Northern Arizona Healthcare

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# FY22 Quality & Safety Report

# Quality & Safety 2022 Report



Northern Arizona Healthcare

## MISSION

*Improving health, healing people.*

## VISION

*Always better care. Every person, every time…together.*

## VALUES

- *Do amazing work!*
- *Respect differences.*
- *Build community.*
- *Be better together.*
- *Show compassion.*

# WELCOME

The 'why' behind our journey to improve quality and safety at Northern Arizona Healthcare (NAH) is simple. High quality care and patient safety are the guideposts for living out our vision of ***Always better care. Every person, every time… together.***

We have worked hard to evaluate and add structure to our quality and safety processes. But what has made these systems and processes effective is individual ownership and accountability, as well as true collaboration among our colleagues.

Throughout this report, you'll learn more about our quality and safety outcomes, but I hope what resonates more are the stories of the multidisciplinary teams who have made each of our accolades and achievements possible.

I am proud of the fact that these improvements have occurred amidst a global pandemic and despite the unprecedented challenges for health care providers COVID-19 has presented. Through it all, the NAH team has never wavered on our desire to provide the best care to our communities and enhancing the patient experience every step of the way.

As I reflect on our progress over the last few years, this formula seems pertinent to our success:

**Renewed Structure + Individual Ownership + Teamwork Mentality**
**=**
**Relentless Improvement in Patient Outcomes**

With the formula for success in place and demonstrated progress to-date, I am confident that NAH will continue to make great strides to improve care outcomes for the patients we have the honor of serving.

We're just getting started!

Jake Lansburg
System Vice President
Care Transformation and Quality
Northern Arizona Healthcare

# NAH FY22 ACHIEVEMENTS

## IMPROVED PATIENT OUTCOMES

Ranked for **lowest CAUTI** (catheter-associated urinary tract infection) **rates***

**60% reduction** in NHSN reportable surgical site infections from FY21

**32% reduction** in Clostridium difficile (C. diff) infections from FY21

**22% reduction** in CLABSI (central line-associated bloodstream infection) rates from FY21

Established **7 multi-disciplinary committees** and **>10** subcommittees to govern and improve quality and safety

**11.4% better** than target on OSHA Recordable Incident Rates (3.70 actual vs. 4.40 goal)


Continued focus on prevention and treatment of COVID-19 through **new innovations** and **community engagement**:

- Treated **2,347 COVID+ patients**, including peak daily census of 123 COVID+ patients on January 28, 2022
- Donated **10,000 N-95 masks** to community members to support COVID-19 prevention in partnership with the Mayor of Flagstaff
- Increased access to COVID-19 treatments in northern Arizona with **standup of Monoclonal Antibody (mAB) clinic** during Omicron surge, in collaboration with Federal Emergency Management Agency (FEMA)

*"2021 Q4 Targeted Assessment for Prevention Strategies report." Arizona Department of Health Services, 28 June 2022.

# RENEWED STRUCTURE

At the start of FY22, NAH leaders re-evaluated the organizational and governance structure related to quality care and patient safety outcomes and opted to implement a new governance structure to help ensure multidisciplinary and multilevel accountability for patient outcomes. In doing so, seven multidisciplinary committees were established in FY22 with responsibility for improving various indicators for overall quality and safety. In addition to the committees, more than 10 subcommittees have been formed to focus on clinical care quality and safety outcomes with individual charters and recruitment strategies for each.

