

How a Shared Governance Culture and Actionable Data Support the IHI Quadruple Aim



Overview

Implementing a shared governance culture, lean principles and care team rounding all support achieving the goals of the IHI Quadruple Aim. Shared governance is not a new concept to clinical teams. Nor are using lean principles and team rounding. The importance of these tactics is to both increase patient satisfaction by enhancing trust and an understanding of the treatment plan, in addition to increasing staff satisfaction and improving clinical outcomes.

Creating a culture of shared governance.

Shared governance in the hospital setting is critical when making decisions that affect both clinical team members and patients. The model is a best practice for promoting partnership and collaboration between nurses and other healthcare professionals for decision making within the professional environment. Shared governance also provides bedside caregivers a voice and opportunity to help lead care and ensure patient-centric care is delivered. Creating a culture of shared governance requires organizational dedication to transformation, including engaging leadership and asking “why not” – creating a forum for dialogue and change.

With the challenges healthcare leaders face today, there is a genuine need to incorporate a shared governance model into everyday practice to avoid costly mistakes both in terms of time and dollars.

Here are five key actions for nurse leaders to put into practice.⁽¹⁾

1) Be clear about what shared governance is.

Shared governance is a venue for clinical staff members to have a voice in decisions regarding practice and the practice environment. It has been defined as “a model that allows for decentralized decision-making resulting in empowerment within an organization”.

2) Help staff members understand why shared governance is important.

Staff members may worry that shared governance will mean more work for them, and the payoff will not be worth it. A skilled leader will be able to communicate the purpose and the importance of shared governance. They also will be able to keep all members on track to improve their organization.

3) Connect mission and vision to everyday actions.

Continue to review the organization’s mission, vision, and strategic priorities as part of this process. Make the connection that this work not only affects patient outcomes, but also the success of the whole organization.

4) Provide staff members with protected time to meet.

Staff members will need protected time away from regular work to focus on shared governance. Plan and project time for meetings.

5) Review the success stories.

Shared governance success stories are not hard to find and demonstrate wins across hospital departments and roles. Positive clinical results include reduction in patient falls, reduction in readmittance for congestive heart failure, and enhanced safe-lifting practices for injury prevention. Positive organizational outcomes include greater nurse job satisfaction and leadership development.

On the other hand, a lack of shared governance can negatively impact care and have long-term effects on the organization. Nursing Management cites an example of a hospital relying on only senior leadership and the vendor when implementing a new electronic health record (EHR). Without input from clinical users, the resulting EHR required numerous modifications after implementation to create a more user-friendly system for frontline staff. These revisions to the EHR continued for over two years because frontline staff were not involved on the front end.⁽²⁾

Through shared governance, organizations can improve employee engagement, employee satisfaction as well as customer satisfaction. Incorporating shared governance allows employees to feel heard and respected, knowing that their contributions matter and can make a positive difference to help the organization thrive.



Lean tools and techniques that bring efficiency to bedside nursing.

Lean methodology in healthcare utilizes tools and principles originating from the Toyota Production System⁽³⁾ that have proven to be effective in healthcare organizations when used in a structured, systematic way. Often, we as nurses ask, “Why do we do it that way?” Lean principles provide the “why” and “why not”. These methodologies identify waste in the processes and allow caregivers to focus on providing quality and maximizing value for patients.

Meeting the needs of patients and families is demanding and lean thinking provides quick, safe, and effective solutions. The 5s approach⁽⁴⁾ (sort, set in order, shine, standardize, and sustain) is a visual management lean tool

that introduces organization and standardization, and is used by many healthcare organizations to drive long-term success. Patients are not all the same, however processes within healthcare can be standardized and maximized to positively impact all patient populations.

