ACHIEVING SYSTEMNESS:

The Critical Impact of Systemness on Your Patient
The Story of Dignity Health

What is Systemness?

For decades, organizations both large and small have operated with *systemness*, providing a consistent consumer experience regardless of setting allowing a free flow of information, and standardizing costs and outcomes.

In 2012 Atul Gawande penned a now-famous essay in *The New Yorker* in which he dissects the business processes of The Cheesecake Factory—one such organization that operates on strict processes to achieve the idea of systemness. Gawande marveled at the idea of hospitals and healthcare providers working in such a coordinated, outcomes-focused fashion, summarizing the concept as "moving from a Jeffersonian ideal of small guilds and independent craftsmen to a Hamiltonian recognition of the advantages that size and centralized control can bring."[1] Now, this concept is gaining steam among the nation's health systems as they further commit to value-based care.

Committing to value-based care means taking on more risk for patient satisfaction and high-quality outcomes. To better manage these risks, health systems are expanding their services to follow patients across the continuum of care—through adding physician groups, hospitals, home care, rehabilitation facilities and more. They are also banding together with other acute-care providers to consolidate operations functions and expand service-line footprints.
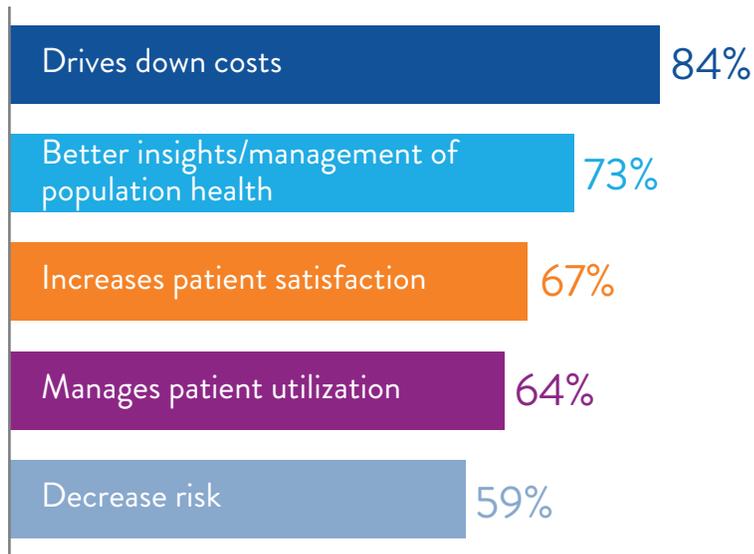
Now, what once was a puzzle of a thousand pieces must come together to act as one. And demonstrating a seamless, cohesive patient experience with predictable outcomes and standardized practices is the ultimate aspiration for health systems.

Systemness is the new goal. And it is a big one. In our recent survey of 306 executives at health systems across the country, conducted by Modern Healthcare's Custom Research division, 96 percent indicated that systemness is an organizational priority. Fifty-five percent even noted it was a top priority.

What does systemness truly mean? It takes on various definitions:

- Providing the same experience and quality for all patients and employees
- When all components of the organization work toward the same organizational goals
- Consistency and standardization of processes, protocols and outcomes
- Alignment of reimbursement and financial incentives across the organization

What is driving organizations to prioritize systemness?

Drives down costs	84%
Better insights/management of population health	73%
Increases patient satisfaction	67%
Manages patient utilization	64%
Decrease risk	59%

Source: Medline/Modern Healthcare Custom Media Survey, 2016

Why Systemness Matters

Today's healthcare consumers face great uncertainty in almost every aspect of the patient experience. They are often unable to determine out-of-pocket costs, find information about care quality at certain hospitals, or navigate a care provider's bureaucracy.

Achieving systemness in healthcare can eliminate some of this uncertainty for consumers by creating a uniform patient experience. Delivering a consistent healthcare experience fosters patient loyalty that can result in retaining patients over the long term, while boosting patient satisfaction scores.

