



# Clinical Communication Deconstructed

A framework for successful,  
human-centered clinical communication

**EXPERIENCE**  
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“ Listen to your patient;  
he is telling you the  
diagnosis. ”

Sir William Osler, M.D.

**Communication is the lifeblood that makes healthcare work.**

More than just listening for facts, communication is at the core of building sacred, trusted, and healing relationships between doctors, nurses, patients, and families. It is what keeps care team members connected to their healing purpose, and what allows them to understand and serve the needs of patients and families.

Whether for coordinating care between teams, sharing critical lab data, educating and instructing, or soothing emotional anxiety, communication lies at the heart of healthcare. Yet it also remains a continual challenge, exacerbated by the increasing complexity of medicine. Pressures to reduce costs and improve efficiency, technologies that increase care providers’ administrative and regulatory burden, and patients from varied cultural backgrounds presenting with higher acuity conditions all add to the challenges of delivering care, and of clearly planning and communicating care priorities.

In creating this report, we examined clinical communication from every angle. We reviewed academic studies and spoke with experts in clinical communication, current leaders in clinical practice, as well as patients and families. Our efforts uncovered numerous challenges as well as promising solutions and innovative protocols to promote effective clinical communication. We found that connection to purpose and the power of trusted relationships are the foundation of all successful clinical communication – whether informal or structured, between teams or with patients and families.

## Executive Summary (continued)

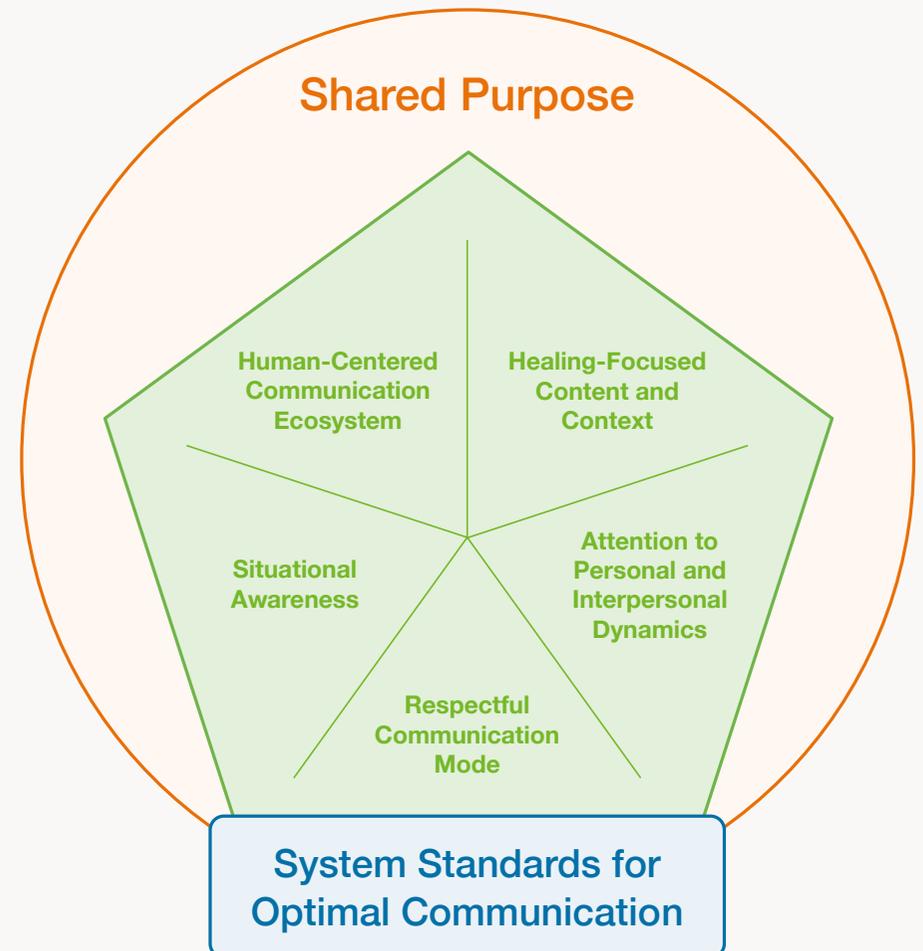
Armed with this information, we devised a framework for successful, human-centered clinical communication that consists of:

- **Shared Purpose**
- **Awareness of Personal and Interpersonal Dynamics**
- **Healing-Focused Content and Context**
- **Situational Awareness**
- **Human-Centered Ecosystem**
- **Respectful Communication Mode**
- **System Standards for Optimal Communication**

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Leaders seeking to enhance successful clinical communication across their organizations should:

- **Embrace human-centered communication as a core value.**  
All decisions, from the boardroom to the bedside, have an impact on communication. Keeping communication front-and-center in decision making is essential.
- **Examine workflow through a relationship lens.**  
Workflows support communication when they are designed with team-based care and shared decision-making in mind.
- **Train the skills of clinical communication.**  
Like technical skills, all care team members need training across their careers to support human-centered communication.
- **Apply technology that enhances human connection.**  
Seek out intuitive, user-friendly tools that allow team members, patients, and families to connect and create the foundation for human-centered communication.



## “ Healthcare is built on a sacred and trusted relationship.

As medicine has moved into the 21<sup>st</sup> century, we've lost the ability to focus on patients' stories and to know one another's stories as care team members. As a result, we have broken, fragmented care that leaves patients and families frustrated and limits their healing, and we're burning out a generation of caregivers. The solution lies in reclaiming narrative stories in medicine and recognizing the power of voice and human connection. Only when we gear our processes, our technologies, and our values around this sacred, healing relationship will we be able to restore humanity to healthcare. ”



**M. Bridget Duffy, M.D.**

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# The Power of Effective Clinical Communication

## Cost

A study examining costs associated with wasted physician time, wasted nurse time, and increases in length of stay estimated that a 500-bed hospital loses over \$4 million annually as a result of communication inefficiencies.<sup>i</sup>

## Sentinel events

According to The Joint Commission, communication was the third most common root cause of sentinel events (serious patient safety events resulting in death, permanent harm, severe temporary harm, or intervention required to sustain life) in 2014.<sup>ii</sup> The top two root causes of sentinel events – human factors (for example, staff supervision) and leadership (for example, organizational planning) – also have communication components.

## Clinical outcomes

In interviews with cancer patients who perceived an avoidable and problematic event had occurred during their treatments, 47% believed the error stemmed from communication breakdowns alone, and 24% blamed a combination of inadequate medical care and communication. Of the patients who attributed the cause to communication, 48% said the breakdown damaged the relationship with the provider, 30% suffered physical harm, and 100% felt psychological or emotional harm.<sup>iii</sup>

## Adherence

A meta-analysis of studies examining communication and patient adherence to medical instruction concluded that patients have a 19% higher risk of non-adherence when physicians communicate poorly than when they communicate well.<sup>iv</sup> When physicians are trained on communication skills, patients are 1.62 times more likely to adhere to their doctor's recommendations than when their physicians are not given any training.

## Patient experience

In a study that examined 3,123 patients admitted in internal medicine, each one-point increase in overall attending physicians' communication behaviors correlated to a 0.58 point increase in overall patient satisfaction.<sup>v</sup> The study examined whether the physician treated the patients as equals, listened without interrupting, discussed options for their care, and encouraged patients to be active participants in their care.

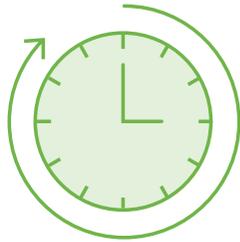
## Burnout and emotional exhaustion

A pediatric intensive care unit introduced multidisciplinary, structured work-shift evaluations as a means of coming together twice a week to discuss how well the workday had gone and how to drive improvement. As a result of the intervention, the team experienced a 21% increase in satisfaction with team communication as well as a significant reduction in levels of emotional exhaustion among PICU staff.<sup>vi</sup>

More on the importance of communication in healthcare can be found on the Institute for Healthcare Improvement (IHI) website: <http://healthcarecomm.org/about-us/impact-of-communication-in-healthcare/>

# The Scope of the Problem

1 hour



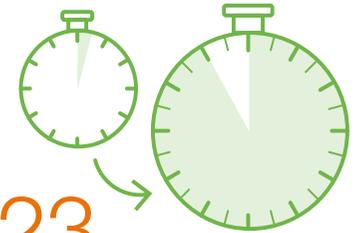
Time spent by nurses daily tracking down physicians <sup>vii</sup>

2x



Greater likelihood that cross-disciplinary communication will fail versus intra-disciplinary communication <sup>viii</sup>

0.5-23



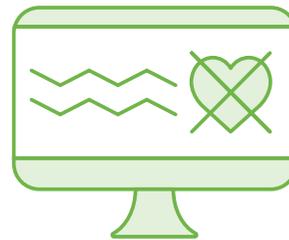
Number of times each hour doctors and nurses are interrupted in ED, ICU, and surgery <sup>ix</sup>

3x



Greater likelihood that patients with a communication disability will experience medical or clinical complications compared to other patients <sup>x</sup>

30%



Communication events that included a failure during surgical procedures. Thirty-six percent of these resulted in consequences such as tension among team members, delays, or procedural errors <sup>xi</sup>

43%



Frequency with which interruptions disrupt direct patient care tasks or interventions <sup>xii</sup>

# Introduction and Methodology

## **Communication is a complicated topic.**

All healthcare stakeholders are concerned with aspects of communication quality, but most have a partial focus on those elements of communications that affect them most.

In our work with clinical, experience, and administrative executives, we hear many concerns about communication quality, and encounter a variety of programs aimed at improving it. These programs often focus on relational skills and alignment of purpose. Among leaders, some gravitate to clinician-to-patient and family communication topics. Others zero in on interdisciplinary and peer-to-peer communication challenges.

When we shadow nurses and doctors on hospital floors and in outpatient clinics, we hear a separate set of concerns, often centered around finding time to confer with colleagues and efficient ways to get plan of care information.

Patients we interview often focus on topics of inclusion, listening, and shared decision-making.

This report provides a comprehensive outline of the relational, logistical, and qualitative components of clinical communication that affect quality. We hope this report serves as a structured lens so executive and frontline leaders can break down existing practices, diagnose issues, and apply appropriate solutions to improve clinical communication.

## **Methodology**

We conducted a large-scale literature review covering topics including: care team communication, clinical communication, nurse-patient communication, nurse-physician communication, physician-patient communication, patient-centered communication, shared decision making, and safety culture and communication.

To limit our scope, and in recognition of the rapid evolution of clinical communication technologies, we focused our search on sources dating from 2010 and later.

In addition to reviewing literature, we conducted more than 35 in-depth interviews with clinical communication experts and senior health system executives as well as patients with extensive care experience.

# Research Scope

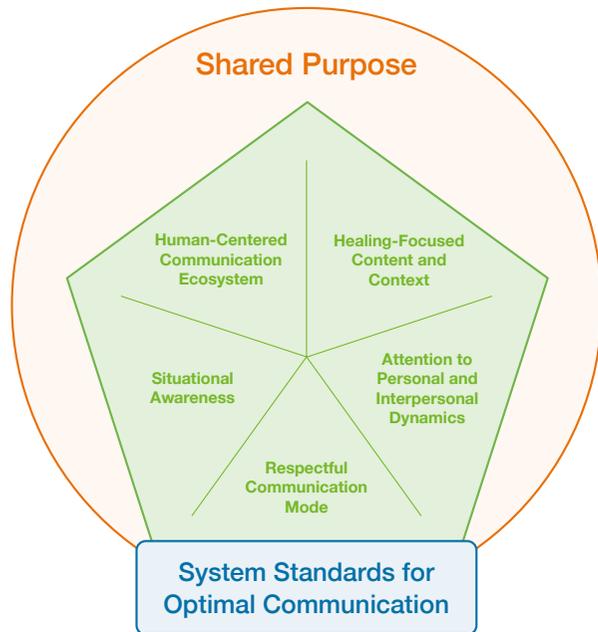
Communication shapes nearly every aspect of healthcare. It crosses quality, safety, efficiency, and experience for physicians, nurses, staff, patients, and families. Because we want to be as comprehensive as possible about the communication that shapes clinical experiences, we are including:

- **Communication between and among members of the care team.** This may include “extended” teams involved in a given episode or course of care. It also includes hand-off communication across the continuum, following the patient’s journey.
- **Communication between care team members and patients and families.** This includes care planning, shared decision making, clinical education, ongoing care management, and other clinically relevant communication. It does not include remote monitoring or administrative communication (such as scheduling).

To limit the research scope, we are omitting key classes of communication, including:

- **Machine-generated communication.** We did not examine either machine-to-machine communication (such as remote vitals monitoring, logistics management, etc.) or machine-to-human communication (such as alerts, alarms, etc.), except to the degree that either might set into motion or provide context for human-to-human communication.
- **Internal leadership communication.** The ways that executive leaders communicate within and across organizations helps to shape the culture and shared purpose that, in turn, shape clinical communication. However, we did not address its best practices or limitations in depth.
- **External corporate communication.** We did not look at communication from a healthcare entity to its local or broader community.
- **Community engagement in system transformation.** While we are strong proponents of partnering with patients to transform system and communication design, we did not include this in our scope.

# Framework for Effective Human-Centered Clinical Communication



## Effective human-centered clinical communication:

Communication that enhances healing through the compassionate, connected, accurate, timely, and effective exchange of information and intent between or among people in a way that achieves the intended objective. Objectives may include exchanging information, enhancing understanding, driving action, facilitating teamwork and trust, easing suffering, etc.

The framework for effective, human-centered clinical communication includes seven categories. Shared Purpose creates a cultural context for all clinical communication. System Standards for Optimal Communication create standard work in service of the Shared Purpose. The other five categories are components of clinical communication, each bringing its own nuance and impact on overall communication effectiveness.

<b>Shared Purpose</b>	An understanding all people share about why they should come together to communicate effectively as part of a commitment to delivering exceptional human-centered care
<b>Attention to Personal and Interpersonal Dynamics</b>	Continual attention to and compassion for the factors unique to each person and the dynamics existing between people that affect how information is exchanged, and the cognitive and emotional context for communication
<b>Healing-Focused Content and Context</b>	The information people need in order to achieve a human-centered outcome, and the context that gives that information meaning and relevance
<b>Situational Awareness</b>	Thoughtful consideration people give to factors about a situation or task that dictate what information they and others need, when they need it, and how to prioritize competing demands
<b>Human-Centered Communication Ecosystem</b>	Purposeful design of the environment (physical space, technology, etc.) that contributes to whether and how people can fully participate in human-centered communication, including the availability of resources people need to make communication effective
<b>Respectful Communication Mode</b>	Selection of the communication mode (in-person, video, voice, etc.) that is best suited to the informational and interpersonal needs of people participating in communication
<b>System Standards for Optimal Communication</b>	The rules, processes, norms, and other factors that influence people's behavior to maximize the likelihood of effective, human-centered communication taking place



Shared Purpose

# Shared Purpose

Many of the leaders we interviewed stressed that effective clinical communication hinges less on mechanics, logistics, or policies than on people being willing to engage around the shared purpose of patient-centered clinical outcomes and experience. While the vast majority of healthcare professionals share this purpose, short-term goals such as completing tasks, accumulating relative value units (RVUs), or even achieving personal expediency can impede patient-centered teamwork and collaborative communication. This is why keys to clinical communication excellence include defining, spreading, and reinforcing the cultural values, leadership practices, and teamwork practices that drive participants toward a shared, patient-centered purpose.

Table: Shared Purpose subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Culture	A system of shared assumptions, values, and beliefs, which governs how people behave in organizations	<ul style="list-style-type: none"> <li>Beliefs, values, statements, and actions that are supported by the organization</li> <li>Coherence between leadership statements and actions in reality</li> <li>Alignment between incentives and goals</li> <li>Degree of commitment to transparency</li> </ul>	<ul style="list-style-type: none"> <li>Human-centered communication values included in organization mission, vision, and values</li> <li>Human-centered communication values reflected in recognition, rewards, and compensation</li> <li>Storytelling</li> </ul>
Leadership	The actions of leaders that serve to set and share a clear vision, provide information and resources to achieve the vision, and set the tone and approach for how to enhance communication and resolve conflicts between stakeholders	<ul style="list-style-type: none"> <li>Leader style (for example, transactional v. transformational)</li> <li>Leader willingness to show vulnerability</li> <li>How leaders set the tone for open communication</li> </ul>	<ul style="list-style-type: none"> <li>Transformational leadership</li> <li>Transparency</li> <li>Active solicitation of and listening to varied viewpoints across the organization</li> <li>Leadership commitment to reinforce human-centered culture</li> </ul>
Patient-centered focus	The Institute of Medicine defines patient-centered care as “providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.”	<ul style="list-style-type: none"> <li>Understanding and valuing of what is most important to patients and families</li> <li>Aligning training and workflows around patient goals</li> <li>Aligning reimbursement and incentives to patient-centered care</li> </ul>	<ul style="list-style-type: none"> <li>Engaging patient partners in system transformation</li> <li>Narrative medicine</li> <li>Shared decision making</li> </ul>
Teamwork	Effective and efficient collaboration toward the achievement of shared goals	<ul style="list-style-type: none"> <li>Understanding of roles</li> <li>Mutual respect</li> <li>Shared goals</li> <li>Communication</li> <li>See also <i>Personal and Interpersonal &gt; Interpersonal Factors</i></li> </ul>	<ul style="list-style-type: none"> <li>Crew Resource Management training techniques</li> <li>Simulation and training</li> <li>Relational coordination</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

# Leaders Driving A Human-Centered Culture of Communication

Throughout our interviews with executive and frontline leaders, we heard a similar theme that the mechanics of communication, while important, are second to the relationships, connections, and sense of shared purpose that shape those mechanics. William Maples, M.D., executive director at The Institute for Healthcare Excellence summed it up: “We have numerous ‘communication’ tools and solutions. They were all designed to fix one broken spoke of the wheel. If you did a root cause analysis of the communication breakdowns, however, the root cause is not being in relationship with a common vision, a common goal of putting the patient at the center of everything.”

“ Communication is effective when we connect ‘the why’ to the purpose. The key is to cultivate the actions, attitudes, and behaviors that support the human experience. That is how we build a sense of **trust and collaboration** with our health care providers that then, in turn, translate to patient-centered care. ”



**Sue Murphy, RN, BSN, MS**  
Chief Experience Officer



“ Love, caring, and communication have to be deeply embedded in everything you do. In 2013, we launched the Bring Your Heart to Work campaign and guided every team member to introduce themselves to patients with ‘who, what, and a heartfelt why.’ **That heart connection makes all the difference.** ”



**Loren B. Hamel, M.D.**  
President and CEO



“ It takes time to build the trust. In our Leadership Academy, which lasts a year, I tell people to ask me the hard questions. I won’t violate HIPAA, or employee confidentiality. Other than that, **there are no secrets.** If you hear a rumor, ask. I answer every email every day. Most likely the rumor isn’t true, and if it is, I’ll tell you why. That makes the organization function better. ”



**Chris Van Gorder, FACHE**  
Chief Executive Officer



“ A culture of learning and transparency requires communication, and the systems built in this type of organization will promote effective communication. If it’s safe to say, “We hurt someone” or “our process failed,” then we can learn and problem solve. The only way to improve communication is to **build a culture of transparency** around what we know and what we don’t know. That means fewer reports, better systems, and more face-to-face conversations. ”



**Elizabeth Warner, M.D.**  
Medical Director for Continuous Improvement Support



# Leaders Driving A Human-Centered Culture of Communication

Leaders shape communication at every level of the organization – whether the executives leading systems, the surgeons leading surgical teams, the nurses leading care processes, or the experience leaders driving transformation. Leaders shape communication expectations, and keep their teams focused on what really matters. Michael Leonard, M.D., managing partner at Safe and Reliable Care, cited the Mayo Clinic as an example: “At Mayo, the mantra from leadership is, ‘the needs of the patient comes first.’ Most conversations end with the question: ‘How is what we’re discussing in the best interest of the patient?’ Whatever is happening is geared toward a specific outcome or objective. It lets you start the conversation in the middle. We all agree why we’re talking and what our outcome is.”

“ Leaders set the tone for communication. Look at surgery. You do your time out right before a case. If, prior to starting, you say, ‘We’re a team. If you see anything that isn’t expected, I need you to speak up and let me know,’ that changes everything. The magic is allowing yourself to be vulnerable so the team can communicate. ”



**Shannon Phillips, M.D.**  
Chief Patient Safety and Experience Office



“ For a transformational leader, hierarchy and position don’t mean much. They encourage individuals to speak up, and will listen to their voices no matter their position in the organization. This creates a culture of openness. In contrast, transactional, authoritative leaders can’t tolerate a lot of voices unless they can control them. ”



**Jan Stichler, DNSc, RN, EDAC, NEA-BC, FAAN, FACHE**  
Professor Emerita of Nursing



“ We need to break a lot of history to be more transparent about sharing information with patients. And if we don’t, we can’t ask the critical questions: Is there anything we left out? Anything else that’s important? Maybe the patient needs a special meal because they’re nauseated. We’re not all-knowing – the patient is in the best position to advise if we’re doing everything we can. ”



**Jennifer Rigglesman, MSN, RN, ONC, NEA-BC**  
Director of Acute Care



“ Whether your culture is one of curiosity and learning or one of blaming will dramatically shape the kinds of communication you have, as well as how you explore and improve communication challenges. ”



**Alpa Sanghavi, M.D.**  
Chief Quality and Experience Officer



## Patient Perspective

### The Power of a Shared Goal

“ The concept of a shared goal is powerful. I’m a teacher. I create goals with my students all the time. But if I don’t share it with the student, he or she can’t achieve it.