The main impacts from this approach in healthcare are increasing productivity and team efficiency, reduction in waiting time for patient care, standardization of care processes, reducing costs, improved teamwork, reduction in the patient’s length of stay, increasing the quality of service provided, increased patient satisfaction, increased patient safety, and improved employee satisfaction.⁽⁵⁾



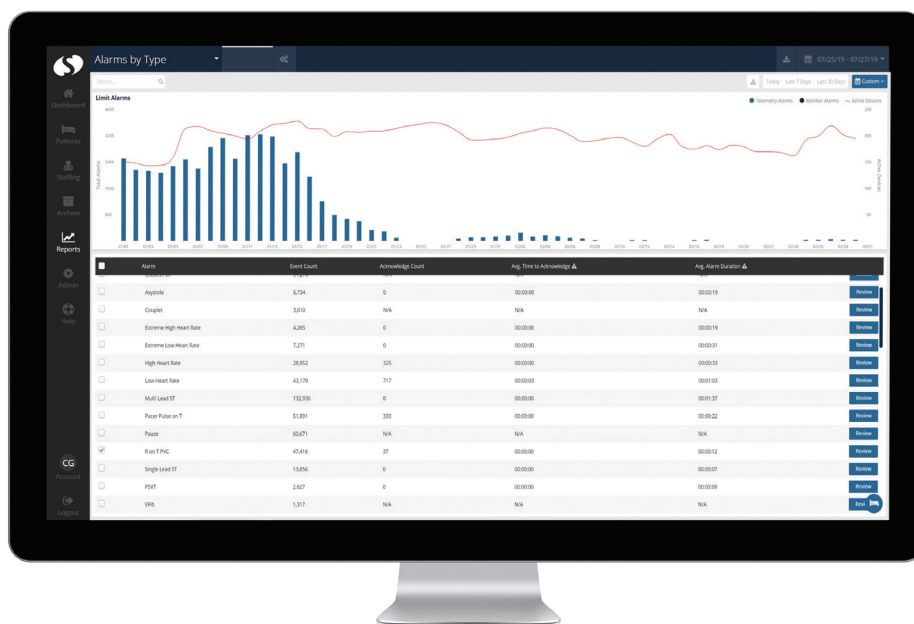
Development of safety huddles and grand rounds in the ICU.

One shared governance technique used in the Intensive Care Unit (ICU) is the safety huddle or grand round. Safety huddles create an interdisciplinary team approach for effective communication and improved patient outcomes. Identification of daily patient goals, length of stay, and safety concerns are some key points during a safety huddle. Successful safety huddles are consistent and occur at a scheduled time with a specific pre-determined team. The team leader provides opportunities for participants to engage, collaborate, and identify “what is going well; what needs improvement or follow-up.” Follow-up items are recorded and assigned to the appropriate participant with a specific due date and time. Accountability is key to ensuring participation and optimizing patient outcomes. White boards, bedside rounds, safety huddle pocket cards, and grand round logbooks are some examples of structured huddles.

Best practices include:

- a. Identify an overall goal and agenda for the huddles.
- b. Set a time for the huddle.
- c. Ensure accountability for participation.
- d. Demand patient centered outcomes.

The goals of shared governance can seem especially challenging within the ICU, as many of the most severely ill patients with complex medical pathologies and the poorest prognoses are admitted to these units. However, through the implementation of interprofessional rounds, and by using a collaborative team-based approach, patient outcomes can be optimized.⁽⁶⁾

