

# Top patient safety and technology hazards and concerns in healthcare — 2022

Risks and hazards impacting the healthcare industry will dominate the headlines this year offering an ever-changing series of concerns in all segments, including acute care, physician practices and senior living, among other areas. Each hazard and risk will require keen monitoring to stay ahead of the next “big” issue.

From the recent introduction of hacker robots to the use of block chain in the insurance industry, all bets are off. Any issue, disruption or operation misstep is fair game today. Although the severity and frequency for these events may vary, even without patients or employees being harmed, near miss analysis and data trending will be essential to anticipate future risk.

In review of current literature on the topic of safety and hazards risks for 2022, the following summarizes some of the most pressing concerns.



## Patient safety

### Human capital

The human issues faced by healthcare systems have exponentially escalated, specifically with regard to staffing facilities. Although there have been staffing concerns for many years, the Covid-19 pandemic allowed us to see just how dire the situation is.

Summarized below are key areas that helped place human capital at the top of the list for top patient safety concerns – 2022.

### Staffing

- Staff shortages of both clinical and non-clinical professionals, such as RNs, certified nursing assistants, respiratory therapists, registrars and others will continue to dominate.
- Creative work force sourcing will be seeking solutions – from escalated training programs to tapping new markets for securing clinical staff.

- Sourcing from outside the U.S. is not new but, since 2020, the volume of caregivers presenting for work here with English as a second language has boomed.
- Approximately 40% of nurses in the U.S. are over the age of 50. Covid-19 has brought forth a worker rethinking of retirement plans, with many retiring or leaving the profession for less stressful employment.<sup>1</sup>

### Use of travelers/contractors/ interim staff

- Contracts with travelers occur quickly, as the goal is to bring the interim worker on as soon as possible. Therefore, opportunities for adequate training and onboarding for interim staff may not be as detailed as necessary or sufficient to acquaint the new worker with the organization and the operational and clinical polices/procedures that are in place.

- Contract staff are costly coming in at two to three times the hourly rate of permanently hired staff. The impact of contract staff hits heavy on the bottom line. Money spent on staffing takes away from other operational needs.

### Risk mitigation

- Review current wellbeing initiative for staff and address gaps.
- Create an environment that offers staff down time to destress away from their unit.
- Review pay grades more often as the expense to onboard new permanent staff may far exceed increasing pay, creating bonus incentives and awards as a retention strategy.
- Encourage the use of peer support and offer employee assistance programs.<sup>2</sup>

### Staff safety

- Episodes of violence and aggression in the workplace continue to escalate.
- Another concern rests with domestic partner violence that may carry over into the work setting.
- Not all patients are found in hospitals or physician offices. Travel risk exists for employees who see patients outside the hospital setting (home health, hospice). Road safety is but one concern. The home-based nurse and care team may often walk into unsafe situations.

### Staff physical and mental wellbeing

- Frontline caregivers are working longer hours resulting in physical and emotional exhaustion putting the team and their core energy reserves to the test.
- Beyond burnout, many are experiencing post-traumatic stress (PTSD) which, for some, creates an increase in suicide risks in both physicians and frontline care team members.

- Staff shortages are impacting access to mental health care, with some prospective patients waiting weeks for a first appointment.
- Long Covid-19 symptoms will continue to impact staffing coverage for those staff impacted personally by Covid-19.
- Will staff shortages and an exhausted care team create the perfect storm where we will see an increase in patient safety incidents? The potential impact of staff shortages on patient safety is under review by regulatory agencies, patient safety forums and accreditation organizations.<sup>3</sup>

### Risk mitigation

- Ensure for an effective onboarding process.
- Use orientation buddying for the first 90 days by assigning a long-term team member to be a resource to your new team member.
- Enhance professional training on such topics as dealing with a difficult patient and family, documenting the difficult encounter.
- Train staff in verbal de-escalation techniques such as offered by the Crisis Prevention Institute (CPI).
- Create emergency preparedness plans for non-traditional healthcare settings, such as home health and community outreach.<sup>4</sup>

### Patient safety

In the complex environment of healthcare today, there are many factors that influence the quality of patient care delivery. Contributing factors resulting in negative outcomes may include staffing vacancies, technology mishaps, increasing number of serious patient harm events, relationship conflicts, ineffective workflow and violence against workers, among other considerations.

With less than optimum staffing, best-practice approach to care may not be realized. Poor handoff and care coordination may occur from shift to shift due to staff shortages. Determining whether burnout and stress are also contributors to patient safety is of late an important topic under review, considering the challenges brought forth by the pandemic.

### Risk mitigation

- Train staff on patient safety policies.
- Ensure that staff know when to notify the risk management team.
- Utilize FMEA evaluation tools to assist in identifying loopholes and policy work-arounds.
- Perform timely investigations on safety incidents.
- Proactively review data gathered from incident reporting for trends.