It’s the same in healthcare. **If the team’s goal is to get the patient discharged, and the patient doesn’t know it, then the patient can’t work towards the goal.** In my hospital stays, there was usually a whiteboard with a section on it for goals. But often it wasn’t filled out, so I would write on it myself. Some days my goal was to not throw up on my care team. Some days it was to enjoy my lunch. Some days I wanted to be able to walk around the unit.

And sometimes the goals aren’t aligned. They think your goal is to go home, but it’s to understand your meds so you feel safe. Or maybe you know your meds but you just want to feel steady on your feet. Or they kept telling me to use my incentive spirometer 10 times, but my goal was to get home.



**Wendy Ron**  
Patient Advocate  
Cancer Thriver

**The really important thing is that the care team and the patient should define the goal together.** It should be a reasonable goal – from both perspectives. My care team didn’t always ask me. Some of the nurses or CNAs would write their goals: I want to make sure you shower, and I would say, ‘I want to make sure I’m hydrated.’

Even just writing the goal on the board was powerful. I had a lot of trouble sleeping in the hospital (there’s all that beeping, and they come in and wake you). I’d write a goal of having a restful night. Then the nurses and team members would know I wasn’t sleeping well.

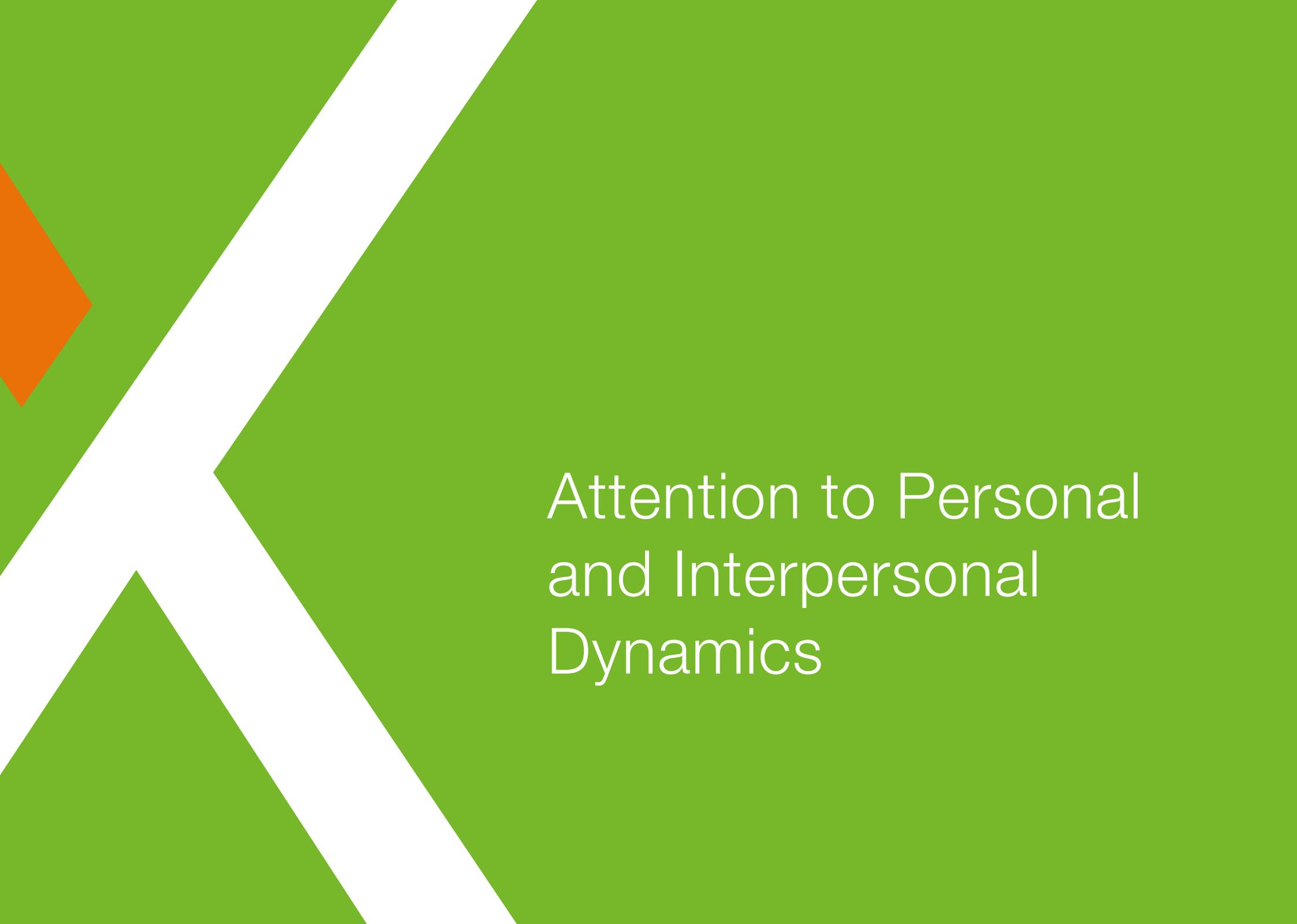
**But the best is the care team sharing their goal, and then asking, ‘what is your goal?’ And then you can arrive at a shared understanding. ”**

## Self-Assessment

### Connection to Purpose as the Core of Communication

Use these questions to reflect on your system's strengths and areas of improvement around connection to purpose as the core of communication.

<input checked="" type="checkbox"/> Is the importance of human-centered communication reflected in our mission, vision, and values?	<input checked="" type="checkbox"/> Do we teach the skills of human-centered communication to leaders at all level of the organization, and hold them accountable?
<input checked="" type="checkbox"/> Do we evaluate all strategic decisions through the lens of their impact on human experience and patient-centered care?	<input checked="" type="checkbox"/> Do we consistently reinforce the importance of safe, open communication by ensuring that all team members and patients and families have a voice?
<input checked="" type="checkbox"/> Do our executive leaders consistently reinforce the importance of respectful, open, human-centered communication in all that they say and do?	<input checked="" type="checkbox"/> Do we consistently reinforce the value of our patients' and families' voices by including patients and families in all aspects of our governance and system transformation work?
<input checked="" type="checkbox"/> Do we understand and embrace the idea that in order to deliver exceptional patient care, all team members must all treat one another with respect and compassion?	<input checked="" type="checkbox"/> Do we provide guidance to patients and families about how to communicate effectively with care team members? Do we listen to patients' and families' guidance about how to best communicate with them?

The background features a large, light green diamond shape on the right side. To its left, there are several overlapping geometric shapes: a smaller green diamond, a white diamond, and a small orange diamond. The overall design is modern and minimalist.

# Attention to Personal and Interpersonal Dynamics

# Attention to Personal and Interpersonal Dynamics: Personal Factors

Healthcare teams are often dynamic and fluid; they form, disband, and reform continually across shifts and staffing changes in order to support specific patients and clinical situations. Personal and interpersonal factors – particularly differences in power, knowledge, experience, culture, or language – strongly affect clinical communication. Building relationships and trust, regardless of difference, is essential to effective clinical communication.

Table: Attention to Personal and Interpersonal Dynamics – Personal Factors subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Cognitive load and capacity	Refers to the total amount of mental effort being used in working memory	<ul style="list-style-type: none"> <li>• Volume of information that must be retained without external aid or internal mental model (intrinsic load)</li> <li>• Presence or absence of factors superfluous to the task (extraneous load)</li> <li>• The amount of cognitive energy devoted to processing information (germane load)</li> <li>• Physical factors (sleep, drugs, etc.)</li> <li>• “Underload” or boredom</li> </ul>	<ul style="list-style-type: none"> <li>• Mnemonics</li> <li>• Mental models</li> <li>• Training and simulation</li> <li>• Appropriate roles and staffing</li> </ul>
Self-awareness	Refers to the individual’s capacity and willingness to reflect on his or her own skills, limits, and tolerances, and the behaviors that stem from them	<ul style="list-style-type: none"> <li>• Awareness and acknowledgment of the tension involved in clinical decision making</li> <li>• Willingness to confront the discomforts of being ill, uncertain, or otherwise “out of balance”</li> </ul>	<ul style="list-style-type: none"> <li>• Narrating decision processes</li> <li>• Coaching and mentoring</li> <li>• Rational-emotive modeling</li> <li>• Behavioral health counseling</li> </ul>
Emotional connection and presence	Having a mental and emotional connection to the present moment; lack of distraction	<ul style="list-style-type: none"> <li>• Mind wandering or distraction</li> <li>• Ability to focus</li> </ul>	<ul style="list-style-type: none"> <li>• Mindfulness training</li> <li>• Sitting at the bedside</li> <li>• “Pause to be present” before each new interaction</li> </ul>
Willingness and capacity to engage	Desire or ability to engage fully with the situation overall or with other people in the dialogue	<ul style="list-style-type: none"> <li>• Burnout</li> <li>• Self-activation</li> <li>• Adverse childhood events (ACEs)</li> <li>• Social determinants of health</li> </ul>	<ul style="list-style-type: none"> <li>• Patient-activation coaching</li> <li>• Behavioral health counseling</li> <li>• Community health workers and peer coaches</li> </ul>
Abilities, disabilities, and skills	The degree to which a person has a capacity (physical, mental, sensory, etc.) to perform certain tasks or functions	<ul style="list-style-type: none"> <li>• Hearing, seeing, or physical impairment may require specialized resources for communication</li> </ul>	<ul style="list-style-type: none"> <li>• Sound absorbing ceiling tiles and other acoustic adjustments for hearing impairment</li> <li>• Braille resources or specialized software and display screens for vision impairment</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

# Attention to Personal and Interpersonal Dynamics: Interpersonal Dynamics

Table: Attention to Personal and Interpersonal Dynamics – Interpersonal Dynamics subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Relationship, Mutual Respect, and Trust	A connection between two or more people characterized by mutual respect, trust, and understanding	<ul style="list-style-type: none"> <li>Knowing the role of the person or people with whom one is interacting</li> <li>Having trust and confidence in the person or people's competence and intent</li> </ul>	<ul style="list-style-type: none"> <li>Respectful introductions</li> <li>Explicit statement or solicitation of patient goals</li> <li>Transparency</li> <li>Crucial conversations</li> </ul>
Active Listening	Listening with the intent to fully concentrate on, understand, respond to, and remember what is being said	<ul style="list-style-type: none"> <li>Presence</li> <li>Attentiveness</li> <li>Setting aside personal agenda or assumptions</li> </ul>	<ul style="list-style-type: none"> <li>Active listening skill building</li> <li>Motivational interviewing</li> <li>Eye contact, sitting, turning away from the computer</li> </ul>
Power Gradient and Psychological Safety	Differences in perceived or actual power between participants and the resulting impact on willingness or ability to voice concerns, seek clarification, or engage fully	<ul style="list-style-type: none"> <li>Leadership setting the tone for safety</li> <li>Learning vs. punitive attitude</li> <li>Assertiveness</li> <li>Accountability</li> <li>Recourse and remediation of disruptive behaviors</li> </ul>	<ul style="list-style-type: none"> <li>Just culture</li> <li>High reliability</li> <li>Explicit solicitation of various perspectives by participant(s) with more organizational power</li> <li>Simulation training</li> <li>Medical improvisation</li> </ul>
Professional or Patient Identity	Differences in role or purpose that participants believe they have in a given situation which affect how they present and accept information	<ul style="list-style-type: none"> <li>Differences in training</li> <li>Assumed attitudes</li> </ul>	<ul style="list-style-type: none"> <li>Intersecting training for doctors and nurses</li> <li>Dyad leadership</li> <li>Training patients in the skills of self-advocacy</li> </ul>
Difference in Literacy or Experience	Differences in topic literacy or experience which affect whether participants share common understanding of language, terminology, and/or mental models	<ul style="list-style-type: none"> <li>Use of technical or lay language</li> <li>Pace and rate of information flow</li> </ul>	<ul style="list-style-type: none"> <li>Creating a shared mental model</li> <li>Best case/worst case communication model</li> <li>Pre- and post-rounding</li> <li>Teach back</li> </ul>
Language, Cultural, and Generational Differences	Differences in the words, signs, and symbols used for communication; socially acquired values, beliefs, and rules of conduct	<ul style="list-style-type: none"> <li>Differences in language and domain skills and knowledge</li> <li>Assumed or actual differences in beliefs, attitudes, or aptitudes</li> </ul>	<ul style="list-style-type: none"> <li>Professional interpreters</li> <li>Cultural sensitivity training</li> <li>"Reverse" mentoring</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### Awareness of Personal and Interpersonal Dynamics

“ There’s an emotional context to communication. Whatever you’re overwhelmed by or immersed in, whether that’s something personal, or another patient, colors the communication that you have. ”



**Alpa Sanghavi, M.D.**  
Chief Quality and Experience Officer



“ I used to give the July 1 talk to the interns. I always told them, ‘You’re going to have two choices every time your pager goes off. You can call and say, ‘This is Dr. Phillips, how can I help you?’ or you can be snippy because you are busy and this is one more thing. I completely believe in human connection no matter what the circumstance. Just, ‘please,’ ‘thank you,’ and never being short are critical because you can easily fracture a relationship. Making those connections is huge. ”



**Shannon Phillips, M.D.**  
Chief Patient Safety and Experience Officer



“ I’ve seen providers use cultural understanding to significantly improve communication. Many of our Hmong patients also see a shaman for ailments they conceptualize as related to the soul or spirit. One patient came in with abdominal pain. The provider asked the technical questions about bowel movements and food, and then asked, ‘Why do you think you’re in pain?’ The patient thought it was because she had fallen and her spirit came out of her body. The provider told her he’d work on the physical parts of her pain, but he was also sure she’d seek a shaman for her spirit. ”



**Mai Neng Xiong, MSM**  
Director of Language Services and Cultural Competency,  
Ascension Wisconsin



“ I think one thing that’s happened in healthcare is we crossed an invisible threshold about 10 to 15 years ago. Previously we could just push through and learn more things. Now we’re beyond the biological threshold for capacity to absorb more information. We need to redesign. In cockpits, the number of gadgets goes down with every redesign. In healthcare, it’s the opposite. ”



**Read Pierce, M.D.**  
Interim Director of the Hospital Medicine Group



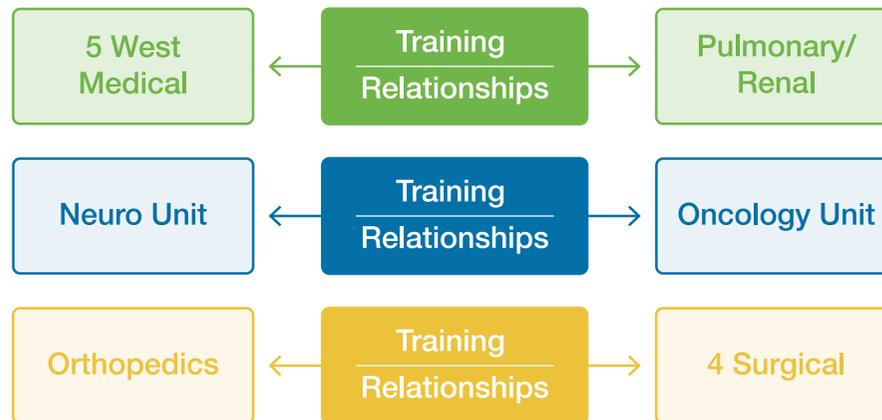
## Case Study

# Sister Units for Nurse Floating

The reality of nurse staffing at a busy hospital is that nurses sometimes have to be pulled from their assigned unit to provide support to another unit that is experiencing either unexpectedly high volume or a staffing shortage (such as when an assigned nurses calls in sick). Nurses often don't like floating because it pulls them from their team, people with whom they've developed relationships and patterns of work and communication, and because it puts them in charge of patients with specialized needs they don't always feel fully prepared to meet.

At Winchester Medical Center in Winchester, VA, nurse leaders have created a system of "sister units" that limit nurse floating between a small set of designated units. Nurses get training so that they are able to safely take care of patients on both their primary and sister units, and they build relationships with team members on both units. "This creates good conditions for relationships and trust, which are essential to communication," said Jennifer Riggleman, MSN, RN, ONC, NEA-BC, director of acute care, "The whole idea is you know what you're doing, and you know the people you're working with."

### How Units Are Paired for Nurse Floating



**Jennifer Riggleman, MSN, RN, ONC, NEA-BC**  
Director of Acute Care



## Case Study

# Gratitude and Recognition at the Center of the Huddle Board

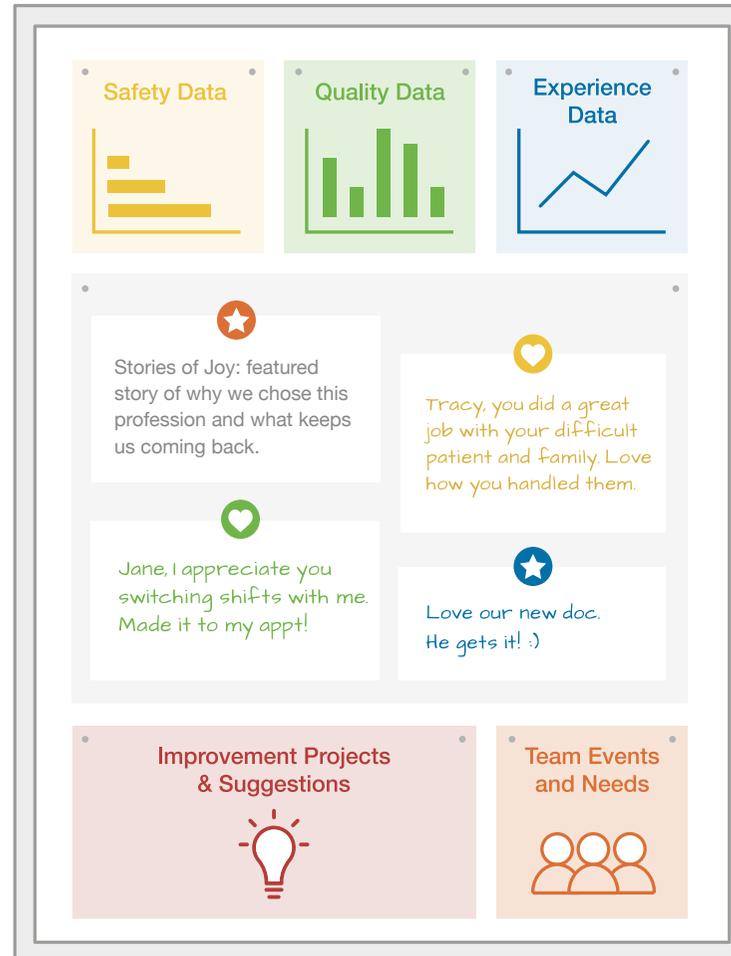
Nurse leaders at Mission Health know that team member well-being is critical to team success. They sought easy ways to boost the positive impact they could have on one another as part of a process to improve resilience, well-being, and joy among team members.

The team was in the process of rolling out huddle boards as part of their Lean management system. The huddle boards are critical for tracking team metrics for quality, safety, and experience, as well as for engaging team members to collaborate to develop continuous improvement ideas. But the team saw an opportunity to focus on supporting one another and to make their commitment to well-being visible on the unit.

“We rearranged the board to put the metrics on the outside, creating an organic space in the middle for writing notes to one another,” said Valerie Frye, MAOM, BSN, RN, NE-BC, nurse manager on the unit that pioneered the change. “People write thank you notes, recognize one another for excellent work, and write stories about the things they love about their work.”

In addition, the team is sharing stories of joy, often focused on the meaning and purpose that brought them into their caring profession in the first place. “Everyone wrote one, and we’re putting one up every week. It’s very powerful,” said Ms. Frye.

## The Huddle Board Puts Team Gratitude at the Center



**Valorie Frye, MAOM, BSN,  
RN, NE-BC**  
Nurse Manager, Acute Care  
*The McDowell Hospital*



## Patient Perspective

### The Right Words Matter

“ The number one problem with communication in healthcare is that people ask things like, ‘Is there blood in your urine?’ Patients say no, because they think they’re supposed to see literal blood. **Doctors need to ask this in a much simpler way, such as, ‘Is your urine any color other than clear or pale yellow?’** We don’t like to talk about gross things. That’s something that happened with my husband, Fred. **They just checked the box and ruled out cancer.** He had orange urine for a year. But he didn’t know that meant blood in his urine. He made the assumption that he wasn’t drinking enough water. He knew his urine could get darker if he was dehydrated or if he ate different things.

**The question is wrong – but it keeps getting asked in the exact same way.** It’s such a powerful diagnostic. There’s a cascade: If you say no to blood in your urine, you don’t get labs done. If the verbal response doesn’t alert you to a continuous problem, that’s the end of it.

**I wish there was more utilization of things like McDonald’s uses – the repeat back.** If people nod along, they may not be following. Society is teaching us to get along. So many patients don’t have that level of comfort and don’t want to feel stupid.