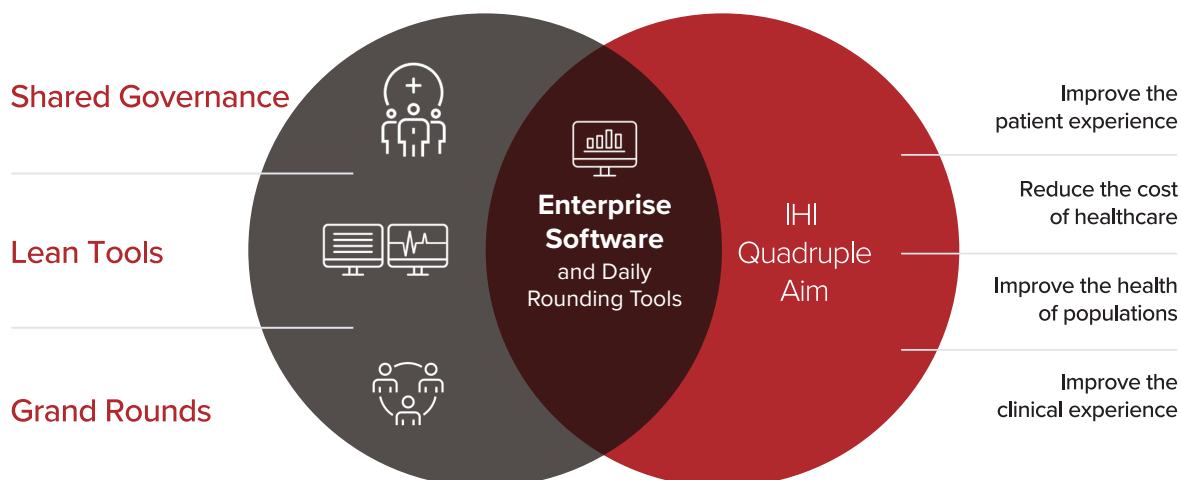


Spacelabs Enterprise software.

Spacelabs Enterprise Software is an innovative cloud-based system that leverages digital technology by providing tools that assist with alarm management, ensure that devices are properly associated to the correct patients, and facilitate collaboration between caregivers while streamlining communications. In the telemetry environment, it automates many traditionally manual tasks, closes the loop among all telemetry stakeholders and processes, provides accountability in telemetry services, and communicates information directly to the patient record. For the entire monitoring environment, it provides data to clinicians to assist in their alarm management initiatives and improves workflow

when associating patients to specific devices to ensure that the correct patient information gets to the right patient chart.

Following are two examples of using data and analytics to improve patient outcomes, enhance clinical satisfaction and workflow, as well as reduce administrative burdens. The first focuses on alarm management and using a cross-disciplinary team to prioritize alarm parameters and make decisions about the audio and/or visual presentation of the alarm. The second focuses on telemetry overutilization and illustrates how one hospital overcame this challenge utilizing the techniques discussed.



Alarm management.

Nurses working in intensive care settings are all too familiar with the overwhelming distraction of constant alarming from patient monitors, ventilators, beds, medication pumps, vital signs monitors, and other medical devices in their care area. Research indicates that 72% to 99% of all alarms are not actionable, which can lead caregivers to become desensitized to critical alarms—a condition commonly known as alarm fatigue.

The American Association of Critical Care Nurses defines alarm fatigue as a sensory overload that occurs when clinicians are exposed to an excessive number of alarms. This desensitization can create serious patient safety issues when clinicians do not respond to alarms because they assume the alarms require no intervention.⁽⁷⁾

Not all patient populations are equal. Settings may be too sensitive for some patients leading to high alarm loads and non-actionable alarm signals. Customization of limits can reduce alarm excess and false alarm signals without decreasing clinical relevance and patient safety.

Using real data to change alarm settings to be clinically pertinent and reduce alarm fatigue is made simple using

Enterprise Software. On review, the Alarm Summary Report showed that respiratory alarms were creating 25% of the nuisance alarms in the care environment. An adjustment in these alarm settings has the potential to reduce alarms by more than 170,000 in 30 days. The impact of being able to review alarms and adjust alarm settings is significant for both clinicians and patients.

A Texas hospital recently implemented Spacelabs Enterprise Software and began utilizing the software's alarm management tools to review alarm data reports. After reviewing alarm detail, a decision was made to adjust the R on T PVC alarm settings. By changing the settings, this facility was able to reduce the occurrence of this alarm by 30,000 alarms over a 30-day period without negatively affecting patient care.

