for bed capacity is available for cardiology, hence no immediate action needed
	Is there risk of providing sub-standard care due to lack of adequate backup facilities per the demand?	<ul style="list-style-type: none"> 50% buffer capacity for key medical gases and 30% for RO water, higher than benchmark (xx%) Power backup for identified key equipment (per benchmark) in place 		
Process efficiency	Is there a risk of being unable to cater to demand spike due to sub-optimal operational processes ?	<ul style="list-style-type: none"> Avg. wait time for admission is 2 hours (higher than benchmark xx) Avg. wait time for transfer is xx, in line with benchmark (xx) Avg. wait time for discharge is xx, in line with benchmark (xx) 		<ul style="list-style-type: none"> Encourage patients to submit insurance details digitally before admission to avoid delay No action needed for reducing transfer time and discharge time
Business continuity planning	Is there risk of operational disruptions or reputational damage due to lack of response and recovery plan to account for all the corner cases?	<ul style="list-style-type: none"> Lack of plan for 1 out of 5 key scenarios- Loss of high-profile patient leading to medico-legal case Cadence for staff trainings on business continuity scenarios is not defined 		<ul style="list-style-type: none"> Build business continuity plan per industry best practice and validate it with an expert Establish a cadence for the staff trainings to ensure preparedness for adverse scenarios

Sample output: Hospitals can monitor select KPIs to assess performance on quality of care for patients and operational efficiency (1/2)

CLINICAL AND OPERATIONAL RISKS




/ ILLUSTRATIVE

Category	KPI	Facility 1	Facility 2	Facility 3
Access assessment and continuity of care 	Avg. <u>waiting time for out-patient consultation</u>	Xx mins	Yy mins	Zz mins
	Avg. <u>waiting time for diagnostics</u>			
	Share of <u>surgeries rescheduled</u>			
	Avg. <u>time taken for initial assessment of patients</u>			
	Share of <u>appropriate handovers during shift change</u> (calculated separately for doctors and nurses)			
	Avg. <u>time taken for discharge</u>			
Care of patients 	Number of <u>reporting errors</u> per 1000 investigations			
	Standardized <u>mortality ratio</u> for ICU (ratio of observed mortality and the predicted mortality for a specific time period)			
	<u>Surgical site infection rate</u> (ratio of number of surgical site infections and number of total surgeries performed in a month)			
	<u>Patient fall rate</u> (falls per 1000 patient days)			
	Share of in-patients with <u>adverse drug reactions</u>			
	Share of <u>unplanned return to OT</u>			
	Share of patients <u>returning to the emergency department within 72 hours</u> with similar presenting complaints			
	Share of surgeries where the <u>org's procedure</u> to prevent adverse events have been <u>adhered to</u>			
	Share of <u>transfusion reactions</u> of total number of units transfused			
	Incidence of <u>hospital associated pressure ulcers</u> after permission (bed sore per 1000 patient days)			

Sample output: Hospitals can monitor select KPIs to assess performance on quality of care for patients and operational efficiency (2/2)

CLINICAL AND OPERATIONAL RISKS

/ ILLUSTRATIVE

Category	KPI	Facility 1	Facility 2	Facility 3
Care of patients 	Share of cases who <u>received appropriate prophylactic antibiotics</u> within the specified timeframe (of the # surgeries in OT)	Xx%	Yy%	Zz%
	Catheter associated <u>urinary tract infection rate</u> (per 1000 urinary-catheter days)			
	Ventilator associated <u>pneumonia rate</u> (per 1000 ventilator days)			
	Avg. <u>turnaround time for issue of blood & blood components</u>			
	Share of <u>near-misses</u> (errors that did not result in patient harm but could have per the # of incidents reported)			
	Incidence of <u>needle-stick injuries</u> (wounds caused by needles that accidentally puncture the skin) (per # of patient-days)			
	<u>Nurse-patient ratio</u> for ICUs and wards			
	Central line-associated <u>blood stream infection rate</u> (per 1000 central line days)			
Mgmt. of medication 	Share of medication <u>charts with error-prone abbreviations</u>			
	<u>Medication errors rate</u> (wrong drug/ strength/ dose/ patient/ administration etc. per # of error opportunities)			
	<u>Stock out rate</u> of emergency medication (# of stock-outs per # of emergency drug listings in hospital)			
	<u>Compliance rate to medication prescription</u> in capital letters			
	Share of medical records having <u>incomplete and/or improper consent</u>			
Facility mgmt. and safety 	<u>Hand hygiene compliance rate</u> (per total # of hand hygiene opportunities)			
	Share of <u>adherence to safety precautions</u> by staff working in diagnostics			
	Total number of <u>variations observed in mock-drills</u>			