It’s delicious to use complicated words – they’re so precise. But it becomes a code. And it’s hard to break the code in a clinical situation. But that’s why **I never say RCC** [Renal cell carcinoma]. **My husband died of kidney cancer.** We have to get away from big words, and from using acronyms for big words. ”



**Regina Holliday**  
Patient Activist  
Artist  
Founder: *the Walking Gallery of Healthcare*

## Case Study

# Care Coordinators Build Relationships that Enhance Communication

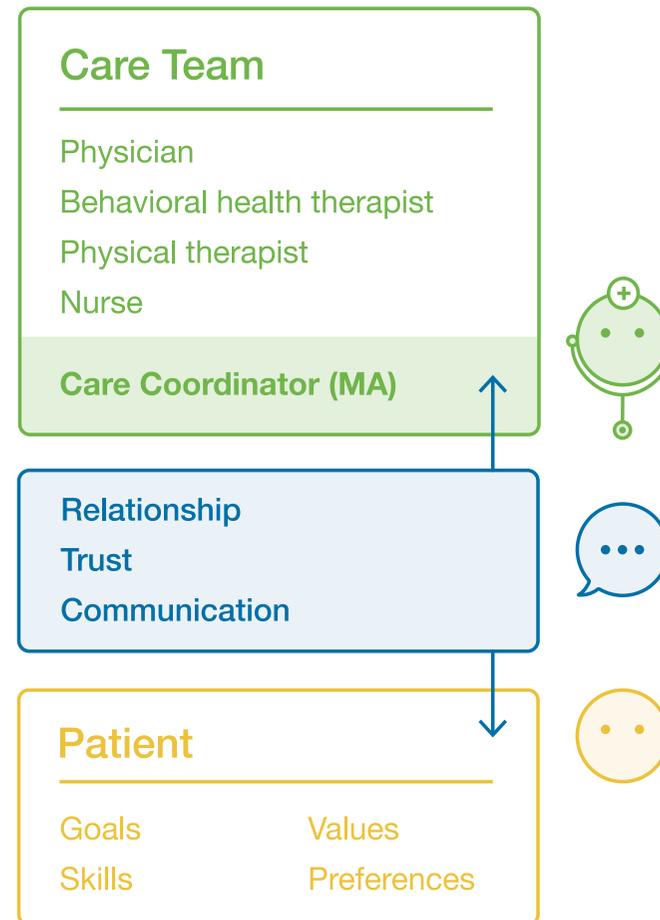
At Stanford Coordinated Care, Alan Glaseroff, M.D., and Ann Lindsay, M.D., recognized that exceptional care for patients with unmanaged chronic conditions takes more than good medicine – it takes great relationships.

The two built a care model that flipped the normal doctor to medical assistant (MA) ratio on its head, creating MA panels that were half the size of an M.D. panel. The concept was the MAs serve the patient, rather than the provider. Together with a nurse and team of allied health professionals, they work with patients who build their own customized care plans with the team’s assistance.

At the center of those plans is a relationship built between the MA (titled, Care Coordinator) and the patient. “It’s amazing how much more comfortable patients are sharing their realities with an MA than with a doctor,” said Dr. Glaseroff. “Even the most empathetic doctor can be intimidating with realizing it, but the MA is like a peer.” Patients are more candid about things like their smoking status, whether they are struggling with medication or lifestyle changes, and the life realities that shaped their health and well-being.

Working together as a team, and co-designing plans based on patients’ goals, the team achieved extraordinary patient outcomes, including **29% reduction in readmissions, 59% reduction in emergency department visits, 99<sup>th</sup> percentile patient experience results, and a 13% reduction in cost of care.**

## Care Centers on the Patient-Care Coordinator Relationship



**Ann Lindsay, M.D.**  
 Clinical Professor of Medicine  
 Co-founder of Stanford  
 Coordinated Care



**Alan Glaseroff, M.D.**  
 Adjunct Professor of Medicine  
 Stanford Clinical Excellence  
 Research Center  
 Co-founder of Stanford  
 Coordinated Care



## Self-Assessment

### Attention to Personal and Interpersonal Dynamics

Use these questions to reflect on your system's strengths and areas of improvement with regard to attention to personal and interpersonal dynamics.



Do we consistently consider the needs of our audience before communicating?



Do we consistently reinforce the importance of team communication and respect for all voices, including remedial or disciplinary action for team members who contribute to a psychologically unsafe environment?



Do we provide training, mentoring, and ongoing coaching to help care team members refine their interpersonal communication skills?



Do we consider the relationship, trust, and communication implications of staffing policies such as floating?



Do our leaders at every level model the importance of respect, kindness, transparency, and other critical communication values?



Do we take specific actions to get to know our patients as people and to reinforce the importance of person-centered communication?



Do we offer patients and families communication skills training that helps advance their health literacy and self-assertion?



Do we consistently celebrate teamwork, well-being, and exceptional care in our standard communication processes?

The background features a large, solid green area on the right side. On the left, there are several overlapping geometric shapes: a large green triangle pointing right, a smaller green triangle pointing left, and a small orange triangle pointing right. These shapes are separated by white diagonal lines.

# Healing-Focused Content and Context

# Healing-Focused Content and Context

Content and context are the “what” of communication. Content and context include data regarding clinical status, knowledge and analysis of what the data means and what actions to take, and the stories that give this information meaning. Content helps deliver information, suggest action, convey emotion, or otherwise move participants in the communication to a state of shared understanding from which they can build a plan of action. Healing-focused content and context include the human elements that speak to patients’ and families’ values and preferences, and to care team members’ needs and priorities.

Table: Healing-Focused Content and Context subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Data and Content	Clinical information related to the patient’s history, status, or change in status	<ul style="list-style-type: none"> <li>• Accuracy</li> <li>• Completeness</li> <li>• Format</li> </ul>	<ul style="list-style-type: none"> <li>• Checklists</li> <li>• Time out, call out</li> <li>• Teach back, read back</li> <li>• Phonetic and numeric clarification</li> <li>• Narrate-your-care</li> <li>• Ending with an open-ended question</li> </ul>
Story and Context	The narrative that surrounds clinical data to give it meaning and context	<ul style="list-style-type: none"> <li>• Structured vs. unstructured</li> <li>• Value placed on patient narrative</li> </ul>	<ul style="list-style-type: none"> <li>• SBAR, I-PASS</li> <li>• Narrative vs. structured clinical assessment</li> <li>• Narrative solicitation</li> <li>• Eliciting vulnerabilities and points of resilience</li> <li>• Linking to social determinants of health</li> </ul>
Intent and Meaning	The creation of a shared agenda or understanding of the immediate purpose of communication between participants	<ul style="list-style-type: none"> <li>• Clear and shared agenda</li> <li>• Clear goal for the communication</li> </ul>	<ul style="list-style-type: none"> <li>• The Four Habits model: invest in the beginning, elicit the patient’s perspective, demonstrate empathy, invest in the end</li> <li>• Pre- and post-rounding</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### Healing-Focused Content and Context

“ When we can build a framework around communication – a checklist or organization – it becomes more precise and thorough. ”



**Janet Chaikind, M.D.**  
Medical Director of Pediatrics  
and Adolescent Medicine



“ Many of our patients use a more narrative or storytelling way to answer questions. The provider asks a simple yes/no question and the patient tells a story. This may happen three or four times, and the provider may get frustrated. But by not listening to the story, they may lose important details. ”



**Iban Monteagudo**  
Manager of Language Services, Ascension Wisconsin



## Case Example

# Frontline-Driven, Highly Reliable, Humanized Communication

Hackensack Meridian *Health* in New Jersey has been on a high reliability journey for more than a year. As one component of building their culture and processes for highly reliable human experience (one that embraces safety, quality, empathy, and respect), leaders are rolling out a humanized version of I-PASS that is designed to ensure quality, completeness, and patient-focus during clinical hand-offs.

The process starts with a standard template, comprising the standard I-PASS elements plus patient values. Frontline nurses who live these hand-offs every day customize the template to reflect the unique needs of the two units involved in the hand-off. Through a plan-do-check-act (PDCA) process at the unit level and, ultimately, the system level, the team is reimagining a standard work process in a human-centered way.

“What’s critical,” explained Marty Scott, M.D., MBA, SVP and chief transformation officer, “is to let the people at the sharp end of care shape it. From a system perspective, we provide guidance and act as facilitators for shared learning.”

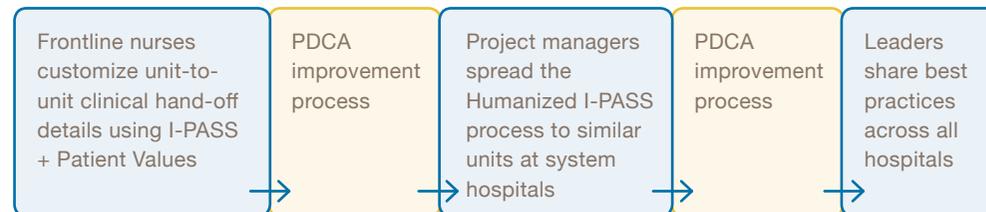
### Standard I-PASS Template

I-PASS Element	Example Details
I Illness Severity	<ul style="list-style-type: none"> <li>Stable, “watcher,” unstable</li> </ul>
P The narrative that surrounds clinical data to give it meaning and context	<ul style="list-style-type: none"> <li>Summary statement</li> <li>Events leading up to admission</li> <li>Hospital course</li> <li>Ongoing assessment</li> <li>Plan</li> </ul>
A Action List	<ul style="list-style-type: none"> <li>To do list</li> <li>Timeline and ownership</li> </ul>
S Situation Awareness and Contingency Planning	<ul style="list-style-type: none"> <li>Know what’s going on</li> <li>Plan for what might happen</li> </ul>
S Synthesis by Receiver	Receiver: <ul style="list-style-type: none"> <li>Summarizes what was heard</li> <li>Asks questions</li> <li>Restates key actions and to-do items</li> </ul>

Patient Values*	
<ul style="list-style-type: none"> <li>Patient’s designated care partner(s)</li> <li>Code status</li> <li>Patient-initiated goals</li> </ul>	<ul style="list-style-type: none"> <li>Basic needs status</li> <li>Cultural considerations</li> </ul>

\*Developed in partnership with Experience Innovation Network members

### Frontline-Driven Process for Rolling Out Humanized I-PASS



**Marty Scott, M.D., MBA**  
Senior Vice President,  
Chief Transformation Officer



# The Compassionate Surgical Checklist

“ A surgeon told me a story. One day he was running late. He scrubbed, ran into the OR, and said, ‘Hey are we ready to get started? Mr. Jones wants to get to his grandson’s graduation in two weeks. I’m hoping we can make that happen.’ Then the team ran through the normal time-out topics. The case was the best he’d done. People brought things up that they were thinking of. It changed the tenor of the room because they were thinking about the person. The first person who spoke with the patient in the recovery room said, ‘You’re going to be able to go to your grandson’s graduation.’ From then on, the surgeon realized the power of his words. ”



**Shannon Phillips, M.D.**  
Chief Patient Safety and Experience Officer



“ I used to think that I just needed to get through the pre-op interview – no chit chat. Now I sit, introduce myself to the patient, go through the required stuff, and then I try to ask one open-ended question. Something like, ‘Are you from the area? That leads to a two-minute conversation about who they are as human beings. I’ve discovered some amazing things that I never would have known. Then I can pass what I’ve learned along to other people on the team. Suddenly the patient is a human being with a story. I find it really gratifying. ”



**Howard Green, M.D.**  
Anesthesiologist



## Pre-Op

- ✓ Conduct informed consent.
- ✓ **Conduct Informed Hope: Ask the patient about her most important hope or goal for after surgery.**

## Before-Anesthesia

- ✓ **Each team member approaches the patient, looks her in the eye, and explains his or her role in making the surgery a success.**

## Time-Out

- ✓ Confirm the patient’s name, procedure, and where the incision will be made.
- ✓ Confirm antibiotic prophylaxis, if appropriate.
- ✓ Anticipate critical events.
- ✓ Display essential imaging.
- ✓ **Share the patient’s goal or hope.**

## Before the Patient Leaves the OR

- ✓ Count instruments, sponges, and needles.
- ✓ Label specimens and read specimen labels aloud, including patient name.
- ✓ Identify any equipment problems to be addressed.
- ✓ Review key concerns for recovery and management of this patient.
- ✓ **Thank the team for helping the patient achieve her goal(s) or return to her family.**

## Recovery

- ✓ Discuss or confirm the patient’s personal goals related to the surgery.

## Patient Perspective

# The Importance of Listening and Open-Ended Questions

“ It’s really important that my doctors listen to me. I once went to the doctor when I was sick, and the pain symptoms were affecting my life severely. **The doctor said it was all in my mind.** He said take 12 aspirins a day for three months and then come back. I said, ‘My feet are so sore I can hardly stand up in the morning.’ He said, ‘You’re a busy, active mom.’ That was before I got diagnosed with rheumatoid arthritis.

I had a surgeon once. The first time I saw him, I wanted to ask a question. He put his hand up like a stop sign and he said, ‘No, I’m not done yet.’ You could see his team got tense and anxious because I was causing him to be a little late. So there I was doing my best to be a good patient for this very unpleasant doctor. The next surgeon I visited, I came in and he said, ‘Call me Brian.’ I sighed with relief. **Empathy and attitude matter.**

A really important part of the medical appointment is when the doctor asks, **‘Is there anything else I can help you with?’** It’s permission to ask a question. Otherwise it’s like going to a meeting and the agenda is all theirs. **Permission to ask a question is a breakthrough. ”**



**Annette McKinnon**  
Patient Advisor

**Patient Advisors**  **Independent  
Informed  
Connected**  
Network

## Case Study

# Building Shared Understanding Before, During, and After Rounding

Nurses at the Riley Hospital for Children’s Pediatric Intensive Care Unit knew that interdisciplinary rounds (IDR) were an important part of communication and care planning for both the care team and for patients and families. But when they asked families about their experiences with IDR many were intimidated or confused. So nurse leaders created a process designed to make families more comfortable with the process so they could engage fully in the communication process. In addition to acting as advocates to help get family questions answered during the IDR, nurses added a critical teach-back step after the IDR.

“It’s easy for families to misunderstand processes that we as nurses take for granted,” explained Terri Bogue, MSN, RN, PCNS-BC, former nurse leader at Riley Children’s. “We say we’re going to wean from the ventilator and parents think their child will be off the vent and talking within the hour. Teach back lets us explain how these processes actually work so families aren’t left worrying about why their child’s recovery isn’t proceeding as they expected.”

As a result of the changes, family engagement and satisfaction increased, and PICU length of stay decreased by nearly a full day.

## Family-Focused Interdisciplinary Rounding Process

1

The nurse assigned to each patient explains the purpose of and family role in multi-disciplinary rounds within 24 hours of patient admission.

2

Prior to each daily IDR, the nurse takes time with the family to understand key questions, concerns, or things the family wants the care team to know.

3

During the IDR, the family gets time to speak up and ask questions or voice preferences or concerns. The nurse helps ensure families get all of their topics covered.

4

After the IDR, the nurse sits down with the family and conducts a “teach back.” The nurse clarifies any areas of confusion and confirms the plan of care with the family.

5

The nurse writes the clarified plan of care on the white board so all care team members can see and reinforce the daily goals.



**Terri Bogue, MSN, RN, PCNS-BC**  
Clinical Nurse Specialist/Chief  
Operations Officer  
*Thor Projects LLC*



## Self-Assessment

# Healing-Focused Content and Context

Use these questions to reflect on your system's strengths and areas of improvement around supporting healing-focused content and context.



Have we intentionally “heart-wired” humanness into our communication by putting human stories into our checklists and communication frameworks?



Do our systems (for example, the electronic health record) that have the potential to support human-focused content and stories do so?



Do we offer training on the skills for soliciting the patient narrative?  
Do we consistently reinforce the value of patient narrative?



Do we consistently include human context in our hand-offs between care teams, across units, and with other facilities?

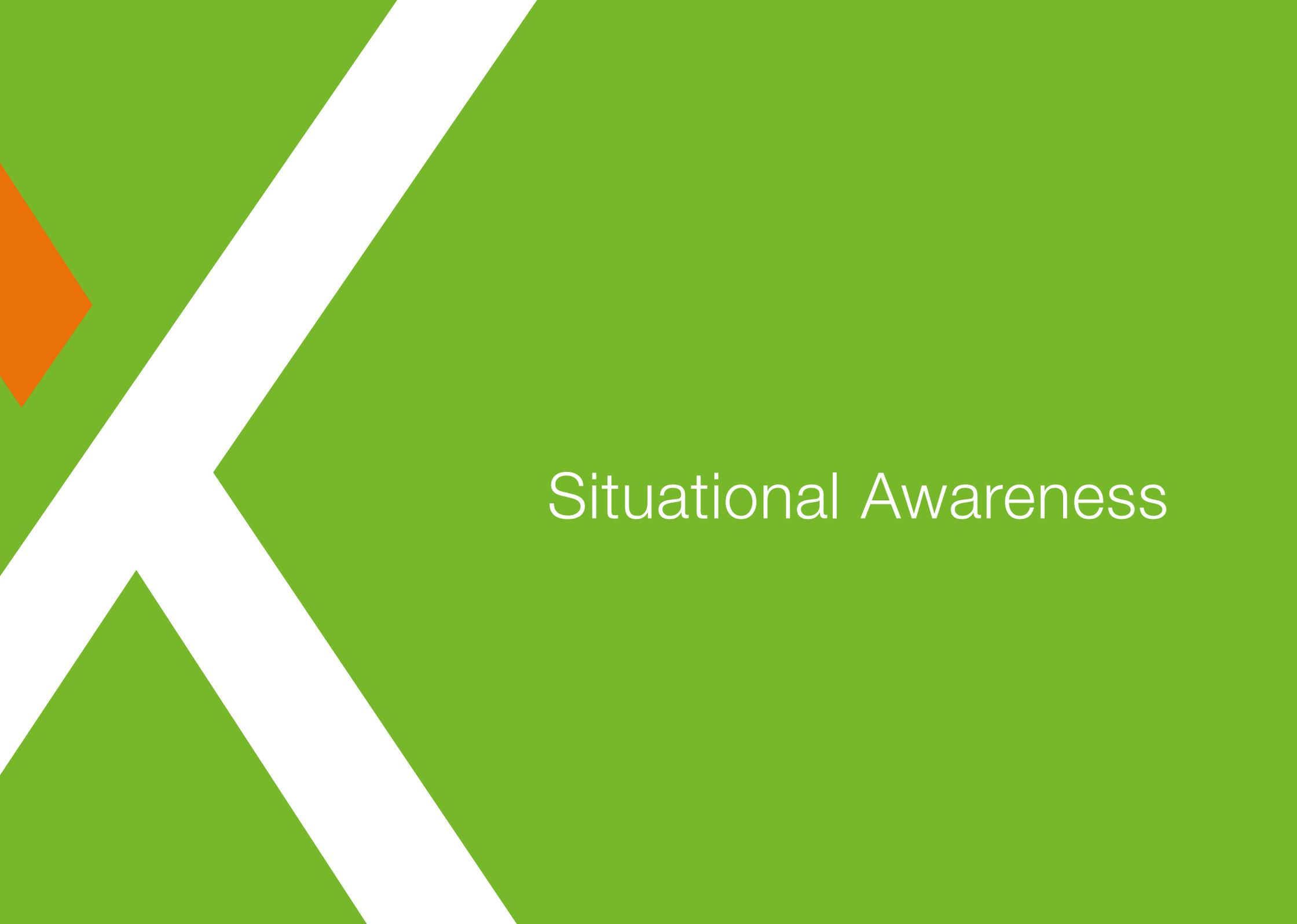


Do we have standards for interdisciplinary communication that include humanizing elements for patients and families, and for physicians and staff?

Are these standards consistently used? Why or why not? (If not, likely barriers might be training, support tools, or workflow fit.)



Do we consistently start communications by setting a shared agenda, or explicitly framing the intent or value of the communication?

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# Situational Awareness

# Situational Awareness

Clinical communication takes place in the context of a specific patient journey, as well as in the context of a specific task to be completed or human interaction. It also takes place in the context of multiple competing priorities, overlapping responsibilities, and potentially interruptive experiences. Situational context influences communication timing, urgency, and tone, and other key elements of its success. Understanding the factors of a situation or task that inform clinical communication provides context for understanding where, how, and why to deliver certain communication at certain times so that people can absorb, process, and act on the communication to achieve the best outcomes.