Systemness also confers direct financial benefits to healthcare organizations. For example, standardization can result in:

- **Reduced costs of care** due to scale, familiarity and predictability

- **Maximized reimbursements** through improved outcomes across the continuum

- **Avoidance of financial penalties** from rehospitalizations, failure to meet to quality benchmarks, etc.

Research supports the idea that reducing variations in care has a positive effect on outcomes. In the case of surgical service lines, for example, data from the National Surgical Infection Prevention Collaborative demonstrated that consistently implementing a surgical site infection (SSI) bundle reduced post-op infections from 27 percent to 1.7 percent over the course of one year.[2]

"I think it's important for our patients and our communities to understand that when they are going to Dignity Health, regardless of where they go, there's a certain standard of care that they can expect and that we're going to deliver."

-Page West, System Chief Nurse Executive, Dignity Health

"We estimate the average cost of a surgical site infection to be $21,000 based on information from CMS's Partnership for Patients and the CDC," said Janet Holdych, Vice President of Quality for Dignity Health. "Reducing the financial burden of SSIs plus the impact to our patients makes the pursuit of systemness worthwhile."

Finding a Starting Point

Understanding the benefits of systemness is one thing, but achieving it is no simple feat. In the Modern Healthcare custom survey, only 5 percent of executives feel their health system has fully achieved systemness. A vast majority—92 percent—are somewhere in the middle, with 3 percent saying they haven't started at all.

Dignity Health, a health system that spans three states and operates 37 hospitals and dozens of ancillary clinics, may be better positioned than most to understand and pursue system thinking. But growing to the fifth-largest healthcare organization in the United States by 2012, Dignity Health executives realized how siloed the organization had become. The antidote: a system-wide rebrand that would bring the multiple locations under one mission and one brand, from both the employee and patient perspective.

As part of the rebrand, the system asked vendor partners to create prototype Dignity Health-branded products, from glove boxes to pamphlets to soap. But Sue MacInnes, chief market solutions officer of Dignity Health partner Medline, expanded on this idea. "I understood the brand awareness angle," MacInnes said, "but I felt we had a much larger opportunity to accomplish something bigger." Instead of simply putting a Dignity Health logo on common products, MacInnes set to work on creating patient- and staff-focused products that helped Dignity Health achieve true **systemness**.

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Medline, the largest privately held manufacturer and distributor of medical supplies, had a collaborative history with Deborah Adler, whose prescription bottle design for Target stores, Clear Rx™, resides in the Museum of Art in New York City. MacInnes turned to Ms. Adler for some innovative ideas on creating product kits for various Dignity Health service lines. Meanwhile, MacInnes was hearing from clients about the issue of SSIs and their negative effect on patient well-being and system revenue. The convergence of these conversations sparked a lightbulb moment for the group.

"One of the branding projects on the Dignity Health master list was a patient-focused kit on the surgical experience," MacInnes recalled. "And we got to thinking that this item could accomplish much more than preparing the patient for surgery. We realized this little kit could improve outcomes, enhance patient engagement and drive **systemness**." Collaboratively through their partnership, Medline and Dignity Health landed on an entire SSI-reduction initiative that would be adopted by every one of Dignity Health's surgical units.

The Surgical Skin Prep Project (and What It Means to Systemness)

Focusing on SSIs represented a significant opportunity for Dignity to demonstrate the financial and clinical impacts of systemness. Surgical site infections represent a huge burden on patients and healthcare systems:

- The CDC estimates there were a total of 722,000 healthcare-acquired infections (HAIs) in acute care hospitals in 2011. Of these, 157,500 were SSIs.[3]

- An SSI adds an additional 11.2 days, on average, to the length of a patient stay, and these days may not be reimbursed.[4]

- SSI patients incur an average additional cost of $20,800, and if MRSA is involved that figure jumps to about $42,000.[4]

Doing the math, if 100 patients per year in a healthcare system acquire an SSI, the cost to the provider could range from $2 million to nearly $4.5 million. As payers move toward outcomes-based reimbursement models that will not pay for preventable complications like SSIs, reducing the incidence of these events becomes critical to the financial survival of healthcare systems.