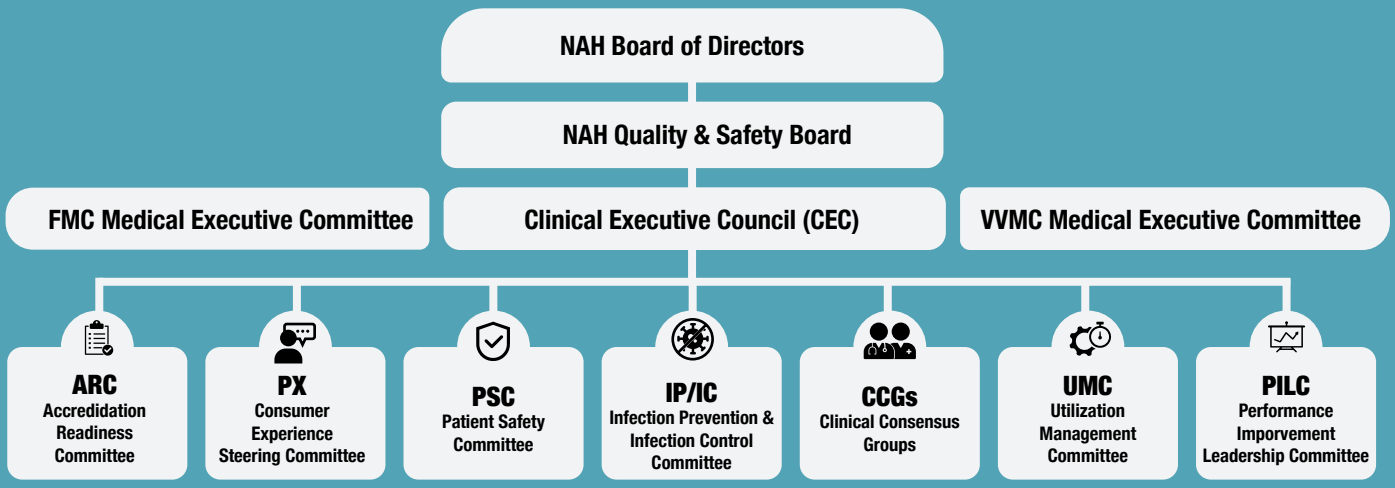
"Bringing essential stakeholders together with input from both clinical and operational leaders has been extremely valuable," said Tyffany Laurano, Chief Nursing Officer. "Multidisciplinary collaboration helps ensure all roles and departments are heard and represented as colleagues help lead system-wide process improvements and ensure safe, high quality, patient-centered care."

As a result of the new governance structure and efforts of the committees and subcommittees, NAH has realized more effective and expeditious quality and safety improvements.

Tyffany Laurano, Chief Nursing Officer

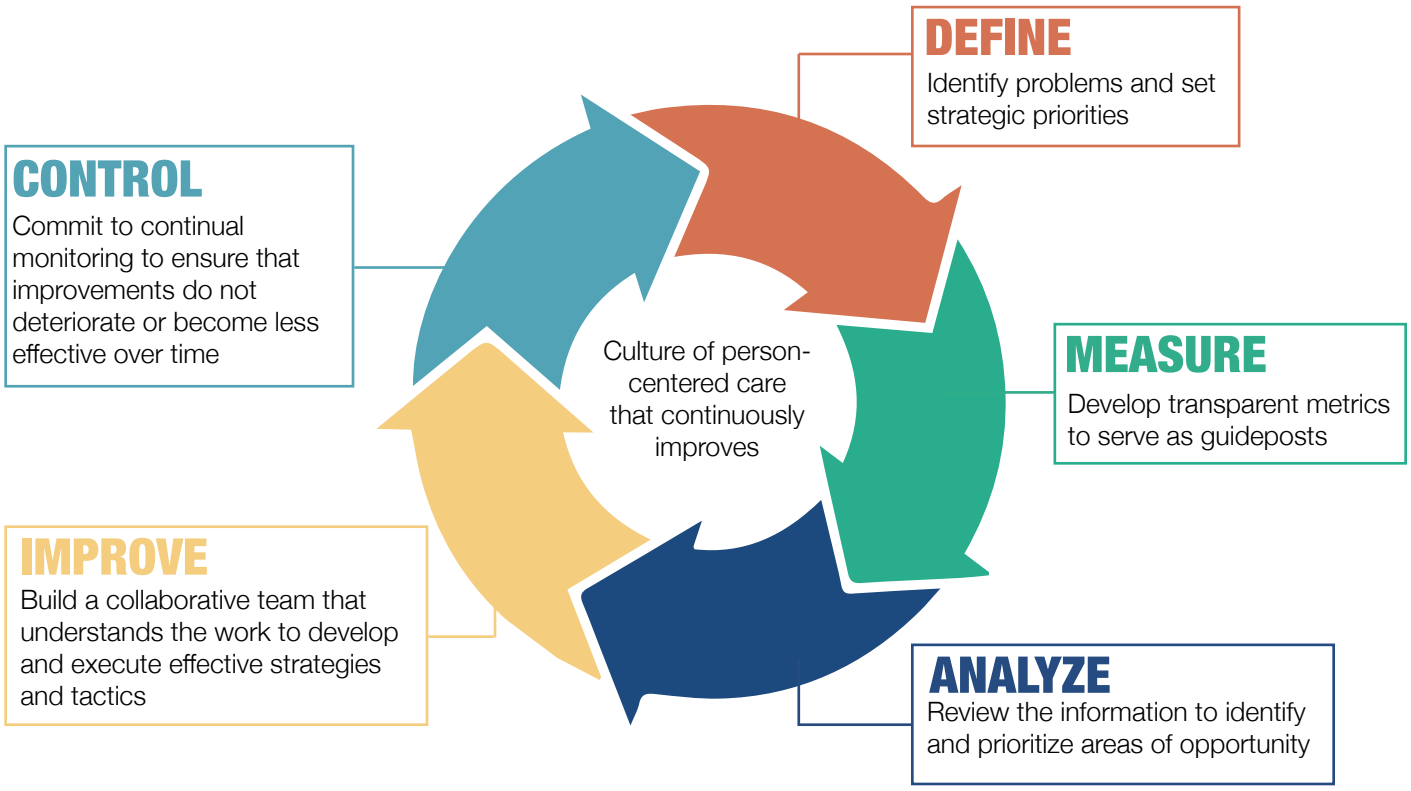
> Patient safety is indistinguishable from the delivery of quality care
>
> *Institute of Medicine*[1]