Table: Situational Awareness subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Timing and Sequence	The transmission of the right information at the right time, as defined by the specific clinical situation and people's needs	<ul style="list-style-type: none"> <li>Differing or conflicting care team member workflows</li> <li>Changes in the patient's clinical status</li> </ul>	<ul style="list-style-type: none"> <li>Surgical "pre-briefings"</li> <li>Structured interdisciplinary rounds</li> <li>Compassionate delivery of difficult news</li> </ul>
Urgency and Priority	The creation of a shared sense of the urgency or importance of the information being communicated based on the clinical context and/or people's emotional needs	<ul style="list-style-type: none"> <li>Differing sense of urgency between care team members based on unique responsibilities</li> <li>Differing understanding of the plan of care by different care team members (see also Attention to Personal and Interpersonal Dynamics)</li> </ul>	<ul style="list-style-type: none"> <li>Trigger phrases such as "I have a concern" or "I need you now"</li> <li>Concern, uncomfortable, safety (CUS) words</li> </ul>
Access	The ability to access the person or resource that has the required data, knowledge, or expertise at the right time, as defined by the specific clinical situation and people's needs	<ul style="list-style-type: none"> <li>Physical proximity of team members</li> <li>Availability and standardization of communication tools</li> </ul>	<ul style="list-style-type: none"> <li>Geographic assignment of care teams</li> <li>Offering cell phone numbers to patients</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### Situational Awareness

“ I’ve never wanted to make nurses feel like they have to convince me to come to a bedside. I’ve always said, ‘If you want me to come look at the baby just say so and I’ll come.’ Ninety percent of the time, it is clinically worth the trip. The 10% of the time that everything’s OK is still well-worth the visit just to build a two-way trusting relationship. ”



**Chris DeRienzo, M.D., MPP**  
System Chief Quality Officer



“ In healthcare practice today, the volume of information flowing through the system has a significant impact on the workforce. How do we prioritize information or determine relevance? Not more alerts, but rather fewer, more relevant alerts. That requires more thoughtful clinical system and technology design. ”



**Read Pierce, M.D.**  
Interim Director of the Hospital  
Medicine Group



## Case Study

### The Sacred Moment on Admission

Physicians and nurses on a med-surg unit at Twin Rivers Regional Medical Center (TRRMC) created a “Sacred Moment on Admission” as a way of establishing a connection with a patient and understanding and attending to immediate patient needs as soon as a patient arrived on their unit.

The protocol calls for five to ten minutes of uninterrupted time during which the care team member asks the patient about his or her fears and concerns, immediate comfort needs, chosen support people, spiritual needs, and other human-centered considerations. “The Sacred Moment lets us connect with our patients, and reminds us why we got into healthcare in the first place,” said Steve Pu, D.O., chief medical officer at TRRMC. “But we also learned that patients often have concerns we haven’t even thought about – like, ‘Who will look after my pet?’ Or, ‘How am I going to pay for this?’ If we don’t help them answer those questions first, they can’t pay full attention to any clinical teaching or questions we might have.”

### Guidelines for the Sacred Moment on Admission

The person conducting the Sacred Moment may follow up with any relevant resources (nutrition services, social work, billing support, etc.). The following questions serve as a guide.

- ✓ **Do you have any fears or concerns?**
- ✓ **Have you had anything to eat?  
Are you hungry or thirsty?**
- ✓ **Do you have a person you would like us to keep involved in your care?**
- ✓ **Are you warm enough?  
Do you need a blanket?**
- ✓ **Do you have any spiritual needs or preferences we should be aware of?**

Only after attending to the patient’s Sacred Moment needs does the care team move on to the more routine questions regarding insurance, advance directives, etc.

**Results: 117% improvement in patient experience; physician engagement reached the 99<sup>th</sup> percentile**



**Steve Pu, DO**  
Chief Medical Officer



## Case Study

# Caring Conversations for Difficult Diagnoses

Like many of his peers across specialties, Chris DeRienzo, M.D., MPP, system chief quality officer, and a neonatologist at Mission Health, has had to deliver his share of bad news to his patients' families. It's never easy. Early in his medical training, Dr. DeRienzo received guidance and opportunities to practice so that he could deliver hard news with as much compassion and empathy as possible, despite his discomfort. "We first learned the basics of structuring a difficult compassionate conversation, then we actually practiced while being recorded. It was awful watching yourself but invaluable to improving as a communicator because seeing and hearing yourself dramatically increased the velocity of change."

The basics Dr. Rienzo learned included beginning with a "warning shot," pausing long enough so families could absorb the emotional impact of the difficult news, and offering the first steps in a path forward. "By the fifth time we went through the practice sessions, pausing for seven seconds of silence didn't seem so awkward."

Dr. DeRienzo recounted the first time he had to put those skills into practice, telling young parents in the emergency department that their child had cancer. "I will forever remember that day, the room we were in, even what they were wearing. When I close my eyes I can still see their eyes at the moment my words turned their whole world on end, and how hard it was guiding them back into orbit. I was so glad I had practiced."

## Communication Practices for Difficult News



Telegraph that you have some difficult news using a "warning shot."



Deliver the news with clarity and compassion.

**Pause**



Put aside your basic tendency as a doctor to fix, be fast, and flood them with information. Recognize you've just knocked the spin from their universe and their lives will forever be divided in half – before this moment, and after this moment.

**Stop**



Once the initial emotional impact has set in, your main focus is to begin guiding their world back into some orbit. It will be a new and different orbit, but it doesn't have to be a lonely one. They need to know:

- You and your team are with them.
- They will have lots of questions, they will ask the same ones repeatedly, and they will forget a lot. That's normal and okay.
- Share the next concrete step on the path forward – the whole path is likely unknown, but it has to start somewhere.



**Chris DeRienzo, M.D., MPP**  
System Chief Quality Officer



## Patient Perspective

### Medical Priorities and Healing Priorities

“ I was diagnosed with late-stage colon cancer shortly after my second son was born. My treatment was incredibly intense - chemo, radiation, surgery, more chemo, more surgery. At times, it felt like needing to psych myself up to put my hand into a moving blender. **I'm grateful for the medical care I received, but I needed so much more to actually survive.** I couldn't have gotten through the treatment my doctors prescribed had I not cobbled together other healing services, such as nutrition and exercise support, acupuncture, herbs and supplements, and therapeutic massage. Guided imagery is what kept me sane throughout my whole journey. Three months into treatment, I had surgery to determine whether I was stage 3 or stage 4. The uncertainty surrounding that surgery was overwhelming, but through guided imagery, I envisioned the outcome I wanted and wrote it down on paper. I gave that written description to my husband and told him, 'You need to post this on my blog while I'm in surgery.' It's what I wanted my outcome to be and it's exactly what happened.

After I was through treatment, I realized **how crazy it was that I had to piece together my healing support by myself. And I knew that every cancer patients diagnosed after me would be forced to do the same thing, but perhaps with less time, connections, and resource than I had.** So I approached my



**Julie Wheelan, MBA**  
Managing Director and Founder, Untether  
CEO and Founder, Navius  
[www.naviushealth.com](http://www.naviushealth.com)

oncologist and the hospital COO and, together, we created a truly integrated center for integrative health and wellness for my community. We offered both inpatient and outpatient programs and services that were developed in response to what patients said they really needed and these offerings were woven into the patient's clinical care plan. **There is an enormous difference between curing and healing. I am grateful that doctors are so focused on curing, but in order to survive, patients also need to heal.**

Innovation in healthcare is not easy. I met many pockets of resistance as I built the Center. In one meeting, the hospital's physicist told me I was 'sullyng the scientific reputation of the cancer program.' My response was: 'With all due respect, **I could not have survived the treatment this cancer center put me through without guided imagery, without running, without nutritional and emotional support. I am not a robot.**'

**The journey to the cure is as important as the cure, but each person is unique and each path to healing is as well.** And so we must meet people where they are today and also understand where they want to be. Only once our healthcare system acknowledges this and begins to deliver truly personalized, whole-person care, can we call ourselves 'patient-centric.' ”

## Self-Assessment

### Situational Awareness

Use these questions to reflect on your system's strengths and opportunities for improvement with regard to situational awareness.

- Do we have clear and standard cues that patients and team members can use to convey urgency around:
- Safety concerns?
  - Emotional needs?
  - Informational needs?

- Do we have an approach to build empathy for workflow and responsibilities across team roles (for example, cross-role shadowing)?

- Do we design workflows and technologies so that team members and patients are most likely to have access to the people and resources they need at the times they need them?

- Do we teach people how to communicate information differently for specific situations (for example, the delivery of difficult news, or conveying complex treatment plans)?

The background features a large, stylized letter 'K' shape formed by white negative space. The surrounding areas are filled with a vibrant green color. In the upper-left corner, there is a small, solid orange triangle pointing downwards.

# Respectful Communication Mode

# Respectful Communication Mode

How communication takes place affects the fidelity of information transfer from one person to another, the speed of information transfer, and the availability of contextual cues such as facial expression, tone, and body language that allow people to convey emotion, meaning, and comprehension. While asynchronous communication modes (such as texting or emailing) may afford each person the flexibility to engage with information on his/her own schedule, synchronous modes allow greater dialogue and opportunity to clarify.

Table: Respectful Communication Mode subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
In-person	Communication in which all people are in a shared space and able to hear and see one another	<ul style="list-style-type: none"> <li>Attributes: Synchronous, includes verbal cues (tone, pace, rate, etc.), facial cues, and body language</li> <li>Requires colocation, which is influenced by workflow, schedules, workload, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Unit-based care teams</li> <li>Nurse-physician bedside rounds</li> <li>Interdisciplinary rounds</li> <li>Bedside shift report</li> </ul>
Video	Communication facilitated by video technology that transmits some or all facial or body language cues in addition to voice	<ul style="list-style-type: none"> <li>Attributes: Synchronous and asynchronous; includes verbal cues, most facial cues, some body language</li> <li>Requires technology investment</li> </ul>	<ul style="list-style-type: none"> <li>Video conferencing</li> <li>Telemedicine</li> <li>Video recorded instructions or messages</li> </ul>
Voice	Communication at a distance facilitated by technology that transmits voice	<ul style="list-style-type: none"> <li>Attributes: Synchronous (typically, though recorded messages may be asynchronous), verbal cues</li> <li>Requires technology investment and standardization</li> </ul>	<ul style="list-style-type: none"> <li>Phones</li> <li>Hands-free devices</li> <li>Universal directory/roles directory</li> <li>Workflow engine</li> </ul>
Written	Communication via writing (text, email, EHR note, etc.)	<ul style="list-style-type: none"> <li>Attributes: Asynchronous, no verbal or interpersonal cues, may include links to visual support or additional context (if tech-based)</li> <li>May require technology investment</li> </ul>	<ul style="list-style-type: none"> <li>Patient whiteboard use</li> <li>Designated sections and/or workflows in the EHR for patient stories or values</li> <li>Huddle boards</li> <li>Educational materials</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### Respectful Communication Mode

“ I waited five days to get my test results. I finally went into my doctor’s office and insisted on getting my results. The receptionist handed me a stack of fax papers. I was sitting in my car googling medical terminology when I learned I had cancer. ”



**Danny Zollars**  
Patient

“ We have to do a better job of matching the message to the medium. Look at the start of the Ebola outbreak as an example of what I mean. The patient’s travel history was recorded in the EHR, but not communicated directly to the physician. The message did not match the medium. Some things can be transmitted through text. Other things require face-to-face communication. ”



**Milisa Manojlovich, Ph.D., RN, CCRN**  
Associate Professor, Department of Systems, Populations, and Leadership



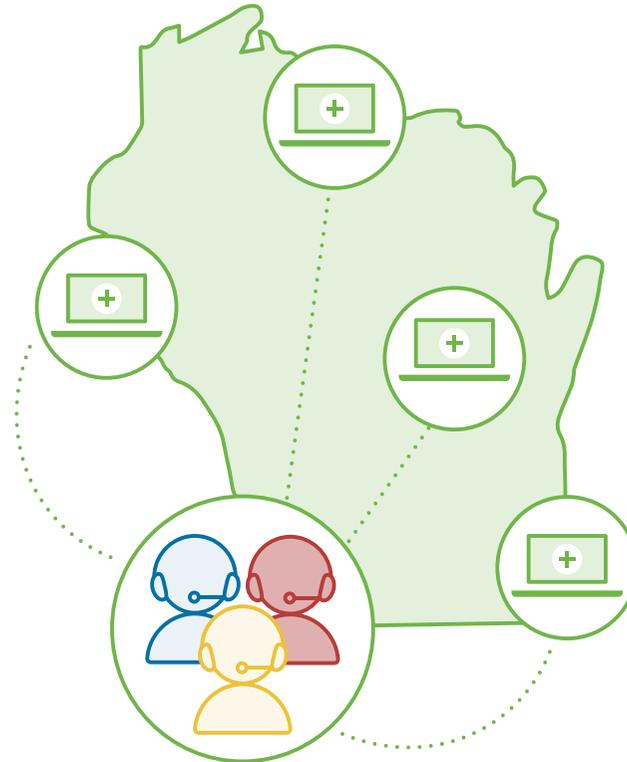
## Case Study

# Using Video for High-Fidelity Medical Interpretation

Ibzan Monteagudo, and Andrea Oyuela, each a manager of language services at Ascension Wisconsin, describe the role of medical interpreter as one of building a bridge between patients with specialized communication needs such as limited English proficiency, and their providers. Their role centers on translating with accuracy and completeness, but also runs deeper than that. “We offer cultural clarification, as needed,” explained Mr. Monteagudo.

Medical interpreters are acutely aware of the strengths and limitations of different modes of communication. “When we’re sitting as interpreters in the interaction between patients and doctors, it’s easy to sense when a patient or doctor isn’t understanding,” said Ms. Oyuela. “Through non-verbal communication, you can see that the patient seems not to understand, or the doctor is using terms that are too complicated. We have to interpret the words, but we also have to help people understand when they are not communicating.”

Ascension Wisconsin is making its cultural clarification and interpretation services available in all of its emergency departments and urgent care centers when and where they’re needed, through real-time video. “It’s a way to help providers and patient communicate instead of waiting – and we can still see the body language and facial expression,” said Ms. Oyuela.



**Mai Neng Xiong, MSM**  
Director of Language Services and Cultural Competency



**Ibzan Monteagudo**  
Manager of Language Services



**Andrea Oyuela**  
Manager of Language Services



## Patient Perspective

### If I'm the Glue, I Need the Right Tools

“ What’s important to me is that the clinicians I work with realize they’re members of my team. I have multiple sclerosis. Today, I have a primary care physician in one system, and specialists in four others. I use two retail pharmacies, one specialty pharmacy, and three lab services. None of these communicate with each other. I also see an acupuncturist, chiropractor, and massage therapist

I’m an individual trying to manage my health. My goal is to live the best life I can with this chronic illness. To do that, I need a team. There are professional and non-professional members of that team, and medical and non-medical members among the professionals. **But it’s my team – it’s about me. I am the glue that holds the team together.** And one of the things that’s crazy about that is that they never talk to each other. But both my PCP and my neurologist asked me the same question: **What’s most important to me?** For me it’s don’t mess with my pathological optimism, and I want to keep playing the saxophone. So we make treatment decisions based on those two parameters. And they think about my values when they make referrals. They’re also open to stuff that I’m trying that’s outside their knowledge.



Danny Van Leeuwen, MPH, RN, CPHQ



**Both my PCP and my neurologist are heavy patient portal users and I really like that. I have it together, but I worry. They’re both really open to the idea of me keeping them posted about what’s going on in my care.** When I go see a specialist, the communication between the specialist and my PCP is usually bad. So my deal with my PCP is to keep her posted via the portal – I saw this doctor, this happened. My neurologist will send me a text that there’s something new, and we’ll look at that next time I come in.

But even portals have their limits. In 20 years, my name has been spelled three different ways, and my med list has only been up-to-date and accurate for three of those 20 years. I have found 12 significant errors in my records and have never been able to have those corrected. My health record has never been shared electronically. I’ve had to pay for copying my record three times.

And I’m still just one person! ”

More on Mr. Van Leeuwen’s relationship with his care team can be found here: <http://www.bmj.com/content/358/bmj.j3219>

# Respectful Communication Mode and the EHR

“ Most healthcare organizations haven’t fully defined the purpose of the EHR note. Is it for billing, for population health, to inform the next provider, or to cover yourself from a liability perspective? ”



**Janet Chaikind, M.D.**  
Medical Director of Pediatrics and Adolescent Medicine



“ As a patient, you should be able to read your doctor’s notes. Open Notes should be everywhere in real time. Lots of people don’t process auditory cues well, so reading is better. And loved ones can help you understand because they can read it with you. And if you speak a different language, someone can help interpret. There are so many good reasons to go with Open Notes. ”



**Regina Holliday**  
Patient Activist  
Artist  
Founder: *the Walking Gallery of Healthcare*

“ I signed up for an online portal and then had surgery. I saw all of the labs and notes in the portal. I saw the discharge note and it was only six lines and full of acronyms. I asked my doctor why that was. He said, ‘I didn’t write them for you. They’re for your GP.’ I asked, ‘Do you see a lot of people seeing their GP after surgery when it’s all they can do to get down to see you for the follow up?’ He said no. ”



**Annette McKinnon**  
Patient Advisor



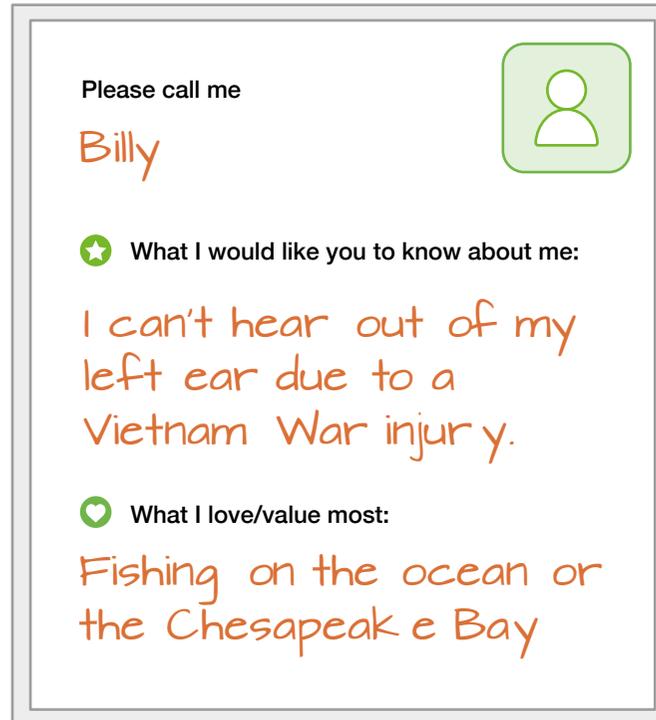
## Case Study

# About Me Boards to Facilitate Patient Relationships

The experience design team at Johns Hopkins is always looking for “within reach” improvement opportunities. One day the design team was observing a patient who was taking meticulous notes. When the team asked the patient about his experience, the patient revealed he had been auditing his care team’s hand washing, and that not only did the doctor who just visited fail to wash his hands, he hadn’t bothered to find out that the patient was also a physician and that he had questions.

This discussion prompted a cascade of design ideas that culminated in one of the team members, a nurse named Matt, creating a simple poster that team members and volunteers could use to capture basic, humanizing information about their patients. “Matt and the volunteers begin to realize the value was in the conversation they were having and the printout was simply an artifact,” said Nick Dawson, MHA, executive director of the Johns Hopkins Sibley Innovation Hub.

“About Me boards have woven themselves into the fabric of our organization,” said Mr. Dawson. “For clinicians, they provide a humanizing reminder that the person in the bed is not their diagnosis. For managers, in a second’s glance, they bolster confidence by providing an opportunity for a non-clinical conversation. But most importantly, for patients, the About Me boards provide an opportunity to feel valued, heard, and treated like a full person.”



Original source: <http://www.nickdawson.net/blog/category/tmu85cnhoyvnhfnln2unvbq002gplr>  
Adapted with permission



**Nick Dawson, MHA**  
Executive Director of the Johns Hopkins Sibley Innovation Hub



## Self-Assessment

### Respectful Communication Mode

Use these questions to reflect on your system's strengths and opportunities for improvement with regard to selecting a respectful communication mode.



Do we consider whether team member assignments and workflows allow them to use the right modes of communication for the right conversations?

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When in-person communication isn't feasible, do we consider which technology will support the right level of human-centered communication (for example, a phone call vs. an email or text)?

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When using written communication formats like email, chart notes, or whiteboards, do we include appropriate humanizing elements such as photos or stories?

The background features a large, solid green area on the right side. On the left, there are several overlapping geometric shapes: a large green triangle pointing right, a smaller green triangle pointing left, and a small orange triangle pointing right. These shapes are separated by white diagonal lines.

# Human-Centered Communication Ecosystem

# Human-Centered Communication Ecosystem

Healthcare professionals interact with one another and with patients and families in a variety of environments. These environments may function to help or hinder communication effectiveness.