Scorecard deep-dive: Physical Infrastructure

● Significant over-estimation ● Neutral ● Significant under-estimation

/ ILLUSTRATIVE

Lever	Key line item	Management Estimate	Bain Estimate	Assessment
Building/ Facility	General ward renovation	<ul style="list-style-type: none"> \$xx for layout change for floor space optimization 	<ul style="list-style-type: none"> \$yy basis historical cost (adjusted for inflation) & external benchmarks; significantly lower than management estimate 	
	New floor addition with xx patient rooms	<ul style="list-style-type: none"> \$xx for designing and construction 	<ul style="list-style-type: none"> \$yy basis external benchmarks (incl. \$yy for acquiring permission to build an extra floor); higher than management estimate 	
	New building with xx bed capacity	<ul style="list-style-type: none"> \$xx for designing, construction, taxes and regulatory approvals 	<ul style="list-style-type: none"> \$yy basis historical cost (adjusted for inflation) & external benchmarks for a building with yy bed capacity, higher than management estimate (xx beds insufficient per growth plan) 	
Medical/ Surgical Equipment	CT Scanner	<ul style="list-style-type: none"> \$xx for xx model 	<ul style="list-style-type: none"> \$yy for yy model since xx will go obsolete in the next 3 years, higher than management estimate 	
	X-ray machine	<ul style="list-style-type: none"> Current plan does not account for this 	<ul style="list-style-type: none"> \$yy accounting for replacement of current machine since it is undergoing repeated failures 	
	Bedside cardiac monitors	<ul style="list-style-type: none"> \$xx for xx model for xx rooms 	<ul style="list-style-type: none"> \$yy basis external benchmark for xx model for yy rooms accounting for higher demand of bedside cardiac monitors 	
Support Infra	Beds	<ul style="list-style-type: none"> \$xx for increasing bed capacity by xx 	<ul style="list-style-type: none"> \$yy for increasing bed capacity, higher than the management estimate (xx beds insufficient as per growth plan) 	
	Sewage and water treatment plant	<ul style="list-style-type: none"> \$xx for maintaining the sewage and water treatment plan 	<ul style="list-style-type: none"> \$yy for maintenance accounting for the increase in waste generated as per growth plan, higher than management estimate 	

Note: Assessment evaluated basis the difference between Management estimate and Bain estimate

