

# **Journey to Zero Harm**

The University of Maryland St. Joseph Medical Center transforms to create a culture of continuous improvement

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# **Executive Summary**

The University of Maryland St. Joseph Medical Center (UM SJMC) is a 218-bed community hospital located in Towson, Maryland, with a workforce of 2,500. The hospital has pursued quality improvements time and again over the last three decades. Results were mixed, and progress was limited to a few individual teams rather than permeating the organization.

When Dr. Tom Smyth ascended to Chief Executive Officer in 2016, he made quality his top priority. Specifically, he aimed to lower the hospital's patient harm index from upwards of 160 preventable events each year — to zero.

To help with this and other goals, UM SJMC contracted with Virginia Mason Institute. The institute helped hospital leaders develop and mobilize a single management system designed for everyone in the organization. The resulting St. Joseph Value Delivery System (SJVDS) combines leadership training, process improvement workshops, and daily management tools and techniques to transform how teams provide care across the hospital.

"What we learned from Virginia Mason Institute was based on principles of human behavior and breaking down hierarchical barriers and siloed workflows," says Dr. Smyth. "It was a true culture shift, from saying we're patient-centric to actually living and breathing that every day."

Three years after launch, UM SJMC has succeeded in cutting its annual harm incidents in half, as well as surpassing its targets for raising patient experience ratings and reducing employee injuries. Improvements like these have helped St. Joseph earn numerous accolades, including a five-star rating from the Centers for Medicare and Medicaid Services, an A grade for safety from Leapfrog, and recognition from U.S. News and World Report as the top community hospital in Maryland.

Critical to the system's success has been the full support of the 15-member executive team, including Chief Medical Officer Dr. Gail Cunningham. Dr. Cunningham draws a stark line between prior initiatives and the system they have today.

"This is so much more than a tool or worksheet for how to fix a broken process," she says. "This is about our entire management approach. Embracing a belief in continuous improvement while fostering behaviors of respect for others."

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# **Building on the Past**

The University of Maryland St. Joseph Medical Center (UM SJMC) had a long history of quality improvements before partnering with Virginia Mason Institute (the institute). But initiatives tended to be project-oriented, with limited engagement from frontline staff. This led to an impact that was localized and often short-lived.

Recent examples include a process improvement methodology called IMPRV. Improvements were generally led by managers, without executive sponsorship or input from frontline workers. So, despite some success, many solutions failed to last, while many others were proposed but never implemented.



**Figure 1: IMPRV** - UM SJMC's previous improvement methodology.

Overlapping with the IMPRV effort, the organization tasked Toyota Production System-trained expert Dave Norton with spreading lean management practices throughout the hospital. "I told the directors when I was hired that I didn't want to be the 'Lean Guy' — each and every leader and frontline worker had to embrace the principles of continuous improvement," he says. During Norton's 10-year tenure, UM SJMC lifted its quality ranking from near the bottom of Maryland hospitals to the top. However, his efforts never grew beyond a one-man band, and they failed to overcome the preference among teams and providers to do things their own way rather than standardize.

Marcia Kuklane, a charge nurse who has worked at St. Joseph for more than 30 years, says the turnover of short-lived improvement efforts takes a toll on staff: "It's just been frustrating. You work hard to learn the new way, then somebody changes it on you."

"To make sustainable improvement, we needed a system-wide approach to quality. We needed to transform."

-Dr. Gail Cunningham, Chief Medical Officer

In hindsight, the hospital's leaders recognize that running competing initiatives, with limited executive support and poor measurement, was not a winning strategy.

"To make sustainable improvement, we needed a system-wide approach to quality," says Dr. Gail Cunningham, Chief Medical Officer. "We needed to transform."

#### **Getting From Good to Great**

Whatever the shortcomings of prior efforts, UM SJMC had much to be proud of. Patient satisfaction and national rankings were high. Financially, for the first time in years, the hospital was in the black. Things were going well enough that when Dr. Tom Smyth ascended to CEO, in 2016, his original mandate was simply to avoid "screwing anything up."