To Dignity Health, the SSI-reduction initiative provided a ripe opportunity to accomplish multiple objectives. The organization could, for one, create a positive impact on patient health and outcomes, and two, achieve systemness across surgical service lines and improve value. Dignity Health assembled a team of about 20 stakeholders that developed the project over the course of nearly two years before rolling it out in late 2016.

"When our mission is all about delivering quality healthcare equally to all our patients, then we can see that reducing clinical variations—a big part of systemness—is the way to achieve the mission," says Page West, RN, MPA/MHA, HACP, the System Chief Nurse Executive at Dignity Health, who is also the executive sponsor of the project. "If I have a patient that needs preop instructions, I want all of them to receive it the same way, whether they're at a small rural hospital or a large metropolitan trauma center. It's better for the patient, and it allows us to deliver on our brand promise."

Example of feedback card sent to patients who used the prep kit.

Thank you.

You indicated to our staff that your received a Pre-Surgery Prep Kit. The Pre-Surgery Prep kit was provided to help you prepare for your surgery. Please take a few moments to complete the survey on the reverse side regarding your use and experience with the Pre-Surgery Prep kit. Your answers will be used to help us continually improve the care we provide to our patients. Thank you for your time and for choosing Dignity Health for your health care needs.

Dignity Health

Your surgery prep kit.
What you should know before you go.

1. Did you use the Pre-Surgery Prep kit?
☐ Yes (please answer questions #3-5)
☐ No (please answer question #2)

2. If you did not use the Pre-Surgery Prep kit, please tell us why.
☐ Forgot   ☐ Did not have time
☐ Did not understand directions   ☐ Other _____

3. The Pre-Surgery Prep kit instructions were easy to understand.
☐ Strongly Agree   ☐ Agree   ☐ Neither Agree or Disagree
☐ Disagree   ☐ Strongly Disagree

4. The Pre-Surgery Prep kit was easy to use.
☐ Strongly Agree   ☐ Agree   ☐ Neither Agree or Disagree
☐ Disagree   ☐ Strongly Disagree

5. I understand the importance for using the Pre-Surgery Prep kit is to reduce my chance of developing a surgical site infection.
☐ Strongly Agree   ☐ Agree   ☐ Neither Agree or Disagree
☐ Disagree   ☐ Strongly Disagree

Additional comments:
_____
_____

Our promise at Dignity Health is to deliver exceptional patient experience. If we did not live up to that promise, please ask to speak to a supervisor. If you would like to be contacted regarding your care, please provide your name and contact information.

Name: _____

Phone: _____   e-mail: _____

Hospital: _____

The Process

The team approached the project from an evidence-based perspective. In particular, they sought to 1) quantify the problem of SSIs and 2) develop a best practice for preoperative skin preparation. Here's how they did it.

01 CREATED A TASK FORCE

A core group of three project champions established a committee with members from all major internal and external stakeholder groups to drive the initiative. The Dignity Health SSI Surgical Prep Kit Team included representatives from:

- △ System Chief Nurse Executive the executive sponsor
- △ Nursing representation from each of the 8 geographical service areas
- △ System VP of Quality
- △ Physician Advisor
- △ Information Services
- △ Finance

- △ Director of Revenue Services
- △ Infection Prevention
- △ Supply Chain
- △ Medline
- △ Deborah Adler Design
- △ Advertising Agency
- △ Surgical Servies

Subcommittees were established to maintain accountability for the major components of the project, including:

- △ Content
- △ Education
- △ Logistics
- △ Finance

02 DETERMINED THE KEY COMPONENTS OF THE BROAD-BASED PROJECT

While the core component of the project was a customized, branded patient skin prep kit, the team identified other key objectives, including:

- △ Patient education inside the kit, to include instructional materials about the overall surgical experience, pain management and more
- △ Patient engagement, including push notifications with videos and reminders to patients who opted in to the electronic service
- △ Data collection via patient comment card and personal interviews by clinical staff to evaluate compliance and efficacy of the program

