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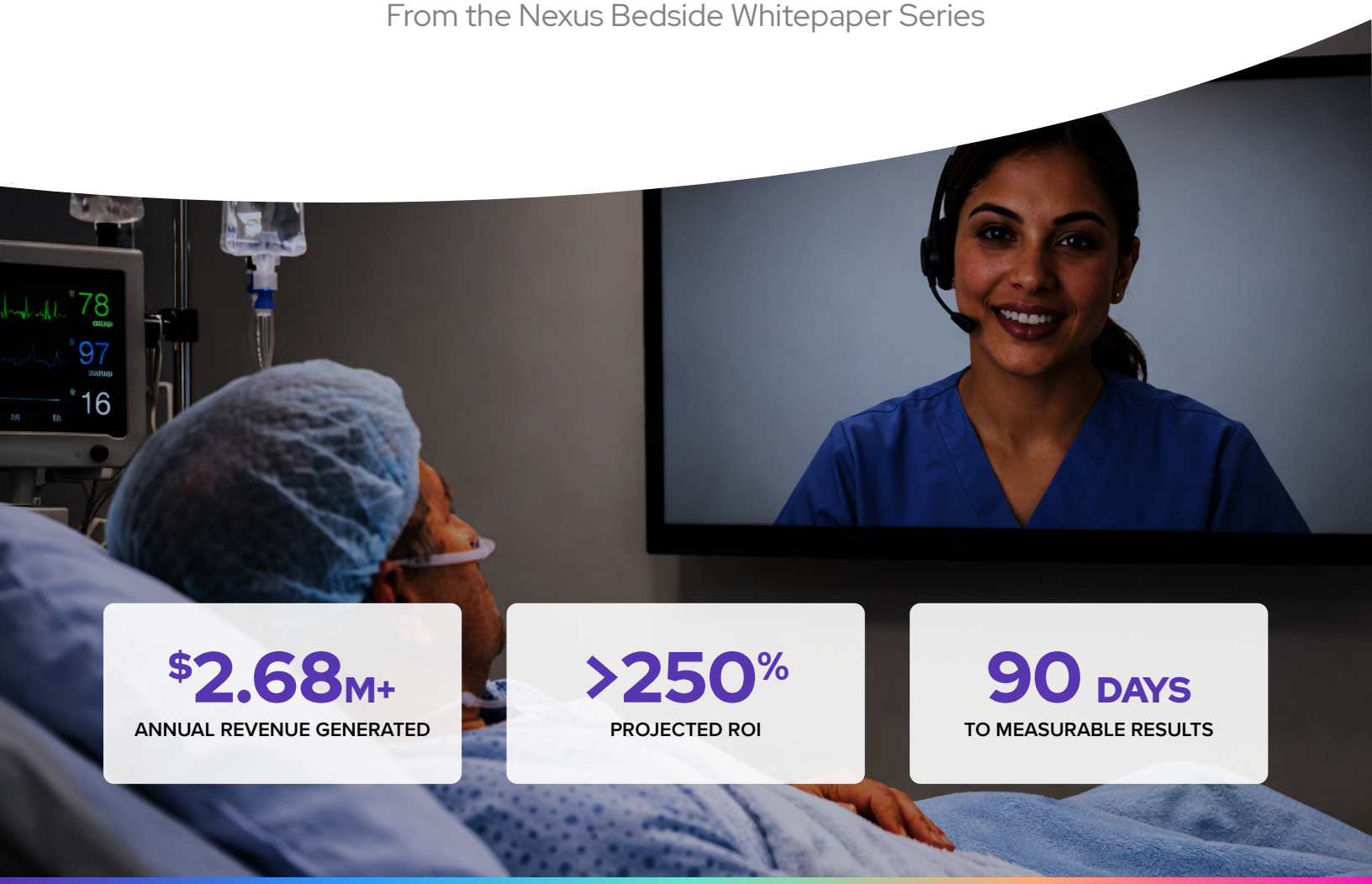
Nexus Bedside

Surgical Care Transformation

Hybrid Care in the Peri-Operative Units

From the Nexus Bedside Whitepaper Series



$2.68M+
ANNUAL REVENUE GENERATED

>250%
PROJECTED ROI

90 DAYS
TO MEASURABLE RESULTS

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1 EXECUTIVE SUMMARY

The peri-operative suite is the financial engine of the American health system - generating 60-70% of a typical hospital's contribution margin. It is also one of the most structurally underperforming environments in clinical care. Nexus Bedside exists to change that.

Across the United States, peri-operative services - pre-operative holding, the Post-Anesthesia Care Unit (PACU), and same-day and ambulatory surgery - are trapped in an operating model that has not fundamentally changed in decades. Highly trained nurses spend the majority of their shift on documentation, administrative coordination, and non-clinical tasks. Patients wait - not because their care is complex, but because the system around them is fragmented. Cases cancel, OR schedules compress, and margins erode not from lack of demand but from operational dysfunction that compounds silently every single day.

The response from health systems has been predictable: incremental technology investments, virtual nursing pilots, AI sensor platforms, and internal improvement projects that generate dashboards, awareness, and reports - but not durable operational change. These solutions share a common failure mode: they are technology-first, not care-model-first. They see the problem clearly and solve it partially, leaving the burden of change management, workforce redesign, and sustained execution entirely with hospital leadership that is already stretched beyond capacity.

1 EXECUTIVE SUMMARY

Nexus Bedside's Clinical Care Transformation Engine takes a fundamentally different path.