Instead, he chose to aim higher.

"I'm a urologist by training, and even as I advanced through other clinical and leadership positions, I'd never had to look at the hospital as a whole," he says.

To gain that view, he dove into research — and found "To Err Is Human: Building a Safer Health System," the landmark Institute of Medicine study from 2000 that calculated the human cost of medical errors.

"I was shocked by the preventable harm going on in American hospitals," he says.

That included his own. At the time, preventable harm events at UM SJMC hovered between 160 and 190 per year — an average of one event every two or three days.

"Fundamentally, what are we in this business to do, if it isn't to give great care to people without harming them?"

—Dr. Tom Smyth, Chief Executive Officer

"That isn't good enough — we need zero," he said at the time. "Fundamentally, what are we in this business to do, if it isn't to give great care to people without harming them?"

#### **True North**

To guide their transformation, UM SJMC leaders identified three areas of emphasis they called their True North. Tied to each area were specific metrics, as shown in Table 1.

First and foremost on their list was tracking annual harm events, with an eventual goal of eliminating patient harm altogether. Also included were targets for a healthy operating margin and potentially avoidable utilization (PAU).

PAU consists of unplanned inpatient readmissions and other services that could be avoided through better coordination or delivery of care in the first place. It is tracked by the state of Maryland and tied to financial incentives for Maryland hospitals. The state government also fixes each hospital's annual revenue, rather than basing it on patient volume.

"That's another reason we needed this transformation," says Dr. Cunningham. "In an essentially capitated revenue system, cost efficiency is the only way to improve our bottom line."

Heading for "True North"  UM SJMC Goals for Improvement	
Focus	Metric
Our Patients	Harm Index (# of annual harm events)
	Patient Experience (national percentile)
	Patient Flow Index (delay time per visit)
Our Colleagues	Employee Safety (# of injuries)
	Operating Margin (% of revenue)
Our Community	Potentially Avoidable Utilization

**Table 1: Heading for "True North" -** UM SJMC selected metrics to correspond to the three areas of focus that form their "True North."

#### The Need for Culture Change

With their direction set, UM SJMC sought a partner to help them move forward. Many leaders knew of Virginia Mason Institute, having worked with or researched lean management in various forms over the years.

To learn more about what the institute could do for them, 15 executives from St. Joseph's spent two days in Seattle visiting Virginia Mason Medical Center and observing the Virginia Mason Production System® (VMPS) at work. They saw much to emulate and aspire to, from the use of production boards in every wing to the respect exchanged between every team member.

"After Seattle, we had to admit: We were a physician-focused organization. And we had to become patient-focused."

— Dr. Jason Marx, Medical Group Director

The executives returned to Maryland inspired and determined — not to try a new "flavor of the month," like all the short-lived improvement efforts of the past, but to change their entire culture.

"The tools are one thing, but rarely do you appreciate the cultural underpinnings that are required to use them effectively," Dr. Smyth says. "Virginia Mason had it in spades."

Dr. Jason Marx, director of UM SJMC's Employed Medical Group, which oversees more than 160 physician providers at the center, also found the trip eye-opening. "After Seattle, we had to admit: We were a physician-focused organization. And we had to become patient-focused."

#### **The Bottom Line**

Dr. Smyth took his proposal for a three-year contract with the institute to the hospital's Board of Directors. The focus on eliminating patient harm impressed the board, including then-Board Chair and former Maryland State Senator Francis X. Kelly, Jr. Says Kelly, "That's the Hippocratic Oath, isn't it? But over 35 years working with hospitals, this was the first time I'd heard someone focusing their whole strategy around it."

To avoid threatening UM SJMC's hard-won financial stability, Smyth and his team committed to making the investment cost neutral: Every new cost would be covered by a cost reduction somewhere else.

