

CAPTURE Falls

Collaboration and Proactive Teamwork Used to Reduce

Quarterly Collaborative Call #43
April 26th, 2022 2:00 – 2:30 p.m. CT

Your Fall Events Matter!

Preliminary results from our multi-state research study to describe and understand implications of falls in patients hospitalized due to COVID-19



AGENDA

- Housekeeping
- Preliminary results from our multi-state research study to describe and understand implications of falls in patients hospitalized due to COVID-19



Housekeeping



1. CAPTURE Falls and Nebraska Coalition for Patient Safety (NCPS) Partnership
 - Provides the federal protections of the Federal Patient Safety and Quality Improvement Act of 2005 to Patient Safety Work Product (both quantitative and qualitative data) you share with CAPTURE Falls
 - Reduces reporting burden – fall event reports only need to be submitted to CAPTURE Falls. No need to also submit to NCPS.
 - Information regarding new agreements was sent last week to CEOs and key contacts of all CAPTURE Falls hospitals
 - Contact us with questions!



Housekeeping

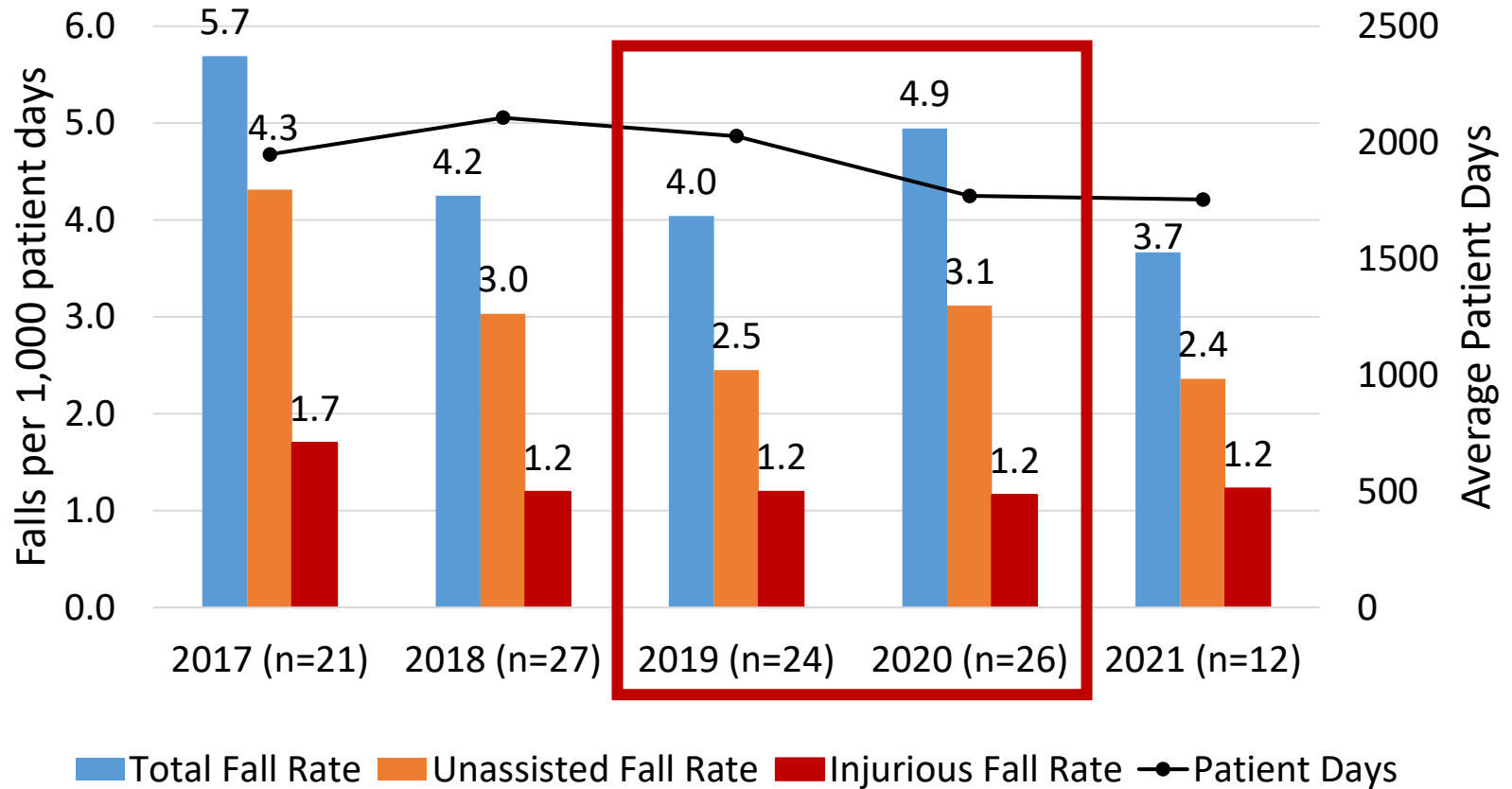


2. Event Reporting

- Update your fall events in Know Falls by April 29 to ensure they are included in the 1st Quarter Reports. Your hospital should receive a report in mid-May if at least one fall was reported in the within the last 12 months.
- Contact Anne at askinner@unmc.edu with REDCap issues (add users, remove users, password resets) and special report requests.