Built on the same operating model that has delivered validated inpatient results:

- *Greater than 70% reduction in falls with injury*
- *Greater than 80% reduction in medication errors*
- *Greater than 30% improvement in throughput*
- *Greater than $200,000 contribution margin improvement per bed-year*

SNAPSHOT

>75%
REDUCTION IN WASTED EFFORT

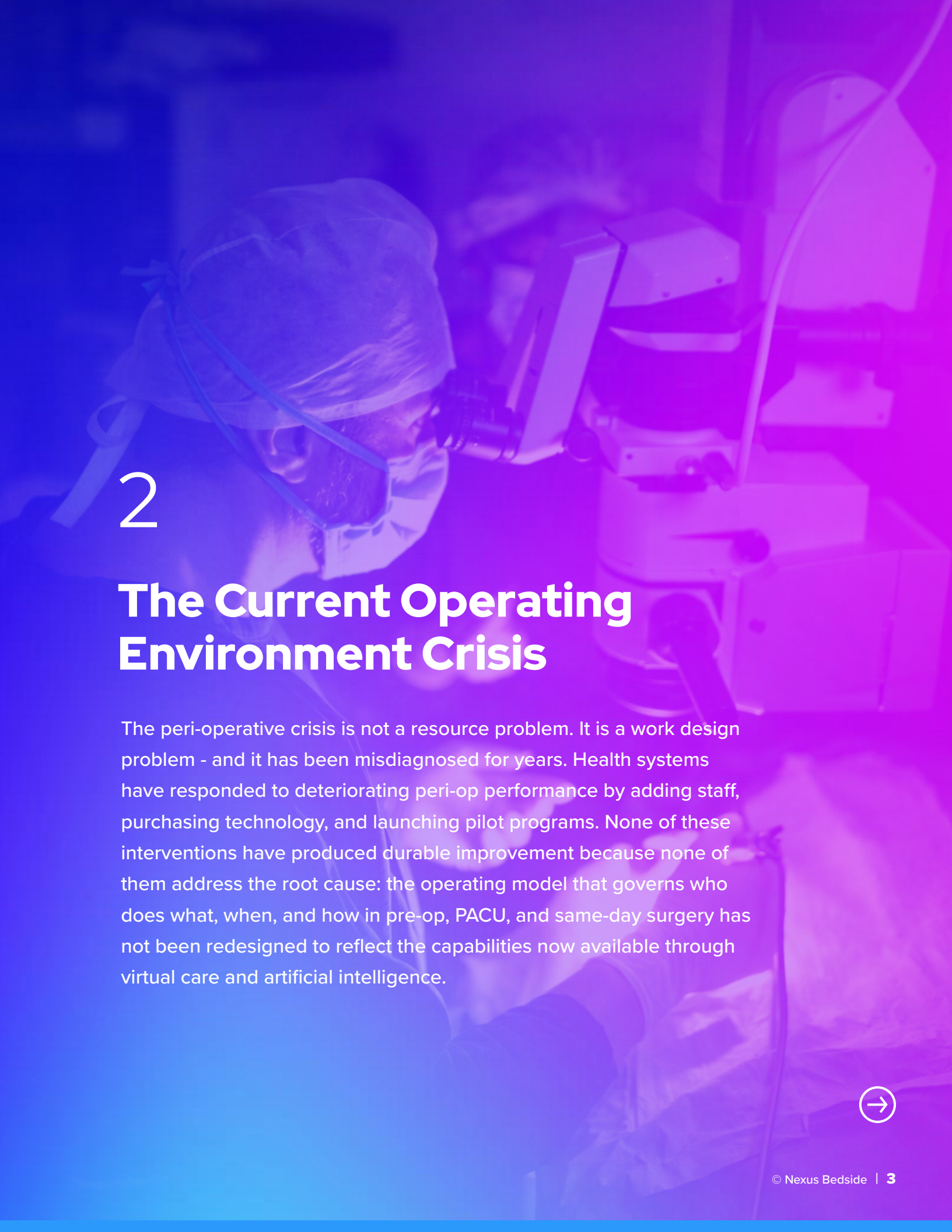
>50%
DIRECT PATIENT CARE TIME INCREASE

90 DAYS
CONTRACT TO LIVE DEPLOYMENT

The Nexus Bedside model is now being applied to the full peri-operative environment. The Co-Caring Model, which pairs bedside RNs, virtual RNs, and AI-enabled support through clear role definitions, maps precisely onto the workflow structure of pre-op, PACU, and same-day surgery, with projected outcomes that meet or exceed the inpatient benchmark in every domain.

This white paper highlights the structural crisis driving peri-operative underperformance, examines the state of hybrid and AI-assisted care in surgical settings, presents the Nexus Bedside Surgical Care Transformation Model in full, and provides quantitative projections across patient safety, patient satisfaction, nurse satisfaction and workforce stability, throughput, and financial performance.

The conclusion is unambiguous: the operating model is the problem, and Nexus Bedside is the solution - accountable, embedded, contractually guaranteed, and operational within 90 days.



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The Current Operating Environment Crisis

The peri-operative crisis is not a resource problem. It is a work design problem - and it has been misdiagnosed for years. Health systems have responded to deteriorating peri-op performance by adding staff, purchasing technology, and launching pilot programs. None of these interventions have produced durable improvement because none of them address the root cause: the operating model that governs who does what, when, and how in pre-op, PACU, and same-day surgery has not been redesigned to reflect the capabilities now available through virtual care and artificial intelligence.

The Pre-Operative Holding Crisis

Pre-operative holding is the gateway to the OR, and it is broken. Industry data consistently shows that 30-40% of first-case OR delays originate not in the operating room itself but in pre-op - in incomplete documentation, unfinished consent processes, delayed anesthesia assessments, and fragmented patient communication. The pre-op nurse, responsible simultaneously for patient assessment, IV access, medication verification, consent documentation, pre-anesthesia questionnaire completion, patient education, and family communication, is performing six distinct roles in a 60-90 minute window. The result is inevitable: something gets abbreviated, something gets missed, and the OR pays the price in delayed starts and compressed volume.

