Implementation of the Brøset Violence Checklist to Combat Workplace Violence Events: An Evidence-Based Practice Initiative

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Introduction and Background

- U.S. Bureau of Labor reports healthcare workers experience intentional injuries at a rate of 10.4 per 10,000 hours worked
- Healthcare workers 5x more likely to suffer WPV vs general workforce
- Major contributor to the problem is tolerance of WPV against nursing and underreporting
- Exposure to violence in the workplace has led some nurses to experience psychological consequences such as post-traumatic stress disorder, fear, anxiety, and decreased job satisfaction.

(U.S Bureau of Labor Statistics, 2018)

Workplace Violence (WPV)

What is WPV?

> Any act or threat of physical violence, harassment, intimidation or other threatening disruptive behavior that occurs at the work site
>
> (OSHA, 2016)

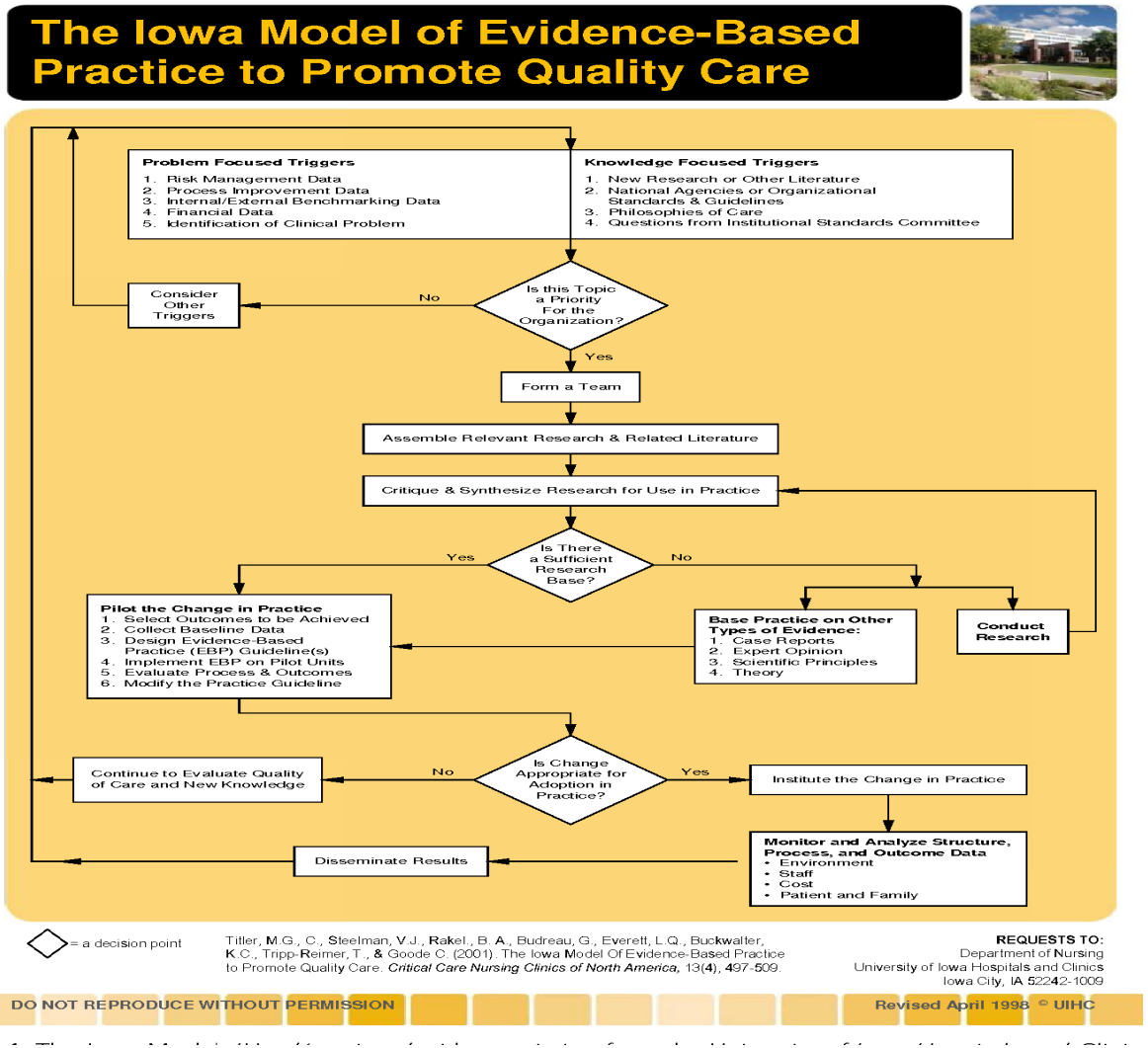
Types of WPV

- Type 1: Criminal Intent
- Type 2: Patient/Client/Visitor
- Type 3: Worker-on-Worker
- Type 4: Personal