- Return your completed Fall Rate Excel Worksheet (for benchmarking) if you have not yet done so.



CAPTURE Falls Collaborative Fall Rate Benchmarks 2017 - 2021 (Preliminary)



Description and Implications of Falls in Patients Hospitalized Due to COVID-19

The purpose of this study was to describe characteristics of falls in hospitalized adult patients who had:

- A diagnosis of COVID-19
- Pending COVID-19 test results
- A history of COVID-19



This study was approved by the UNMC IRB under protocol #186-21-EP and is a collaboration between UNMC's CAPTURE Falls Program, Nebraska Medicine, and HD Nursing.

Additional investigators include:

- Kellie Clapper, OTR/L, and Christina Reames, APRN, CNS, Nebraska Medicine
- Amy Hester, PhD, RN, BC and Patricia Quigley, PhD, MPH, APRN, HD Nursing



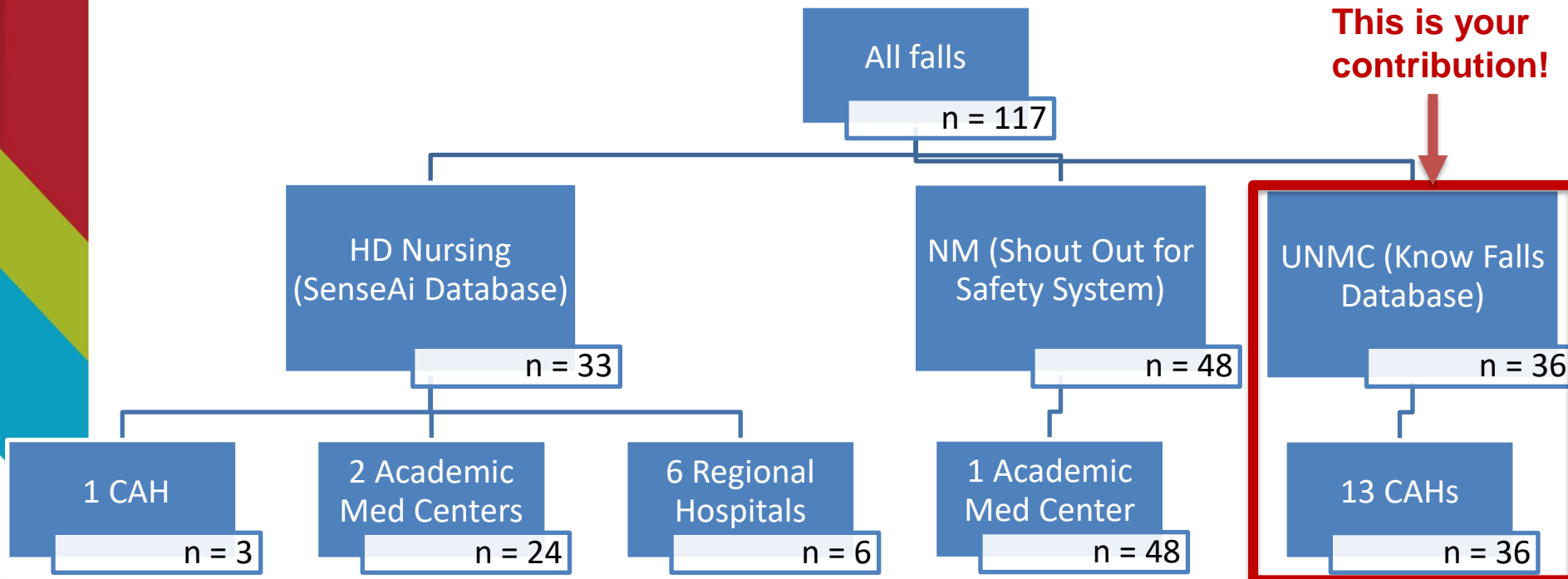
Background

- Falls can be one of the first signs of COVID-19 in older adults.¹⁻⁶
- COVID-19 is linked to impairments that are common risk factors for falls.⁵⁻⁸
- Patients hospitalized with COVID-19 may be at greater risk for hospital-associated disability.⁹
- Older adults may even begin a hospitalization due to COVID-19 with worse baseline health and function than they would have had pre-pandemic.¹⁰⁻¹¹



Methods: Data Sources

Data from 117 fall events occurring between 1/1/2020 and 4/23/2021 were pooled from three sources.