A single first-case delay of 15 minutes cascades into 45-60 minutes of lost OR time by mid-afternoon due to turnover stacking. Across a six-room surgical suite operating 250 days per year, even modest first-case delay rates represent hundreds of hours of unrealized OR capacity annually - capacity that translates directly into foregone contribution margin at $3,000-$8,000 per surgical case. Day-of case cancellations, running at 5-8% nationally and driven largely by inadequate pre-operative patient preparation, add further revenue leakage that compounds the financial damage. Patient anxiety - a significant but chronically under-addressed driver of last-minute cancellations - goes largely unmanaged because no one has time to sit with a frightened patient when the pre-op checklist is still incomplete.

The PACU Crisis

The PACU is where the peri-operative throughput crisis is most acutely visible. Patients emerging from anesthesia require intensive monitoring, pain management, airway protection, and hemodynamic surveillance - work that demands the full clinical attention of a highly skilled PACU nurse. Yet in the current operating model, that same nurse is simultaneously charting vital signs every 15 minutes, delivering discharge instructions, updating waiting family members, completing phase transition documentation, and coordinating receiving bed availability. The PACU nurse is not understaffed; s/he is mis-deployed - performing administrative work that does not require nursing licensure while the clinical work that does goes undersupported.

The operational consequence is PACU backup: when patients who are clinically ready for Phase II or discharge cannot be moved because the operational and documentation requirements for transition are not complete, PACU beds fill and OR cases cannot complete. Industry data shows that a 10-room surgical suite can lose 20-45 minutes of OR time per PACU backup event, with 3-5 such events occurring daily in programs without workflow redesign. Annually, this single constraint costs surgical programs millions in unrealized case volume -without any corresponding reduction in staffing cost. Meanwhile, nurse turnover in PACU exceeds 25% annually, driven by the same cognitive overload and documentation burden that characterizes every other over-tasked nursing environment.

The Same-Day and Ambulatory Surgery Crisis

Same-day and ambulatory surgery operates on the tightest margins in the peri-operative suite. High case volumes, compressed scheduling windows, and minimal staffing buffers mean that any disruption to the patient flow pipeline has immediate financial consequences.

The primary drivers of same-day dysfunction are well established: inadequate pre-operative patient preparation leading to day-of cancellations, insufficient post-discharge follow-up contributing to avoidable readmissions and emergency department visits, and scheduling inefficiencies that leave OR capacity underutilized during peak demand periods.

Case cancellations cost an average of $2,500 or more per event in direct lost margin - not including the downstream scheduling disruption, staff overtime, and patient dissatisfaction they generate.

Thirty-day readmission rates in ambulatory surgery populations of 4-6% reflect a post-discharge care gap that technology exists to close but that no existing point solution has systematically addressed.

The pattern is consistent across all three peri-operative environments: the problem is not clinical capability. It is operating model failure - and it is costing health systems patients, nurses, capacity, and margin every single day.

30–40%
OR delays originate in pre-op

$2,500+
Cost-per-case cancellation

+25%
Annual PACU nurse turnover

5–8%
National same-day cancellation rate

3

The State of Hybrid Care in the Peri-Operative Environment

The recognition that technology can transform peri-operative care is not new. Over the past five years, a generation of AI-enabled platforms has entered the surgical environment promising workflow intelligence, ambient monitoring, and operational analytics. These platforms represent genuine technical achievement. They have produced real data - real visibility into OR turnover times, case start delays, patient flow patterns, and workflow bottlenecks. In isolated domains, particularly around OR efficiency analytics and sensor-based situational awareness, the best of these platforms have demonstrated meaningful results, including 30-40% reductions in OR turnover time in controlled deployments.

And yet, the peri-operative crisis has not abated. Cancellation rates have not fallen. PACU backup persists. Nurse turnover in surgical settings continues to accelerate. The financial performance of surgical programs - despite billions invested in technology - remains under structural pressure. Understanding why requires an honest examination of what these platforms actually deliver and what they do not.

What Current Technology Platforms Deliver Well

The most sophisticated AI-enabled surgical platforms available today share a common architecture: a distributed sensor network - cameras, depth sensors, microphones, computer vision algorithms - deployed throughout the peri-operative environment to create a real-time digital representation of activity in the OR and surrounding spaces.

These systems are genuinely capable of capturing workflow data at a granularity that was previously impossible: they can identify when a surgical case starts and ends, measure turnover time to the minute, flag first-case delays as they occur, and provide retrospective analytics that illuminate patterns of inefficiency invisible to human observers.

When coupled with ambient documentation support and patient flow dashboards, these platforms give clinical and operational leaders an unprecedented view into the surgical day.

For health systems that have been flying blind - managing OR performance through anecdote and delayed reporting - the data visibility these platforms provide is genuinely valuable.

In settings where operational leadership has the bandwidth, expertise, and organizational support to act on that data, meaningful improvement is achievable.

The Critical Gap: Seeing the Problem Is *Not* Solving It

The fundamental limitation of every technology-first platform currently operating in the peri-operative space is that data visibility is not operational change.

A platform that tells a CNO that 38% of first cases started late last Tuesday has provided awareness.

It has not redesigned the pre-op workflow that caused those delays. It has not assigned ownership for closing the gap. It has not trained the pre-op team in a new role structure. It has not provided on-site coaching when adoption stalls at week six. And it has not guaranteed any outcome - clinical, operational, or financial.

This is not a technology deficiency. It is a category deficiency. Sensor platforms, workflow analytics tools, and ambient AI systems are designed to observe and report. They are not designed to redesign care models, architect hybrid workforces, manage change, or own execution.

The burden of translating sensor intelligence into operational change falls entirely on a health system whose clinical and operational leaders are already managing a workforce crisis, a margin crisis, and a safety crisis simultaneously.

In this context, better dashboards are not a solution - they are an additional responsibility.

