Stuck in the Past:

In the Era of Digital Healthcare, Providers Are Still Taking a Low-Tech Approach to Deadly Patient Problems

While the healthcare industry is changing rapidly, there are some things that remain the same.

Some of hospitals' most vulnerable patients – the elderly and mentally ill – continue to face some of the same deadly problems they always have, including falls and other incidents in which they cause harm to themselves or staff. This situation is worsening, as the inpatient population ages and the number of patients with behavioral health problems is growing rapidly – thanks in part to the opioid epidemic but also to a dramatic rise in patients with depression.

These problems persist, and despite significant advances in healthcare technology, a recent survey by

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Modern Healthcare Custom Media shows that providers continue to use low-tech, often ineffective approaches in their attempts to resolve these issues. These methods, such as special socks or bed alarms, have

questionable efficacy, and some, such as one-to-one sitters, can be extremely costly.

With resources becoming increasingly limited at American hospitals, providers can no longer afford to waste money on ineffective safeguards, even if they're inexpensive. And the most common intervention, one-to-one sitters, is decidedly not. In fact, the cost of sitters may be so prohibitive that it limits how many patients can benefit from their presence. Providers must explore how they can harness the power of technology – video surveillance technology in particular – to help them stretch their dollars and the capabilities of their existing resources so that more patients can benefit, and more "never events" can be avoided.

FALL PREVENTION

AvaSure, a Grand Rapids, Mich.-based healthcare technology firm, commissioned Modern Healthcare Custom Media to survey healthcare leaders to better understand how they're preventing falls, patient self-harm and violence against caregivers. Nearly 200 healthcare executives in varying management roles responded to the survey.

Regardless of how they're approaching fall prevention, the overwhelming majority of providers see it as a major priority at their organization, according to our survey. When asked how significant of a priority fall prevention is at their organization — on a scale of 1 to 5 where 1 is "not at all a priority" and 5 is a "high priority" — 89 percent of providers chose a 4 or 5. Most leaders (66 percent) rated fall prevention as a 5, or high priority.

Administrators also tell us they are confident in their current approach. Seventy percent of respondents rated their solutions as "very effective" or "effective." But it's worth noting that few providers are supremely confident in their fall prevention programs — only 13 percent of them rated their solutions as "very effective." Most providers (58 percent) rated their solutions as "effective," and a sizable 24 percent said that their solutions are only somewhat effective. This would suggest that providers may want to explore more sophisticated and effective approaches for fall prevention, and our analysis of the tools that providers are using supports that theory.

When we asked how exactly leaders are approaching fall prevention, the results show that technology is not a major part of provider strategy. Nearly all providers (95 percent) told us they have some kind of fall prevention solution in place, but the most popular tools are either low-tech or no-tech.

Fall assessment tools are the most popular solution, with 82 percent of providers saying they use them. These tools are a great way to assess patient risk, but they're only the first step in deciding which patients need extra attention.

Eighty percent of providers said they use bed alarms to alert staff when patients may be at risk for a fall. Though bed alarms can alert staff to a patient that has gotten out of bed, they tend to be relatively unsophisticated and can generate false alarms that cause fatigue among staff and annoy patients. Bed alarms only sound after a patient has left the bed, at which point they may have already fallen. Though their intent is to prevent falls, these devices

> ## Only 13 percent of providers rated their fall prevention efforts as "very effective"

may inadvertently cause a fall if they startle patients who are getting up.

Scheduled rounding and patient room signage are also popular low-tech options that respondents cited as being used in their facilities, at rates of 74 percent and 66 percent, respectively.

Rounding is only effective if a nurse happens to be around a patient and is able to prevent a fall, and it's also very labor-intensive. Hospitals that use frequent, scheduled rounding to prevent falls are increasing their labor utilization rather than finding a more cost-effective synergy between human resources and technology.

Signage is only effective if the patient adheres to its call to action. Many patients at risk of falling suffer from severe dementia, and some may not speak English, which can limit the efficacy of signage intended to prevent falls.

Other choices, such as one-to-one sitters (65 percent) and high-lo beds/floor mats (40 percent), are particularly cost-prohibitive. One-to-one sitters can only be used on as many patients as cost allows, and some are not even authorized to touch a patient to directly prevent a fall. The efficacy of sitters has also been questioned; studies have shown conflicting results as to whether one-to-one sitter programs are effective in reducing falls, and sitter reduction studies have shown no increase in fall rates.[1]

Our survey findings present the possibility that sitters may be too expensive to deploy adequately. Most providers (57 percent) told us they use one-to-one sitters for less than 5 percent of daily census, while 16 percent said they use them for 10 to 15 percent of daily census. It is likely that more patients could benefit from the close watch of patient-monitoring staff. Only 2 percent of providers said sitters are used for over 10 percent of daily census, 12 percent said their organization does not use sitters for any purpose and 14 percent said they're not sure of their organization's sitter utilization.

Only 15 percent of providers said they utilize remote video monitoring for at-risk patients. AvaSure refers to this as TeleSitting, which specifically allows a caregiver to monitor multiple patients at once, expanding monitoring capabilities and relieving skilled nursing caregivers from having to make frequent rounds. AvaSure's TeleSitter solution also contains pre-recorded safety prompts in multiple languages, which mitigates challenges that may arise in hospitals that rely on tools like signage or scheduled rounding.