Scorecard deep-dive: Technology and Data Infrastructure

● Significant over-estimation ● Neutral ● Significant under-estimation

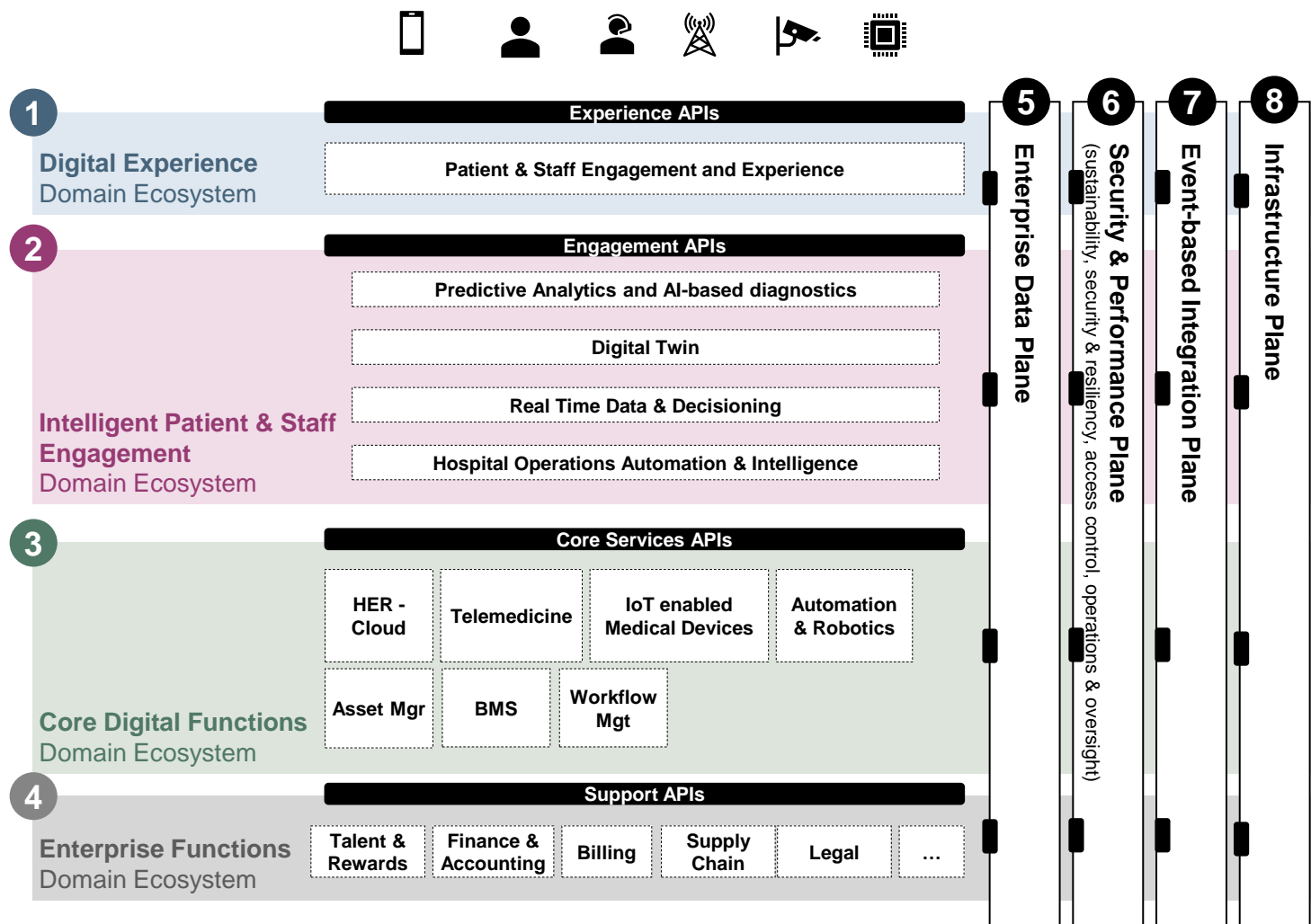
/ ILLUSTRATIVE

Lever	Key line item	Management Estimate	Bain Estimate	Assessment
Patient and doctor facing apps	New patient & doctor facing apps	<ul style="list-style-type: none"> \$xx for purchase of 5 new patient and doctor facing applications 	<ul style="list-style-type: none"> \$yy basis increased costs due to industry benchmark; significantly higher than management estimate 	
	Tech upgrades for existing applications	<ul style="list-style-type: none"> \$xx for addition of 4 new capabilities for across the 6 existing applications 	<ul style="list-style-type: none"> \$yy for enhancement of existing capabilities; in line with management estimate 	
Core & enterprise function apps	New apps for core and enterprise functions	<ul style="list-style-type: none"> \$xx for addition of 5 new apps to support core and enterprise applications to support for future growth 	<ul style="list-style-type: none"> \$yy accounting for addition of 5 new applications with ability to integrate with existing application & multiple platforms; higher than management estimate 	
	Tech upgrades for core & enterprise function applications	<ul style="list-style-type: none"> Current plan does not account for this 	<ul style="list-style-type: none"> \$yy accounting for addition of new features & capabilities to support scale & org. of the future; higher than management estimate 	
Non-functional requirements	Storage upgrade/expansion	<ul style="list-style-type: none"> \$xx for purchase of additional storage 	<ul style="list-style-type: none"> \$yy for purchase of additional storage; higher owing to increased requirement estimate in comparison to the management's estimate 	
	Security systems	<ul style="list-style-type: none"> Current plan does not account for this 	<ul style="list-style-type: none"> \$yy basis industry benchmark for security upgradation or additional security systems to account for data regulations and future service growth plans 	
	Tech. infra upgradation (IoT gateways, smart sensors)	<ul style="list-style-type: none"> \$xx for upgrading facilities with IoT, smart sensors and other infra 	<ul style="list-style-type: none"> \$yy for tech. upgradations; higher than management estimates to account for future technological advancements like GenAI, Robotics & Automation, 3D printing etc. 	

Note: Assessment evaluated basis the difference between Management estimate and Bain estimate