3 THE STATE OF HYBRID CARE IN THE PERI-OPERATIVE ENVIRONMENT

WHAT TECHNOLOGY PLATFORMS DELIVER

- *OR workflow analytics & digital twin visibility*
- *Sensor-based ambient intelligence*
- *Case time & turnover tracking*
- *First-case delay identification*
- *Patient flow dashboards*
- *Retrospective performance analytics*

WHAT TECH PLATFORMS CANNOT DELIVER

- *Care model or workflow redesign*
- *Virtual nursing, clinical staffing, hybrid structure*
- *Embedded operational ownership*
- *Patient engagement or education*
- *Contractual performance guarantees*
- *Change management & sustained adoption*

The Gap That Technology-Only Platforms Cannot Close

Current AI-enabled surgical platforms excel at observation and analytics. They do not redesign care models. They do not architect hybrid workforces. They do not provide embedded operational ownership. They do not manage change. They do not guarantee outcomes. The hospital bears all of these responsibilities - on top of an already active workforce and margin crisis. Seeing the problem with greater clarity does not reduce the burden of solving it.

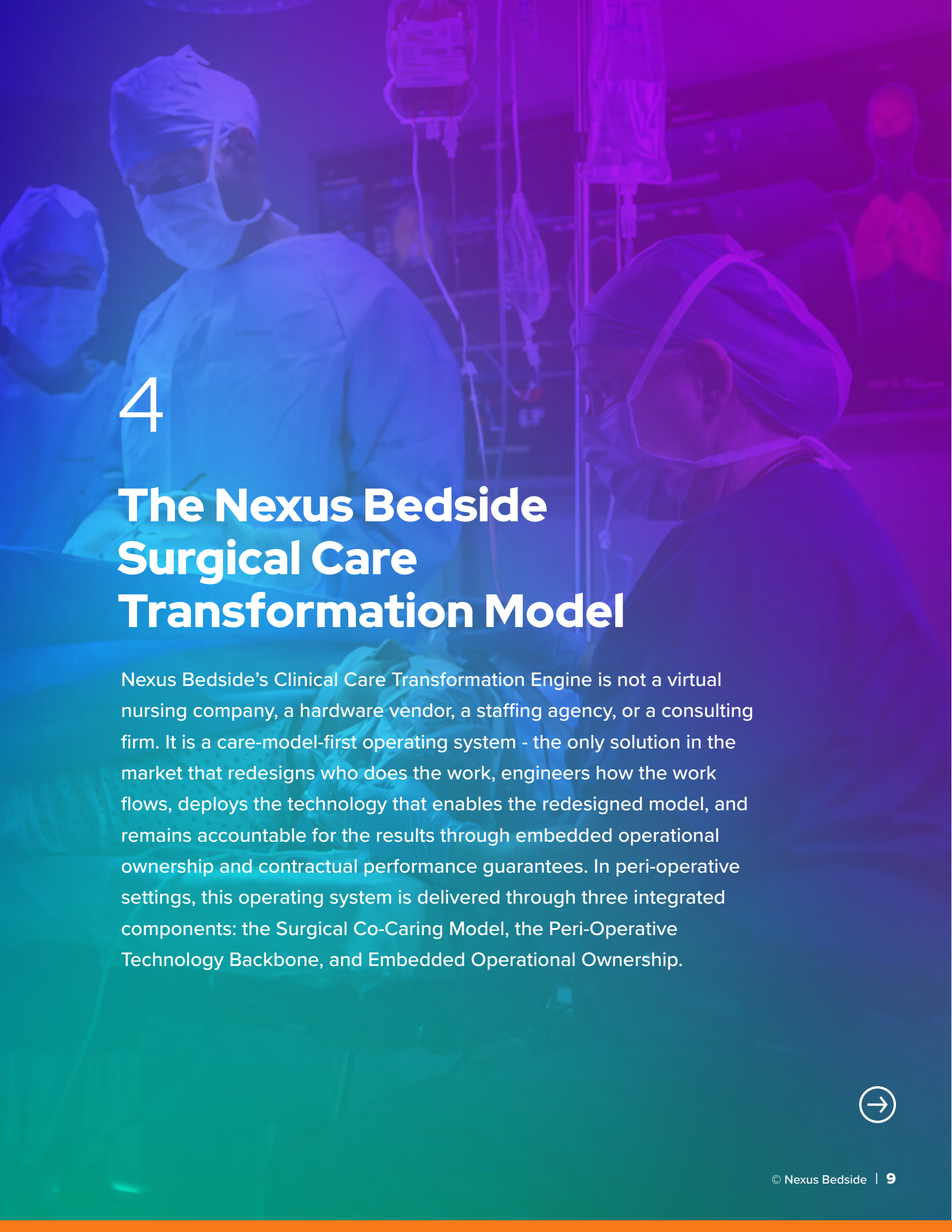
What the Peri-Operative Environment Actually Requires

Transforming peri-operative performance requires four things that no technology platform alone provides: a redesigned care model that deliberately reallocates work based on role capability, a hybrid workforce architecture that introduces virtual clinical capacity at scale, embedded operational ownership that sustains execution through the inevitable friction of change, and contractual accountability that aligns the partner's incentives with the hospital's outcomes.

These four elements are inseparable. A care model without execution support reverts to baseline within weeks. Execution support without a redesigned care model produces activity without improvement. Technology without care model redesign amplifies existing inefficiency rather than eliminating it.

The peri-operative environment does not need a better camera. It needs a better operating system - one that has been purpose-built to redesign who does the work, how the work flows, and who is accountable when it does not.

That operating system is the Nexus Bedside Clinical Care Transformation Engine.



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The Nexus Bedside Surgical Care Transformation Model

Nexus Bedside's Clinical Care Transformation Engine is not a virtual nursing company, a hardware vendor, a staffing agency, or a consulting firm. It is a care-model-first operating system - the only solution in the market that redesigns who does the work, engineers how the work flows, deploys the technology that enables the redesigned model, and remains accountable for the results through embedded operational ownership and contractual performance guarantees. In peri-operative settings, this operating system is delivered through three integrated components: the Surgical Co-Caring Model, the Peri-Operative Technology Backbone, and Embedded Operational Ownership.