According to Chief Financial Officer Paul Nicholson, committing to cost neutrality made it much easier for the executive team to get on board. More importantly, it proved that the organization was committed. "If you're not willing to give something up to make it happen, then you probably don't believe in it in the first place," he says.

#### "What's the ROI?"

Paul Nicholson, UM SJMC's Chief Financial Officer since 2012, never opposed the plan to transform. But he did question it. "Any good finance person will ask 'What's the ROI? How is it going to improve my bottom line?" he says.





"The first thing she said was, 'This is not a one-and-done exercise that you start and finish. This is ongoing and pervasive.'

Then she pointed out that every healthcare organization has many talented clinicians in leadership roles who have no managerial training. For those that do have training, the level and type is highly variable.

Finally, she said, 'Imagine you had a standardized management training program for all leaders, so that everyone approached management issues the same way — with the same set of tools and the same philosophy about reducing waste, accepting zero harm, and accepting zero errors. What would that be worth?'

That was a turning point for me."

# **Making Transformation Work**

A new way of working must be owned and carried out by people within the organization. So the institute's approach begins with building skills and buy-in among leaders. It falls on those leaders to spread the new processes and practices to the rest of their organization, by sponsoring individual improvement events and being visible, active and engaged with the frontline every day.

The institute trained UM SJMC executives through formal sessions and ongoing coaching. Formal training included the six-day "Lean for Leaders" course over six months, in which cohorts of 20 leaders are immersed in the key concepts and behaviors of lean management. As of 2020, the hospital has graduated 111 leaders through the course. The institute trained and licensed UM SJMC's Transformation Director and others to conduct the course on their own, and some executives who took part in the initial cohorts have stepped up as role models to help teach their colleagues in subsequent rounds.

Training and coaching were led primarily by institute "senseis" — instructors with special expertise in VMPS (who carry the Japanese term for "teacher," reflecting VMPS's roots in the Toyota Production System).

Executive Sensei Susan Neidig and Transformation Sensei Melissa Lin held monthly, onsite personal coaching sessions with the transformation office and members of St. Joseph's executive guiding team for the first year, with a mixture of onsite and virtual meetings continuing over the next two. The senseis were also in regular contact with executives in between sessions, answering questions and providing counsel via phone and email.

"The personal coaching is when we talk about specific dilemmas and mental barriers the leaders are experiencing — applying the teachings from the management system's concepts to their actual day-to-day," says Lin.

For the executives, it was a chance to see the sense is practicing the very principles and habits UM SJMC was trying to perfect.

Karen Campbell, Director of St. Joseph's internal Norton Transformation Office (NTO), says, "Once a month, I knew Melissa was going to tell me, 'Okay, show me what's going on with your metrics.' So I knew I had to be accountable. Those behaviors of accountability continue today and are part of the foundation of our management system."

### **Transformation HQ**

UM SJMC created the Norton
Transformation Office (NTO)
— named in recognition of Dave
Norton and his earlier contributions
to the hospital — to headquarter
and facilitate key components of
the transformation, like Lean for
Leaders. However, the office is not
responsible for the transformation as
a whole.

"Putting one team or committee in charge of improvement is almost like protecting the rest of the organization from having to change," says the institute's Executive Sensei Neidig. "It leads to the kind of short-lived, piecemeal improvement efforts UM SJMC had done in the past."



Figure 2: Partnership between executive team, transformation team and all leaders

The NTO, in other words, is just one part of the St. Joseph Value Delivery System. The system as a whole belongs to everyone in the organization.

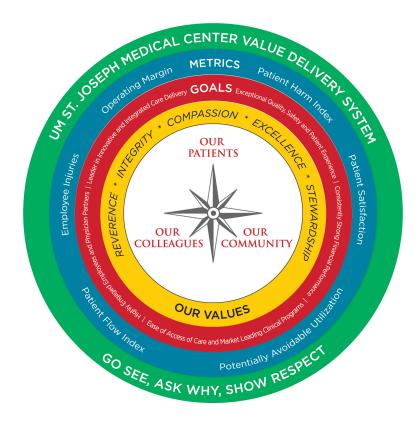
Karen Campbell, NTO Director, puts it this way: "My measure of success is when the system is in everyone's blood, and people don't need us to inject it again and again at different points."

