



Leading Health System Transforms Preoperative Care

Fast-tracks 70% of patients into surgery and increases overall clinical productivity by 66%

Background

Robust preoperative preparation reduces avoidable last-minute cancellations, ensures patients are properly prepared for surgery, and improves recovery outcomes. However, significant resources are traditionally required to coordinate activities, requiring multiple in-person appointments, consultations, and testing. Furthermore, patients may still cancel due to confusion over instructions or developing 'cold feet.'

In today's climate of labor shortages and stressed clinicians and staff, there has never been a greater need to deliver consistent, efficient preoperative care to keep care teams and patients harmonized and working towards the best outcomes.

Lumeon's work with a leading IDN demonstrates that a significant majority of healthy patients can benefit from a 'fast-track' automated process guided by digital touchpoints. This powerful approach allows preoperative teams to increase their capacity to care for patients by up to 66%.

Problem

A leading U.S. IDN with a world-renowned surgical service line wanted to reduce the administrative burden on preoperative care teams. They had invested in pre-anesthesia evaluation teams and centers, but resource constraints meant up to a third of patients needed to be evaluated by PCPs.

There was a pressing need to:

- Minimize unnecessary in-person visits and tests
- Optimize capacity within their preoperative teams
- Enhance control and visibility of the patient journey
- Maintain digital touchpoints with patients, keeping them on track
- Reduce unnecessary tests that cause bottlenecks



70%

of patients guided digital only or digital with follow up call.



66%

increase in overall clinic productivity



>75%

of patient questionnaires completed within 3 days

Solution

Lumeon's preoperative readiness solution for surgery automates a digital care plan for every patient, enabling healthy patients to be fast-tracked through preoperative assessment and avoiding the need for on-site appointments.

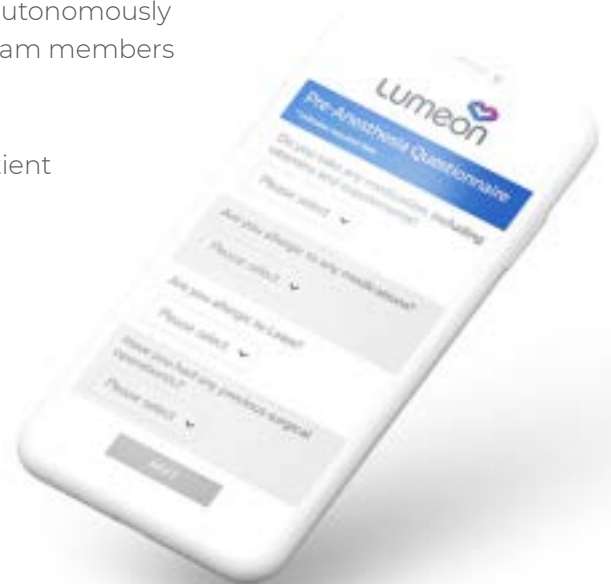
Lumeon worked closely with the client to embed their in-house preoperative protocols into a digital care journey using Lumeon's orchestration engine. Our solutions experts documented the IDN's legacy manual process, automated it, and made recommendations for improvement, working closely with the IDN's clinical and transformation teams.

The automated journey created for the client enables 70% of patients to be managed preoperatively with no on-site visit, either through digital touchpoints only (45%) or digital plus a brief follow-up call for clarifications (25%). First, the Lumeon platform automatically assesses patients using a digital pre-anesthesia questionnaire and data from the EHR. It then determines what type of engagement strategy is required and autonomously manages patients along their journey to surgery, or tasks care team members if manual intervention is required.

Continuous digital touchpoints and instructions help reduce patient anxiety and ensure they know what to do at every stage.

The care pathway created for the client includes:

- A pre-anesthesia assessment digital survey
- Automated, risk-based engagement strategy
- Care activity coordination and tasking
- Integration with their Epic EHR
- Test ordering algorithm to reduce unnecessary orders
- Automated patient communications



For care teams

Most patients managed using digital touchpoints only.

Real-time view of patient progress, tasks completed, and tasks yet to do.

Clinical decision support, ordering algorithm, and automated laboratory test chasing.



For patients

Reduced need to come into the clinic and fewer tests required.

Step-by-step digital navigation using SMS and email.

Personalized engagement strategy based on risk profile.

Results

70% OF PATIENTS: AUTOMATED CARE

One of this IDN's most significant results was to fast-track 70% of patients into surgery without requiring costly and time-consuming in-person visits in advance. Before deploying the Lumeon platform, this IDN saw the patients in person, prior to them coming into the hospital setting for preoperative assessments.

90% OF PATIENTS: ENGAGED

90% of target patients completed the initial digital assessment for surgery. The virtual care pathway combines a variety of patient engagement techniques, encouragement, and 'nudging' to ensure survey responses are completed accurately and in a timely way.

45% OF PATIENTS: PURE DIGITAL ENGAGEMENT

45% of surgical patients were suitable for fully automated, digital fast-tracking. These patients didn't need to come into the preoperative assessment clinic and could be prepared for surgery without calls from staff and nurses, using digital touchpoints only.

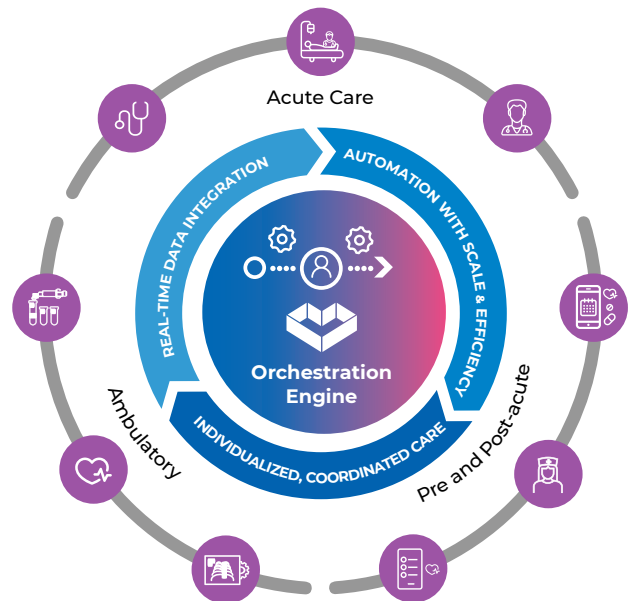
25% OF PATIENTS: ASSISTED WITH CALLS

Only 25% of patients required nursing to call them to collect missing data, clarify any issues, and further assess risks.

30% OF PATIENTS: PROVIDED WITH IN-PERSON PREPARATION

With the Lumeon automated virtual care process, only the high-risk patients needed an in-person visit for pre-surgery assessments and additional tests.

THE LUMEON CARE ORCHESTRATION PLATFORM



Potential Outcomes

↑ Increase in preoperative team capacity

↓ Reduction in late cancellations

↑ Positive patient and staff adoption and feedback

↓ Reduction in unnecessary testing