The Surgical Co-Caring Model

The Co-Caring Model is the architectural foundation of every Nexus Bedside deployment. In peri-operative settings, it pairs three distinct workforce layers - bedside RNs, virtual RNs, and AI-enabled clinical support -with explicit role definitions governed by a RACI framework that eliminates the task ambiguity that drives both safety events and workflow delay. Every task in the peri-operative workflow is assigned to the role best positioned to perform it: the role with the required licensure, the physical presence, or the information access needed for that specific task.

Bedside RNs in the Surgical Co-Caring Model are freed from documentation, coordination, and administrative work and restored to the clinical functions that require their physical presence and professional judgment: patient assessment, IV access, medication administration, airway management, pain intervention, and therapeutic presence. This is not merely a philosophical reorientation - it is a structural change enforced by role definitions, measured by direct-care time metrics, and sustained by daily coaching from embedded Client Success Partners.

Virtual RNs operate continuously to absorb the cognitive and administrative load that currently consumes bedside nursing time in peri-op settings. In pre-operative holding, virtual RNs complete pre-anesthesia questionnaires, conduct medication reconciliation, manage consent documentation, coordinate with anesthesia, and deliver structured patient education - often before the patient has changed into their gown. In PACU, virtual RNs manage discharge instruction delivery, phase transition documentation, pharmacy coordination, and family communication. In same-day surgery, virtual RNs conduct pre-procedure preparation calls 48-72 hours before the case and manage post-discharge follow-up to prevent readmissions. The result, validated in inpatient deployments, is a 60-80% reduction in documentation burden for bedside clinicians and a greater than 50% increase in direct patient care time.

The Peri-Operative Technology Backbone

The Nexus Bedside technology platform integrates seven capabilities that function as a single unified operating system within the Co-Caring Model. Each capability is purpose-selected to enable the care model rather than to generate data for its own sake.

Infinity Watch Virtual Sitting provides continuous patient observation at a 30:1 virtual-to-patient ratio, delivering fall detection, safety monitoring, and immediate escalation capability in PACU without the cost of 1:1 sitter assignments. For patients emerging from anesthesia - peak fall risk, disorientation, impaired protective reflexes - this represents a qualitative improvement in safety surveillance over interval rounding models.

aimee™ AI Patient Companion and Staff Amplifier can engage patients pre-operatively through structured education, anxiety management, and FAQ response, and post-operatively through discharge preparation and follow-up. In same-day surgery, aimee™ manages the 48-72 hour pre-procedure preparation workflow - confirming NPO compliance, reviewing medication holds, answering patient questions - reducing the anxiety-driven and preparation-failure-driven cancellations that cost surgical programs millions annually.

Family Care Connect provides secure, real-time family communication during the surgical and recovery period, delivering updates that currently require a PACU nurse to step away from a patient to make a phone call. Family satisfaction in surgical settings is disproportionately driven by communication access; Family Care Connect addresses this without adding a single minute of bedside nurse time.

Continuous Vital Signs Monitoring and **AI-Augmented Workflows** provide always-on physiological surveillance and intelligent alert routing that enable early deterioration detection in PACU and reduce the alarm fatigue that currently characterizes high-volume surgical recovery environments. EHR-Native Integration ensures that all virtual RN documentation flows directly into existing clinical workflows without parallel systems or additional reconciliation burden. Third-Party Integration preserves interoperability with existing surgical platform investments.

Embedded Operational Ownership

The element that most consistently differentiates Nexus Bedside from every technology platform and consulting engagement in the peri-operative space is what happens after go-live. Nexus Bedside embeds on-site Client Success Partners who provide daily unit-level rounding, coaching, adoption management, and first-line issue resolution throughout the deployment and indefinitely beyond it. This is not a transition support model with a fixed end date - it is a permanent operating partnership that owns execution accountability alongside clinical and operational leadership.

Performance is contractually guaranteed through unit-level scorecards that tie measurable outcomes directly to the economics of the engagement. Glide paths from baseline to target performance are defined before deployment and monitored in real time through executive dashboards visible to CNO and COO leadership.

When performance deviates from trajectory, Nexus Bedside identifies the cause, redesigns the workflow, and restores momentum - without waiting to be asked. This is what it means to own outcomes rather than sell tools.

THE NEXUS BEDSIDE DIFFERENCE IN PERI-OP

Every technology platform in the peri-operative market sees the problem. Nexus Bedside solves it - through care model redesign, hybrid workforce architecture, AI-enabled clinical support, and embedded operational ownership that sustains results through contractual accountability.

The hospital gains ***a permanent operating partner***, not another tool to manage.

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Nexus Bedside Quantitative Impact

All projections in this section are derived by applying the validated inpatient outcomes published in the Nexus Bedside Clinical Care Transformation Engine Whitepaper (January 2026) to the specific clinical and operational characteristics of peri-operative settings. Where peri-operative conditions are more favorable than inpatient - shorter patient cycles, higher documentation density relative to clinical tasks, greater consequences per safety event - projections are adjusted upward. All metrics are expressed across conservative, base-case, and optimistic scenarios.

5.1 Patient Safety & Rapid Response

Patient safety in peri-operative settings carries disproportionate clinical and financial consequence relative to inpatient environments. Patients emerging from general anesthesia are at peak vulnerability: residual sedation impairs protective reflexes, hemodynamic instability persists in the immediate post-operative period, and pain management complexity creates medication error exposure that exceeds the inpatient baseline. The Nexus Bedside Co-Caring Model and technology backbone address each of these vulnerabilities directly.