# NAH QUALITY & SAFETY GOVERNANCE STRUCTURE




| COMMITTEES | FOCUSED ON | FY22 ACCOMPLISHMENTS |
|---|---|---|
| **ARC** | Maintaining accreditation readiness and making NAH a Highly Reliable Organization (HRO) | • **Achieved Join Commission accreditation** at both FMC and VVMC<br>• **11.4% better** than target for OSHA Recordable Incident Rate |
| **PX** | Improving the experience for all NAH patients | • **16 providers** in the **top 10th percentile** of national comparison group for "Care Provider Overall"<br>• **25 providers** in the **top 25th percentile** of national comparison group for "Care Provider Overall"<br>• **100%** of Special Care Nursery patients surveyed would recommend the Special Care Nursery at FMC to family and friends |
| **PSC** | Creating a culture of safety among all colleagues to improve patient outcomes | • **3.2%** improvement in Culture of Safety score on annual employee engagemnet survey (3.70 FY21 vs. 3.82 FY22) |
| **IP/IC** | Improving safety through the oversight of all infection prevention activities | • **Ranked #1** in Arizona for lowest CAUTI rates<br>• **60% reduction** in NHSN reportable Surgical Site Infections (SSIs)<br>• **27% reduction** in CAUTI, CLABSI, C.diff and MRSA infections (0.72 FY21vs. 0.53 FY22) |
| **CCGs** | Reducing unwarranted variation in care delivery via standardization of evidence-based best practices | • Recognized in the **US News and World Report 2022 Best Hospitals Guide** for participation in American College of Cardiologists Quality Improvement Programs to optimize patient care and outcomes |
| **UMC** | Stewarding NAH resources to provide low-cost, high value care | • **13% reduction** in observed/expected mortality (1.14 FY21 vs. 0.99 FY22)<br>• Pneumonia, heart failure and acute myocardial infection readmission rates at FMC and VVMC were below national observed rate for **third consecutive year**<br>• VVMC outperformed 5-measure peer group average in readmissions **by 81%** (1.34 VVMC vs. 0.74 5-measure peer group) |
| **PILC** | Leading NAH to improved performance | • **22** newly-certified Six-Sigma Green Belts |

The NAH approach to quality and safety involves a focus on patient outcomes, providing support to our clinical staff, and a relentless drive to improve. Our process for relentless improvement:




## The NAH *philosophy* for quality and safety has several guiding principles:

- Our patients, families, and communities are at the center of all that we do.
- Ensuring care is safe, effective, efficient, and equitable requires constantly monitoring outcomes and comparing current practice to best practice.
- Simple and standardized solutions drive lasting change.
- Regardless of role or position, everyone in our organization has a collaborative role to play in improving quality and safety.
- Success must be recognized, collected, and communicated, and engagement should be celebrated.

# INDIVIDUAL OWNERSHIP & TEAMWORK MENTALITY

Quality and safety success at NAH is made possible by ownership and engagement among all colleagues. In the new structure, representation from frontline departments sets the expectation for cross-functional collaboration and a shared commitment to improving patient outcomes throughout every step of the patient experience.