Effective alarm management strategies enable prioritization of critical alarms and elimination of nuisance alarms. The goal is to send only actionable notifications and appropriate patient, caregiver, and event context, so that caregivers can respond faster and collaborate more efficiently.

Telemetry overutilization.

Telemetry overutilization, alarm burden and general workflow challenges combined with typical communication systems are realities of life in an everchanging service area where life often hangs in the balance. Problems with locating and quickly assigning telemetry devices, timely access to patient data and efficient information exchange among clinicians and monitoring technicians in an ultra-fast-paced environment can lead to frustration for everyone involved, compromise care, and elevate costs.

“We knew there had to be a better way,” says April Crim, BSN, RN, CCRN, Clinical Director of INTEGRIS Southwest Medical Center, Oklahoma City, OK, who has significant responsibility for hospital telemetry. “By leveraging state-of-the-art technology, we felt we could enhance management of the entire telemetry process to improve efficiency and improve outcomes, while cutting costs. The challenge was how to begin.”

With that in mind, Ms. Crim and her team engaged with Spacelabs to take advantage of the power of its innovative Enterprise Software to address these issues, with building in new efficiencies, enhancing outcomes, and cutting costs as the major goals.

INTEGRIS had already been using Spacelabs' monitors throughout the hospital system. Given the success of that relationship, expanding its involvement with Spacelabs Enterprise Software was a natural step to better management of clinical workflow and increased patient safety.

ASSESSMENT OF CURRENT AND DESIRED PRACTICES: A Deep Dive into Departmental Workflows

INTEGRIS launched the project with a comprehensive assessment of current department practices. Defining the end-to-end process was crucial to pinpointing roadblocks to efficient and effective workflows and formulating a plan to improve operations.

Know What You Don't Know

A comprehensive department walk through performed by a cross-functional team including clinical, biomed, and IT examined all the varying telemetry processes and procedures, which are spread across multiple clinicians and hospital staff, departments, technologies, locations, and file rooms. What came into focus was a fragmented web of telephone calls, faxes, and hardcopy and scanned forms. There were excessive paper-based communications and duplicate processes.

Within the confines of this unconnected, manual environment, staff were challenged to provide high-quality patient care. Standardized procedures were few and far between. Monitoring technicians were overburdened by alarms, manual tasks, and an enormous volume of communications to keep patient care moving forward.

Identify Key Workflow Weaknesses, Analyze Findings and Set Project Goals

As a result of their review, key challenge areas were identified. These included the telemetry admission process, staff notifications, task duplication, alarm fatigue, equipment accountability, appropriate telemetry usage, bedside staff education, and strip interpretation. Additionally, the hospital placed special emphasis on streamlining the tasks performed by its over-burdened monitoring techs, who play a key role in or are significantly affected by many of the problem areas above. Initially the hospital had one monitoring tech stationed in the intensive care area and three in the central monitoring unit ("CMU").

Crucial to the success of the project was analyzing all telemetry workflows involved to understand the issues in each problem area so that they could be appropriately addressed. Also important was identifying current telemetry performance and setting benchmarks for comparison at project completion.