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Falls with injury: >70% reduction **Adverse events:** >15% reduction
Medication errors: >80% reduction **Rapid response alerts:** >40% reduction

SAFETY METRIC	Setting	Impatient Baseline	Conservative	Base Case	Optimistic
Falls with injury	PACU	>70%	65%↓	75%↓	**85%↓**
Falls with injury	Pre-op/same-day	>70%	52%↓	63%↓	**73%↓**
Medication errors	Pre-op/verification	>80%	70%↓	80%↓	**87%↓**
Medication errors	PACU/discharge	>80%	65%↓	75%↓	**82%↓**
PACU unplanned escalations	PACU	>40% RR↓	33%↓	45%↓	**55%↓**
PACU adverse events	PACU	>15%↓	22%↓	32%↓	**42%↓**
Safety-driven cancellations	Pre-op	N/A inpatient	20%↓	30%↓	**40%↓**
30-day readmissions	Same-day	N/A inpatient	20%↓	30%↓	**40%↓**

PACU fall reduction is projected to exceed the inpatient benchmark because Infinity Watch's continuous 30:1 virtual monitoring eliminates the surveillance gaps inherent in interval rounding. A PACU patient attempting to self-transfer at minute four of a 60-minute rounding cycle is invisible in the traditional model; under Nexus Bedside, that movement is detected and responded to in real time. Each prevented PACU escalation to ICU avoids an average of $25,000-$75,000 in direct cost and substantial reduction in medicolegal exposure.

5.2 Patient Satisfaction

Patient satisfaction in peri-operative settings is driven by a fundamentally different set of factors than in inpatient care. Patients undergoing surgical procedures are evaluating how informed they felt, how their anxiety was managed, whether their family was kept updated, and whether their discharge experience left them feeling prepared and supported - precisely the domains that aimee™, Family Care Connect, and the virtual RN layer are designed to own.

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Likelihood to recommend: >30% percentile improvement
Patient opt-out of co-caring model: 0%

SATISFACTION METRIC	Setting	Impatient Baseline	Conservative	Base Case	Optimistic
Likelihood to recommend	Pre-op holding	>30% pctile	+28 pts	+35 pts	**+42 pts**
Likelihood to recommend	PACU	>30% pctile	+26 pts	+33 pts	**+40 pts**
Likelihood to recommend	Same-day surgery	>30% pctile	+30 pts	+38 pts	**+46 pts**
Patient opt-out of co-caring	All peri-op	0%	0%	0%	**0%**
Pre-op anxiety score reduction	Pre-op	Not measured	28%↓	38%↓	**48%↓**
Family communicaiton satisfaction	PACU/pre-op	Not measured	38%↑	48%↑	**58%↑**
Discharge education comprehension	PACU/same-day	Not measured	33%↑	44%↑	**54%↑**

Same-day surgery is projected to produce the largest patient satisfaction gains of any peri-operative setting. aimee™'s structured pre-operative engagement and post-discharge follow-up create a continuous care experience that patients currently perceive as absent. Family Care Connect transforms the most cited source of peri-op dissatisfaction - the feeling of being kept in the dark - into a demonstrable competitive differentiator.

5.3 Nurse Satisfaction & Workforce Stability

The peri-operative nursing workforce is under structural duress that mirrors, and in some dimensions exceeds, the inpatient crisis. PACU nurses managing four recovering surgical patients simultaneously - charting vital signs every 15 minutes, delivering discharge instructions, updating families, completing phase transition documentation, and monitoring for post-anesthetic complications - are performing the work of multiple roles at once. The predictable result is burnout, departure, and a vacancy cycle that drives reliance on expensive agency staff.

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Nurse turnover: >50% reduction **Vacancy rate:** >25% reduction **Engagement:** >20% improvement
Direct-care time: >50% increase **Documentation time:** >100% reduction (virtual RN)

SATISFACTION METRIC	Setting	Impatient Baseline	Conservative	Base Case	Optimistic
Nurse turnover rate reduction	Pre-op	>50%	44%↓	52%↓	**60%↓**
Nurse turnover rate reduction	PACU	>50%	48%↓	57%↓	**65%↓**
Nurse turnover rate reduction	Same-day	>50%	38%↓	47%↓	**55%↓**
Vacancy rate reduction	All peri-op	>25%	20%↓	28%↓	**36%↓**
Engagement score improvement	All peri-op	>20%	18%↑	25%↑	**32%↑**
Bedside direct-care time increase	Pre-op/PACU	>50%	44%↑	54%↑	**64%↑**
Documentation burden reduction	All peri-op	>100%↓	78%↓	92%↓	**105%↓**

PACU nurse satisfaction is projected to show the largest gains of any peri-operative setting because the PACU role is currently the most acutely over-burdened relative to its clinical mandate. When the Co-Caring Model removes documentation, family communication, and discharge education from the PACU bedside role, what remains is precisely the work that PACU nurses entered the specialty to perform. The virtual RN role also creates a workforce retention mechanism for experienced nurses approaching retirement - preserving institutional knowledge and deepening the talent pipeline without adding headcount.

5.4 Throughput Impact

Throughput is where the Nexus Bedside peri-operative model most dramatically outperforms its inpatient equivalent in financial terms. A 25% length-of-stay reduction in an inpatient unit saves 1.5 days per patient. The same proportional improvement in PACU saves 25-30 minutes per recovery - minutes that, in a high-volume surgical program, unlock OR cases worth $3,000-$8,000 each in contribution margin. The financial leverage of peri-operative throughput improvement over inpatient throughput improvement is estimated at 4:1 to 8:1 on a per-hour basis.

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Throughput: >30% improvement
LOS: >25% reduction
Admissions per bed day: >20% improvement
Discharges within 2 hours: >5% improvement

METRIC	Current Benchmark	Conservative	Base Case	Optimistic
Door-to-OR transfer time	75 min avg	61 min (-19%)	52 min (-31%)	**44 min (-41%)**
First-case on-time start rate	62% nationally	73% (+11 pts)	79% (+17 pts)	**86% (+24 pts)**
Day-of case cancellation rate	5-8%	4.5% (-30%)	3.5% (-46%)	**2.5% (-60%)**
Pre-op documentation complete at arrival	40-50%	70%	82%	**92%**

Improving first-case on-time starts from 62% to a base-case 79% represents approximately 66 additional hours of OR availability per room annually- enough to accommodate 8-12 incremental cases per OR per year at current case mix and turnover times.