Capability framework to capture gaps to target level of maturity

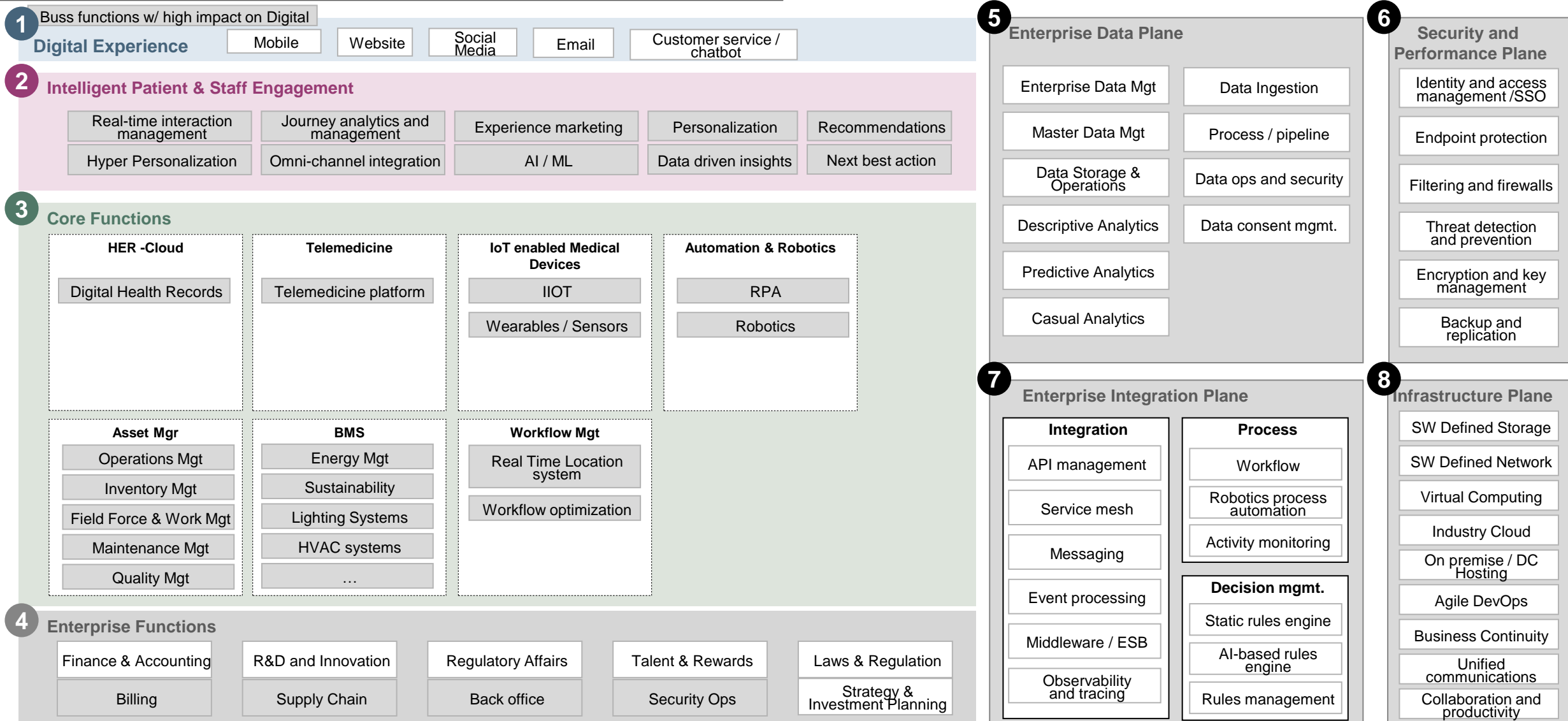
TECHNOLOGY AND DATA INFRASTRUCTURE



- 1 'Digital Experience'** will be responsible for human & device interaction across channels
- 2 'Intelligent Patient & Staff Engagement'** will be the heart of the future architecture, responsible for **'knowing, seeing & doing'** anything associated with serving patient and staff needs.
- 3 'Core'** will provide support for business core activities. This is centred around the idea of 'multi-speed IT' & 'hub and spoke' for products.
- 4 'Enterprise support'** will be responsible for supporting business operations, with extensive capability integration to **'manage, work & deliver'**
- 5 'Transparent and ubiquitous Data Plane'** will ingest, deliver & facilitate data access across the stack and verticals, including external data sources from the verticals
- 6 'Security & Performance Plane'** will dynamically sense & respond, adjusting the platform and proactively enforcing specific operational and security policies
- 7 'Event-based Integration'** will enable real-time transfer of information between applications and third parties using APIs and streaming technologies
- 8 'Enterprise Infrastructure'** is based on a cloud first, hybrid infrastructure designed to meet the dynamic capacity and performance requirements of a modern, digital business

Smart Hospital capabilities and architecture required: agile, real-time and intelligent