Table: Human-Centered Communication Ecosystem subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Geographic Layout	The physical design of the space in which communication takes place, which may affect availability of communication modes or ability to interact	<ul style="list-style-type: none"> <li>• Size of unit (affects whether team members can visually or audibly locate one another with ease)</li> <li>• Location of shared and private workspaces</li> </ul>	<ul style="list-style-type: none"> <li>• Mix of centralized and distributed nursing stations</li> </ul>
Technology Availability	The availability of communication tools (phones, pagers, badges, video, etc.) and the workflow intelligence behind them that enable participants to connect synchronously or asynchronously as appropriate	<ul style="list-style-type: none"> <li>• Availability</li> <li>• Standardization</li> <li>• Accessibility to patients and families</li> </ul>	<ul style="list-style-type: none"> <li>• Closed-loop communication workflow tools</li> <li>• Device-agnostic communication middleware</li> </ul>
Privacy and Interruptions	The degree to which the environment supports communication from end-to-end without interruption or a feeling of intrusion	<ul style="list-style-type: none"> <li>• Alignment or protection of key workflows to prevent interruption</li> <li>• Presence or absence of dedicated space for huddles, private conversations, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of vests, sashes, or other visual cues to indicate that a person is engaged in a task that should not be interrupted (for example, med-pass)</li> <li>• Designated spaces for private conversations</li> </ul>
Distractions	The presence or absence of external stimuli (alerts, alarms, other conversations, people, etc.) that distract from the focus on current communication	<ul style="list-style-type: none"> <li>• Noise</li> <li>• Extraneous visual stimuli</li> </ul>	<ul style="list-style-type: none"> <li>• Alarm management systems</li> <li>• Quiet at night</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### Human-Centered Communication Ecosystem

“ In many ways, time is our enemy. Every second I waste trying to track down the person I need to talk to is time I can’t spend on patient care. ”



**Daniel Z. Sands, M.D., MPH, FACP, FACMI**  
Co-Founder and Board Chair Society  
for Participatory Medicine  
Assistant Clinical Professor of Medicine



“ There are a few things that enhance interprofessional communication on a nursing unit. You need both centralized and decentralized nursing stations on the unit. The centralized unit is the hub of activity and care coordination. The decentralized areas are for the minute-to-minute, day-to-day communication that happens near the patient. While decentralized areas keep nurses near their patients, you still need an area where care teams can come together to interact and communicate. Some hospitals don’t want the duplication of space because it drives up cost. But hospitals that try to design without the central unit usually end up creating a centralized care coordination and communication area with moveable furniture, fixtures, and equipment. ”



**Jan Stichler, DNSc, RN, EDAC, NEA-BC, FAAN, FACHE**  
Professor Emerita of Nursing



## Case Study

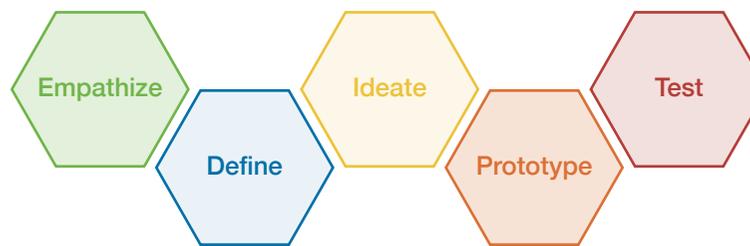
# Space to Collaborate and Space to Think

Physician leaders Patrick Kneeland, M.D., and Read Pierce, M.D., at the University of Colorado Health know that physician well-being is a crucial underpinning to solid collegial relationships and good communication.

Dr. Kneeland conducted a design session with his peers in which they identified three key areas for improvement around the surprising question that emerged: “Can the physician workplace promote rejuvenation?” 1) Healthy food available in the workflow; 2) Scheduled recovery time; and 3) Enhanced workspace, including both a space for collaborative and social interaction and a space for quiet and focus. “Needing collaboration and socialization at work, but also needing an environment that promotes focus is definitely a common theme in much of our work,” explained Dr. Kneeland.

The team is working on designating the current physician workrooms as both collaborative and optimized for focus. “Finding sustenance outside of the workplace should be a priority in promoting physician resilience. But what this design pushed me to ponder this: If we want our healthcare teams to truly thrive, let’s figure out how to design their immediate work environments to promote rejuvenation while at work.”

### Design Thinking



#### Community Space

- ✓ Build relationships
- ✓ Confer on cases
- ✓ Collaborate

#### Quiet Space

- ✓ Focus
- ✓ Reflect
- ✓ Relax

### Can the physician workplace promote rejuvenation?



**Read Pierce M.D.**  
Interim Director of the Hospital  
Medicine Group  
*University of Colorado Health*



**Patrick Kneeland, M.D.**  
Medical Director for Patient  
and Provider Experience at the  
University of Colorado Hospital,  
Director of Safety and Patient  
Experience for the University of  
Colorado Hospital Medicine Group



## Case Study

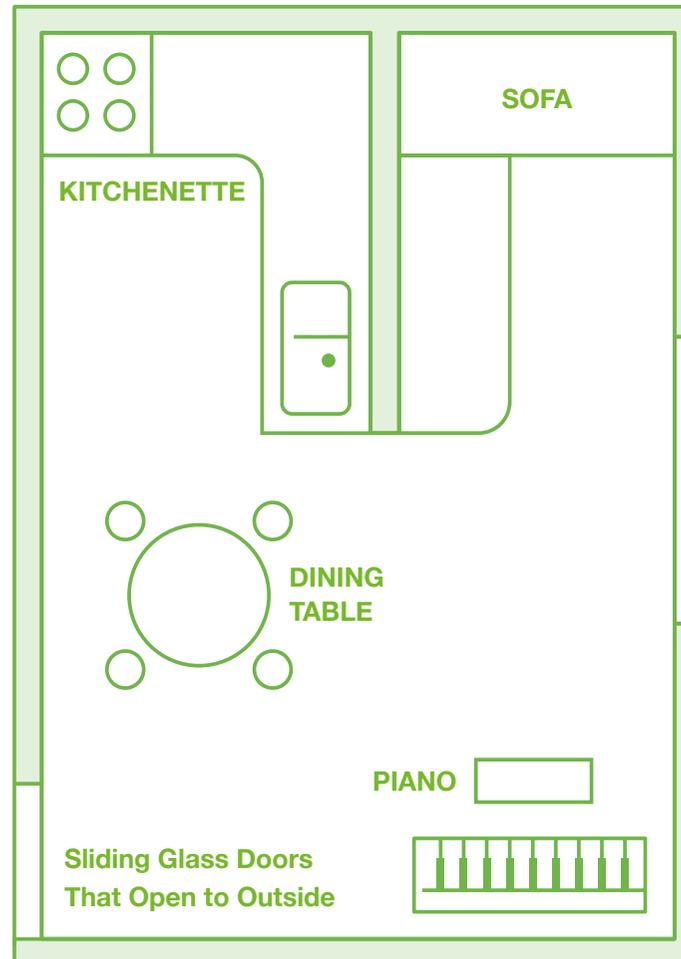
# ‘Ohana Rooms for Family Connection

Family is critical to the Hawaiian culture. When a family member falls ill and goes to the hospital, it’s not unusual for a large number of family members to arrive to support the patient and one another. When the team at North Hawaii Community Hospital (NHCH) were building out their new facility, they wanted to honor this spirit of family by creating ‘Ohana (Hawaiian for family) rooms.

Some are basic waiting rooms, but one in particular is designed to give families a private, comfortable space in which to gather and support one another. This special room comes equipped with a kitchenette, TV, piano, and couches. It gives families a place to rest, prepare special meals, or even play some of their own music.

In addition, the team included a small, private, library-like room called Suzanne’s Corner (named in memory of a local family counselor). It was designed to be a quiet, private room for anyone to use for conversation, reflection, or reading.

“When we were planning and designing NHCH around a patient- and family-centered environment, we felt it was critical to program in space for families for conversation, sharing a meal, or just getting out of the clinical setting,” said Susan Pueschel, one of the original planners at NHCH. “We also knew that so many conversations (doctor to family, nurse to family) take place in the hallways outside of patient rooms, so we set aside private space for that kind of conversation, or for simple solitude for patients, families, visitors, and staff. Staff lounges aren’t conducive to quiet privacy. Sometimes caregivers need to remove themselves from the hectic din and find space to regroup and recharge.”



**Susan Pueschel, Employee #1**  
Former Director of Development



## Case Study

# Streamlining Communication Through Unified Technology

Sean Spina, RPh, BSc(Pharm), ACPR, PharmD, FCSHP, pharmacy clinical coordinator at Island Health, spends a lot of time scientifically evaluating and comparing drugs to determine which are best suited to a clinical situation. He also spends a lot of time waiting for responses to pages so he can help resolve medication questions. “It happens all the time,” he said. “You’ve got highly trained medical professionals sitting by the phone waiting for another highly trained medical professional to call, and then you give up and have someone with no medical training take a message.” Dr. Spina decided to apply his scientific acumen to sourcing and testing an integrated communication platform that would minimize the amount of time that clinical team members wait for communications.

“We landed on a solution that replaces pages with secure text messages. The most significant improvement is that the texts include context so that the clinician can make a quick determination of whether the incoming message is more urgent than what they’re already doing.” The solution is supporting patients, saving time, and driving satisfaction among team members – so much so that Dr. Spina’s team is launching a trial to extend the platform’s use to optimize care transitions between hospital and community care settings. “Our measure of value will be improved patient outcomes and quality adjusted work hours. We want to see if this drives improvement in the quality of our care, and in the workflow and experience for clinicians.”

### Applying the Scientific Method to Improving Clinical Communication

1

Establish a project to study the real-world communication environment through a collaborative approach involving pharmacists, physicians, nurses, switchboard operators, Information Management and Information Technology (IMIT), and technology vendors.

2

Design a trial to test the impact of introducing smartphone-based technology and workflow tools on the speed and effectiveness of clinical communication; review with research and ethics board.

3

Conduct a test, and measure factors including usage, effects on clinician workflow and experience, and clinical outcomes.

**Results: Perceived improvements in patient care, patient safety, and faster care; 81% physician willingness to continue using the platform.**



**Sean Spina, RPh, BSc(Pharm),  
ACPR, PharmD, FCSHP**  
Pharmacy Clinical Coordinator



## Patient Perspective

### Why Must Everything Beep?

“ Morgan Gleason has spent a lot of time in hospitals – enough to recognize that some of the typical communication tools don’t make sense. In a 2014 YouTube video, she pointed out the irrationality of having an IV infusion pump beep loudly at the patient’s bedside when there’s nothing the patient can do to fix the issue. “I get a certain med that’s frothy and bubbly. So in the middle of the night, air bubbles get stuck in the tubing. The IV pump starts beeping extremely loudly – louder than your alarm clock. It wakes you up... It just doesn’t make sense – why would it beep in the patient’s room instead of out by the nurses where they could actually do something about it?”

Ms. Gleason also explains why the nurse call button can be a frustration.

“You press the nurse call button, a light goes on outside your room, and it sends a signal to someone sitting at a desk. That person is supposed to page the nurse to come to your room. A couple of times it’s happened where that person turns off the light outside your room, so you’re waiting for 30-40 minutes at a time without anybody knowing you need anything. It’s annoying, because you’re in pain or you need something...Also there’s a pain button on the remote that does the exact same thing as the nurse call button. It doesn’t make sense that they would have a pain button if it does the same thing as the other button. The people still come in and ask you what you need... and you’re like, ‘Yes, I pressed the pain button. I’d like something for my pain.’ And they say, ‘I don’t know, it said the same thing as the nurse button.’ So that’s not very helpful at all. ”



**Morgan Gleason**  
Patient

See Ms. Gleason’s original video about communication challenges here:  
[https://www.youtube.com/watch?v=6T0oNg9p\\_Xo](https://www.youtube.com/watch?v=6T0oNg9p_Xo)  
(repurposed with permission)

## Self-Assessment

# Human-Focused Communication Ecosystem

Use these questions to reflect on your system's strengths and opportunities for improvement with regard to creating a human-focused communication ecosystem.



Do we have adequate spaces for patients and care team members to have private conversations or reflection in comfortable environments?

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Do our professional workspaces support both proximity to patients and care team collaboration?

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Does our communication technology infrastructure allow care team members to connect efficiently?



Does our communication technology infrastructure allow patients and families to connect effectively with their care team?

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Do we minimize audible distractions and other interruptions that detract from human-centered communication?



# System Standards for Optimal Communication

# System Standards for Optimal Communication

Knowing that clinical communication is both essential and complex, organizations put in place policies, processes, guidelines, and even unwritten norms that govern how communication should take place in various situations. The most structured of these policies tend to revolve around situations of greatest risk, such as calling codes, so that all participants share the same mental model and communication habits to support safety and outcomes. In other situations, such as in coordinating care, there can be a lack of clarity in policy which can lead people to communicate critical information in nonstandard ways.

The challenge for leaders is to strike the balance between implementing policies that make operations efficient and effective, and allowing frontline workers the flexibility to devise communication approaches that work optimally for unique situations.

Table: System Standards for Optimal Communication subcategories, key elements, and example solutions

Subcategory	Definition	Key Elements	Example Solutions*
Workflow Alignment	Defining workflows for interdisciplinary care team members so team members can more readily communicate with one another and with patients and families	<ul style="list-style-type: none"> <li>• Leadership collaboration</li> <li>• Standard work</li> </ul>	<ul style="list-style-type: none"> <li>• Interdisciplinary rounding, huddles</li> <li>• Nurse-physician rounding</li> <li>• Aligning rounding time with patient/family availability</li> </ul>
Defined Roles	Clearly designating people who are responsible for specific roles and specific communication	<ul style="list-style-type: none"> <li>• Role is assigned; members of the team know to whom the role belongs; all team members are clear on the responsibilities belonging to the role</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterback for care</li> <li>• Vest or sash to indicate team leader role (for example, trauma team)</li> </ul>
Meta-Processes	Communications processes built to manage other communication processes	<ul style="list-style-type: none"> <li>• Verbal or visual cues that ensure that participants follow communication best practices</li> </ul>	<ul style="list-style-type: none"> <li>• Visual management</li> <li>• Training guides</li> <li>• Crisis manuals</li> <li>• Checklists</li> </ul>

\* See the bibliography for studies and papers related to these challenges and solutions.

## Voices from the Research

### System Standards for Optimal Communication

“ A lot of the doctor-nurse communication challenge is workflow. They haven’t figured out how to get together for five minutes at the beginning of the day and make a plan. So there’s a lot of chasing around piecemeal to try to make up for it. ”



**Michael Leonard, M.D.**  
Managing Partner



“ People say multi-disciplinary rounds can’t happen, but when they make them happen, people begin to love their jobs again. ”



**Elizabeth J. Warner, M.D., FACP, CPE**  
Medical Director, Continuous Improvement Support



“ Multiple specialists can be like a blind man describing an elephant. Our solution was to build a team. If a child had more than two specialty visits without a firm diagnosis, we had a complex case consult. One person was identified as the quarterback responsible for coming up with a plan for how to move forward. ”



**Marty Scott, M.D., MBA**  
Senior Vice President,  
Chief Transformation Officer



“ When residents orient on the first day, we include the elements of positive therapeutic communication in their training because it is a key factor of success. It is vitally important that we enlighten the health care provider about the personal approach of nurturing and developing human interactions, which contribute to an effective, impactful, positive experience for the clinician and the patients. ”



**Sue Murphy, RN, BSN, MS**  
Chief Experience Officer



## Case Study

# Nurse-Physician Rounding as the Standard of Care

The concept of nurses and physicians rounding on patients together isn't new. The practice allows the patient and her primary nurse and physician to share information and agree on a plan of care. But the practicalities of getting nurses and physicians in the same place at the same time can be daunting.

At Parkview Health, nurses and doctors created a process that is individualized based on the unit needs. On the medical units, doctors arriving on the unit check the nurse call system to see which nurses are assigned to their patients. At the same time, nurses on surgical units who see a doctor arrive on the floor send out a group-wide text so that nurses can make themselves available for the round. "The nurse is engaged with the physician and is also watching for patient comprehension," explained Kimberly Burns, MSN, RN, CMSRN, educator, nursing professional development and clinical care. "Sometimes as a nurse you can help explain something in a different way to the patient or help clarify a question. And sometimes the patient needs to hear something directly from the doctor."

The system has been so successful the team has adopted it house-wide, as part of the Parkview Way. "We do it because it works. It's effective, it decreases work, increases satisfaction, builds relationships, and helps us educate the patient."



### Nurse-Physician Rounding Process

**Physician arrives on unit**

- Physician checks for nurse assignments
- Nurses send out group text (some units)

**Nurse and physician round on patient together**

- Physician assesses with nurse input
- Physician, nurse, and patient discuss plan of care
- Nurse asks the patient clarifying questions and provides patient-centered explanations

**Contingency plan**

- If patient's assigned nurse is not available, another nurse or tech attends the round
- Nurse or tech connects with assigned nurse and patient for knowledge transfer



**Kimberly Burns, MSN, RN, CMSRN**  
Educator, Nursing Professional Development, and Clinical Care



## Case Study

# Structured Interdisciplinary Rounds Focus on Communication

The University of Colorado Hospital Acute Care for the Elderly (ACE) service comprises two inpatient teams caring for the hospitalized elderly (patients more than 75 years of age). To facilitate teamwork and care quality, the ACE unit introduced an inter-professional care model that brought together nurses, physicians, therapists, pharmacists, dietitians, social workers, and patient liaison teams. Today, this multi-disciplinary team functions together as one unit. But it took several iterations and lots of trial and error to build efficient and effective communication.

To foster dialog and build relationships, the team implemented structured rounding facilitated by the charge nurse. During rounds, the team reviews each patient's care, with each team member taking a few moments to run through the critical elements related to his or her discipline. The discussion takes place in a set order "We didn't want this to be a checklist," said Ethan Cumbler, M.D., medical director of the unit. "The only piece that we explicitly scripted was the hand-off from the physician to the nurse: 'From a nurse perspective, what are your thoughts and suggestions?'" By creating a space for everyone to have a voice, the unit overcame the tendency of some team members to stay quiet and prevented any one person from dominating the discussion.

The team also recognized that they often lacked clarity about two key decisions in patient care: Whether or not the patient should be discharged to a skilled nursing facility (SNF), and whether to involve the palliative care team in the care plan. So they labeled two ping pong paddles with the words "Decision to SNF," and "Think Palliative Care," as visual reminders for these key communication steps.

### Structured Interdisciplinary Rounds Process

- ✓ Conducted five days per week (M-F), plus mini "lightning" version on weekends
- ✓ Charge nurse leads
- ✓ Defined order of speaking
- ✓ The specific expertise of each discipline is written on a poster on the wall to rapidly orient new rounding participants to the order and expectations
- ✓ No explicit scripting, except for M.D.-nurse hand-off: "From a nurse perspective, what are your thoughts and suggestions?"
- ✓ Palliative care team joins once a week (and ad hoc as needed)
- ✓ Use paddles as visual communication cue ("Decision to SNF" and "Think Palliative Care")
- ✓ Communication with primary care at facilitated through Epic and by email throughout stay



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## Adding A Third Challenge to the Two-Challenge Rule

The Agency for Healthcare Research and Quality (AHRQ) promotes a program called TeamSTEPPS that is designed to train clinical teams on the skills and systems required for exceptional teamwork that leads to safe care.

One of the program’s principles is the two-challenge rule, designed to ensure that all team members speak up about safety concerns. In the two-challenge rule, if a person notices a safety concern, he has to speak up and state his safety concern. If his peer or the group ignores him, he has to speak up again (first challenge). If he is still ignored, he must take his concern up the clinical ladder until it is addressed (second challenge).

The system is designed to encourage all team members to speak up, even if it means challenging people with more institutional authority or power. It grants everyone permission to escalate concerns.

Beth Boynton, RN, MS, a strategic organizational development consultant, argues that this doesn’t go far enough. “There should be a third challenge – to identify why people are ignoring the person in the first place. That is the origin of the problem,” she explained. “Too often we look at a communication breakdown and say that people aren’t speaking up. Just as often, the problem is that people aren’t listening effectively. Speaking up and listening are interrelated and both are critical for promoting a culture of safety. By invoking this third challenge, we could explore individual or organizational patterns that signal areas for deeper work.”

Ms. Boynton advocates for experiential training, such as improvisational workshops, that teach the cores skills of listening and sharing power, not just learning structured tools for specific communication situations.

Excerpted and adapted from AHRQ website:

### Two-Challenge Rule

Empowers all team members to “stop the line” if they sense or discover an essential safety breach.

#### When people ignore your initial assertive statement

- It is your responsibility to assertively voice concern **at least two times** to ensure that it has been heard.
- The team member you are challenging must acknowledge that he or she has heard your concern.
- If the safety issue still hasn’t been addressed:
  - Take a stronger course of action.
  - Escalate to supervisor or chain of command.

#### Challenge #3

Leadership review and root cause analysis:

- Why wasn’t the challenge heard and/or acknowledged the first time?
- What skills (listening, mutual respect, acknowledgment, etc.) do team members need to learn so people don’t need to escalate safety-concern challenges in the future?



**Beth Boynton, RN, MS**

Sole Proprietor

*Beth Boynton, RN, MS Consulting*

## Patient Perspective

### Make the Patient the Problem Solver

“ The best communication is truly empathetic. When we first started going to Kaiser Permanente, I explained that my son is autistic, and resistant to shots and labs. The doctor sat down and talked to my son. She said, ‘I understand you don’t like needles. This blood draw is important for your health. What do you think we could do to make it better?’ My son said, ‘When you hug me with the pump [meaning the blood pressure cuff] it feels good. Maybe if you did that on one arm, and drew on the other, I would be okay.’ So then they did. They brought a blood pressure cuff into the phlebotomy lab and it went great. It worked because they were willing to listen, and willing to ‘break protocol.’ **The approach – even with children – should be listen, involve them in the solution, and follow through. ”**



**Regina Holliday**  
Patient Activist  
Artist  
Founder: *the Walking Gallery of Healthcare*

## Self-Assessment

# System Standards for Optimal Communication

Use these questions to reflect on your system's strengths and opportunities for improvement with regard to system standards for optimal communication.

Do our leaders across medicine, nursing, and other care team disciplines collaborate to create aligned workflows that maximize interdisciplinary communication?

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In situations where multiple specialists are responsible for a single patient's care, do we create explicit ways for them to collaborate? Do we also designate who is responsible for engaging in key communication with other care team members and patients and families?

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Do we use clear and accessible tools such as visual management to manage not just processes but also important communication events?