03 OBTAINED RELEVANT DATA TO ESTABLISH EVIDENCED-BASED BEST PRACTICES AND ESTABLISHED BENCHMARKS FOR TRACKING RESULTS ACCURATELY

- △ Team members pulled studies and interviewed independent researchers to determine the overall incidence and prevalence of SSIs in the United States, and within Dignity Health.
- △ Best practices that could impact the design of the kit from a standardization perspective
- △ They also assembled financial figures to quantify the internal impact of SSIs.

04 DEVELOPED BEST PRACTICE GUIDELINES TO USE SYSTEM-WIDE

The committee evaluated all of the data related to skin prep products that reduce SSIs and chose chlorhexidine gluconate (CHG) based on the best available evidence.

They subsequently established evidence-based clinical guidelines (instructions) to be presented to patients for using CHG, including:

△ How to apply the wash
△ Length of time to leave wash on skin
△ How many pre-op showers patient should take

05 STREAMLINED THE LOGISTICS FOR EFFICIENCY

Team members established a system for getting the prep kits to every patient.

△ Here, site-specific variances had to be accommodated since not every surgical location offered a pre-op clinic where patients could receive the kit in person.
△ Alternative delivery methods were developed to achieve 100% facility participation in the project.
△ Committee members worked with the vendor to provide drop-shipping of the kits when necessary.

The team finalized budget considerations to address how the cost of the kits would be assigned, and to determine how the cost of mailing would be handled.

The committee opted to create a staged implementation schedule to identify and correct any implementation issues on a small scale before rolling out the protocol to the entire system.

06 COLLECTED DATA TO TRACK CLINICAL AND FINANCIAL OUTCOMES

From the beginning, a patient feedback card to evaluate various components of the initiative was included in every kit, and clinical staff tracked these responses online using SurveyMonkey.

Front-line staff conducted pre-op patient interviews at the time of surgery to evaluate adherence with the prep protocol.

Data evaluation is ongoing to measure SSI reductions and/or financial benefits.

Data is relayed back to each site, weekly, in a dashboard format that shows:

△ Number of elective surgeries
△ Method of shipment
△ Spanish vs. English
△ Number of feedback cards returned

Providers' Top Obstacles to Achieving Clinical Standardization

1.
Differing cultures within the organization

2.
Strong clinical preferences

3.
Lack of leadership commitment

4.
Different patient bases across the continuum

5.
Differing reimbursement priorities across the continuum

Source: Medline/Modern Healthcare Custom Media Survey, 2016

Overcoming Challenges in Creating a Project across an Entire System

Dignity Health had to overcome substantial challenges in designing and deploying a patient surgical prep kit that would meet the unique needs of every facility while achieving its stated goals of reducing SSIs, increasing patient engagement and driving system thinking. During the course of developing the project, they overcame four major challenges.

Choose the right stakeholders to facilitate communication

"Communication is the most important factor in a project like this one. You've got to be able to communicate with your committee members. You've got to be able to communicate with your CMOs, your OR directors, your CNOs, the CFOs, the presidents. Because if you aren't communicating well, the project will stagnate and stall." Patty Armond, Director of Perioperative Services at Dignity Health

An initial step in the project was identifying staff members from each facility and from the system office to sit on the committees required to create the prep kit. Stakeholders included clinical staff, infection prevention representatives, finance directors, supply chain managers, marketing personnel, vendor representatives and many others. Dignity Health even recruited a small focus group from its patient council to provide input from the patient perspective.

Pulling together team members from geographically diverse locations proved to be challenging. After an initial in-person meeting to kick off the project, the group relied on conference calls and web presentations to keep everyone informed of the project's progress and maintain individual accountability.

It became important to keep in mind how the project might be perceived by various constituencies within the system, and to keep channels open for a healthy exchange of information. Choosing the right stakeholders can enhance these downstream communications.