### Laying the Foundation

To start, the institute helped UM SJMC build the structure on which their entire transformation would depend: a single management system, based on VMPS but sculpted according to St. Joseph's unique cultural values.

"Organizations will usually be strict about preserving technical components of VMPS, like the definition of waste or the concept of mistake-proofing," reflects Lin, Transformation Sensei. "But for everyone we partner with, it's important we honor the evolution of their own QI journey, as well as the cultural tenets that make their organization unique."

In the end, UM SJMC did make the system their own. But initially, they appreciated following what the institute taught them to a T. Campbell explains, "We were new at this, so we couldn't afford to improvise. If one person strays, we don't have a system anymore."



**Figure 3: True North at UM SJMC** - The St. Joseph Value Delivery System, depicted in green, was added to UM SJMC's True North in 2017 as their single management system to transform healthcare for their patients, colleagues, and community.

The concept of a single improvement method spanning the entire organization is one of the institute's "requirements of transformation" (see Figure 4). Other requirements include having a shared vision, such as St. Joseph's True North, and having leaders who actively and visibly embody and encourage the changes underway.

The requirements also make clear that transformation involves technical as well as human dimensions of change. To be successful, organizations must embrace not one or the other, but both.

### **Technical Dimensions of Change**

The technical dimensions of UM SJMC's transformation include applying the discreet tools and programs they learned from the Virginia Mason Production System®, which they now use as a matter of course. This solidified the foundation of scientific thinking with a marriage of problem-solving tools and daily management techniques.

A prominent example is the production board — a large visual management display used by individual teams to share and monitor everything that helps the team run their day-to-day business, from planned work for the day and issues to escalate to leadership to daily staff schedules. In addition to information,

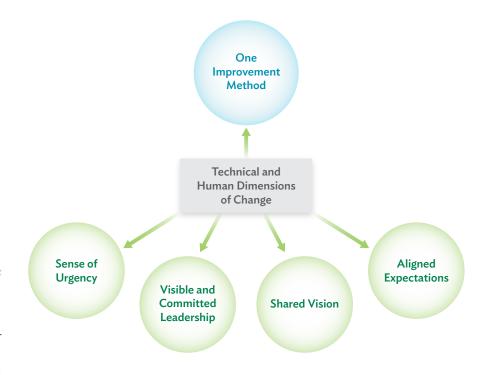
the boards provide accountability. Staff post their pain points, known as "rocks in our shoes," to the board, which fosters brainstorming and innovation from the frontline in solving the problems with their managers.

Jon Wells, UM SJMC Facilities Director, sees his staff engaging more as a result of their boards. "They know they have a voice, and their bosses are putting themselves on the hook to listen and follow through," he says.

At St. Joseph's, teams in clinical areas, facilities and even finance maintain their own boards and hold daily huddles around them. As CFO Paul Nicholson says, "Seeing it on every shift, in every department, reiterates to staff that this is not just something 'those nurses do over there when they have time.' This is our system."

Another technical component of the system is the Rapid Process Improvement Workshop (RPIW). An RPIW is like a "solution incubator," in which staff involved in a flawed process — which often includes frontline workers from different teams and departments — devise, test and implement improvements over the course of a week.

Staff at UM SJMC quickly found that the RPIW method itself was a vast improvement on tools they had tried in the past. Marcia Kuklane, the charge nurse frustrated by decades of previous improvement efforts, says, "We did a midweek report-out — we weren't even done with the test yet — and I thought, 'We did all this in three days. What could we do in a month or six months or a year?' I think that was my ah-ha moment, when I really felt this system was going to work."



**Figure 4: Requirements of Transformation** - An organization's successful transformation requires the presence of both the technical and human dimensions of change.