# *Teamwork Reduces NAH CAUTI Rates, Leading to #1 Ranking in AZ*

Dr. Steven Kurzweil is a board-certified Urologist who also completed a fellowship in stone disease and endourology. He also serves as Associate Chief Medical Officer, supporting the overall leadership and administration of NAH among his clinician colleagues. So, when the IP/IC Committee began to establish its CAUTI (Catheter-associated Urinary Tract Infections) subcommittee with the goal of minimizing CAUTI incidences among NAH patients, Dr. Kurzweil was a natural fit to serve as the physician lead due to his administrative experience and subject matter expertise.

Dr. Steven Kurzweil

The CAUTI subcommittee is led by clinical manager Cristian Tapia, BSN, RN, and consists of physicians, nursing leaders, educators, infection prevention, and quality staff. The committee's areas of focus are:

- Creating and refining the new indwelling nurse-driven catheter removal orders
- Providing best practice education on urine culture ordering and collection to physicians, advance practice providers, and nurses
- Adopting new external devices to reduce urinary catheter usage

The multidisciplinary collaboration has led to drastic improvement in the last couple of years and distinction as the #1 hospital in Arizona for the lowest CAUTI rates.

> It's rewarding to see what you're doing make a difference. The success shows what can be done when people work together and collaborate. We have nurses and doctors working as a team to make sure this is not a problem for patients, and it results in better patient care and better patient safety.
>
> *Dr. Kurzweil*

The NAH CAUTI subcommittee includes:

- Cristian Tapia, BSN, RN, Clinical Manager Kendrick Unit
- Deb Bescak, MSN, RN, Infection Prevention
- Steven Kurzweil, MD, Associate Chief Medical Officer Board Certified in Urology, Fellowship in Endourology and Stone Disease
- Stacey Matson, MSN, RN, CCRN, RN Educator
- Linus Nienstadt, MPH, CIC, CMIP, RN, Infection Prevention
- Danielle Ondayko-Lewis, BSN, RN, CPHQ, Senior Quality RN

# *Multidisciplinary Effort Improves Clostridium difficile (C. diff) Outcomes in Patients*

*Clostridium difficile* (C. diff) infection is a serious public health problem that has recently increased in both incidence and severity. Taking steps to reduce C. diff is a major public health imperative to improve quality and safety in healthcare.

Since its formation in September 2021, the NAH C. diff subcommittee has drastically reduced C. diff infection rates throughout the system, helping to improve the quality of care NAH patients receive.

Through the implementation of new processes and education efforts, the multidisciplinary team has made a 32% reduction in C. diff infection rates since FY21, achieving a target rate of 0.6 (~30% less infections than the NHSN SIR (standardized infection ratio) expectation) consistently. The C. diff subcommittee includes members from the lab, IT, and quality departments, senior leadership, nurses, physicians, and other NAH colleagues.

Clinical Manager and Subcommittee Lead Latisha Jeffers, RN said by engaging members of different disciplinary teams, the committee was able to remove barriers and promote C. diff reduction efforts with different plans of action.

"Examples of these action plans include two-step testing for C. diff; a nursing education campaign with signage and reminders throughout our facilities; lab education for proper sampling acceptance; Cerner changes with ordering and documentation, and more," Jeffers said.

The reduction in C. diff infections could have not happened without teamwork across different disciplines, subcommittee member Joel Terriquez, MD, medical director of infectious disease and preventio, said.

"For years we have tried to make a difference by implementing different initiatives to decrease our C. diff rates," Dr. Terriquez said. "The C. diff subcommittee allowed us to create a link between leadership and the different disciplines working with the same goal of decreasing C. diff rates. It also gave accountability and expectations for all members of the team. Senior leadership has been involved in every step of the way supporting our recommendations and making things happen."

Dr. Terriquez said by implementing new testing procedures, patients at NAH are receiving even greater quality care.

"By decreasing inappropriate diagnoses, we also decrease exposure to unnecessary antibiotics and consumption of isolation supplies," Dr. Terriquez said. "We are able to better serve the community by accommodating more patients as we do not need to unnecessarily isolate patients."

Subcommittee member and RN Danielle Ondayko-Lewis is happy to be part of such a collaborative team that has made a big difference in improving NAH patient outcomes.


Members of the C. diff subcommittee including, from left to right,Ben Johnston, Linus Nienstadt, Dr. Joel Terriquez, Latisha Jeffers, Dr. John Mougin

"Each department affects one another," she said. "We may think we are in our own bubble, but we are totally interdependent on each other to do the right thing for our patients. Although our subcommittee has a ton of pride, it is nothing compared to the pride we have for the NAH frontline staff and the years of work from the infection prevention staff. Without them, these positive outcomes for our patients could never have occurred."