Introduction and Background continued

- WPV injuries at Project Site
    - Year 2 = 28 violent events
    - Year 1 = 11 violent events
    - Increase of 154% in WPV events

Framework



7-steps of the Iowa Model Revised

- Identify Trigger
- State the Question or Purpose
- Form a team
- Assemble, Appraise and Synthesize Body of Evidence
- Design and Pilot the Practice Change
- Integrate and Sustain the Practice Change
- Disseminate Results

(Iowa Model Collaborative et al, 2017)

Step 1: Triggering Issue

Step 1: **Identify Triggering Issue/ Opportunities**

- Emergency departments have reported a 154% increase in WPV events, including physical and verbal altercations, in the preceding 12 months.

Opportunities

- Cost savings related to the length of stay
- Reduction of WPV events

Step 2: Clinical Question

Among all patients receiving care in a hospital setting, does the implementation of an aggression predictor screening instrument in comparison to current practices decrease workplace violence events?

Step 3: Form a Team

Setting- Emergency department

Team members

- Team lead (myself)
- Academic advisor (Dr. Quatrara)
- Second Reviewer (Dr. Yost)
- Site Practice Mentor (Kathryn Kasen, ED Manager)
- Emergency Department Attending (Dr. Wendel)
- Chief Nursing Officer (Dr. Baker)
- Emergency Department RN's & Providers

Step 4: Assemble, Appraise, and Synthesize Body of Evidence

- The team lead performed ROL with a Comprehensive database search
  - -PubMed, CINAHL, PsycINFO, and Cochrane Library
  - -Key Terms: violence, workplace violence, screening, emergency department, inpatients, and psychiatric
- Filters applied
  - Publication in last 5 years
  - English language

Literature Review Conclusion

Full-text review identified **three** themes:

1. Professional Organizations recommend an observational assessment of a patient with documentation to determine the risk the patient posed for aggression/violent events towards staff and other patients (OSHA, 2016), (NICE, 2015), (RNAO, 2019)
2. Staff observations aided by a screening instrument were more successful in predicting aggressive/violent patient events rather than only staff observations (NICE, 2015)
3. Brøset Violence Checklist (BVC) scores over 1 require Best Practices in Evaluating and Treating Agitation (BETA) interventions (Richmond et al., 2012)

The Broset Violence Checklist

BVC

- Validated accuracy for detecting agitation
- Performed in less than 60 seconds
- Supported by evidence-based literature
- Detection
  - Specificity (violence will not occur): 92%
  - Sensitivity (violence will occur): 63%

(Almvik et al., 2000)

Step 5: Design & Pilot the Practice Change

The purpose of this evidence-based practice initiative is to identify patients at risk for committing workplace violence events and introduce an intervention to reduce WPV events.

Step 5: Design & Pilot the Practice Change

Methods

- **Design:** Evidence-based practice initiative guided by the Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care©
    - BVC integrated into EHR via hospital IT staff
- **Population-** All pts admitted to the emergency department
- **Intervention-** RNs will apply the BVC screening instrument on all patients once per shift, with behavioral changes and 60 minutes after an intervention
    - RN-driven interventions start at a BVC ≥ 1
    - RN collaborates with the provider for BVC ≥ 3

Step 5: Continued

Brøset Violence Checklist:

Behavior	Definition	Observed?
Confused	Appears obviously confused and disoriented. May be unaware of time, place or person	
Irritable	Easily annoyed or angered. Unable to tolerate the presence of others.	
Boisterous	Behavior is overtly 'loud' or noisy, e.g. slams doors, shouts out when talking, etc.	
Physically Threatening	Where there is a definite intent to physically threaten another person, e.g. the taking of an aggressive stance; the grabbing of another person's clothing; the raising of an arm, leg, making of a fist, or modeling of a head-butt directed at another	
Verbally Threatening	A verbal outburst which is more than just a raised voice; and where there is a definite intent to intimidate or threaten another person, e.g. verbal attacks, abuse, name-calling, verbally neutral comments uttered in a snarling aggressive manner	
Attacking Objects	An attack directed at an object and not an individual, e.g. the indiscriminate throwing of an object; banging or smashup windows; kicking, banging or head-butting an object; or the smashing of furniture	
	Total	