TECHNOLOGY AND DATA INFRASTRUCTURE



Scorecard deep-dive: Commercial Excellence

● High upside ● Neutral ● Low upside

/ ILLUSTRATIVE

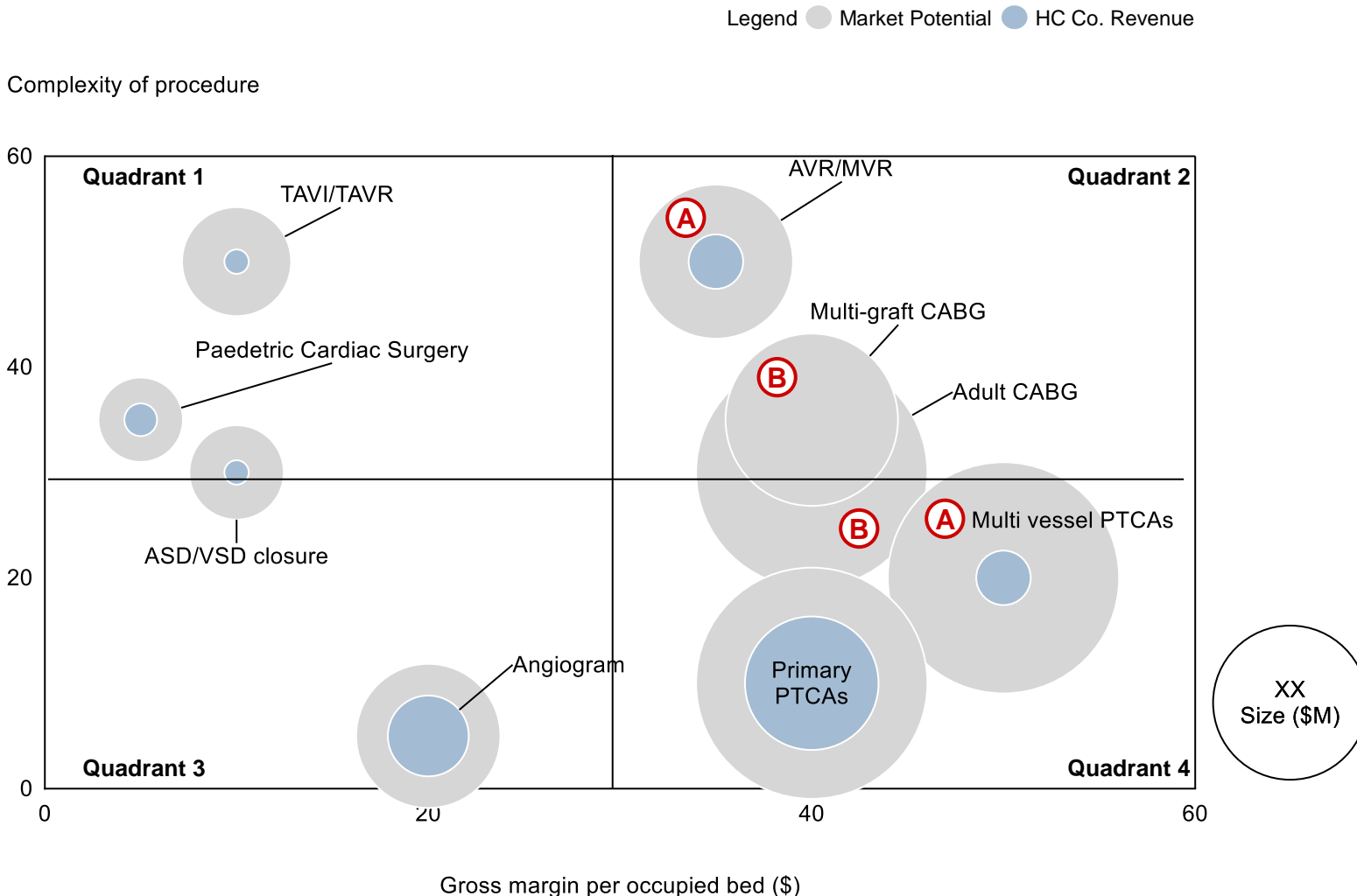
Lever	Sub-lever	FY23 Base (\$ Mn)	Size of Prize (\$ Mn)	Rationale	Upside
Existing offering (volume upside)	① Getting higher share of wallet from visiting doctors	XX	YY	zz% increase in SoW led by improved conversions for 4 prioritized procedures by redefining value prop.	
	② Reduce leakages at IP, investigation & pharmacy for in-house doctors	XX	YY	zz% reduction in leakages by defining SOPs, ensuring availability of procedures & medicines prescribed	
	③ Increase in IP volume through referrer doctors	XX	YY	zz% increase in revenue via enhancing relationships by conducting sessions & workshops	
	④ Targeting new geographies via sales & marketing expansion (upcountry regions or other countries)	XX	YY	zz% increase in revenue by focusing on 5 new geographies based on patient flow & medical tourism	
New offering (volume upside)	⑤ Onboarding new referrer doctors	XX	YY	zz% increase in revenue by onboarding 10 new doctors	
	⑥ Tying up with new insurance providers	XX	YY	zz% increase in revenue by tying up with 3 new insurance providers	
	⑦ Developing missing sub-specialties under focus TAs	XX	YY	zz% increase in revenue by prioritizing development of 3 missing sub-specialties	
Price Realization	⑧ Optimization of prices for IP, OP, packaged offerings for select procedures	XX	YY	zz% increase in revenue by setting competitive pricing to align with benchmarks	
	⑨ Change in TA mix or change in sub-specialty mix	XX	YY	zz% increase in revenue by focusing on TAs / sub-specialties with higher margins & potential	
Totals		XX	YY		

Note: Assessment based on size of prize i.e., percentage upside / downside from the FY23 Base numbers