Do we have protocols to facilitate communication at times when there's a high risk of communication break down, such as hand-offs?

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Do we have clear, transparent, consistent, system-level processes for examining and improving communication protocols?

# Heart-Wiring Compassionate Clinical Communication

Healthcare is on a trajectory of continual change. New discoveries contribute to the science of medicine. Process improvements increase efficiencies and lead to better outcomes. New communication and information technologies alter the nature and flow of care delivery.

Through all of these changes, relationships and communication will remain the healing lifeblood of healthcare. To navigate whatever changes organizations will face as science, technology, and industry pressures evolve, leaders across healthcare should:

- **Embrace human-centered communication as a core value.**  
Organizations pursuing concepts such as Just Culture and high reliability already know that culture shapes and is shaped by communication. Given the importance of relationships and respect to successful communication, even in structured or crisis situations, executive leaders should model the values that make clinical communication successful, such as active listening, respect for all voices, and transparency.
- **Examine workflow through a relationship lens.**  
Healthcare teams are and will remain dynamic, but relationships built through workflow alignment and social engagement will have an impact on communication efficiency and effectiveness. Key best practices such as interdisciplinary rounding, nurse-physician rounding, and daily huddles will only work if all parties are willing to adjust workflows and commit to an aligned process that serves the needs of all care team members and patients and families.

- **Train the skills of connected communication.**  
Hospitals and health systems run code and crisis drills because they understand the importance of seamless communication in critical moments. Similarly, the skills of relationship-centered, connected communication can and should be taught to all members of the healthcare team – including patients and families who are often left to navigate care without critical skills. Intensive training should be coupled with one-on-one coaching and ongoing practicing through simulations and medical improvisation for continued skill building.
- **Apply technology that enhances human connection.**  
It's easy to point to technology such as the EHR as the enemy of connected communication. But intuitive, user-friendly technology will play a critical role in shaping and enhancing the healthcare communication environment. From artificial intelligence and rules engines that change the signal-to-noise ratio of interruptive, machine-generated alerts and alarms, to unified communication and collaboration platforms that make it easier for team members and patients to connect at the right time using the right mode, technology can aid in improving the relationships and connections that make compassionate clinical communication possible.

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## Endnotes

- <sup>i</sup> Ritu Agarwal, M. B. A., Sands, D. Z., & Jorge Díaz Schneider BS, M. B. A. (2010). Quantifying the economic impact of communication inefficiencies in US hospitals. *Journal of Healthcare Management*, 55(4), 265. <https://www.ncbi.nlm.nih.gov/pubmed/20812527>
- <sup>ii</sup> Joint Commission. (2015). Sentinel event statistics released for 2014. [http://www.jointcommission.org/assets/1/23/jconline\\_April\\_29\\_15.pdf](http://www.jointcommission.org/assets/1/23/jconline_April_29_15.pdf)
- <sup>iii</sup> Mazor, K. M., Roblin, D. W., Greene, S. M., Lemay, C. A., Firreno, C. L., Calvi, J., ... Gallagher, T. H. (2012). Toward Patient-Centered Cancer Care: Patient Perceptions of Problematic Events, Impact, and Response. *Journal of Clinical Oncology*, 30(15), 1784–1790. <http://doi.org/10.1200/JCO.2011.38.1384> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3383179/pdf/zlj1784.pdf>
- <sup>iv</sup> Haskard Zolnerek, K. B., & DiMatteo, M. R. (2009). Physician Communication and Patient Adherence to Treatment: A Meta-analysis. *Medical Care*, 47(8), 826–834. <http://doi.org/10.1097/MLR.0b013e31819a5acc> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2728700/>
- <sup>v</sup> Clever, S. L., Jin, L., Levinson, W., & Meltzer, D. O. (2008). Does Doctor–Patient Communication Affect Patient Satisfaction with Hospital Care? Results of an Analysis with a Novel Instrumental Variable. *Health Services Research*, 43(5 Pt 1), 1505–1519. <http://doi.org/10.1111/j.1475-6773.2008.00849.x> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653895/>
- <sup>vi</sup> Sluiter, J. K., Bos, A. P., Tol, D., Calff, M., Krijnen, M., & Frings-Dresen, M. H. (2005). Is staff well-being and communication enhanced by multidisciplinary work shift evaluations?. *Intensive care medicine*, 31(10), 1409–1414. <https://www.ncbi.nlm.nih.gov/pubmed/16132886>
- <sup>vii</sup> Evans, J, & Brooks, B. (2012, May 10). Secure texting for healthcare — the time has come. Retrieved from <http://www.beckershospitalreview.com/healthcare-information-technology/secure-texting-for-healthcare-the-time-has-come.html>
- <sup>viii</sup> Hu, Y. Y., Arriaga, A. F., Peyre, S. E., Corso, K. A., Roth, E. M., & Greenberg, C. C. (2012). Deconstructing intraoperative communication failures. *Journal of Surgical Research*, 177(1), 37–42. <https://insights.ovid.com/pubmed?pmid=22591922>
- <sup>ix</sup> Grundgeiger, T., & Sanderson, P. (2009). Interruptions in healthcare: theoretical views. *International Journal of Medical Informatics*, 78(5), 293–307. <http://ai2-s2-pdfs.s3.amazonaws.com/6149/4f5a065fd69269b61578ffe5629918663d63.pdf>
- <sup>x</sup> Bartlett, G., Blais, R., Tamblyn, R., Clermont, R. J., & MacGibbon, B. (2008). Impact of patient communication problems on the risk of preventable adverse events in acute care settings. *Canadian Medical Association Journal*, 178(12), 1555–1562. <http://www.cmaj.ca/content/178/12/1555>
- <sup>xi</sup> Lingard, L., Espin, S., Whyte, S., Regehr, G., Baker, G. R., Reznick, R., ... & Grober, E. (2004). Communication failures in the operating room: an observational classification of recurrent types and effects. *Quality and Safety in Health Care*, 13(5), 330–334.
- <sup>xii</sup> Rivera, A. J., & Karsh, B.-T. (2010). Interruptions and Distractions in Healthcare: Review and Reappraisal. *Quality & Safety in Health Care*, 19(4), 304–312. <http://doi.org/10.1136/qshc.2009.03328>

# About the Experience Innovation Network

The Experience Innovation Network, part of Vocera, works to restore the human connection to healthcare. We lead and accelerate the discovery, adoption, and execution of innovations that meet the quadruple aim of improving population health, elevating patient-centered care, and reducing costs while restoring joy to practice. Co-founded by Bridget Duffy, M.D., the first chief experience officer in healthcare, this global community of industry pioneers works to transform the healthcare experience.

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# Bibliography

# Shared Purpose

## Culture

**A comprehensive review of literature on patient safety culture identified seven subcultures: leadership, teamwork, evidence-based, communication, learning, just, and patient-centeredness.**

- Sammer, C. E., Lykens, K., Singh, K. P., Mains, D. A., & Lackan, N. A. (2010). What is patient safety culture? A review of the literature. *Journal of Nursing Scholarship*, 42(2), 156-165. <http://onlinelibrary.wiley.com/doi/10.1111/j.1547-5069.2009.01330.x/full>

**“Culture conditions attitudes toward communication and communication processes and systems.”**

- Brown, A. D., & Starkey, K. (1994). The effect of organizational culture on communication and information. *Journal of Management studies*, 31(6), 807-828. [https://www.researchgate.net/publication/229773063\\_The\\_Effect\\_of\\_Organizational\\_Culture\\_on\\_Communication\\_and\\_Information](https://www.researchgate.net/publication/229773063_The_Effect_of_Organizational_Culture_on_Communication_and_Information)

**Workplace culture (and hierarchies) contribute to communication failures, which, in turn, contribute to malpractice risk.**

- Hoffman, J. (2016). Malpractice Risks of Health Care Communication Failures. CRICO. <https://www.rmhf.harvard.edu/Clinician-Resources/Newsletter-and-Publication/2016/SPS-The-Malpractice-Risks-of-Health-Care-Communication-Failures>

## Leadership

**A study of leadership style and communication showed that “charismatic and human-oriented leadership are mainly communicative, while task-oriented leadership is significantly less communicative.” Leader communication style was associated with knowledge-sharing behaviors.**

- De Vries, R. E., Bakker-Pieper, A., & Oostenveld, W. (2010). Leadership = Communication? The Relations of Leaders' Communication Styles with Leadership Styles, Knowledge Sharing and Leadership Outcomes. *Journal of Business and Psychology*, 25(3), 367-380. <http://doi.org/10.1007/s10869-009-9140-2> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2912722/>

**An ICU study found unit leadership to be a predictor of open communication perception, which, in turn, predicted whether team members understood patient goals.**

- Reader, T. W., Flin, R., Mearns, K., & Cuthbertson, B. H. (2007). Interdisciplinary communication in the intensive care unit. *British journal of anaesthesia*, 98(3), 347-352. <https://academic.oup.com/bja/article-lookup/doi/10.1093/bja/ael372>

**When tension arose in observational studies of the OR, surgical trainees either withdrew, or mimicked the communication style of the senior surgeon.**

- Lingard, L., Reznick, R., Espin, S., Regehr, G., & DeVito, I. (2002). Team communications in the operating room: talk patterns, sites of tension, and implications for novices. *Academic Medicine*, 77(3), 232-237. <https://www.ncbi.nlm.nih.gov/pubmed/11891163>

## Patient-centeredness

**The Institute of Medicine defines patient-centered care as “providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.”**

- Baker, A. (2001). Crossing the quality chasm: a new health system for the 21st century. *BMJ*, 323(7322), 1192.

**Article examines aligning reimbursement and incentives around patient-centered care**

- Shannon, D. (2012). Effective physician-to-physician communication: An essential ingredient for care coordination. *Physician Executive Journal*, 38(1): 16-21. [http://www.mdwriter.com/uploads/1/8/0/3/18033585/md\\_to\\_md\\_communication\\_pej.pdf](http://www.mdwriter.com/uploads/1/8/0/3/18033585/md_to_md_communication_pej.pdf)

**More patient-centered communication results in better patient and physician satisfaction.**

- Ha, J. F., & Longnecker, N. (2010). Doctor-Patient Communication: A Review. *The Ochsner Journal*, 10(1), 38-43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096184/>

**“Proximity to the patient” shapes decision-making around withdrawal of treatment in the in ICU.**

- Melia, K. M. (2001). Ethical issues and the importance of consensus for the intensive care team. *Social Science & Medicine*, 53(6), 707-719. <https://www.ncbi.nlm.nih.gov/pubmed/11511047>

**Reimbursement models affect patient-centeredness.**

- Shannon, D. (2012). Effective physician-to-physician communication: An essential ingredient for care coordination. *PE J*, 16-21. [http://www.mdwriter.com/uploads/1/8/0/3/18033585/md\\_to\\_md\\_communication\\_pej.pdf](http://www.mdwriter.com/uploads/1/8/0/3/18033585/md_to_md_communication_pej.pdf)

**Patients are the ultimate judge of how patient-centered an organization or clinician is.**

- Rickert, J. (2012). Patient-centered care: What it means and how to get there. *Health Affairs Blog*, 24. <http://healthaffairs.org/blog/2012/01/24/patient-centered-care-what-it-means-and-how-to-get-there/>

**Patients' perceptions of patient-centeredness can be measured. These correlate to outcomes such as enablement, satisfaction, and burden of symptoms.**

- Little, P., Everitt, H., Williamson, I., Warner, G., Moore, M., Gould, C., ... & Payne, S. (2001). Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. *BMJ*, 323(7318), 908-911 <http://www.bmj.com/content/323/7318/908>

## Shared Purpose

### Teamwork

#### **Teamwork affects and is affected by communication.**

- Manser, T. (2009). Teamwork and patient safety in dynamic domains of healthcare: a review of the literature. *Acta Anaesthesiologica Scandinavica*, 53(2), 143-151. <http://onlinelibrary.wiley.com/doi/10.1111/j.1399-6576.2008.01717.x/full>

#### **Crew Resource Management (CRM) approaches borrowed from the airline industry help build trust, respect, accountability, situational awareness, open communication, assertiveness, shared decision making, feedback, and education to operating room settings.**

- Leming-Lee, S., France, D., Feistritz, N., Kuntz, A., Sanders, F., & Higgins, M. S. (2005). Crew resource management in perioperative services: navigating the implementation road map. *Journal of Clinical Outcomes Management*, 12(7), 353-8. [http://www.turner-white.com/pdf/jcom\\_jul05\\_crew.pdf](http://www.turner-white.com/pdf/jcom_jul05_crew.pdf)
- Grogan, E. L., Stiles, R. A., France, D. J., Speroff, T., Morris, J. A., Nixon, B., ... & Pinson, C. W. (2004). The impact of aviation-based teamwork training on the attitudes of health-care professionals. *Journal of the American College of Surgeons*, 199(6), 843-848. [http://www.journalacs.org/article/S1072-7515\(04\)01175-5/fulltext](http://www.journalacs.org/article/S1072-7515(04)01175-5/fulltext)

#### **Simulation and training are effective means of teaching CRM skills.**

- Wallin, C. J., Meurling, L., Hedman, L., Hedegård, J., & Felländer-Tsai, L. (2007). Target-focused medical emergency team training using a human patient simulator: effects on behaviour and attitude. *Medical education*, 41(2), 173-180. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2929.2006.02670.x/abstract>
- Morey, J. C., Simon, R., Jay, G. D., Wears, R. L., Salisbury, M., Dukes, K. A., & Berns, S. D. (2002). Error reduction and performance improvement in the emergency department through formal teamwork training: evaluation results of the MedTeams project. *Health services research*, 37(6), 1553-1581. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1464040/>

#### **Quality of care is significantly improved by relational coordination (frequent, timely, accurate communication, as well as problem-solving, shared goals, shared knowledge, and mutual respect).**

- Gittel, J. H., Fairfield, K. M., Bierbaum, B., Head, W., Jackson, R., Kelly, M., ... & Zuckerman, J. (2000). Impact of relational coordination on quality of care, postoperative pain and functioning, and length of stay: a nine-hospital study of surgical patients. *Medical care*, 38(8), 807-819. <https://www.ncbi.nlm.nih.gov/pubmed/10929993>

#### **The Stichler Collaborative Behavior Scale (CBS) helps leaders evaluate the amount of power balancing, interacting, and interpersonal valuing that happens in collaborative relationships.**

- O'Grady, T.P. Shared Governance Implementation Manual. (pp. 115-117). Retrieved from <http://www.tpgassociates.com/shared-governance/appendix-c.pdf>

## Attention to Personal Factors

### Cognitive load and capacity

#### **Communication errors increase when cognitive capacity is exceeded.**

- Parker, J., & Coiera, E. (2000). Improving Clinical Communication: A View from Psychology. *Journal of the American Medical Informatics Association*, 7(5), 453-461. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC79040/>

#### **Use of checklists lessens the cognitive load on participants.**

- Gawande, A. *The Checklist Manifesto*. New York: Metropolitan Books, 2009

### Self-awareness

#### **Self-monitoring, the ability to examine and critically review one's own actions, helps clinicians to improve clinical, communication, and relational skills.**

- Epstein, R. M., Siegel, D. J., & Silberman, J. (2008). Self-monitoring in clinical practice: A challenge for medical educators. *Journal of Continuing Education in the Health Professions*, 28(1), 5-13. [http://projectes.camfic.cat/CAMFiC/Projectes/Salut\\_Mental\\_2010/Docs/\\_Epstein2008%20Self\\_MonitoringinClinicalPractice.pdf](http://projectes.camfic.cat/CAMFiC/Projectes/Salut_Mental_2010/Docs/_Epstein2008%20Self_MonitoringinClinicalPractice.pdf)

#### **Self-awareness helps detect the inappropriate use of low-level decision rules, as well as detecting the factors that limit a physician's capacity to tolerate the tension of uncertainty and ambiguity, which leads to poor clinical decision making and communication.**

- Borrell-Carrió, F., & Epstein, R. M. (2004). Preventing errors in clinical practice: a call for self-awareness. *The Annals of Family Medicine*, 2(4), 310-316. <http://www.annfam.org/content/2/4/310.long>

#### **Participation in a mindful communication program was associated with short-term and sustained improvements in well-being and attitudes associated with patient-centered care.**

- Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., & Quill, T. E. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *Journal of the American Medical Association*, 302(12), 1284-1293. <http://jamanetwork.com/journals/jama/fullarticle/184621>

### Emotional connection, presence, and mindfulness

#### **Mind wandering and distraction affect clinical effectiveness.**

- Smallwood, J., Mrazek, M. D., & Schooler, J. W. (2011). Medicine for the wandering mind: mind wandering in medical practice. *Medical Education*, 45(11), 1072-1080. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2923.2011.04074.x/abstract>

#### **Patient visits with high-mindfulness clinicians were more likely to be characterized by a patient-centered pattern of communication.**

- Beach, M. C., Roter, D., Korthuis, P. T., Epstein, R. M., Sharp, V., Ratanawongsa, N., ... & Saha, S. (2013). A multicenter study of physician mindfulness and health care quality. *The Annals of Family Medicine*, 11(5), 421-428. <http://www.annfam.org/content/11/5/421.short>

# Attention to Personal Factors

## **Mindfulness training resulted in decreased stress and increased empathy among medical students.**

- Barbosa, P., Raymond, G., Zlotnick, C., Wilk, J., Toomey III, R., & Mitchell III, J. (2013). Mindfulness-based stress reduction training is associated with greater empathy and reduced anxiety for graduate healthcare students. *Education for Health*, 26(1), 9. <http://www.educationforhealth.net/article.asp?issn=1357-6283;year=2013;volume=26;issue=1;spage=9;epage=14;aulast=Barbosa>

## **Mindfulness-based stress reduction reduced burnout and associated factors.**

- Goodman, M. J., & Schorling, J. B. (2012). A mindfulness course decreases burnout and improves well-being among healthcare providers. *The International Journal of Psychiatry in Medicine*, 43(2), 119-128. <http://journals.sagepub.com/doi/abs/10.2190/PM.43.2.b>

## **When providers sit down at the patient bedside, patients perceive that providers spend more time with them.**

- Swayden, K. J., Anderson, K. K., Connelly, L. M., Moran, J. S., McMahon, J. K., & Arnold, P. M. (2012). Effect of sitting vs. standing on perception of provider time at bedside: a pilot study. *Patient education and counseling*, 86(2), 166-171. <https://www.ncbi.nlm.nih.gov/pubmed/21719234>

## **Experience and literacy**

### **More experienced clinicians suffer less from the downside of interruptions.**

- Parker, J., & Coiera, E. (2000). Improving Clinical Communication: A View from Psychology. *Journal of the American Medical Informatics Association*, 7(5), 453-461. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC79040/>

### **AHRQ's SHARE Communication toolkit provides resources for managing patients' variance in literacy, language, and ability.**

- SHARE approach curriculum tools. (2014, July). Retrieved from <https://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/tools/index.html>

### **The Joint Commission provides guidance on a variety of communication tools and their impact on patients and families with low health literacy or low English proficiency.**

- The Joint Commission. "What did the doctor say?." Improving health literacy to protect patient safety. Retrieved from the Joint Commission Website: [https://www.jointcommission.org/assets/1/18/improving\\_health\\_literacy.pdf](https://www.jointcommission.org/assets/1/18/improving_health_literacy.pdf)

### **An overview of cultural and linguistic barriers to health literacy**

- Singleton, K., & Krause, E. (2009). Understanding cultural and linguistic barriers to health literacy. *The Online Journal of Issues in Nursing*, 14(3). <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No3Sept09/Cultural-and-Linguistic-Barriers-.html>

## **Abilities, disabilities, and skills**

### **When working with hearing impaired patients, doctors should address them with empathy and take note of various issues in the environment: background noise, lighting, booking an appointment, or the waiting room. There are also different types of interpreters (lipspeakers or ASL interpreters).**

- Middleton, A., Niruban, A., Girling, G., & Myint, P. K. (2010). Communicating in a healthcare setting with people who have hearing loss. *BMJ*, 341, 726-729. [https://www.researchgate.net/profile/Phyo\\_Myint/publication/46820215\\_Practice\\_Pointer\\_Communicating\\_in\\_a\\_healthcare\\_setting\\_with\\_people\\_who\\_have\\_hearing\\_loss/links/53cfff6f0cf2fd75bc5b4d14.pdf](https://www.researchgate.net/profile/Phyo_Myint/publication/46820215_Practice_Pointer_Communicating_in_a_healthcare_setting_with_people_who_have_hearing_loss/links/53cfff6f0cf2fd75bc5b4d14.pdf)

### **AHRQ's SHARE Communication toolkit provides resources for managing patients' variance in literacy, language, and ability.**

- SHARE approach curriculum tools. (2014, July). Retrieved from <https://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/tools/index.html>

## **Willingness or Capacity to Engage**

### **Interventions that augment patient activation could increase quality of care and improved patient-provider communication, potentially reducing health care disparities for Latinos.**

- Alegría, M., Sribney, W., Perez, D., Laderman, M., & Keefe, K. (2009). The role of patient activation on patient-provider communication and quality of care for US and foreign born Latino patients. *Journal of General Internal Medicine*, 24(3), 534-541. <https://link.springer.com/article/10.1007%2Fs11606-009-1074-x>

### **Adverse childhood events (ACEs) have a profound impact on adult mental well-being.**

- Hughes, K., Lowey, H., Quigg, Z., & Bellis, M. A. (2016). Relationships between adverse childhood experiences and adult mental well-being: results from an English national household survey. *BMC Public Health*, 16, 222. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4778324/>