PACU

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Throughput: >30% improvement
LOS: >25% reduction
Admissions per bed day: >20% improvement
Discharges within 2 hours: >5% improvement

METRIC	Current Benchmark	Conservative	Base Case	Optimistic
Phase I PACU LOS	90 min avg	73 min (-19%)	65 min (-28%)	57 min (-37%)
Phase II / step-down LOS	60 min avg	50 min (-17%)	44 min (-27%)	37 min (-38%)
PACU-to-floor handoff time	25 min avg	20 min (-20%)	17 min (-32%)	14 min (-44%)
Unplanned admissions from PACU	3-5% of cases	2.9% (-28%)	2.2% (-44%)	1.8% (-55%)
Overall PACU throughput improvement	>30% (inpatient)	24%↑	33%↑	42%↑

Each 28-minute reduction in average Phase I PACU LOS, applied across 4,000 annual cases, produces 1,867 additional PACU bay-hours per year - equivalent to approximately three additional PACU bays without adding a single physical bed or nursing FTE.

Same-Day/Ambulatory Surgery

INPATIENT BASELINE (PUBLISHED WHITEPAPER)

Contribution margin improvement: >$200,000/bed-year
Annualized ROI: >250%
Payroll per patient day: >10% reduction
Unit payroll per discharge: >20% reduction

METRIC	Current Benchmark	Conservative	Base Case	Optimistic
Cases per OR day	8-10 cases	+12%	+20%	+28%
Arrival-to-procedure time	45 min avg	36 min (-20%)	31 min (-31%)	26 min (-42%)
Day-of cancellation rate	5-8%	4.0% (-33%)	3.0% (-50%)	2.0% (-67%)
30-day readmission rate	4-6%	3.5% (-25%)	2.9% (-42%)	2.3% (-53%)
Discharge within target time window	55-65%	70% (+12 pts)	78% (+20 pts)	86% (+28 pts)

Financial Projections

The financial case for Nexus Bedside in peri-operative settings operates through three reinforcing value streams - labor cost restructuring, OR throughput revenue recovery, and harm reduction with associated liability avoidance - that compound as the operating model matures. Projections are modeled for a representative health system operating 6 main ORs, 20 PACU bays, 12 pre-op holding bays, and 8 same-day surgery ORs at 250 operative days per year, with an average surgical contribution margin of $4,000 per case.

Value Stream 1: Labor Cost Restructuring

LABOR METRIC	Conservative	Base Case	Optimistic
PACU sitter cost elimination (30:1 vs 1:1)	$180k/yr	$280k/yr	$380k/yr
Agency / travel premium reduction	$150k/yr	$240k/yr	$340k/yr
Nurse turnover cost avoidance	$200k/yr	$380k/yr	$560k/yr
Payroll per discharge reduction	8%	14%	20%
TOTAL ANNUAL LABOR VALUE	**$530k**	**$900k**	**$1.28M**

Value Stream 2: OR Throughput Revenue Recovery

THROUGHPUT DRIVER	Conservative	Base Case	Optimistic
Incremental cases - pre-op improvement (6 ORs)	48 cases	72 cases	96 cases
Incremental cases - PACU backup relief	60 cases	90 cases	120 cases
Incremental cases - Cancellation reduction	75 cases	120 cases	160 cases
Total incremental cases/year	183 cases	1282 cases	376 cases
REVENUE RECOVERY @ $4,000 CM/CASE	**$732k**	**$1.13M**	**$1.50M**

Value Stream 3: Harm Reduction & Liability Avoidance

HARM CATEGORY	Conservative	Base Case	Optimistic
PACU adverse event cost avoidance	$120k/yr	$210k/yr	$340k/yr
Medication error cost avoidance	$80k/yr	$150k/yr	$240k/yr
Fall with injury cost avoidance	$90k/yr	$180k/yr	$330k/yr
Readmission penalty avoidance	$60k/yr	$110k/yr	$180k/yr
TOTAL HARM REDUCTION VALUE	**$350k/yr**	**$650k/yr**	**$1.09M/yr**

Consolidated Financial Summary

SUMMARY	Conservative	Base Case	Optimistic
Total annual gross value generated	$1.61M	$2.68M	$3.87M
Estimated annual platform investment	$600k - $800k	$600k - $800k	$600k - $800k
Net annual benefit	$810k - $1.01M	$1.88M - $2.08M	$3.07M - $3.27M
Annualized ROI	100% - 170%	235% - 260%	385% - 545%
CM IMPROVEMENT / PERI-OP BAY-YEAR	**~$120k**	**~$200k**	**~$290k**

The base-case net benefit of $1.88M-$2.08M annually, achieved against a $6ooK-$8ooK platform investment, is consistent with the Nexus Bedside inpatient benchmark of greater than $200,000 contribution margin improvement per bed-year when normalized across peri-operative bay equivalents. These gains are durable because they are produced by operating model redesign, not temporary staffing augmentation that disappears when a contract term ends.

For health system executives whose mandate is safer surgical care, a stable peri-operative workforce, and predictable financial performance: Nexus Bedside is the practical, accountable, and contractually guaranteed path to delivering those outcomes - at scale, within 90 days, with embedded operational ownership that does not expire at go-live.

The Case for Acting Now

The peri-operative status quo is not a stable equilibrium. It is a slowly deteriorating system in which every quarter of inaction compounds the cost of eventual transformation. Each month of elevated nurse turnover adds to the vacancy burden and the agency premium spend. Each day-of case cancellation that goes unaddressed represents foregone contribution margin that is permanently unrecoverable. Each PACU backup event that compresses the OR schedule erodes the surgical program's competitive position in a market where referring surgeons and patients have choices. And each preventable adverse event in PACU or pre-op carries clinical, financial, and reputational consequences that extend far beyond the immediate cost of the event.

The technology-only path has been tried. It generates data. It does not generate durable operational change. The consulting path has been tried. It generates recommendations. It does not generate embedded execution. The internal improvement project path has been tried. It generates initiative fatigue. Nexus Bedside generates results - contractually guaranteed, operationally owned, and compounding over time.