Key aspects of an RPIW include the heavy use of data to understand the true current state, assess solutions and illustrate progress; readouts for three months after the workshop to sustain the improvements; and the involvement of frontline workers. While an executive sponsor and manager-level "process owner" provide oversight, the actual problem solving is done by the people who do the work every day. Those workers also have the honor of reporting on results to an audience that includes the CEO, senior executives, teammates and others across the organization.

CMO Dr. Cunningham found that final aspect to be the most inspiring of the hospital's first RPIW, which involved front-desk workers improving the patient admission process. "These were people who would

never get that kind of opportunity if they were just going about work as usual," she says. "So to see the elevation of those individuals in their knowledge and enthusiasm about process improvement — it was profound."

### **Human Dimensions of Change**

Tools and techniques alone will not tackle the hairiest challenges in healthcare. As noted by Dr. Smyth, company culture is a pivotal but often overlooked dimension of change. Two cultural aspects UM SJMC has stressed in particular are the way staff address errors and the quality of leadership.

In terms of errors, staff at St. Joseph's used to do what people everywhere tend to do: blame whoever made the error. The institute taught them to focus instead on the process that allowed someone to do something wrong. If you don't fix the process, someone else is bound to make the same mistake in the future.

Nicholson recalls a case where a front-desk clerk accidentally gave a patient the wrong bracelet:

It had the correct patient ID but was coded for a previous visit to the hospital. At our morning safety huddle, the director said, "Don't worry. We counseled the employee, and it won't happen again." And we said, "Wait."

Why was the registrar able to print a bracelet from a previous discharge? Because the computer gave her the option. Why is that an option? Do we ever need to print a bracelet from a previous visit? No. So why are they able to do it? No reason.

There you go. That's not the registrar's fault. That's an error in the process that allows a human error to occur. If we want to avoid this error in the future, we have to change the process so that it is impossible to print a bracelet from a previous discharge.

So that's what we did.

It took time for staff to get used to this shift. A major point of contention was the Accountability Wall, an especially large production board that the NTO uses to chart the progress of the entire Value Delivery System journey as it relates to St. Joseph's True North metrics and other developments. Early on, leaders learned that many staff referred to it as the Wall of Shame.

"People resented it because they had to stand in front of this wall sometimes and admit they didn't meet their goals," explains Dr. Cunningham.

Leaders turned opinions around by proving, meeting after meeting, that falling short of a goal wasn't a failure. It was another opportunity to ask why — to assume the best intentions of the staff and explore the barriers that kept them from succeeding.

It also helped that, as time went on, teams had more opportunities to share good news and celebrate wins. NTO Director Campbell says, "Now people see the wall as a place to get recognition or help with things they need. It's hard to get a slot in these meetings anymore. We're booked out."

UM SJMC survived many rough patches like this thanks to steady, strong and visible commitment among leaders. Nicholson remarks, "Every consulting article will tell you executive support is the most important thing, so it's not surprising. Then again, to see your CEO out on the unit floor on a Sunday morning, meeting with nurses at their production board and asking questions — the impact of that is dramatic."

Indeed, Dr. Smyth takes his responsibility very seriously. That includes backing up frontline workers when they "stop the line" because their team or superiors are deviating from an established process. "Twice I've come down to the OR and stopped a procedure," he says. "The surgeon didn't want to, but the nurse said there was an issue, and they were right. And I'm there to show everyone that we mean what we say: This is how we do things now."

Dr. Smyth doesn't carry the torch alone, however. Says Campbell, "He worked really hard to have a solid, united front among his leadership team. He was very strong in the message that this was our management system and we all had to learn it."

### Joint Leadership

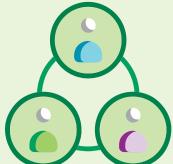
St. Joseph's CEO, Dr. Tom Smyth, is the first to admit that he had help at the top. His closest ally over the last three years has been his CMO, Dr. Gail Cunningham. "We're very like-minded and completely aligned on zero harm and the quality of care we want to deliver," she says.