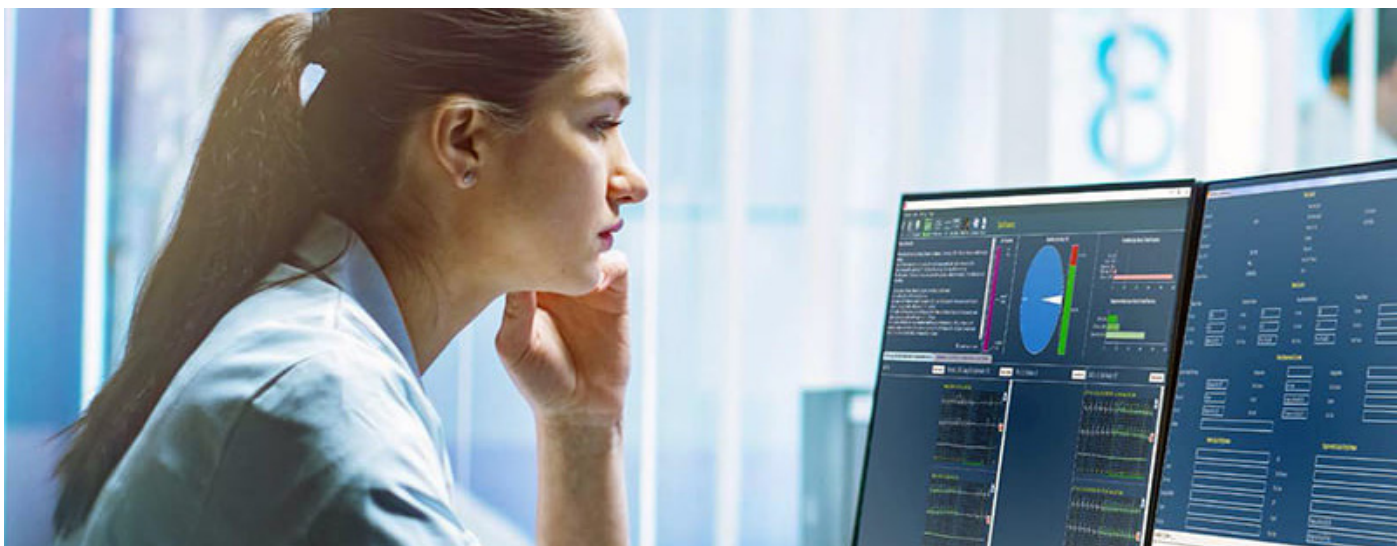
MANAGING THE PROCESS OF CHANGE: Improvement Doesn't Happen by Chance

To help the project progress smoothly, INTEGRIS carefully engineered and monitored the process. To facilitate this, the hospital:

- Defined and engaged an interdisciplinary committee
- Analyzed data and compared current and desired performance
- Held a forum on intradepartmental cooperative processes necessary for success
- Developed a detailed plan for Enterprise Software implementation and process change to reach the desired goals
- Defined an implementation timeline
- Identified staff training needs
- Measured results

The interdisciplinary committee met monthly during the transition to using the Enterprise Software, and now meets quarterly to streamline ongoing maintenance. A continuing focus for the group is metrics that include:

- Order compliance
- Equipment maintenance
- SOP compliance
- Admission compliance
- Near-miss events
- Telemetry usage



ADVANCED TECHNOLOGY ADVANCES MONITORING: Better Processes Manage Patients Appropriately, Enhance Care and Cut Costs

Spacelabs Enterprise Software drove new efficiencies and enhanced the speed and precision of care through an enterprise transition of many formerly manual processes and communications to digital automation. For example, strip interpretation and recording had been a tremendous workflow impediment when the data had to be scanned by hand into the electronic medical record (“EMR”). Today, the software enables automatic PDF printing into the patient record, saving significant telemetry technician time and disruption.

Now, device to patient association automates the information flow between the bedside caregiver and telemetry technicians when admitting a patient to a device. This keeps the techs informed of patient status, location, and ongoing telemetry processes. Automated documentation of communication has eliminated paper reporting, enhanced efficiency and information accuracy as well as creating a culture of accountability.