Sample output: Procedure prioritization

COMMERCIAL EXCELLENCE

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<Sample Commentary>

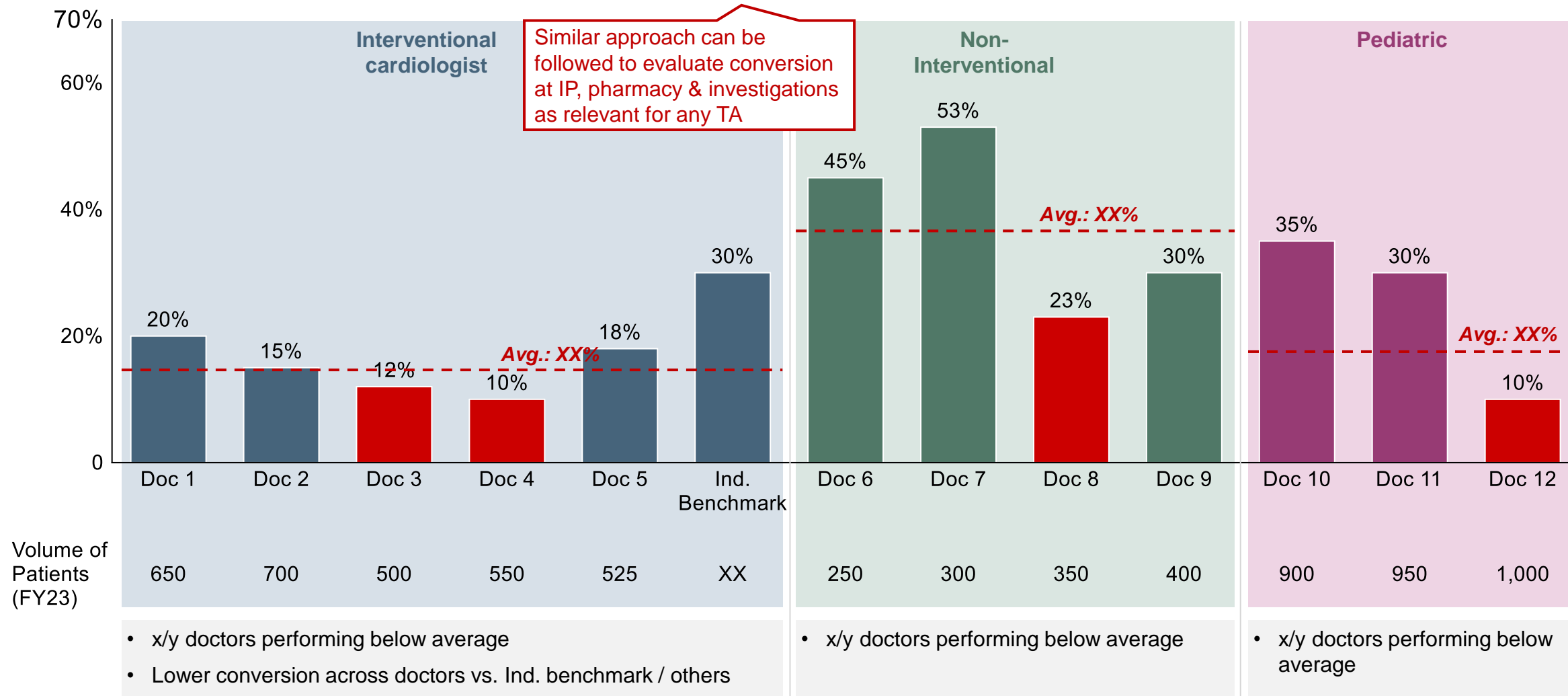
- Strengthening existing sub-specialties
 - (A)** Potential to increase revenue in Multi vessel PTCAs and AVR/MVR by:
 - > Increasing share of wallet from visiting doctors
 - > Reduction of IP leakage for in-house doctors
 - > Strengthening referrer doctor network
 - > Directing sales and marketing efforts towards prospective patients
- Developing new sub-specialties
 - (B)** Adult CABG and Multi-graft CABG because of:
 - > High revenue potential and gross margin
 - > Potential for differentiation due to high complexity of procedure

2 Sample output: Reduce leakages at IP, investigation & pharmacy for in-house doctors (1/2)

COMMERCIAL EXCELLENCE

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Laboratory investigation conversion at a hospital by doctor for a TA



2 Sample output: Reduce leakages at IP, investigation & pharmacy for in-house doctors (2/2)

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Feasibility:  High  Medium  Low / ILLUSTRATIVE

TA 1	Doctor	Conversion (FY23)	Size of Prize	Commentary	Feasibility
Sub-specialty 1	Doc 1	XX%	YY	...	
	Doc 2	XX%	YY	...	
	Doc 3	XX%	YY	...	
	
	
Sub-specialty 2	Doc 6	XX%	YY	...	
	Doc 7	XX%	YY	...	
	
	
...	