"She could see my unwavering commitment, and I think this gave her the strength to back me up when I started saying this stuff," says Dr. Smyth. "Her voice absolutely provided fuel for me as well."

In addition to supporting each other's ideas, they also support each other emotionally. More than a year into the transformation, a particularly bad incident of preventable harm occurred in the emergency department.

Dr. Cunningham says, "That was a real low point for me. I remember sitting in Tom's office, pretty tearful about it. And he said, 'This is why we're doing what we're doing.' And he sort of helped me out of that well."

She has done the same for him when his confidence flags. Dr. Cunningham can't imagine it any other way. "It's a very long journey," she says. "It would be a really rough solo trip."



# **Managing Success**

UM SJMC designed the St. Joseph Value Delivery System according to Virginia Mason's World-Class Management System. As seen in Figure 5, the system helps large organizations focus on key strategies, align and cooperate across multiple departments, and manage everyday work in a consistent and effective way. Three years after launching their transformation, St. Joseph's progress can be viewed through these three windows.

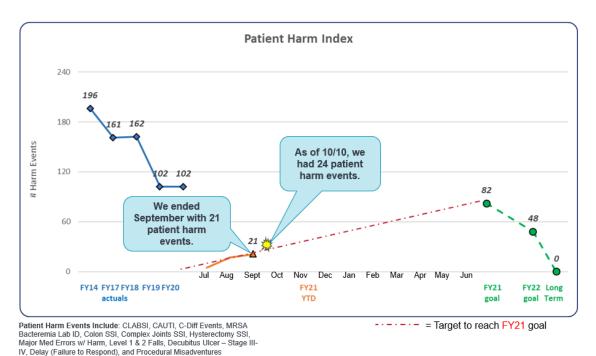
### Strategic Alignment

Establishing their True North allowed UM SJMC to focus their energy and affect meaningful change where it matters. Most key metrics were assigned a small committee, including an executive sponsor, that was accountable for meeting annual targets.



Figure 5: World-Class Management - The world-class management system is a leadership system that provides focus, direction, alignment and a method of management for daily work.

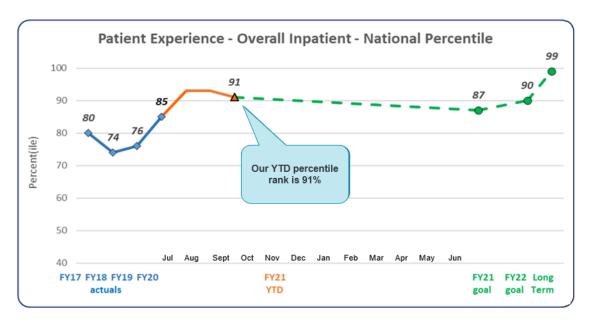
Their most important metric, the Patient Harm Index (Figure 6), fell by almost 50 percent from 2014 to 2020. In fiscal year 2020 (ending in July), the hospital brought many infection rates down to zero, including central-line associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), methicillin-resistant staphylococcus aureus infections (MRSA), and hysterectomy and colon surgery site infections.



**Figure 6: Patient Harm Index** - UM SJMC believes they can achieve zero harm through the lens of waste reduction and continuous improvement.

UM SJMC beat their FY2020 goal for patient experience by 4 percent (Figure 7), with an overall rating of 85 out of 100. The hospital also saw 257 non-COVID-related employee injuries that year, 5 percent better than their goal. Lost work days dropped by half from 2019 to 2020, while worker's compensation costs dropped by more than \$150,000.

They have missed some targets, including reducing patients' waiting time at different stages in emergency care and other goals for patient flow. Noting the shortfall, leaders have recently elevated patient flow among their priorities, dedicating an executive sponsor and mapping out specific milestones for improvement.