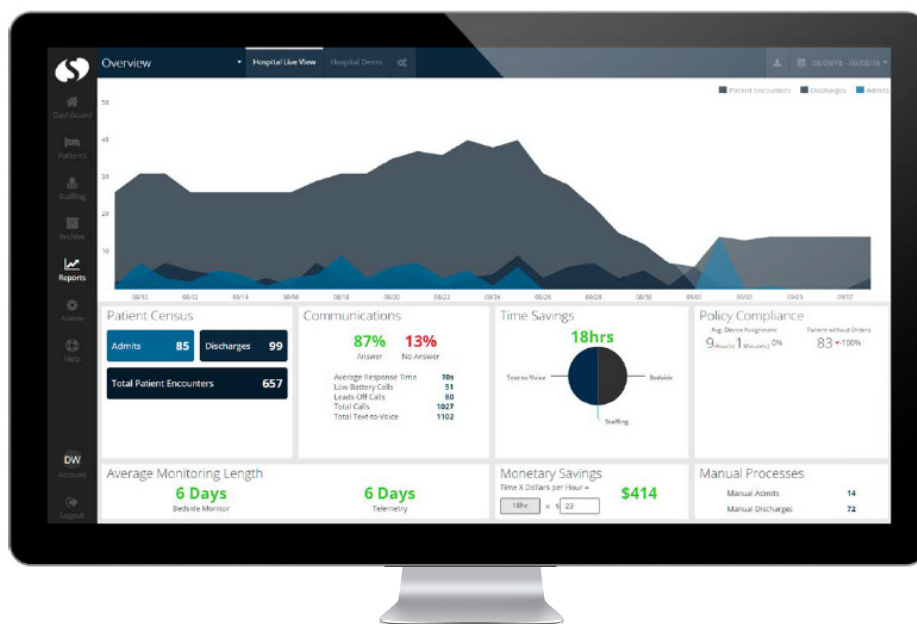
Telephone calls from caregivers on the floor to the central monitoring room were decreased by 37,000, yielding an estimated savings of more than 1,800+ FTE hours in one year alone. The central monitoring room environment also is significantly quieter and more controlled. With calls now tracked, the quality of communications has improved and is more professional and succinct.

In addition, through automated patient to device pairing, the device association time was decreased by six minutes per patient, saving valuable time. As a result of all this, INTEGRIS was able to realize a major improvement in telemetry throughput, while also decreasing costs and increasing patient satisfaction.

Most important, with more precise targeting of patients truly in need of telemetry service and better communication about when a patient is ready for discharge, unnecessary telemetry usage decreased by 30%. This enabled the hospital to significantly cut costs and ultimately care for more patients who were truly in need of telemetry services.

These changes, in turn, drove improvements in other problem areas including elimination of task duplication and enhanced equipment accountability.

More comprehensive information flow in near real time among clinicians, administrative personnel, and telemetry techs enabled better device management, compliance, quality reviews and, most important, patient care.



Significant Central Monitoring Unit Task Improvements – What Changed?

Below are key improvements enabled by use of the Enterprise Software, which boosted INTEGRIS workflow and patient care.

Task	Prior to Use	Year One of Implementation
Strip Interpretation	Paper Report Scanning Report into EMR	Electronic Report Automatic Printing into EMR
Calls To/From Bedside Staff	Frequent Calls to Verify Patient Assignments, Rhythm Interpretation, Leads Off, Battery Changes, Admission/Discharge from Monitoring	Patient Dashboard accessible by telemetry techs and caregivers allowing them to collaborate and automate communications related to patient Updates, Rhythm Interpretations, Automatic TTV Calls, Electronic Patient Admission/Discharge
Documenting Calls/Report Sheets	Paper Report Sheets Update Manually Manual Data Retrieval	Electronic Patient Reports that are easily updated and retrievable
Equipment Accountability	Monitor Tech Logs for "Check Out" Monitor Tech Cleaning CMU Responsible for Return of Equipment	Units now accountable for their own equipment, including cleaning and log keeping



CLOSED LOOP COMMUNICATIONS: Keeping the Entire Team Accountable and Informed

Accountability and timely communication are key to running a successful hospital. A lack of these can erode quality-of-care, frustrate staff, and decrease patient safety, impacting the organization's reputation.