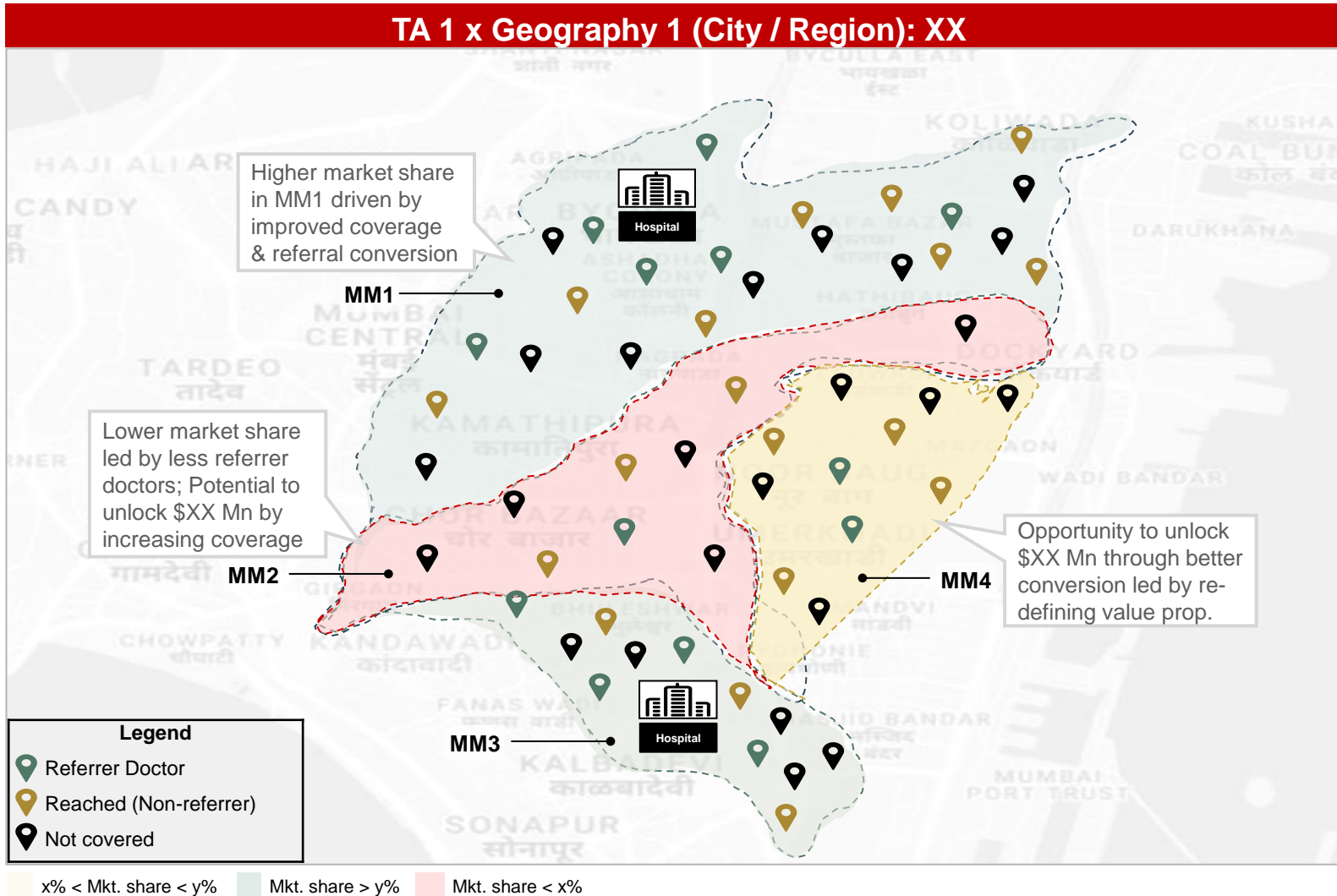
Similar approach can be followed to evaluate conversion at IP, pharmacy & investigations as relevant for any TA

\$XX Mn size of prize led by reduction in investigation leakages by defining SOPs, ensuring availability & competitive pricing

Sample output: Increase in IP volume through referrer doctors (1/2)

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Note: MM: Micro Market

3,5 Sample output: Increase in IP volume through referrer doctors (2/2)

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Region	A. Coverage % (Total doctors reached / Total doctors)	B. Referrer conv. (Referrer Doctors / Total doctors reached)	C. Referrer doctor SOW (Patient referred at HC Co. / Total patient vol.)	Size of Prize from New Doctors (Led by increase in A & B)	Size of Prize from Existing Doctors (Led by increase in C)
MM-1	XX%	YY%	Z%	XX Mn	XX Mn
MM-2	XX%	YY%	Z%	XX Mn	XX Mn
MM-3
...
...