PREVENTION OF SELF-HARM AND SUICIDE

Behavioral health challenges have risen in tandem with the physiologic acuity of inpatients over the past few decades, as more and more patients present with medical problems that are complicated by suicide ideation, dementia, substance use disorders or other causes of confusion. It's particularly a problem in the emergency department, which isn't typically equipped for one-to-one sitter care.

In 2017, 18.9 percent of adults reported that they suffered from a mental illness in the past year — the highest rate since 2008, according to the latest data available from the Substance Abuse and Mental Health Services Administration.[2] A study published in the Journal of the American Medical Association found that 29.1 percent of emergency department patients had at least one mental health diagnosis, And while the mortality rates for heart disease and cancer have mostly dropped over the past 20 years, the mortality rate for suicide has increased.[3, 4, 5, 6]

The above statistics call for increased protection of patients to guard against self-harm or suicide. Eighty-eight percent of survey respondents said they have some sort of solution in place.

Our statistics show that providers are slightly more likely to use one-to-one sitters to monitor suicidal patients than patients who are at risk for a fall — 72 percent of leaders said their organization employs sitters for suicide prevention, as opposed to 65 percent for fall prevention. While this is positive, it's costly, and given our findings on sitter utilization, it's possible that not enough severely at-risk patients are being assigned a sitter.

Fifty-six percent of organizations told us they use frequent rounding in their suicide prevention efforts, which, as previously stated, is only effective if a clinician witnesses an event. Only 12 percent of leaders said they employ video technology such as TeleSitting, which could allow them to continuously monitor more patients. Nine percent of providers cited other tools, including risk assessments and the use of specially-designed rooms. Nine percent were unsure of their organization's suicide prevention efforts.

Our findings suggest that there is significant opportunity for technology to support providers in their efforts to eliminate patient suicide and self-harm.

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WORKPLACE VIOLENCE PREVENTION

Although patient monitoring technology has been designed for a primary task of keeping patients safe, these tools have also become effective in capturing — and in best cases de-escalating — violence against staff.

Healthcare workers are four times more likely to experience violence than workers in other industries, according to the Occupational Safety and Health Administration.[7] In 2018, The Joint Commission released Sentinel Event Alert 59, challenging hospital leaders to tackle this known but underreported problem and offering best practices to help them do so.

Similar to our findings on fall and suicide prevention, our study found that most healthcare organizations are using a low-tech approach when it comes to protecting staff from abusive patients or visitors. That being said, workplace violence prevention appears to be a priority: 94 percent of leaders said they're employing one or more solutions to keep staff safe.

Most providers stated that they've implemented some sort of training or documentation program: 82 percent provide de-escalation training for staff, 77 percent promote increased documentation of physical abuse, 72 percent promote increased documentation of verbal abuse and 49 percent incorporate a risk-of-aggressive behavior assessment tool. These approaches may be useful in providers' efforts to build a culture of safety, but these initiatives alone cannot stop incidents as they occur. And like many low-tech approaches, training or increased documentation requires additional man-hours that can be costly to an organization and burdensome for staff who are already drowning in administrative tasks that take them away from patient care.

Among solutions that incorporate technology and could potentially play an active role in stopping violence as it occurs, 16 percent of leaders say they equip their staff with wearable panic buttons, and 9 percent make use of remote patient monitoring technology, or TeleSitting, to monitor at-risk patients. Six percent of leaders don't employ any of the aforementioned solutions.

While providers clearly prioritize workplace violence prevention, the overwhelming majority are not employing an approach that is supported by 21st technology that can provide assurance to staff and safety for patients and their families. Video technology has the potential to allow caregivers to feel safer in their workplace while ensuring that, if a "never event" does occur, staff are able to respond and act quickly to mitigate its effects on patients, visitors or staff.

ENABLING A SAFER FUTURE

Companies such as AvaSure are working to create multi-faceted audio-visual solutions that not only protect patients, but also protect the dedicated caregivers and family members who support them. New technologies help providers create a safe care environment, complementing vital processes, protocols and organizational values that are already in place at many health systems.

Technology alone cannot solve the complex problems of falls, patient suicide and workplace violence. Behind any piece of patient monitoring equipment are dedicated individuals who must make

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important decisions on how to respond to "never events." Monitoring staff must be trained on how to effectively use the technology,

and leaders must create protocols for frontline caregivers who are tasked with responding to incidents. Any implementation of technology should be supplemented by a robust clinical program that trains hospital staff. Technology should supplement and support caregivers, not replace them.

In the shift to value-based care, the ability to improve care while reducing costs is vital to provider success. Sophisticated technology and highly skilled staff have the potential to help healthcare organizations efficiently protect more patients and caregivers in a more effective manner, positioning them for success under this new paradigm.

Sources: [1]Lang, Carrie E. "Do Sitters Prevent Falls? A Review of the Literature." Journal of Gerontological Nursing, vol. 40, no. 5, 2014, pp. 24–33., doi:10.3928/00989134-20140313-01. [2]hhttps://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHFFR2017/NSDUHFFR2017.htm [3]https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2707424. [4]http://budgetmodel.wharton.upenn.edu/issues/2016/1/25/mortality-in-the-united-states-past-present-and-future. [5]https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures- 2019.htm. [6]https://afsp.org/about-suicide/suicide-statistics/. [7]https://www.osha.gov/Publications/OSHA3826.pdf.