**Figure 7: Patient Experience** - The St. Joseph Value Delivery System's focus on quality and value, as defined by the patient, can be seen as a positive impact on the overall patient experience.

#### **Cross-Functional Management**

Like at any hospital, a single process at UM SJMC almost always involves multiple teams. Having all teams follow the same improvement method, and participate together on improving shared processes, is critical for making and sustaining progress. Their True North gave the executive team clear direction on which strategic priorities to select in their first three years of their partnership with Virginia Mason Institute. Choosing cross-functional processes like Access to Primary Care, Patient Flow, and Surgical Services paved a path forward toward sustained improvements by aligning expectations across the medical center and devoting resources and tools to accelerate the improvement work forward.

For UM SJMC, primary tools in this effort include RPIWs and kaizen events (smaller-scale improvement workshops, named after the Japanese word for "continuous improvement"). One kaizen event brought together representatives from nursing, dietary and facilities departments to improve the process of delivering food to diabetes patients. By the end of a recent RPIW focusing on patient flow, members of five different departments reduced the time it takes to transfer patients from the emergency department

to the medical surgical floor by 40 percent. A key part of that sequence is the hand-off between ED nurse and inpatient nurse. Prior to the RPIW, the first phone call from the ED nurse to the inpatient nurse went unanswered 73 percent of the time. By the end of the five-day workshop, that defect was reduced to 50 percent, and continues to improve as the new process becomes the norm for the whole team.

Of course, cross-functional management is relevant outside of a workshop setting. Managers of numerous departments have improved their teams' efficiency and morale by having a daily cross-team manager huddle to share information and priorities. One example is the maternal-child health service line, where Labor and Delivery, Mother and Baby Care, and the NICU overlap. Three years ago, this was one of the least cohesive intersections in the hospital. Today, the teams collaborate smoothly and happily, speaking a common language and using common tools for responding to sudden needs or problems.

### **Daily Management**

The commonality among teams is due to the widespread embrace of daily management. Daily management includes many of the technical and human dimensions of change discussed earlier, such as the use of production boards and the regular presence of managers on the frontline. Together, these components make continuous improvement a daily expectation and habit.

For charge nurse Marcia Kuklane, this is something else that sets the SJVDS apart. "In the past, leaders stayed in their offices. This time, they're actually boots on the floor. I see Dr. Smyth and the guiding team doing actual interviews with patients and rounding — things I've never seen before."

#### The COVID Test

UM SJMC staff have leaned heavily on their Value Delivery System to respond to challenges raised by the coronavirus pandemic.

From the beginning of the crisis, Dr. Mohan Suntha, CEO of the University of Maryland Medical System, refused to lay off or furlough a single staff member in the 13-hospital system. Dr. Smyth and his team at UM SJMC



fully embraced this decision. When elective procedures were paused, many nurses and techs were cross-trained into other areas. Some formed new teams that managed the new personal protective equipment (PPE) in circulation. Non-clinical staff and staff from ambulatory practices spent time in the hospital for the very first time, supporting operational and clinical activities.

Teams instinctively gravitated to the new SJVDS tools they had learned. They used their process improvement skills and tactics to test and design ideal ways to sanitize and store PPE for reuse. They used standard work to minimize errors that could harm staff. The effort required intense coordination, respect, transparency and communication among multiple departments, including nursing, sterile processing, environmental services, supply chain and more.

"It took an army, and it's still happening today," says NTO Director Campbell. "But everybody knows how to make a standard process and how to make it visible. That has been invaluable."

Daily management practices have improved the day-to-day function of numerous teams and made it easier to identify waste and problem-solving opportunities for the staff to tackle. In the anatomical pathology lab years ago, a labeling error caused two specimens to be swapped, resulting in an unnecessary procedure for one patient and a delayed diagnosis for the other. Several attempts to improve the labeling process failed. In the SJVDS era, the relevant managers got to the root cause of their process errors by walking the paths that specimens travel from OR to lab. Frontline staff then developed standard work routines to mistake-proof the handling and labeling of specimens. The process includes safeguards to catch discrepancies in labeling, and the team has since gone five straight weeks with zero defects.