Members of the C. diff subcommittee Danielle Ondayko-Lewis and Deb Bescak

Members of the C. Diff subcommittee include:

- Latisha Jeffers, RN, BSN, PCCN, Clinical Manager of 2 East
- Deb Bescak, MSN, RN, Infection Prevention
- Julie Crowder, Senior Informatics Analyst
- Marlene Gaither, CIC, REHS, MPA, ME
- Cathy Haven, RN, BSN, Clinical Informatics Analyst
- Ben Johnston, Laboratory Informatics Analyst
- Lacey Lemke, MPH, Infection Prevention
- John Mougin, MD, Physician Executive of Quality and Safety
- Linus Nienstadt, MPH, CIC, CMIP, RN, Infection Prevention
- Danielle Ondayko-Lewis, BSN, RN, CPHQ, Senior Quality RN
- Michael Papaz, MD, Laboratory Medical Director
- Joel Terriquez, MD, Infection Disease Medical Director

# *Continuous Improvement in Medication Safety*

As a medical professional, one of the first things that you do is take an oath to optimize care of patients to the best of your ability and to embrace and advocate for changes that improve patient care.

Almost 30 years after NAH Medication Safety Officer Mimi Meeks, Pharm. D., took her oath, that is still driving her to identify and make critical changes in her role to protect patients the best she can.

"As healthcare providers, we all have taken an oath to do no harm, but unfortunately providing care to patients is a complex process with a lot of handoffs, a lot of providers, nurses, pharmacists, respiratory therapists, pharmacy technicians [and more]," she said. "My focus on medication safety is an opportunity to implement system and process improvements in the medication use system from procurement to administering the right medications to our patients."

In the last fiscal year, Meeks has been busy leading more than 50 system and process improvements. Those improvements include: having nurses assess patients' skin for medication patches; implementing a new process for oncology pharmacist review of oral chemotherapy prescriptions; revising how medications are prescribed/ordered; and updating tools that pharmacists use for high-risk medications."

"Two changes a month requires rapid cycle changes, but doing three or more a month is really challenging," Meeks said. "The pharmacy, nursing, and information technology teams play a huge part in our ability to improve the medication use process. They are experts who are vital members of our NAH Medication Safety Team."

Her responsibilities include making sure relevant Leapfrog grading measures are up to par and ensuring that all patient- and medication-specific information required for medication-related patient care decisions is readily available and usable for our healthcare team. All interventions are focused on the Institute for Safe Medication Practices (ISMP) Targeted Medication Safety Best Practices.

Mimi Meeks, Pharm. D

Medication safety, just like many aspects of the medical field, is something that is continuously evolving and as Meeks said, "a never-ending process." This is why in her role, she constantly reviews NAH's processes and systems to see if they could be improved.

"Medication use is fraught with potential adverse drug events," she said. "In the hospital and clinics, we focus on sound-alike, look-alike drugs and high-risk medications across the continuum of care. It is important we ensure our patients are receiving the best care while at the hospital and when they are discharged. We need to constantly review our processes to elevate them."

# *Promoting a Just Culture for Improved Communication, Collaboration, and Care*

NAH has also made a concerted effort to rollout "Just Culture" throughout the organization – a learning culture that is constantly improving and oriented toward patient safety.[2] Just Culture emphasizes evidence-based practices, learning from errors, and providing constructive feedback rather than blame and punishment.

In a Just Culture:

- Unsafe conditions are proactively identified
- Errors are reported and analyzed
- Mistakes are openly discussed
- Suggestions for systemic improvements are welcomed

Kayleigh Cook, RN

Patient care in any medical setting is complex, dynamic, and subject to human error. Many systems are dependent on one another and interrelated. If one system is broken – or impacted by an error – it can have broad and sometimes dire consequences. Since adopting a Just Culture for improved safety at NAH, colleagues throughout the system have witnessed and experienced the impact it can have on teams and leaders.

Take Kayleigh Cook, for example.

Cook has had many roles at NAH, starting as a phlebotomist in 2015; leaving for school and returning as a new graduate nurse; and most recently in the role of Clinical Manager of Clinical Care Operations for VVMC, which she began after completing her graduate degree. As both a colleague and now people leader, she knows first-hand what Just Culture at NAH looks and feels like.

"My first experience was when I was a new graduate nurse in the OR," Cook said. "I was in a hurry one day, getting a patient from pre-op on a tight schedule. I flipped through the chart and thought everything looked good, so I took the patient back to the OR."