Be very aware of the operational nuances that will affect your ability to make a project like this work, West said. For instance, employees will wonder, with any kind of change within the system, whether or not it is going to take their job away. From a communication perspective, recruit project champions at both the system and the facility level to express their passion about what they're trying to accomplish while also educating everyone about how the change will affect them.

Make sure vendor partners are aligned with your mission

"Choose your external partners very carefully. You need to evaluate whether or not they are willing to actually collaborate with you, and not just have it be their way or the highway. They need to understand and align with your mission. They need to bring broad knowledge and expertise to the table." Page West, System Chief Nurse Executive, Dignity Health

How do you put the patient at the center of a project where most of the work is focused on clinical team adherence and internal alignment? The surgery prep kit project did three main things:

1. **Allowed for flexibility.** The goal of the project was to standardize outcomes, not standardize every step of the process. Allowing for flexibility in the following areas helped ensure the project worked for all patients and facilities:

• The SSI prep kit was printed in different languages

• The SSI prep kit could be delivered in four different ways to the patient, including directly to the patients home

2. **Branding the kit for Dignity Health.** The kit was not branded with supplier logos, but took on Dignity Health's system-wide branding, fulfilling the promise of consistency to consumers.

3. **Consumerized the language.** Many medical products come with technical instructions that are not patient-friendly. Medline worked with Dignity Health to ensure the entire kit, including the instructions and feedback card, was written in consumer-friendly language to optimize patient adherence.

For almost any need in healthcare, there is a vendor to provide it. But not all vendors are created equal. When Dignity Health decided to pursue a project that would vitally impact its patient population, they took great care to choose vendors who brought understanding and enthusiasm to the project.

Systemness does not mean eliminating variances entirely

"We understand that not all of our facilities are the same, and we can't expect them to be. What we really want is 100 percent participation in the program. We realized we had to be flexible about the manner in which we get the prep kit into the patient's hands, because the details of the method don't matter as much as achieving the goal of making sure every patient gets a kit." Patty Armond, Director of Perioperative Services at Dignity Health

A key aspect of Dignity Health's pursuit of systemness lay in reducing SSIs by eliminating care variances across the system. However, the committee learned it's nearly impossible to reduce variances to zero, because some sites will always have unique needs. For this reason, the organization had to aim for variance reduction and maintain flexibility in addressing the truly unique situations that arose and required a deviation from the new protocol.

For example, when the committee considered how the prep kit should be delivered to patients, they realized there was not a one-size-fits-all answer. Some surgery units had pre-op clinics at which they could personally hand the kit to the patient. But other units did not have a pre-op clinic, so those sites would require a different delivery method. The committee overcame this challenge by identifying it as early as possible in the process, and then problem-solving with a realistic solution as a group.

Try to visualize potential pitfalls before you get started

"It's always the pitfalls that trip you up. It's always the pitfalls that make people say, 'This isn't going to work.' Figure out what the potential pitfalls are, and make sure they don't occur. This drives your ability to implement the project successfully." Page West, System Chief Nurse Executive, Dignity Health

When venturing into the unknown, it can be difficult to imagine what pitfalls lie in wait to scuttle the project. The prep kit team did its best to identify potential stumbling blocks to mitigate them in advance. These included taking into account how the prep kit would affect the front-line staff, and how they might react to it. Another consideration revolved around whether independent surgeons' offices would cooperate with the effort—because the project could not work without their support.

Unanticipated pitfalls, nevertheless, cropped up. One such issue involved budget minutiae. While the cost of the prep kits themselves was known early in the process, no one considered the cost of postage when a decision was made to include mail order as a delivery method. Medline stepped in with a solution that leveraged its home care distribution capabilities as a supplier to get Dignity Health the most cost-effective and efficient solution.

Systemness by the Numbers

How is the project faring so far? Dignity Health has tracked a variety of metrics related to the preop kit, including data about CHG usage and the efficacy of the kit's patient education materials.