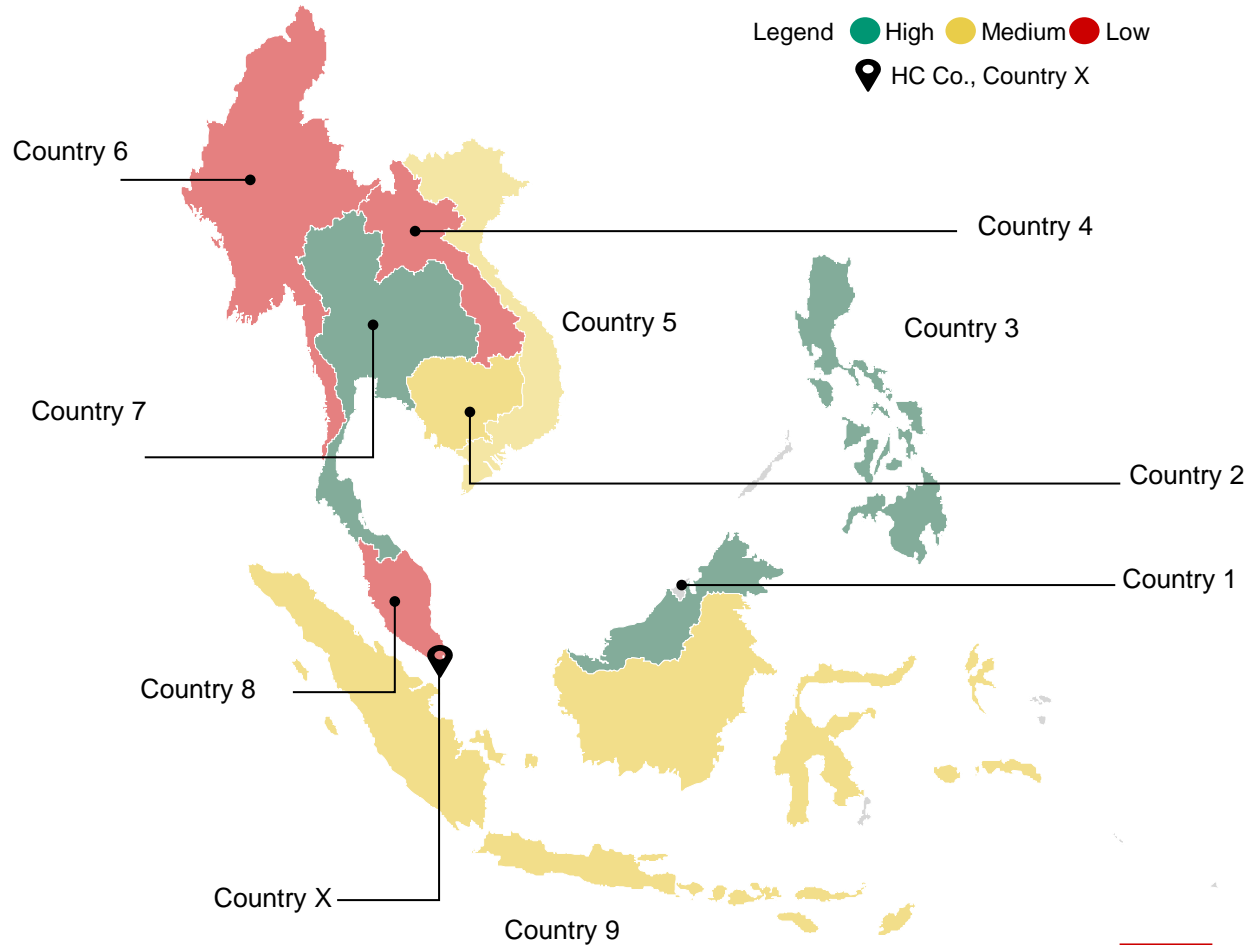


Potential to unlock \$XX Mn value by increasing sales force coverage and capturing greater SOW driven by streamlined referral process & building strong relationships

4 Sample output: Targeting new geographies via sales & marketing expansion (upcountry regions or other countries)

COMMERCIAL EXCELLENCE

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Country	Medical tourism influx (Mn)	Patients at HC Co. (%)	Target (%)	Size of Prize (Mn)
Country 1	XX	YY%		XX
Country 2	XX	YY%		XX
Country 3
...
...

Similar approach can be followed for upcountry regions around HC Co.

Potential revenue uptick of \$XX Mn for HC Co. in XX by targeting patients in <countries> for medical tourism

Scorecard deep-dive: Cost Optimization

● High upside ● Neutral ● Low upside

/ ILLUSTRATIVE

Lever	Sub-lever	FY23 Cost Base (\$ Mn)	Size of Prize (\$ Mn)	Rationale	Upside
Manpower Cost	Headcount optimization and compensation restructuring for specialty doctors	XX	YY	<ul style="list-style-type: none"> zz% reduction in minimum guarantee payout of top 15 doctors to align with benchmark 	
	Headcount optimization and compensation restructuring for support doctors	XX	YY	<ul style="list-style-type: none"> zz% reduction in compensation of pathologists to align with benchmark zz% reduction in compensation of anesthesiologists to align with benchmark 	
	Headcount optimization and compensation restructuring for non-doctors (nursing, paramedical, non-clinical, corporate HO and outsourced staff)	XX	YY	<ul style="list-style-type: none"> zz% reduction in headcount of paramedics zz% reduction in average rate of F&B personnel owing to contract re-negotiation 	
Procurement Cost	Procurement pricing of key injectables, consumables and implants	XX	YY	<ul style="list-style-type: none"> zz% reduction in cost of top 5 of 10 injectables by switching to a different brand zz% reduction in cost of top 4 of 10 implants by switching to a different vendor 	
	Consumption pattern optimization for key high contribution surgeries	XX	YY	<ul style="list-style-type: none"> zz% reduction in cost by minimizing excess stock & reducing wastages zz% reduction in cost by implementing reuse policy for select consumables 	
Working Capital Management	Optimization of Revenue cycle management	XX	YY	<ul style="list-style-type: none"> zz% reduction in working capital by implementing follow up mechanisms for account receivables 	
	Optimization of tied-up capital	XX	YY	<ul style="list-style-type: none"> zz% reduction in tied-up capital by reducing the inventory days & negotiating better payment terms with suppliers 	
Totals		XX	YY		

Note: Assessment based on size of prize i.e., percentage upside / downside from the FY23 Base numbers