Workers in the blood bank had also struggled with clutter and errors. Using a production board, workspace organization tactics called 5S, and relentless iteration, they revolutionized their processes. While the turnover rate for receiving reagents used to be a full 24 hours, the team now has it down to 90 minutes.

Best of all, the blood bank improvements were made with no executive pressure or input. An NTO employee trained one staff member on workspace organization, that staff member trained his colleagues, and they did the rest.

"They got the slightest nudge from us, but that's it," Campbell shared. "My dream of people not needing this office to carry the whole system is coming true."

## **Plans and Reflections**

While they've accomplished a lot in three years, the leadership team at UM SJMC knows they've only just begun. It's a large organization, and the Value Delivery System hasn't permeated all of it yet. Short-term goals include ushering more managers through the Lean for Leaders program and building SJVDS training into the orientation for new hires.

Clinical providers in particular have been less integrated into the SJVDS than other groups. CMO Dr. Cunningham is starting to correct this through a Physician and Advanced Practitioner Compact — a list of mutual commitments that she drafted in collaboration with a large cohort of providers. As well, employment contracts for all physician leaders now require them to participate in Lean for Leaders and RPIWs.

"To touch 2,500 individuals to the depths that we want is going to take years for us to do," says Dr. Cunningham.

"On a daily basis your team is looking for ways to get better. It not only improves how we're treating the patients, but it improves how we're treating each other and how we all do our work."

—Dr. Jason Marx, Medical Group Director

Dr. Smyth is girded for the long haul, and says leaders at other organizations should be as well. "We're still laying the foundation in a way. Because in order for this to survive, it has to survive past me and this leadership team. We have to continue embedding and enforcing new principles. Carrying as many stragglers as we can, yet being decisive about letting go people who consistently resist getting on board. And being vulnerable and transparent about the harm we're trying to prevent."

From finance to facilities to clinical care, there are endless improvement opportunities in healthcare. Leaders at UM SJMC agree there is no shortage of work to be done. But there is no shortage of belief either.

Dr. Marx, Medical Group Director, believes the benefits of the SJVDS are providing powerful momentum. "On a daily basis," he says, "your team is looking for ways to get better. It not only improves how we're treating the patients, but it improves how we're treating each other and how we all do our work."

Paul Nicholson, CFO, believes he can lead his finance team to a culture of zero harm as well. Every paycheck, every patient bill, and every invoice payment should be correct every time. "There will be resistance along the way," he says, "but that's the expectation of error-free work. Why should our standards be any different than the nurses at the bedside or the surgeons in the OR?"

Karen Campbell, NTO Director, believes they can meet their goals by taking it one step at a time. "It's about continuous improvement, which applies not only to our daily work but also to our management system," she says. "We want to get better at our Value Delivery System a little bit every day. Continuously improve. Continuously learn about it. Continuously teach it."



#### **About University of Maryland St. Joseph Medical Center**

University of Maryland St. Joseph Medical Center was founded in 1864 by the Sisters of St. Francis of Philadelphia. In 2012, it joined the University of Maryland Medical System, a multi-hospital system with academic, community and specialty service missions reaching every part of the state and beyond. Today, St. Joseph continues to follow a Catholic health care tradition of loving service and compassionate care, serving 22,000 inpatients and 120,000 outpatients each year.



#### **About Virginia Mason Institute**

Virginia Mason Institute helps clients around the world sustain improvement capabilities and infrastructure. It was founded on the integrated healthcare management and quality improvement system developed and applied at Virginia Mason Medical Center. That system has powered the medical center to countless awards for safety, quality and patient experience, including ranking among the top 1 percent of U.S. hospitals by Healthgrades.

See how Virginia Mason Institute can lead your organization toward timely, sustainable change. Visit our website or contact us to learn how we can help.

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