### **"Low-income individuals with high BP were less likely to take their medication when their physician did not ask them about social issues or did not engage in collaborative communication, according to recent findings."**

- Havranek, E. & Schoenthaler, A. (2017, August 22). Communication improves BP medication adherence in low-income patients. Retrieved from <https://www.healio.com/cardiology/vascular-medicine/news/online/%7B07b35cf5-f19a-488f-9691-f08ff09b6c02%7D/communication-improves-bp-medication-adherence-in-low-income-patients>

# Attention to Interpersonal Dynamics

## **Examination of how physicians' competence in professional conversations with patients can be assessed**

- Duffy, F. D., Gordon, G. H., Whelan, G., Cole-Kelly, K., & Frankel, R. (2004). Assessing competence in communication and interpersonal skills: the Kalamazoo II report. *Academic Medicine*, 79(6), 495-507. [http://bevwin.pbworks.com/f/Kalamazoo\\_2.pdf](http://bevwin.pbworks.com/f/Kalamazoo_2.pdf)
- Frankel, A., Gardner, R., Maynard, L., & Kelly, A. (2007). Using the communication and teamwork skills (CATS) assessment to measure health care team performance. *The Joint Commission Journal on Quality and Patient Safety*, 33(9), 549-558. [http://www.jointcommissionjournal.com/article/S1553-7250\(07\)33059-6/fulltext](http://www.jointcommissionjournal.com/article/S1553-7250(07)33059-6/fulltext)

## **Training interventions can be effective improving communication skills.**

- Rao, J. K., Anderson, L. A., Inui, T. S., & Frankel, R. M. (2007). Communication interventions make a difference in conversations between physicians and patients: a systematic review of the evidence. *Medical Care*, 45(4), 340-349. [http://www.journalacs.org/article/S1072-7515\(04\)01175-5/fulltext](http://www.journalacs.org/article/S1072-7515(04)01175-5/fulltext)
- Morey, J. C., Simon, R., Jay, G. D., Wears, R. L., Salisbury, M., Dukes, K. A., & Berns, S. D. (2002). Error reduction and performance improvement in the emergency department through formal teamwork training: evaluation results of the MedTeams project. *Health Services Research*, 37(6), 1553-1581. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1464040/>
- Salas, E., DiazGranados, D., Weaver, S. J., & King, H. (2008). Does team training work? Principles for health care. *Academic Emergency Medicine*, 15(11), 1002-1009. <http://onlinelibrary.wiley.com/doi/10.1111/j.1553-2712.2008.00254.x/full>

## **Communication Assessment Tool:**

- Ibrahim, H. (2014). Critical synthesis package: communication assessment tool (CAT). *MedEdPORTAL Publications*, 10. <https://www.mededportal.org/publication/9806>

## **Relationship, mutual respect, and trust**

### **At least eight U.S. medical schools, including Stanford and UCLA, now require candidates to pass “multiple mini interviews,” role playing scenarios intended specifically to evaluate their communication skills and emotional intelligence.**

- Harris, G. (2011, July 10). New for aspiring doctors, the people skills test. *The New York Times*. Retrieved from <http://www.nytimes.com>

## **Implementation of unit-based care teams improved communication between physicians and nurses.**

- Gordon, M. B., Melvin, P., Graham, D., Fifer, E., Chiang, V. W., Sectish, T. C., & Landrigan, C. P. (2011). Unit-based care teams and the frequency and quality of physician-nurse communications. *Archives of pediatrics & adolescent medicine*, 165(5), 424-428. <http://jamanetwork.com/journals/jamapediatrics/fullarticle/384574>

## **ICUs with higher levels of trust and other team development metrics had lower mortality rates.**

- Wheelan, S. A., Burchill, C. N., & Tilin, F. (2003). The link between teamwork and patients' outcomes in intensive care units. *American Journal of Critical Care*, 12(6), 527-534. <http://ajcc.aacnjournals.org/content/12/6/527.long>

## **40% of vulnerable patients report feeling disrespected by providers. This makes them less likely to follow providers' advice.**

- Leis, H., Garg, P., & Soh, I. (2017). Right place, right time: Marketplace responses to the health information needs of vulnerable consumers. Retrieved from Oliver Wyman Website: <http://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2017/jan/right-place-right-time/Oliver%20Wyman%20Right%20Place%20Right%20Time.pdf>

## **Listening**

### **Active listening is a skill that can be developed.**

- Robertson, K. (2005). Active listening: more than just paying attention. *Australian Family Physician*, 34(12), 1053. <http://www.racgp.org.au/afpbackissues/2005/200512/200512robinson.pdf>

### **Active listening skills examined**

- Zenger, J., & Folkman, J. (July 14, 2016). What great listeners actually do. *Harvard Business Review*. Retrieved from <https://hbr.org/2016/07/what-great-listeners-actually-do>

### **Active listening skills inventory**

- McShane, S. L. (2000). Active Listening Skills Inventory [Self assessment]. Retrieved from: [http://www.mheducation.ca/college/mcshane4/student/olc/4obm\\_sa\\_08.html](http://www.mheducation.ca/college/mcshane4/student/olc/4obm_sa_08.html)

## **Power gradient and psychological safety**

### **Just Culture and High Reliability**

- Frankel, A. S., Leonard, M. W., & Denham, C. R. (2006). Fair and just culture, team behavior, and leadership engagement: The tools to achieve high reliability. *Health Services Research*, 41(4p2), 1690-1709. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955339/>

### **Communication failures often relate to hierarchical differences, concerns with upward influence, conflicting roles and role ambiguity, and interpersonal power and conflict.**

- Sutcliffe, K. M., Lewton, E., & Rosenthal, M. M. (2004). Communication failures: an insidious contributor to medical mishaps. *Academic Medicine*, 79(2), 186-194. <https://www.ncbi.nlm.nih.gov/pubmed/14744724>

### **Power struggles can result in trying to control, hoarding of information, or other communication dysfunction.**

- Crawford, C. L., Omery, A., & Seago, J. A. (2012). The challenges of nurse-physician communication: a review of the evidence. *Journal of Nursing Administration*, 42(12), 548-550. [http://www.nursingcenter.com/journalarticle?Article\\_ID=1463970&Journal\\_ID=54024&Issue\\_ID=1463960](http://www.nursingcenter.com/journalarticle?Article_ID=1463970&Journal_ID=54024&Issue_ID=1463960)

### **Historical power and gender dynamics persist between doctors and nurses.**

- Brown, T. (2011, May 7). Physician, heel thyself. *The New York Times*. Retrieved from <http://www.nytimes.com>

# Attention to Interpersonal Dynamics

## **Creating an environment that is psychologically “safe” is crucial for encouraging team members to speak up in potential safety situations.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

## **Assertiveness can help a person express themselves effectively, defend their point of view, and respect the rights and beliefs of others.**

- Mayo Clinic. (2017). Being assertive: Reduce stress, communicate better. Retrieved from: <http://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/assertive/art-20044644?pg=1>

## **In the transition from open-heart to minimally-invasive cardiac surgery, an environment of psychological safety was a key learning accelerator.**

- Edmondson, A. C., Bohmer, R., & Pisano, G. P. (2001) Speeding up team learning. *Harvard Business Review*, 79(9), 125–134. <https://hbr.org/2001/10/speeding-up-team-learning>

## **Implementation of standardized “trigger” words or phrases (e.g. “I have a concern”) can grant permission to speak up against a power gradient.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

## **Professional or patient identity**

### **“Nurses are taught to be very broad and narrative in their descriptions of clinical situations (“paint the big picture”), whereas physicians learn to be very concise, and get to the “headlines” quite quickly.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

### **In an ICU study, collaboration broke down due to the privileging of case knowledge (physician domain) over person knowledge (nurse domain).**

- Stein-Parbury, J., & Liaschenko, J. (2007). Understanding collaboration between nurses and physicians as knowledge at work. *American Journal of Critical Care*, 16(5), 470-477. <http://ajcc.aacnjournals.org/content/16/5/470.long>

### **In a study of communication surrounding complex operations, cross-disciplinary exchanges resulted in failure twice as often as intradisciplinary communication.**

- Hu, Y. Y., Arriaga, A. F., Peyre, S. E., Corso, K. A., Roth, E. M., & Greenberg, C. C. (2012). Deconstructing intraoperative communication failures. *Journal of Surgical Research*, 177(1), 37-42. <https://insights.ovid.com/pubmed?pmid=22591922>

## **Nurses and PCTs have different conceptions of patient care priorities unless PCTs are appropriately socialized in the role of nursing.**

- Evanoff, B., Potter, P., Wolf, L., Grayson, D., Dunagan, C., & Boxerman, S. (2005). Can we talk? Priorities for patient care differed among health care providers. In K. Henriksen, J. B. Battles, E. S. Marks, & D. I. Lewin (Ed.), *Advances in patient safety: From research to implementation (Volume 1: research findings)*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK20468/>

## **Difference in literacy or experience**

### **Creating a shared mental model helps participants communicate more efficiently and effectively.**

- Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A. (2000). The influence of shared mental models on team process and performance. *Journal of applied psychology*, 85(2), 273. [http://www.ida.liu.se/~729A15/mtrl/shared\\_mental-models\\_mathieu.pdf](http://www.ida.liu.se/~729A15/mtrl/shared_mental-models_mathieu.pdf)

### **Briefing (huddle) and debriefing can help teams accelerate learning and creation of shared mental models.**

- Edmondson, A., Bohmer, R., & Pisano, G. (2001). Speeding up team learning. *Harvard Business Review*, 79(9), 125-134. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

### **Critical event training and simulation helps team members gain experience and build a shared mental model.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

### **Best Case/Worst Case communication model helps surgeons convey risk and leads to shared decision-making.**

- Taylor, L. J., Nabozny, M. J., Steffens, N. M., Tucholka, J. L., Brasel, K. J., Johnson, S. K., ... & Campbell, T. C. (2017). A Framework to Improve Surgeon Communication in High-Stakes Surgical Decisions: Best Case/Worst Case. *JAMA Surgery*, 152(6), 531-538. <http://jamanetwork.com/journals/jamasurgery/article-abstract/2599170>

### **The Joint Commission provides guidance on a variety of communication tools and their impact on patients and families with low health literacy or low English proficiency.**

- The Joint Commission. “What did the doctor say?.” Improving health literacy to protect patient safety. Retrieved from the Joint Commission Website: [https://www.jointcommission.org/assets/1/18/improving\\_health\\_literacy.pdf](https://www.jointcommission.org/assets/1/18/improving_health_literacy.pdf)

### **Doctors are using skills from business negotiation skills to reframe conversations with patients.**

- Lagnado, L. (2017, September 2). Bargaining with cancer patients about treatment. *Wall Street Journal*. Retrieved from <https://www.wsj.com/>

## Attention to Interpersonal Dynamics

### Language, culture, and generational differences

#### **Providing medical interpreters is a cost-effective means of overcoming language barriers.**

- Jacobs, E. A., Shepard, D. S., Suaya, J. A., & Stone, E.-L. (2004). Overcoming Language Barriers in Health Care: Costs and Benefits of Interpreter Services. *American Journal of Public Health*, 94(5), 866–869. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448350/>

#### **AHRQ's SHARE Communication toolkit provides resources for managing patients' variance in literacy, language, and ability.**

- SHARE approach curriculum tools. (2014, July). Retrieved from <https://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/tools/index.html>

#### **An overview of cultural and linguistic barriers to health literacy**

- Singleton, K., & Krause, E. (2009). Understanding cultural and linguistic barriers to health literacy. *The Online Journal of Issues in Nursing*, 14(3). <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No3Sept09/Cultural-and-Linguistic-Barriers-.html>

#### **Information on addressing diversity in healthcare**

- Campinha-Bacote, J. (2003). Many faces: Addressing diversity in health care. *Online Journal of Issues in Nursing*, 8(1), 3. <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume82003/No1Jan2003/AddressingDiversityinHealthCare.aspxThank>

## Healing-Focused Content and Context

### Data and Content

#### **Patients in an emergency department with an identified “information gap” had an average 1.2 hour longer stay than those without a gap.**

- Stiell, A., Forster, A. J., Stiell, I. G., & van Walraven, C. (2003). Prevalence of information gaps in the emergency department and the effect on patient outcomes. *Canadian Medical Association Journal*, 169(10), 1023-1028. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC236227/>

#### **Conducting a structured “time out” to review relevant information pre-procedure helps ensure that all participants have received relevant information.,**

- Feldman, D.L. (2008). The Inside of a time out. *Patient Safety Network, Web Morbidity & Mortality Rounds on the Web Cases & Commentaries*. <https://psnet.ahrq.gov/webmm/case/177/the-inside-of-a-time-out>
- Lingard, L., Whyte, S., Espin, S., Ross Baker, G., Orser, B., & Doran, D. (2006). Towards safer interprofessional communication: constructing a model of “utility” from preoperative team briefings. *Journal of interprofessional care*, 20(5), 471-483. <http://www.tandfonline.com/doi/abs/10.1080/13561820600921865?journalCode=ijic20>

#### **“Teach back” helps healthcare providers assess whether they have effectively communicated concepts or instructions to patients and families.**

- Health literacy universal precautions toolkit, 2nd edition: Use the teach-back method: Tool #5. (2015). Retrieved from Agency for Healthcare Research and Quality Website: <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2-tool5.html>

#### **The Joint Commission requires “repeat backs” or “read backs” to confirm correct transmission of verbal and telephone orders.**

- Carr, S. (2012). High Reliability Healthcare: Applying CRM to High-Performing Teams, Part 4. *Patient Safety & Quality Healthcare*. <https://www.psqh.com/news/high-reliability-healthcare-applying-crm-to-high-performing-teams-part-4/> (ibid)

#### **Phonetic and numeric clarification (e.g. “15, one-five”) helps distinguish words and numbers that can sound alike (e.g. 15 and 50)**

- Carr, S. (2012). High Reliability Healthcare: Applying CRM to High-Performing Teams, Part 4. *Patient Safety & Quality Healthcare*. <https://www.psqh.com/news/high-reliability-healthcare-applying-crm-to-high-performing-teams-part-4/>

#### **Checklists standardize and improve the reliable translation of information.**

- Winters, B. D., Gurses, A. P., Lehmann, H., Sexton, J. B., Rampersad, C. J., & Pronovost, P. J. (2009). Clinical review: Checklists - translating evidence into practice. *Critical Care*, 13(6), 210. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2811937/>

#### **The tool “SBAR” (Situation, Background, Assessment, Recommendation) improves the clarity and completeness of content transmission in a clinical referral.**

- Marshall, S., Harrison, J., & Flanagan, B. (2009). The teaching of a structured tool improves the clarity and content of interprofessional clinical communication. *Quality and Safety in Health Care*, 18(2), 137-140. <https://www.ncbi.nlm.nih.gov/pubmed/19342529>

## Healing-Focused Content and Context

- Haig, K. M., Sutton, S., & Whittington, J. (2006). SBAR: a shared mental model for improving communication between clinicians. *The joint commission journal on quality and patient safety*, 32(3), 167-175. <https://pdfs.semanticscholar.org/ff00/2a3daad0450300e1c11b1286197bc2126fca.pdf>

### **Training in I-PASS (illness severity, patient summary, action list, situation awareness and contingency plans, and synthesis by receiver) reduces medical errors and adverse events.**

- Starmer, A. J., Spector, N. D., Srivastava, R., West, D. C., Rosenbluth, G., Allen, A. D., ... & Lipsitz, S. R. (2014). Changes in medical errors after implementation of a hand-off program. *New England Journal of Medicine*, 371(19), 1803-1812. <http://www.nejm.org/doi/full/10.1056/NEJMsa1405556#t=article>

### **Story and Context**

#### **Examination of the value placed on patient narrative**

- In an emergency medicine study, technical rationality (actionable lists) was consistently prioritized over narrative rationality (patient story). Eisenberg, E. M., Murphy, A. G., Sutcliffe, K., Wears, R., Schenkel, S., Perry, S., & Vanderhoef, M. (2005). Communication in emergency medicine: Implications for patient safety. *Communication Monographs*, 72(4), 390-413. <http://www.tandfonline.com/doi/abs/10.1080/03637750500322602>

#### **An evaluation of fall prevention patient narrative vs. structured assessment found that narratives conveyed patients' emotional response to their fall and health status, and helped identify strengths that could be leveraged in care planning.**

- Wong, C., & Hogan, D. B. (2013). The value of patient narratives in the assessment of older patients presenting with falls. *Canadian Geriatrics Journal*, 16(2), 43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3671011/>

#### **Narrative Medicine approaches help clinical teams to include patient preferences, values, and quality of life in care planning.**

- Hurwitz, B. (2011). Narrative in Medicine. In B. Hurwitz & P. Spinozzi (Eds.), *Discourses and Narrations in the Biosciences* (pp. 73-87). Retrieved from <https://books.google.com>

### **Shared Intent**

#### **The Kaiser Four Habits model teaches physicians to invest in the beginning (to create a shared agenda), elicit the patient's perspective, demonstrate empathy and invest in the end for more effective patient visits, better patient satisfaction, and reduced medicolegal risk.**

- Stein, T., Frankel, R. M., & Krupat, E. (2005). Enhancing clinician communication skills in a large healthcare organization: a longitudinal case study. *Patient education and counseling*, 58(1), 4-12. <https://www.ncbi.nlm.nih.gov/pubmed/15950831>
- Ananth, S. (2013) Emotional intelligence: a new requirement for physicians. *Hospitals & Health Networks*. <http://www.hhnmag.com/articles/5883-emotional-intelligence-a-new-requirement-for-physicians>

## Situational Awareness

### **An observational study of communication failures in the OR found that failures of "occasion," or timing, occurred in 46% of incidents.**

- Lingard, L., Espin, S., Whyte, S., Regehr, G., Baker, G. R., Reznick, R., ... & Grober, E. (2004). Communication failures in the operating room: an observational classification of recurrent types and effects. *Quality and Safety in Health Care*, 13(5), 330-334. <https://www.ncbi.nlm.nih.gov/pubmed/15465935>

### **Timing and Sequence**

#### **Surgical "prebriefings" reduce perceived risk of wrong-site surgery and improved collaboration among OR staff.**

- Makary, M. A., Mukherjee, A., Sexton, J. B., Syin, D., Goodrich, E., Hartmann, E., ... & Pronovost, P. J. (2007). Operating room briefings and wrong-site surgery. *Journal of the American College of Surgeons*, 204(2), 236-243. [http://www.journalacs.org/article/S1072-7515\(06\)01585-7/fulltext](http://www.journalacs.org/article/S1072-7515(06)01585-7/fulltext)

### **Urgency and Priority**

#### **The sense of urgency between care team members differs based on unique responsibilities.**

- Flicek, C. L. (2012). Communication: A dynamic between nurses and physicians. *Medsurg Nursing*, 21(6), 385. <https://www.amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ-Flicek-21-06.pdf>

#### **Understanding of the plan of care by differs by different care team members.**

- Evanoff, B., Potter, P., Wolf, L., Grayson, D., Dunagan, C., & Boxerman, S. (2005). Can we talk? Priorities for patient care differed among health care providers. In: Henriksen K, Battles JB, Marks ES, et al., editors. *Advances in Patient Safety: From Research to Implementation (Volume 1: Research Findings)*. Rockville (MD): Agency for Healthcare Research and Quality (US) <https://www.ncbi.nlm.nih.gov/books/NBK20468/>

#### **Use of scripted trigger phrases such as "I have a concern" or "I need you now" can create a shared sense of urgency around safety issues.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

#### **AHRQ advocates for CUS words (concern, uncomfortable, safety) to indicate an escalating degree of urgency around safety issues.**

- Module 2: Communicating change in a resident's condition: Appendix: Example of the SBAR and CUS tools. (October). Retrieved from Agency for Healthcare Research and Quality Website: <http://www.ahrq.gov/professionals/systems/long-term-care/resources/facilities/ptsafety/lcmod2ap.html> The use of asynchronous communication often leads to breakdowns, as these methods do not allow communicators to easily convey a sense of urgency.
- Flicek, C. L. (2012). Communication: A dynamic between nurses and physicians. *Medsurg Nursing*, 21(6), 385. <https://www.amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ-Flicek-21-06.pdf>

## Situational Awareness

### **Use of a color-coding system can help identify test results as having higher or lower urgency.**

- Hanna, Doris, et al. "Communicating critical test results: safe practice recommendations." *The Joint Commission Journal on Quality and Patient Safety* 31.2 (2005): 68-80. <http://www.macoalition.org/Initiatives/docs/CTRgriswold.pdf>

### **Design a "sequential notification system" for the most urgent categories of lab values or changes in status that indicates in what order to contact physicians and nurses, the frequency of the calls, and a fail-safe plan in case of emergencies.**

- Hanna, Doris, et al. "Communicating critical test results: safe practice recommendations." *The Joint Commission Journal on Quality and Patient Safety* 31.2 (2005): 68-80. <http://www.macoalition.org/Initiatives/docs/CTRgriswold.pdf>

### **Access**

#### **Nurses waste an average of one hour each day tracking down physicians, according to research published by the Robert Wood Johnson Foundation**

- Evans, J, & Brooks, B. (2012, May 10). Secure texting for healthcare — the time has come. Retrieved from <http://www.beckershospitalreview.com/healthcare-information-technology/secure-texting-for-healthcare-the-time-has-come.html>

#### **Because nurses and physicians can be independently busy, finding time to communicate properly becomes a pressing issue.**

- Flicek, C. L. (2012). Communication: A dynamic between nurses and physicians. *Medsurg Nursing*, 21(6), 385. Use of a color-coding system can help identify test results as having higher or lower urgency

#### **Geographic assignment of both nurses and hospitalists improved communication efficiency at Bassett Medical Center.**

- Nelson, J. (2015). Geographic rounding of hospital nurses challenges unit-based theory. *The Hospitalist*, 2015(3). <http://www.the-hospitalist.org/hospitalist/article/122538/geographic-rounding-hospital-nurses-challenges-unit-based-theory>

#### **Geographic assignment of care teams resulted in communication improvement across ease of access to care team members, likelihood of information transfer, clarity, and timeliness of order.**

- Kupersmith E, Gandhi S, Rachoin J, Kreidy M, Chaaya A, Cerceo E. (2008). Impact of a predominant geographic model on outcomes for hospitalist patients. *Journal of Hospital Medicine*, 3(suppl 1). <http://www.shmabstracts.com/abstract/impact-of-a-predominant-geographic-model-on-outcomes-for-hospitalist-patients/>

## Respectful Mode

### **In-person**

#### **A 1966 study suggested that 97% of meaning derives from body language, attitude, and tone.**

- Allesandra, T., & O'Connor, M. (1996). *The platinum rule: Discover the four basic business personalities and how they can lead you to success*. Victoria, Canada: Warner Business Books.