Recommended Deployment Sequence

Phase I (Months 1-3)

PACU and Pre-Op Holding

The highest-leverage entry points. PACU delivers the most immediate financial return through throughput release and sitter cost elimination. Pre-op delivers the upstream OR performance gains that cascade across the entire surgical program. These two settings are operationally adjacent, share a common workforce pool, and reinforce each other's outcomes.

Phase II (Months 4-6)

Same-Day and Ambulatory Surgery

Sequenced after demonstrated PACU and pre-op results, with the Co-Caring Model, technology backbone, and embedded Client Success Partner infrastructure already operational. aimee™ and virtual RN pre-procedure workflows are introduced to drive cancellation reduction and post-discharge follow-up capability.

Phase III (Month 7+)

Performance Optimization and Expansion

Continuous workflow reengineering, scorecard-driven performance improvement, and expansion of the model to additional surgical service lines, specialty units, or additional campuses as validated results support the business case for scale.

Governance and Accountability Structure

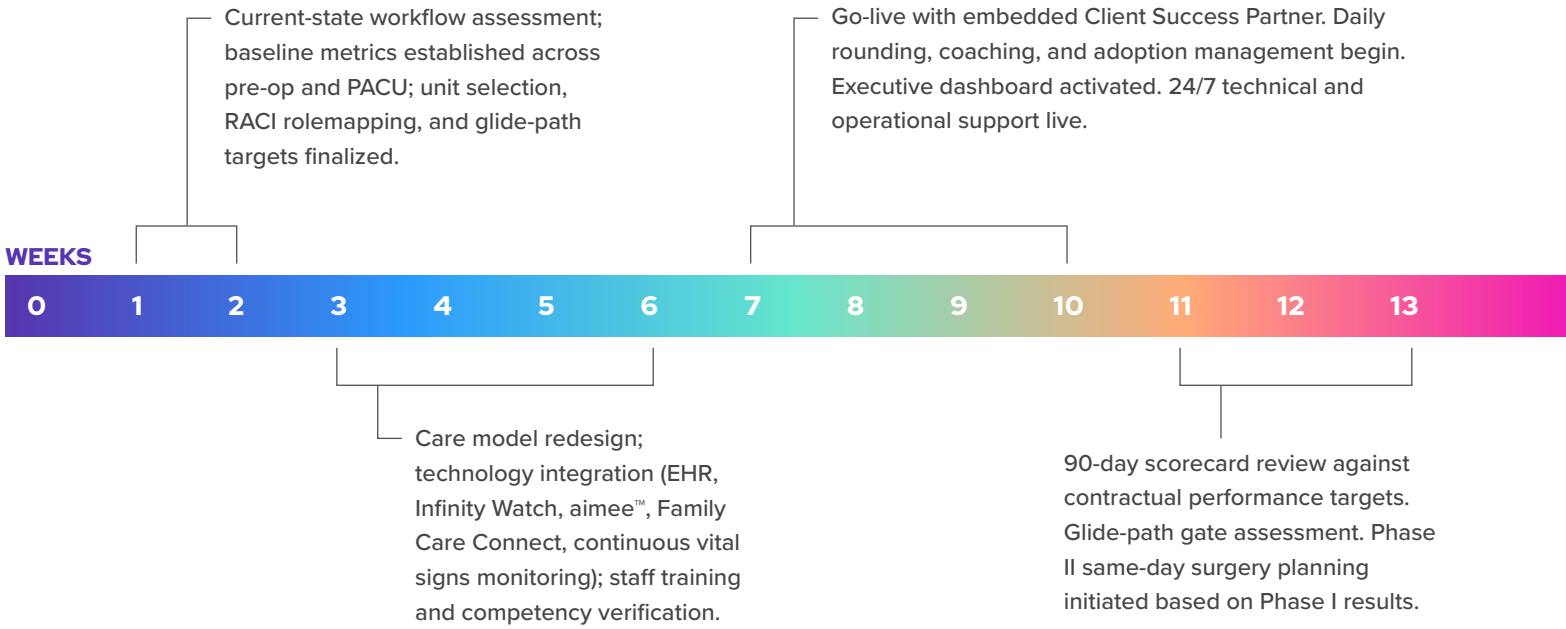
Every Nexus Bedside peri-operative deployment includes a defined governance structure designed to maintain executive visibility and operational accountability.

A joint steering committee, co-chaired by the CNO and COO with Nexus Bedside senior leadership, meets bi-weekly to review scorecard performance against contractual targets and glide-path trajectories.

Unit-level performance is managed daily by the embedded Client Success Partner, with escalation pathways to Nexus Bedside operational leadership for any issue that cannot be resolved at the unit level within 24 hours.

Executive dashboards - available from day one of go-live - display real-time performance across clinical, workforce, operational, and financial domains, connecting unit activity directly to enterprise outcomes. These dashboards are not reporting tools; they are the accountability infrastructure that ensures Nexus Bedside's contractual performance guarantees are visible, tracked, and enforced in real time by both parties.

90-DAY DEPLOYMENT MILESTONES



The Bottom Line

Applying the Nexus Bedside Clinical Care Transformation Engine to peri-operative services — pre-op holding, PACU, and same-day surgery — is projected to generate **$2.68M in gross annual value** at base case, with a net benefit of **$1.88M–$2.08M annually** after platform investment. Patient safety outcomes match or exceed inpatient benchmarks. Nurse satisfaction and retention gains are structurally durable. Throughput improvements unlock surgical capacity worth multiples of the platform cost. And the financial leverage of peri-operative throughput — where every recovered minute releases high-margin OR cases — makes this the highest-ROI deployment context in the health system portfolio. The inpatient model works. In peri-op, it compounds. For executives whose mandate is safer care, a stable workforce, and predictable financial performance, Nexus Bedside is the only accountable path to delivering all three — simultaneously, at scale, and within 90 days.

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