This is your contribution!

CAH = Critical Access Hospital

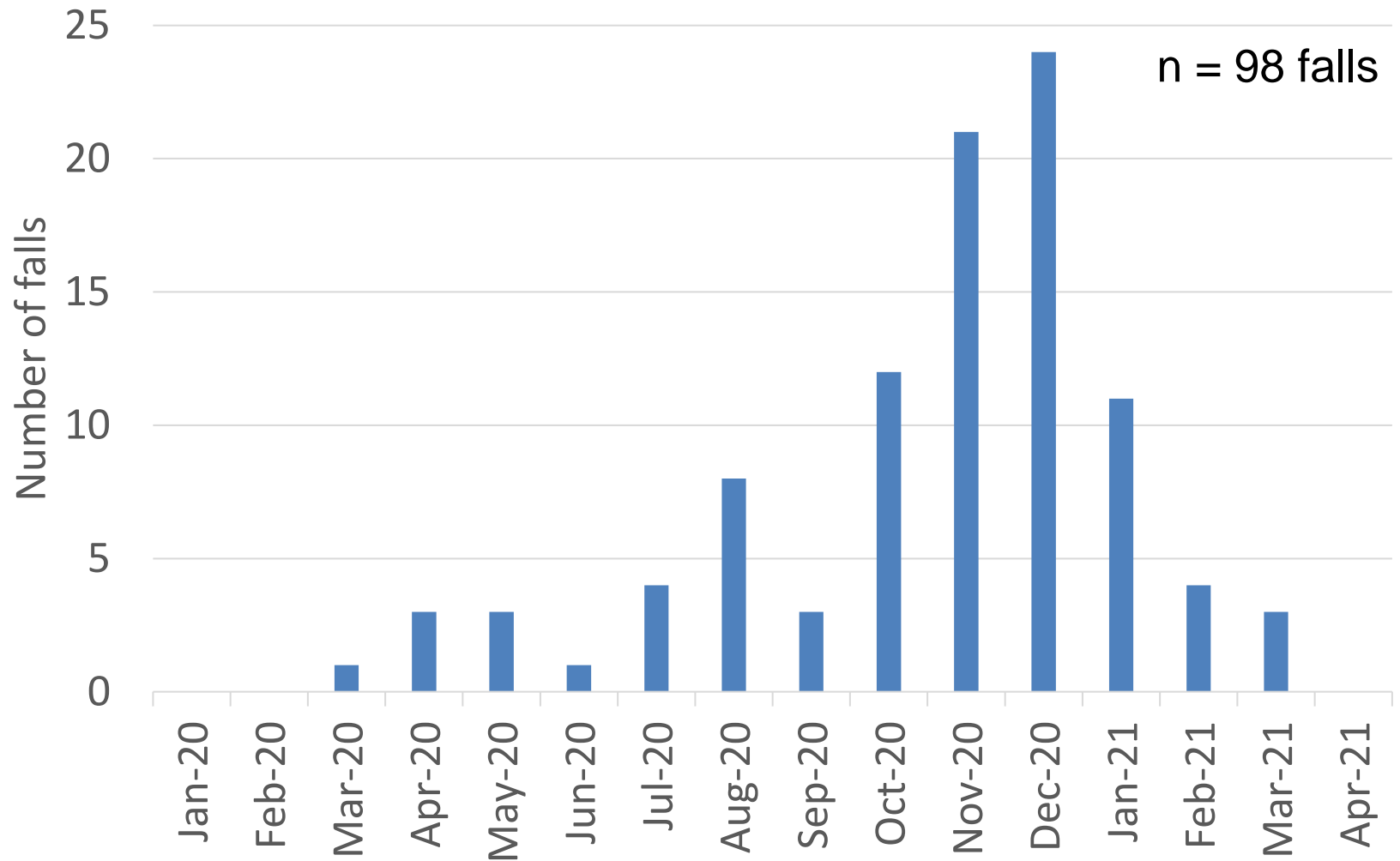


Methods: Data Review and Analysis

- Members of the research team compared data fields from each source for common variables
- Data from each source were pooled for analysis
- Multiple members of the research team reviewed each fall event entry for consistent application of operational definitions of variables
- Descriptive analysis was performed (primarily frequencies)