The patient was already under anesthesia when things took a turn. During her routine "time out," – a habitual process in which nurses confirm that the team has the right patient at the right time, the right consents, and is prepared to do the right procedure – Cook noticed a problem.

"During my time out, I was re-reviewing the chart and realized there was only one surgical consent form for what was intended to be a dual-surgeon procedure," Cook said.

Dr. Adam Weiss

They were able to consult the patient's medical power of attorney to get the proper consent for the second planned procedure but Cook knew she had made a mistake and needed to escalate it. When the surgery began, Cook stepped out to self-report the error to her manager and surgical director.

"I was terrified because I was a new grad," Cook said. "But they went through the Just Culture process and, together, we were able to identify a number of points in the pre-op process where the error could and should have been caught, indicating that this mistake was truly a system failure."

As a result, the team was able to evaluate the entire pre-op process and implement process improvements to help avoid repeating the error. Now, Cook is quick to champion and implement a Just Culture among her team.

"It's easy to put the blame on people, but if you can go through and identify system errors, you can help prevent future issues," Cook said. "I've noticed by practicing Just Culture as a leader in the organization, I feel like staff are comfortable enough to open up and self-report when they make a mistake, because they know I'm not going to immediately jump to disciplinary action."

Dr. Adam Weiss, cardiac anesthesiologist and NAH System Medical Director for Anesthesiology Services, has also seen Just Culture have a positive impact on the teamwork and collaboration required within the NAH system.

"As a physician in the Cardiac OR, patient outcomes largely depend on the collaboration between a diverse group of physicians, PAs, NPs, nurses, techs, and perfusionists," Dr. Weiss said. "When there is a challenging case, it's human nature to point the finger and attribute blame. Instead of solving anything, it degrades the team's ability to work together in the future."

In shifting from casting blame to problem-solving, the Cardiac OR Team has been able to identify system problems and improve their collective ability to perform.

"To me, Just Culture means listening with compassion, withholding judgement, and fostering communication," Dr. Weiss said. "Regrettably, I don't always do this right. When I've rushed to judgement or stopped listening, the problem got worse, and teamwork broke down. There are two sides to any story, and communication is a central theme. By avoiding judgment and facilitating communication, it's easier to identify a root cause and help the team improve. Starting with the premise that no single person is at fault allows a leader to identify greater opportunities for improvement."

He credits Just Culture for helping the Anesthesiology Department navigate staffing challenges they've experienced in line with the broader US healthcare market.

"The Anesthesiology Department has maintained consistent coverage, despite being 40% understaffed," Dr. Weiss said. "The extra work and long days could easily have impacted patient care, but we continue to provide high-quality anesthesia services thanks to an amazing team. We communicate openly, acknowledge mistakes, identify opportunities for improvement, and prioritize patient safety. That is a Just Culture I am proud to be part of."

Dr. Weiss emphasizes the personal responsibility affiliated with Just Culture as NAH strives for broader adoption throughout the system.

"Just Culture is everyone's responsibility," he said. "As a leader, I'm responsible for building a fair, supportive workplace for individuals to function well as a team. But everyone shares responsibility for maintaining that culture across the organization. When you interact with patients, colleagues, or administrators, listen compassionately, avoid judgement, and foster communication. We all share ownership in the success of NAH."

# LOOKING AHEAD

Our journey to increased safety and higher quality care is continuous. Looking ahead, we aspire to create a culture of quality and safety in which colleagues feel empowered to own their role and responsibility for system-wide patient outcomes and high levels of trust, communication, and engagement exist between all departments and disciplines united by our common mission and desire for continuous improvement. In doing so, our ultimate goal is to constantly deliver a highly reliable care experience through all of our sites of service – with consistency in quality, outcomes, and experiences – for the patients and communities we have the distinct pleasure of serving.

## REFERENCES


[1]Institute of Medicine (US) Committee on Data Standards for Patient Safety; Aspden P, Corrigan JM, Wolcott J, et al., editors. Patient Safety: Achieving a New Standard for Care. Washington (DC): National Academies Press (US); 2004. Executive Summary. Available from: https://www.ncbi.nlm.nih.gov/books/NBK216103/. Accessed 5 Sept 2022.

[2]Boysen PG 2nd. Just culture: a foundation for balanced accountability and patient safety. Ochsner J. 2013 Fall;13(3):400-6. PMID: 24052772; PMCID: PMC3776518.

# Thank You


Northern Arizona Healthcare