### Political and governmental

- Staff disruption may continue with ever-changing staff vaccine mandates. Different mandates exist from state to state in the U.S., also impacting staffing for those states sharing a border but requiring different nursing licensing requirements.
- Political climate influences have impacted both staff and patient behaviors in the workplace. Worker-against-worker aggression is on the rise.


### Risk mitigation

- Ensure there is an “open door” policy for staff to communicate their concerns on vaccine mandates.
- Consciously enforce vaccine mandates.
- Considering the recent charges levied against a nurse who made a fatal medication error, review your Just Culture policy and training.

## Patient rights

- Patients, when met with refusal from their provider or a member of the care team to order a desired, but not warranted or scientifically validated medication or treatment, may allege an allegation of bias or discrimination.
- Patients who experience an encounter with staff where they feel they were treated harshly may find such behavior reportable. The patient or family may make a complaint against the staff person alleging abuse (physical, mental, emotional, fiscal). Many such instances require prompt review and may result in involving law enforcement and licensing boards reporting.

## Risk mitigation

- Create policies that support a thorough and credible investigative process for when such abuse allegations are made.
- 
- Reach out to EAP to process staff support during the investigative process.
  - Contact WTW for assistance in policy development and management training on conducting investigations.

## Technology hazards

Summarized below are key areas that helped place technology again this year at the top of the list for top technology hazards and concerns – 2022.

### Cyber threats

Coming in at first place, cybersecurity and ransom attacks will continue to grow in number and remain as a prominent concern in all industry sectors. However, hospitals are at a greater risk not only because of a breach of patient information but the potential for compromising patient care directly.

Beyond the desktop computer and the electronic medical record, a significant portion of medical devices found in healthcare settings are at risk for a cyberattack as well. Infusion pumps, patient cardiac monitors and glucometer (for blood testing for diabetics) are the most vulnerable.

## Risk mitigation

- Ensure that emergency preparedness and downtime plans are up to date and that drills occur at least twice a year.
- Contact your broker and insurance carriers for assistance as soon as possible.
- Consider whether the disruption interrupted your business operation and to what extent.<sup>5</sup>

## Supply chain

Supply chain issues include empty shelves not only in the grocery stores but also in hospital warehouses. Bottlenecks in delivery due to trucking and other transport issues have created demand and a domino effect of unmet need. Healthcare providers being forced to using inventory that may not be ideal may place the patient at risk.

Looking at an already challenging supply chain, we can also add the potential for a cyber event to further impact and damage the already taxed transportation industry. Inadequate stockpiles during the early days of the pandemic brought awareness to on-hand inventory that was supported by third-party vendors. Those same third-party vendors are also impacted by the same patient safety risks and hazards.

Inadequate medical device and supply inventory may result in reprocessing of one-time use equipment, which in turn may put the patient at risk for infection.

Continued labor challenges and natural disasters also play a role in supply chain disruptions.<sup>6</sup>

## Risk mitigation

- Conduct daily supply audits.
- Review surge capacity plans regularly.
- Activate incident command if not already activated.
- Extend a deep commitment to collaborating with vendors.

## Telehealth/virtual care

Telehealth has been available for some time, particularly for mental health care or underserved communities in need of specialty care. However, the service format expanded at the start of the Covid-19 pandemic. Telehealth, or the virtual appointment, is no longer an exception but now an option for the patient to consider when scheduling to see their provider. However, there are limitations and risk to this delivery process. Some risks include<sup>7</sup>:

- Physical assessments of the patient may be less than accurate.
- Computer access may be limited for some demographics.
- Privacy may not be assured, and personal health information may be at risk of a breach.
- Connecting online and staying connected throughout the appointment may be an issue.
- Alignment with reimbursement for virtual care could be problematic.

## Risk mitigation

- Train staff on the legal and regulatory aspects of telehealth.
- Create staff competencies to ensure staff are effectively following policy.
- Audit, through observation, a patient encounter conducted via telehealth or virtual care.

## Emergency use authorization

As with the Covid-19 pandemic, emergency use authorization (EUA) occurs when current products, drugs or devices are discovered to not meet the need of a newly identified disease. The U.S. Food and Drug Administration (FDA) may step in and allow for such emergency use of a medication or device when no other approved alternatives exist. EUAs allow for temporary use of an unapproved product or off-label use for an existing product.

Use of EUAs is not without risks, such as regulatory problems, loss of certain liability protections and civil suits.<sup>8</sup>

### Risk mitigation

- The care team and physician will need to provide for a detailed informed consent process with the patient or their legal decision maker.
- The conversation should be well-documented in the medical record.

## Medication delivery systems

Infusion pumps from a technology risk standpoint appear again here as a hazard and a risk. The pumps are easy to damage and it is even easier to override internal metrics.

The Pyxis machine (an automated medication storage unit) was created so that the care team could readily access the medications needed for their patients. Overtime, standards, safeguards and metrics were put in place within the mechanics of the device. However, humans can override those protections.

### Risk mitigation

- It is essential that the health care organization put in place written processes and checks and balances for ensuring patient safety with electronic devices.

- When the processes are not followed, managerial follow-up will be warranted as well as employing the Just Culture process to determine next steps following a breach in policy.