#### **Organizing unit-based care teams increases the likelihood of doctors knowing their patients' nurses, frequency of face-to-face communication, and perception of patients' needs being met.**

- Gordon, M. B., Melvin, P., Graham, D., Fifer, E., Chiang, V. W., Sectish, T. C., & Landrigan, C. P. (2011). Unit-based care teams and the frequency and quality of physician-nurse communications. *Archives of pediatrics & adolescent medicine*, 165(5), 424-428. <https://www.ncbi.nlm.nih.gov/pubmed/21536957>

#### **Nurse-physician rounds increase perception of communication by nurses.**

- Linebarger, N. (2014). Increased communication between nurses and doctors on an acute medical unit (Doctoral dissertation). Received from <http://repository.usfca.edu/cgi/viewcontent.cgi?article=1086&context=capstone>

#### **Multidisciplinary rounds shorten length of stay for trauma patients.**

- Dutton, R. P., Cooper, C., Jones, A., Leone, S., Kramer, M. E., & Scalea, T. M. (2003). Daily multidisciplinary rounds shorten length of stay for trauma patients. *Journal of Trauma and Acute Care Surgery*, 55(5), 913-919. <https://www.ncbi.nlm.nih.gov/pubmed/14608165>

#### **Bedside shift report improves end-of-shift overtime, call light usage, nurse perceptions, and patient satisfaction.**

- Cairns, L. L., Dudjak, L. A., Hoffmann, R. L., & Lorenz, H. L. (2013). Utilizing bedside shift report to improve the effectiveness of shift hand-off. *Journal of Nursing Administration*, 43(3), 160-165. [http://journals.lww.com/jonajournal/Abstract/2013/03000/Utilizing\\_Bedside\\_Shift\\_Report\\_to\\_Improve\\_the.9.aspx](http://journals.lww.com/jonajournal/Abstract/2013/03000/Utilizing_Bedside_Shift_Report_to_Improve_the.9.aspx)
- Radtke, K. (2013). Improving patient satisfaction with nursing communication using bedside shift report. *Clinical Nurse Specialist*, 27(1), 19-25. [http://journals.lww.com/cns-journal/Abstract/2013/01000/Improving\\_Patient\\_Satisfaction\\_With\\_Nursing.7.aspx](http://journals.lww.com/cns-journal/Abstract/2013/01000/Improving_Patient_Satisfaction_With_Nursing.7.aspx)

### **Video**

#### **Parents were more likely to remember their child's diagnosis (75% vs 60%) following discharge from the emergency department when using video as opposed to audio interpretative services.**

- Lion, K. C., Brown, J. C., Ebel, B. E., Klein, E. J., Strelitz, B., Gutman, C. K., ... Mangione-Smith, R. (2015). Impact of Telephone versus Video Interpretation on Parent Comprehension, Communication and Utilization in the Emergency Department: A Randomized Trial. *JAMA Pediatrics*, 169(12), 1117-1125. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5524209/>

# Respectful Mode

**Delivery of health services by real time video communication was cost-effective for home care and access to on-call hospital specialists, showed mixed results for rural service delivery, and was not cost-effective for local delivery of services between hospitals and primary care.**

- Wade, V. A., Karnon, J., Elshaug, A. G., & Hiller, J. E. (2010). A systematic review of economic analyses of telehealth services using real time video communication. *BMC health services research*, 10(1), 233. <https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-10-233>

**The American College of Physicians offers recommendations on the use of telemedicine in primary care.**

- Daniel, H., & Sulmasy, L. S. (2015). Policy Recommendations to Guide the Use of Telemedicine in Primary Care Settings: An American College of Physicians Position Paper Recommendations for the Use of Telemedicine in Primary Care Settings. *Annals of Internal Medicine*, 163(10), 787-789. <http://annals.org/aim/article/2434625/policy-recommendations-guide-use-telemedicine-primary-care-settings-american-college>

## Voice

**Observations show a preference among healthcare workers show a bias toward interruptive, or synchronous, communication methods such as telephone and face-to-face.**

- Parker, J., & Coiera, E. (2000). Improving Clinical Communication: A View from Psychology. *Journal of the American Medical Informatics Association*, 7(5), 453-461. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC79040/>

**Physicians are more capable of recalling and transferring medical knowledge when using smartphone-based communication that encompasses speech, images, and image annotation.**

- Pimmer, C., Mateescu, M., Zahn, C., & Genewein, U. (2013). Smartphones as Multimodal Communication Devices to Facilitate Clinical Knowledge Processes: Randomized Controlled Trial. *Journal of Medical Internet Research*, 15(11), e263. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3868983/>

## Written

**“Advances in technology implemented to increase quality and efficiency have a part in communication breakdown as well. Communication modalities, such as text pagers, patient inbox messaging, and electronic ordering systems, can contribute to increased errors. Use of these methods may misrepresent the urgency or the tone of the communication received; due to equipment malfunction, a message may not be received at all. According to Robinson and colleagues (2010), nurses and physicians express a desire to follow up on urgent orders or electronic messages with some form of verbal contact.”**

- Flicek, C. L. (2012). Communication: A dynamic between nurses and physicians. *Medsurg Nursing*, 21(6), 385. <https://www.amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSNJ-Flicek-21-06.pdf>

**Team members value whiteboards for family contact information, patient goals, and anticipated discharge date.**

- Sehgal, N. L., Green, A., Vidyarthi, A. R., Blegen, M. A., & Wachter, R. M. (2010). Patient whiteboards as a communication tool in the hospital setting: a survey of practices and recommendations. *Journal of Hospital Medicine*, 5(4), 234-239. <http://onlinelibrary.wiley.com/doi/10.1002/jhm.638/full>

**“Physician-researchers within a medical home environment tested the use of one-page templates containing content elements found to be of value during referral communication. They found that clinicians rated these elements as providing value, with the most valuable components for communication from the primary care physician being specific questions for the specialists and exam features of note, and the most valuable components for communication from the specialist being brief education about the condition.”**

- Shannon, D. (2012). Effective physician-to-physician communication: An essential ingredient for care coordination. *Physician Executive Journal*, 38(1): 16-21. [http://www.mdwriter.com/uploads/1/8/0/3/18033585/md\\_to\\_md\\_communication\\_pej.pdf](http://www.mdwriter.com/uploads/1/8/0/3/18033585/md_to_md_communication_pej.pdf)

**Multi-modal communication – combining verbal with written and even pictogram-style instructions may help with patient comprehension and retention.**

- Kessels, R. P. C. (2003). Patients' memory for medical information. *Journal of the Royal Society of Medicine*, 96(5), 219-222. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC539473/>

**This study details “opportunities for designing asynchronous communication tools to better facilitate understanding of and coordination around care activities between patients and clinicians” following interviews with 34 patients or family caregivers that manage chronic illnesses.**

- Eschler, J., Liu, L. S., Vizer, L. M., McClure, J. B., Lozano, P., Pratt, W., & Ralston, J. D. (2015). Designing asynchronous communication tools for optimization of patient-clinician coordination. In *AMIA Annual Symposium Proceedings (Vol. 2015, p. 543)*. American Medical Informatics Association. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4765629/>

# Human-Centered Communication Ecosystem

## Geographic Layout

**Mixing of centralized and distributed nursing stations facilitates both care coordination and collaboration, and patient-centered communication.**

- Hua, Y., Becker, F., Wurmser, T., Bliss-Holtz, J., & Hedges, C. (2012). Effects of nursing unit spatial layout on nursing team communication patterns, quality of care, and patient safety. *HERD: Health Environments Research & Design Journal*, 6(1), 8-38. <http://journals.sagepub.com/doi/abs/10.1177/193758671200600102?journalCode=hera>

**Nursing unit design and “organizational ecology” affect communication patterns.**

- Becker, F. (2007). Nursing unit design and communication patterns: What is “real” work?. *HERD: Health Environments Research & Design Journal*, 1(1), 58-62. [https://pdfs.semanticscholar.org/3c07/029529d132227ecf13725726992cd7c2e6b7.pdf?\\_ga=2.34713890.24792600.1499290736-1337148675.1499290736](https://pdfs.semanticscholar.org/3c07/029529d132227ecf13725726992cd7c2e6b7.pdf?_ga=2.34713890.24792600.1499290736-1337148675.1499290736)

**Nurses in decentralized nursing stations have increased feelings of isolation and decreased the frequency of interactions among nurses, and between nurses and doctors.**

- Becker, F. (2007). Nursing unit design and communication patterns: What is “real” work?. *HERD: Health Environments Research & Design Journal*, 1(1), 58-62. [https://pdfs.semanticscholar.org/3c07/029529d132227ecf13725726992cd7c2e6b7.pdf?\\_ga=2.34713890.24792600.1499290736-1337148675.1499290736](https://pdfs.semanticscholar.org/3c07/029529d132227ecf13725726992cd7c2e6b7.pdf?_ga=2.34713890.24792600.1499290736-1337148675.1499290736)

**Implementation of a “pod” nursing model increased patient (satisfaction, call lights, and falls) and nurse (satisfaction and overtime) outcomes.**

- Friese, C. R., Grunawalt, J. C., Bhullar, S., Bihlmeyer, K., Chang, R., & Wood, W. (2014). Pod Nursing on a Medical/Surgical Unit: Implementation and Outcomes Evaluation. *The Journal of Nursing Administration*, 44(4), 207–211. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3968792/>

**Design of the patient exam room affects both patient experience and communication.**

- Rico, L. (2010, February 8). Exam room design affects patient satisfaction. Retrieved from <https://news.uci.edu/2010/02/08/exam-room-design-affects-patient-satisfaction/>

**The placement of computers in exam rooms affects the quality of communication between patient and physician.**

- Frankel, R., Altschuler, A., George, S., Kinsman, J., Jimison, H., Robertson, N. R., & Hsu, J. (2005). Effects of exam-room computing on clinician–patient communication. *Journal of General Internal Medicine*, 20(8), 677-682. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1490186/>

## Technology Availability

**Introduction of a smartphone-based communication platform reduced wait times over traditional paging for pharmacy-related communication**

- Power, J. M., Spina, S. P., Forbes, D. A., Harder, C. K., Lalli, S. L., Loewen, P. S., & Zed, P. J. (2014). Integration of smartphones into clinical pharmacy practice: an evaluation of the impact on pharmacists’ efficiency. *Health Policy and Technology*, 3(4), 296-305. [http://www.healthpolicyandtechnology.org/article/S2211-8837\(14\)00049-5/fulltext](http://www.healthpolicyandtechnology.org/article/S2211-8837(14)00049-5/fulltext)

- Webb, C., Spina, S. P., & Young, S. (2016). Integrating smartphone communication strategy and technology into clinical practice: A mixed methods research study. *Health Policy and Technology*, 5(4), 370-375. [http://www.healthpolicyandtechnology.org/article/S2211-8837\(16\)30051-X/fulltext](http://www.healthpolicyandtechnology.org/article/S2211-8837(16)30051-X/fulltext)

**Secure texting may reduce length of stay by creating an effective asynchronous communication channel.**

- Bolen, D. (2016, April 8). Why healthcare needs real-time, asynchronous communications. Retrieved from <http://www.beckershospitalreview.com/healthcare-information-technology/why-healthcare-needs-real-time-asynchronous-communications.html>

**By assigning a team-based pager for on-call physicians, nurses were more likely to know who to page and had lower incident rates of inability to reach physicians.**

- Shieh, L., Chi, J., Kulik, C., Momeni, A., Shelton, A., DePorte, C., & Hopkins, J. (2014). Assigning a team-based pager for on-call physicians reduces paging errors in a large academic hospital. *Joint Commission Journal on Quality and Patient Safety*, 40(2), AP1-AP2. [https://www.elsevier.com/\\_\\_data/promis\\_misc/JCJQPSShieh.pdf](https://www.elsevier.com/__data/promis_misc/JCJQPSShieh.pdf)

**Creating a standardized, team-based paging process decreased pages to the wrong physician from 14% to 3%.**

- Wong, B. M., Cheung, C. M., Dharamshi, H., Dyal, S., Kiss, A., Morra, D., ... & Etchells, E. E. (2011). Getting the message: a quality improvement initiative to reduce pages sent to the wrong physician. *BMJ Quality & Safety Online*. <http://qualitysafety.bmj.com/content/21/10/855.long>

**15% of consumers have access to “communication via online messaging platform” with their primary doctor. Another 28% want it.**

- Colamonico, J., Pearl, R., Taylor, H., & Marchibroda, J. (2015). Better together: High tech and high touch consumer healthcare survey results. Presented at The Center for Total Health Press Conference, Washington, DC, 2015. [http://accountablecaredoctors.org/wp-content/uploads/2015/11/CAPP-SHP-Consumer-Survey\\_Full-Presentation\\_103015.pdf](http://accountablecaredoctors.org/wp-content/uploads/2015/11/CAPP-SHP-Consumer-Survey_Full-Presentation_103015.pdf)

## Privacy and Interruptions

**In a hospital setting, doctors and nurses are interrupted anywhere from once every 2 hours to 23 times every hour in emergency, intensive care, and surgery.**

- Grundgeiger, T., & Sanderson, P. (2009). Interruptions in healthcare: theoretical views. *International Journal of Medical Informatics*, 78(5), 293-307. <http://ai2-s2-pdfs.s3.amazonaws.com/6149/4f5a065fd69269b61578ffe5629918663d63.pdf>

**A study of emergency department communication classified 30% of communications as interruptions.**

- O’Connor, A. E. (2002). Communication loads on clinical staff in the emergency department. *The Medical Journal of Australia*, 177(6), 333-335. <https://www.ncbi.nlm.nih.gov/pubmed/12056992>

**Interruptions (most often from coworkers) disrupt direct patient care tasks or patient interventions nearly 43% of the time.**

- Bolen, D. (2016, April 8). Why healthcare needs real-time, asynchronous communications. Retrieved from <http://www.beckershospitalreview.com/healthcare-information-technology/why-healthcare-needs-real-time-asynchronous-communications.html>

## Human-Centered Communication Ecosystem

**“In the 36 RN observations (total, 136 hours) 3,441 events were captured. There were a total of 1,354 interruptions, 46 hours of multitasking, and 200 errors. Nurses were interrupted 10 times per hour, or 1 interruption per 6 minutes. However, RNs in one of the hospitals had significantly more interruptions—1 interruption every 4 1/2 minutes in Hospital 1 (versus 1 every 13.3 minutes in Hospital 2). Nurses were observed to be multitasking 34% of the time (range, 23%–41%). Overall, the error rate was 1.5 per hour (1.02 per hour in Hospital 1 and 1.89 per hour in Hospital 2).”**

- Kalisch, B. J., & Aebersold, M. (2010). Interruptions and multitasking in nursing care. *The Joint Commission Journal on Quality and Patient Safety*, 36(3), 126-132. <http://www.sciencedirect.com/science/article/pii/S1553725010360211>

**Residents interrupted patients 12 seconds into their initial meeting. Overall, one fourth of all patients were interrupted by residents before they finished speaking. During their visit, patients were typically interrupted by the residents twice.**

- Rhodes, D. R., McFarland, K. F., Finch, W. H., & Johnson, A. O. (2001). Speaking and interruptions during primary care office visits. *Family Medicine*, 33(7), 528-532. <https://pdfs.semanticscholar.org/b235/c7538ba51ffd384df76d31228569a5606af0.pdf>

**Interruptions affect time to complete a task and task accuracy.**

- Li, S. Y., Magrabi, F., & Coiera, E. (2011). A systematic review of the psychological literature on interruption and its patient safety implications. *Journal of the American Medical Informatics Association*, 19(1), 6-12. <https://academic.oup.com/jamia/article/19/1/6/734339/A-systematic-review-of-the-psychological>

**Interruptions in surgical flow result in significant increase in error rates.**

- Wiegmann, D. A., ElBardissi, A. W., Dearani, J. A., Daly, R. C., & Sundt, T. M. (2007). Disruptions in surgical flow and their relationship to surgical errors: an exploratory investigation. *Surgery*, 142(5), 658-665.

**Kaiser Permanente introduced vests for nurses to wear during med pass to limit interruptions.**

- Heath, C., & Heath, D. (2010). *Switch: How to change things when change is hard*. New York: Broadway Books.

### Distractions

**By replacing standard ceiling tiles with identical sound absorbing tiles, overall sound level decreased by 5-6 dB in the central area of the nursing ward and speech intelligibility was found to improve to “excellent” in patient rooms.**

- Blomkvist, V., Eriksen, C. A., Theorell, T., Ulrich, R., & Rasmanis, G. (2005). Acoustics and psychosocial environment in intensive coronary care. *Occupational and Environmental Medicine*, 62(3), 1-8. <http://oem.bmj.com/content/oemed/62/3/e1.full.pdf>

## System Standards for Optimal Communication

### Workflow Alignment

**One study found inconsistent verbal communication between nurses and physicians, and greatly differing priorities of patient care expressed by physicians, RNs, and PCTs, due in part to misaligned workflow and discordant priorities.**

- Evanoff, B., Potter, P., Wolf, L., Grayson, D., Dunagan, C., & Boxerman, S. (2005). Can we talk? Priorities for patient care differed among health care providers. In K. Henriksen, J. B. Battles, E. S. Marks, & D. I. Lewin (Ed.), *Advances in patient safety: From research to implementation (Volume 1: research findings)*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK20468/>

**The use of interdisciplinary rounds (IDR) and SBAR was found to improve Foley catheter removal compliance 78% to 94% and re-admissions decreased from 14.5% to 2.1%.**

- Townsend-Gervis, M., Cornell, P., & Vardaman, J. M. (2014). Interdisciplinary rounds and structured communication reduce re-admissions and improve some patient outcomes. *Western Journal of Nursing Research*, 36(7), 917-928. [https://www.researchgate.net/profile/Paul\\_Cornell/publication/261033951\\_Interdisciplinary\\_Rounds\\_and\\_Structured\\_Communication\\_Reduce\\_Re-Admissions\\_and\\_Improve\\_Some\\_Patient\\_Outcomes/links/0f317537e16aa40bbb000000.pdf](https://www.researchgate.net/profile/Paul_Cornell/publication/261033951_Interdisciplinary_Rounds_and_Structured_Communication_Reduce_Re-Admissions_and_Improve_Some_Patient_Outcomes/links/0f317537e16aa40bbb000000.pdf)

**While many doctors prefer to round early in the morning (due to workflow scheduling for other responsibilities), some patients find this disruptive.**

- Gleason, M. [Morgan Gleason]. (2014, January 26). I am a patient and I need to be heard [Video File]. Retrieved from: <https://www.youtube.com/watch?v=iVt3eHAsdK4>

**Implementation of standardized “trigger” words or phrases (e.g. “I have a concern”) can grant permission to speak up against a power gradient.**

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *Quality and Safety in Health Care*, 13(suppl 1), i85-i90. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1765783/pdf/v013p00i85.pdf>

**Interdisciplinary Rounds have been shown to reduce the number of adverse events.**

- O’Leary, K. J., Buck, R., Fligel, H. M., Haviley, C., Slade, M. E., Landler, M. P., ... & Williams, M. V. (2011). Structured interdisciplinary rounds in a medical teaching unit: improving patient safety. *Archives of Internal Medicine*, 171(7), 678-684. <http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/227060>

### Defined roles

**Challenges in trying to quarterback care:**

- Press, M. J. (2014). Instant replay—A quarterback’s view of care coordination. *New England Journal of Medicine*, 371(6), 489-491. <http://www.nejm.org/doi/full/10.1056/NEJMp1406033#t=article>

**One hospital used an orange vest to visually indicate the leader of the trauma team, improving communication and role clarity.**

- Kalaichandran, A. (Aug. 3, 2017). *Design Thinking for Doctors and Nurses*. New York Times. Retrieved from [www.nytimes.com](http://www.nytimes.com)