Results: Falls Over Time



Results: Patient Variables

| Patient Variables | % of Sample |
|---|-------------|
| Age (years) (n = 66 falls) | |
| ≤ 50 | 9% |
| 51-65 | 8% |
| 66-79 | 36% |
| ≥ 80 | 47% |
| Sex (n = 97 falls) | |
| Male | 59% |
| Female | 41% |
| Reason for admission (n = 117 falls) | |
| Admitted with COVID-19 | 75% |
| COVID-19 test pending | 5% |
| History of COVID-19 | 4% |
| Under Verification* | 16% |

*At the time of slide submission, the precise reason for COVID-19 admission was still being verified by the research team

Results: Patient Variables

| Patient Variables | % of Sample |
|---|-------------|
| ICU care (n = 109 falls) | |
| Yes | 9% |
| No | 91% |
| Most Common Comorbidities (n = 66 falls) | |
| Cardiovascular | 62% |
| Endocrine | 42% |
| Generalized Weakness | 52% |
| Medications Known to Increase Fall or Injury Risk (n = 66 falls) | |
| Anticoagulants | 54% |
| Antidiabetics | 18% |
| Analgesics | 42% |
| Anticholinergics | 54% |
| Cardiovascular | 34% |
| Psychotropics | 45% |
| Steroids | 20% |

Results: Fall Variables

| Fall Variables | % of Sample |
|---|-------------|
| Patient Identified at Risk Prior to Fall (n = 113 falls) | |
| Yes | 94% |
| No | 6% |
| Fall Type (n = 114 falls) | |
| Assisted | 21% |
| Unassisted | 79% |
| Fall Outcome (n = 114 falls) | |
| Injurious | 18% |
| Non-injurious | 82% |
| Fall Classification (n = 110 falls) | |
| Unanticipated Physiological | 4% |
| Accidental | 12% |
| Anticipated Physiological | 84% |



Results: Fall Variables

| Fall Variables | % of Sample |
|--|-------------|
| Most Common Patient Contributing Factors (n = 117 falls) | |
| Cognitive Impairment | 27% |
| Hypoxemia | 11% |
| Impulsivity | 21% |
| Overestimated Ability | 23% |
| Weakness | 38% |
| Most Common Organizational Contributing Factors (n = 117 falls) | |
| Communication Breakdown | 8% |
| Fall Risk Score Inaccurate | 15% |
| Human Factors (staff fatigue, stress, etc.) | 7% |
| Staffing Issues | 12% |
| Time to Don PPE | 13% |

Days Since Admission When Fall Occurred

Mean: 7 days; Median 4 days; Range 1 - 26 days



Implications: Negative Impact of COVID-19 on Fall Risk Reduction

Most patients were correctly identified as being at risk, but managing risk factors with an unfamiliar disease is challenging

- Cognitive impairment/impulsivity/overestimating ability, hypoxemia, weakness, and anticoagulants were common in our dataset
- Common comorbidities of hospitalized patients with COVID-19 pose their own risk of falls
- Long lengths of stay may contribute to hospital-acquired disability
- Fall risk level changing throughout hospitalization, sometimes rapidly



Implications: Negative Impact of COVID-19 on Fall Risk Reduction

- Isolation Precautions
 - High percentage of unassisted falls
 - Delayed response time to alarms and call lights;
Time needed to don PPE¹²
 - Difficult direct observation of patients (unless video available)
- Staffing Challenges



Recommendations for Managing Risk Factors

- Be aware of potential for rapid decline and risk factors common in patients with COVID-19
- Recognize risk for injury due to frequent anticoagulant use
- Consider how hypoxemia impacts fall risk
 - Not typically part of common fall risk assessment tools
 - Could be reflected by surrogate markers on tools such as weakness, dizziness, level of assistance needed for mobility, or cognitive impairment
 - Impacts safe patient mobility



Recommendations for Isolation Precautions

- Organize care; prepare to enter and exit the patient room
 - Having all the needed supplies, etc.
 - Grouping and scheduling care
 - “Isolation Buddy” assistance
- Use video surveillance (if available)¹³
 - If audio included, allows for communication without PPE



Strengths and Limitations of this Study

Strengths

- Large sample of falls from a variety of hospital types
- Interdisciplinary research team with recognized expertise on falls

Limitations

- Unstandardized use of variables across data sources
- Retrospective data entered by staff from multiple hospitals
- Missing data
- Voluntary data reporting



Collaborative Member Sharing and Discussion

When providing care at the bedside to reduce fall risk during the COVID-19 pandemic.....