## Artificial intelligence (AI)

There are benefits to using AI, specifically in the realm of diagnostics. AI may also offer a future that quite possibly reduces caregiver burnout. Examples of AI include predictive analytics, clinical pathway decision making, wearable tech, off-site or home-based patient monitoring and more.

However, an issue relative to risks and benefits is the possibility that AI may not be able to interpret all human nuances resulting in biases, lapses and unintended consequences in care. The AI system must be consistently monitored and offer checks and balances to ensure safety.

Sophisticated equipment is used for monitoring patient vital signs. Such devices offer alarms, bells and whistles to alert the care team to a potential life-threatening problem. With such alerts also comes alarm fatigue.

### Risk mitigation

- Create policies and procedures for AI-based devices.
- To ensure safety, test the effectiveness of the process using FMEA.

## Connectivity

If you have ever visited a hospital, you may have learned quickly that making a phone call using your personal device may not be a simple task because some areas in the building may not have good reception. Hospitals are typically constructed out of steel and concrete. Thick walls and energy-efficient windows may also come into play. External geography, such as mountains or transformers, may create interference.

Equally problematic, particularly for medical equipment in need of connectivity, is that some buildings have Wi-Fi dead zones within the patient-care setting. Anything that interferes with Wi-Fi signals can impact safe patient handling.

### Risk mitigation

- Identify Wi-Fi dead zones through walk-around inspections.
- Reposition, when possible, obstructions between the area and the router.
- When possible, restore the Wi-Fi to the affected area.
- Consider signal boosters and enhancers, where appropriate.

## Summary

2022 promises to bring forth continued risks and hazards for the healthcare industry. With less than optimum staffing, a best-practice approach to care may not be realized. Poor handoff and care coordination may occur from shift to shift due to staff shortages.

As we ease into the first few months of 2022 and year three of the pandemic, the relationship between the frontline workers and their employers has evolved into something almost unfamiliar.

Ensuring for the safety of healthcare workers is now paramount and a leading priority for healthcare organizations. The concern for employee safety also extends to ensuring patient safety, as both issues go together. Reducing error rates and mistakes will require continued monitoring.

From the front line to senior leadership, employee safety will continue to be one of the highest priorities. In a time of uncertainty, where high emotions are coming from peers, patients and their families, staff need to feel safe and heard. Continually escalating episodes of violence at the workplace likely will further exacerbate burnout, staffing shortages and turnover. Leadership visibility and problem-solving difficult encounters with patients provide emotional staff support.

## Sources

<sup>1</sup>ECRI (2022).

<sup>2</sup>CDC (2022). [Strategies to Mitigate Healthcare Personnel Staffing Shortages](#)

<sup>3</sup>Risk & Insurance (2022).

<sup>4</sup>OSHA: [Workplace Violence in Healthcare](#) (2022).

<sup>5</sup>U.S. Department of Health and Human services (2019). [Health Industry Cybersecurity Practices: Managing Threats and Protecting Patients](#).

<sup>6</sup>Risk & Insurance (2022).

<sup>7</sup>Telehealth Risk During Covid-19 and Beyond (2021). Association of Healthcare Auditors.

<sup>8</sup>Risks of emergency use authorizations for medical products during outbreak situations: a COVID-19 case study (2020).

## Contact

**Rhonda DeMeno, RN, BS, MPM, RAC-CT, A-IPC, CPHRM**

Director Clinical Risk Services, Senior Living Center of Excellence

+1 312 288 7704

[rhonda.demeno@willistowerswatson.com](mailto:rhonda.demeno@willistowerswatson.com)

**Joan M. Porcaro, RN, BSN, MM, CPHRM**

Associate Director, Client Relationship Management

North America Healthcare Industry

+1 480 528 4872

[joan.porcaro@willistowerswatson.com](mailto:joan.porcaro@willistowerswatson.com)

Willis Towers Watson hopes you found the general information provided in this publication informative and helpful. The information contained herein is not intended to constitute legal or other professional advice and should not be relied upon in lieu of consultation with your own legal advisors. In the event you would like more information regarding your insurance coverage, please do not hesitate to reach out to us. In North America, Willis Towers Watson offers insurance products through licensed entities, including Willis Towers Watson Northeast, Inc. (in the United States) and Willis Canada Inc. (in Canada).

## About WTW

At WTW (NASDAQ: WTW), we provide data-driven, insight-led solutions in the areas of people, risk and capital. Leveraging the global view and local expertise of our colleagues serving 140 countries and markets, we help you sharpen your strategy, enhance organizational resilience, motivate your workforce and maximize performance. Working shoulder to shoulder with you, we uncover opportunities for sustainable success – and provide perspective that moves you. Learn more at [wtwco.com](http://wtwco.com).



[wtwco.com/social-media](http://wtwco.com/social-media)

Copyright © 2022 Willis Towers Watson. All rights reserved.  
WTW42050/04/2022

[wtwco.com](http://wtwco.com)