Total number of SSIs* at the Phase 1 (pilot) hospitals: **0**

Total number of sites using the kit: **31**

Total number of kits ordered: **19,607**

Percentage English-language kits: **77.7%**

Percentage Spanish-language kits: **22.3%**

Patient adherence*: **95%**

Patient found kit easy to use*: **97%**

Patient understands importance of pre-surgical skin prep to prevent SSI*: **99%**

Notes: Four phases of implementation from Aug. 22 to Jan. 9 on rolling/regional schedule. Data available as of 1/5/17

*Colon, Abdominal Hysterectomy, Knee and Hip SSIs data through 10/30/2016

*Based upon about 1,400 patient feedback cards returned as of 12/30/16 (see example on pg. 5).

Enhancing Systemness Benefits all Stakeholders

Great brands thrive because they provide a consistent consumer experience in every location. Retailers have known for decades that business thrives when customers exhibit loyalty to the consistent experience the brand provides.

This is a lesson healthcare organizations can take to heart. As consumers increasingly view healthcare as a commodity, they are demanding a consistent brand experience when they choose a provider. If they do not get it, they may develop a negative opinion of the brand. Conversely, when a healthcare brand delivers the consistent, high-quality experience consumers expect, then their loyalty will likely increase.

Systemness in healthcare enables organizations to capitalize on the brand experience consumers expect.

To achieve systemness, healthcare executives must look for innovative opportunities. As Dignity Health learned through partnering with Medline, initiatives that may seem small—like creating a branded patient surgical prep kit—can yield significant dividends and extend far beyond their original intentions. These types of projects should be viewed with a wider lens of how they can improve quality and patient engagement, while simultaneously reducing the cost of care, across an entire system to achieve **systemness**.

What Do You Want to Know?

The ROI and results metrics are in progress for this project. Updates will be given at ModernHealthcare.com/systemness. If you would like to know about a specific metric or result, please send your suggestion or idea to Sue MacInnes, Chief Market Solutions Officer, at smacinnes@medline.com.
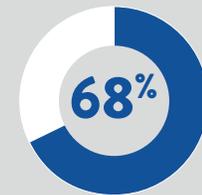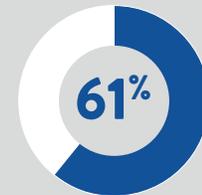
Goals with the Highest Business Value to Providers

Improved patient experience

68%

Reduction in / elimination of variation

61%

Reduction in readmission rates

53%
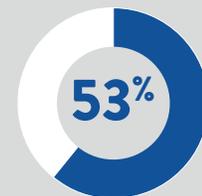
Reduction in length of stay
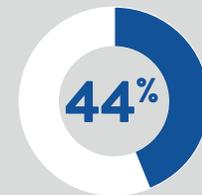
44%

Reduction in HAIs

38%

Source: Medline/Modern Healthcare Custom Media Survey, 2016

[1] http://www.newyorker.com/magazine/2012/08/13/big-med

[2] https://www.ncbi.nlm.nih.gov/pubmed/15972163

[3] https://www.cdc.gov/hai/surveillance/

[4] Becker's Hospital Review. Patient Shield Companies. May 12, 2015. The True Cost of HAIs. https://www.youtube.com/watch?v=7QyKhmeFeL8
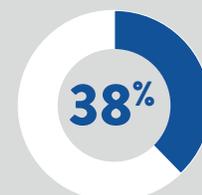
Excellent, affordable health care, delivered with compassion, is what we stand for. Since our founding in 1986, we've made it our goal to create environments that meet each patient's physical, mental, and spiritual needs. We also believe this healing philosophy promotes the wellbeing of our staff and the places they serve.

Dignity Health is made up of more than 60,000 caregivers and staff who deliver excellent care to diverse communities in 21 states. Headquartered in San Francisco, Dignity Health is the fifth largest health system in the nation and the largest hospital provider in California.

Through teamwork and innovation, faith and compassion, advocacy and action, we endeavor every day to keep you happy, healthy, and whole.

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