What challenges have you faced?

What strategies have you tried?



Collaborative Member Sharing and Discussion

When coordinating the fall risk reduction program in your hospital during the COVID-19 pandemic.....

What challenges have you faced?

What strategies have you tried?



REMINDERS

1. Future Collaborative Calls/Educational Opportunities:

- July 26, 2022; 2:00-2:30pm CT
- Topic – TBA
 - ***What would you like to discuss?***

2. Looking for fall risk reduction resources?

Click here: <https://www.unmc.edu/patient-safety/capturefalls/index.html>

Still can't find what you are looking for? Let us know what we are missing!

CAPTURE

Collaboration and Proactive Teamwork Used to Reduce

Falls

Assistance is an email away!

- Contact us for more information about:
 - Fall risk reduction best practices: Dawn (dvenema@unmc.edu)
 - Know Falls and Online Learning (RedCAP): Anne (askinner@unmc.edu)
 - Team performance, implementation challenges: Vicki (victoria.kennel@unmc.edu)
 - General questions or not sure?: CAPTURE.Falls@unmc.edu



References

1. Blain H, Rolland Y, Benetos A, et al. Atypical clinical presentation of COVID-19 infection in residents of a long-term care facility. *Eur Geriatr Med.* 2020;11(6):1085-1088. doi: 10.1007/s41999-020-00352-9.
2. Kerr AD, Stacpoole SRL. Coronavirus in the elderly: a late lockdown UK cohort. *Clin Med.* 2020;20(6):e222-e228. doi: 10.7861/clinmed.2020-0423.
3. Sacco G, Foucault G, Briere O, Annweiler C. COVID-19 in seniors: Findings and lessons from mass screening in a nursing home. *Maturitas.* 2020;141:46-52. doi:S0378-5122(20)30319-4.
4. Annweiler C, Sacco G, Salles N, et al. National French survey of coronavirus disease (COVID-19) symptoms in people aged 70 and over. *Clin Infect Dis.* 2021;72(3):490-494. doi: 10.1093/cid/ciaa792.
5. Vrillon A, Hourregue C, Azuar J, et al. COVID-19 in older adults: A series of 76 patients aged 85 years and older with COVID-19. *J Am Geriatr Soc.* 2020;68(12):2735-2743. doi: 10.1111/jgs.16894.
6. Knopp P, Miles A, Webb TE, et al. Presenting features of COVID-19 in older people: relationships with frailty, inflammation and mortality. *Eur Geriatr Med.* 2020;11(6):1089-1094. doi: 10.1007/s41999-020-00373-4.
7. Fleisher LA, Schreiber M, Cardo D, Srinivasan A. Health Care Safety during the Pandemic and Beyond - Building a System That Ensures Resilience. *N Engl J Med.* 2022 Feb 17;386(7):609-611. doi: 10.1056/NEJMp2118285.



References

8. Nabors C, Sridhar A, Hooda U, et al. Characteristics and outcomes of patients 80 years and older hospitalized with coronavirus disease 2019 (COVID-19). *Cardiol Rev.* 2021;29(1):39-42. doi: 10.1097/CRD.0000000000000368.
9. Martinez MS, Robinson MR, Arora VM. Rethinking hospital-associated disability for patients with COVID-19. *J Hosp Med.* 2020;15(12):757-759. doi: 10.12788/jhm.3504.
10. Goethals L, Barth N, Guyot J, Hupin D, Celarier T, Bongue B. Impact of home quarantine on physical activity among older adults living at home during the COVID-19 pandemic: Qualitative interview study. *JMIR Aging.* 2020;3(1):e19007. doi: 10.2196/19007.
11. Yamada M, Kimura Y, Ishiyama D, et al. Effect of the COVID-19 epidemic on physical activity in community-dwelling older adults in Japan: A cross-sectional online survey. *J Nutr Health Aging.* 2020;24(9):948-950. doi: 10.1007/s12603-020-1424-2.
12. Patient safety and COVID-19: a qualitative analysis of concerns during the public health emergency. Rockville, MD: Agency for Healthcare Research and Quality, November 2021
(<https://www.ahrq.gov/sites/default/files/wysiwyg/npsd/data/spotlights/spotlight-ptsafety-and-covid-19.pdf>)
13. Quigley PA, Votruba LJ, Kaminski JM. Registered Nurses, Patient-Engaged Video Surveillance, and COVID-19 Patient Outcomes. *MEDSURG Nursing.* 2021;30(2):89-96.