Spacelabs Enterprise Software supported significant process improvements, greater accountability, and more precise information exchange through well-planned closed loop communications. These improvements included:

- Immediate review of events
- Manager access to instant and specific event reporting
- Manager access to device tracking
- Manager access to compliance
- Event reporting to other appropriate parties
- Conversations recording and tracking

A sound investment in enhanced clinical workflow.

Measurement and reporting were key to implementing workflow improvements. Enterprise Software measured, reported, and analyzed key data to enable INTEGRIS to enhance workflow and throughput.

CASE STUDY

INTEGRIS

Real Results

37,000

Reduced calls to the Central Monitoring Room

18,000

Tracked and managed this number of patients

60,000,000+

Processed this many vital signs

167,617

Tracked and recorded calls

1,800

Hours it saved nurses being on the phone

30%

Decreased unnecessary telemetry utilization

Quantifiable financial results.



INTEGRIS realized significant telemetry cost savings by reducing unnecessary telemetry usage by 30% in the first year of implementation. Specific details of the cost-savings appear below.

Telemetry usage before and after implementation of Enterprise Software:

	Total telemetry patients per day	Cost of telemetry patient per day	Cost savings metrics	Cost savings for one year
Prior to Enterprise Software Implementation	140	\$53.00		
One Year After Enterprise Software Implementation	90	\$53.00	140 telemetry patients - 90 telemetry patients = 50 fewer patients per day 50 x 53.00 x 365 days = \$967,250	\$967,250

In addition, the hospital was better able to manage resources, eliminating one position and consolidating three positions in the central monitoring unit.

Results

In general, due to outdated manual processes and inconsistent communication, telemetry management for many hospitals today has long been rife with challenges that potentially compromise patient care and add significantly to costs. Convinced that there must be a better solution, the Nursing Management team at INTEGRIS Southwest Medical Center implemented Spacelabs' innovative software solution with a particular focus on improving communication and streamlining the tasks of its monitoring technicians.

After implementation, the hospital saw immediate improvements well beyond monitoring tech responsibilities due to enhanced alarm management, patient-to-device pairing, and dashboard communication across all staff engaged in the telemetry process.

INTEGRIS continues to benefit as Spacelabs Enterprise Software evolves, adding features based on customer needs and requirements. As hospitals have moved into a data-driven world where decisions are information-driven and evidence-based, this software continues to support these initiatives, bringing an ever-increasing amount of meaningful data to the users' fingertips.



Summary

As nursing leadership takes the initiative and engages in governance, lean thinking, and grand rounds, tools that provide actionable data and on-demand reports become more important than ever. They provide data to clinical decision makers when and where they need it, and provide a better patient experience. Spacelabs Enterprise Software is one example of a product that can improve patient care 'in many ways' as well as care team members ability to provide outstanding care while supporting the goals of the Quadruple Aim.

INTEGRIS Southwest Medical Center

Southwest Medical Center, one of eight INTEGRIS facilities, is Oklahoma's center for health care excellence. With a commitment to leveraging state-of-the-art technology, Southwest Medical Center has a decades-long proven track record of providing an unsurpassed level of care, reaching beyond the walls of their Oklahoma City facility into the neighborhoods and communities that need care the most.



Greater efficiencies using Enterprise Software.

As healthcare organizations increasingly seek technology that facilitates evidence-based, data-driven decisions, caregivers are turning to Spacelabs Enterprise Software. The software offers much more than alarm management and reporting, with real-time reports on communications and throughput management and detailed retrospective information on patient events, providing valuable insights to clinical directors and managers. Bedside caregivers and monitor technicians can also take advantage of automated communications and Admit-Discharge-Transfer (ADT) capabilities for associating and dissociating a device to a patient.

If you are interested in learning more about Spacelabs Enterprise Software or any of the points made in this case study, please call us at 1-800-522-7025, or register for a demo at **www.spacelabshealthcare.com/datapower**. We can arrange a video conference or an on-site discussion at your convenience.

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