Each item in the checklist is either present (1) or absent (0) in the scoring system and scoring is conducted in relation to the patient's normal baseline behavior.
(0) – small risk of violence
(1-2) – moderate risk of violence
(>3) – very high risk of violence*

*very high risk resident – interventions should be implemented immediately to prevent a potential episode

Step 5: Continued

How the BVC is applied

- Assessment instrument that evaluates the patient's level of confusion, irritability, boisterousness, physical threats, verbal threats, and attacking objects
- Each section is scored present (+1) or absent (+0)
- Score ≥ 1 = positive for risk of committing a WPV event
  - Scores of 1-2 (mild/moderate risk)
  - Scores ≥ 3 (high-risk)
  - A score of 6 is the maximum

Step 5: Continued

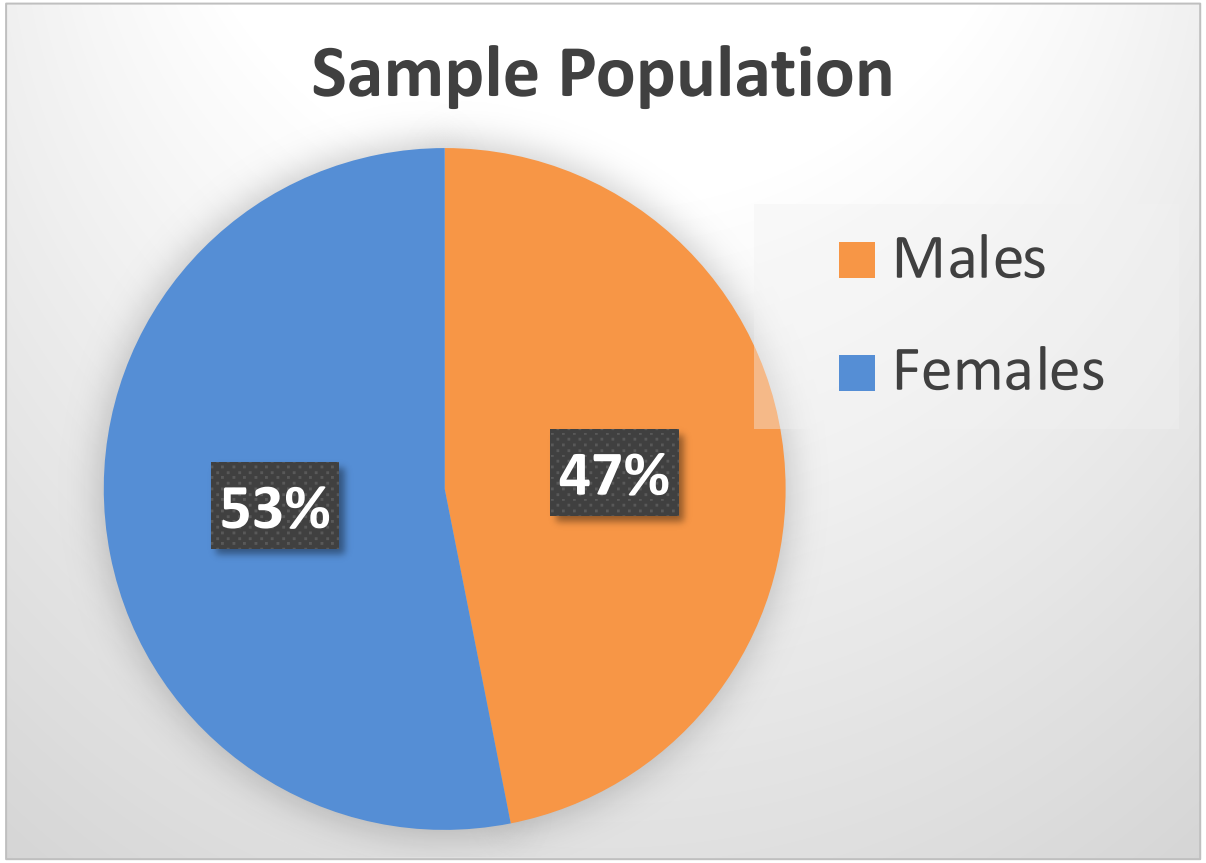
- Change Process
  - Kotter's 8-Step for implementing change
    - Create A Sense of Urgency
    - Build a guiding coalition
    - Form a strategic vision
    - Enlist a volunteer army
    - Enable action by removing barriers
    - Generate short-term wins
    - Sustain acceleration
    - Institute change

Data Collection and Analysis

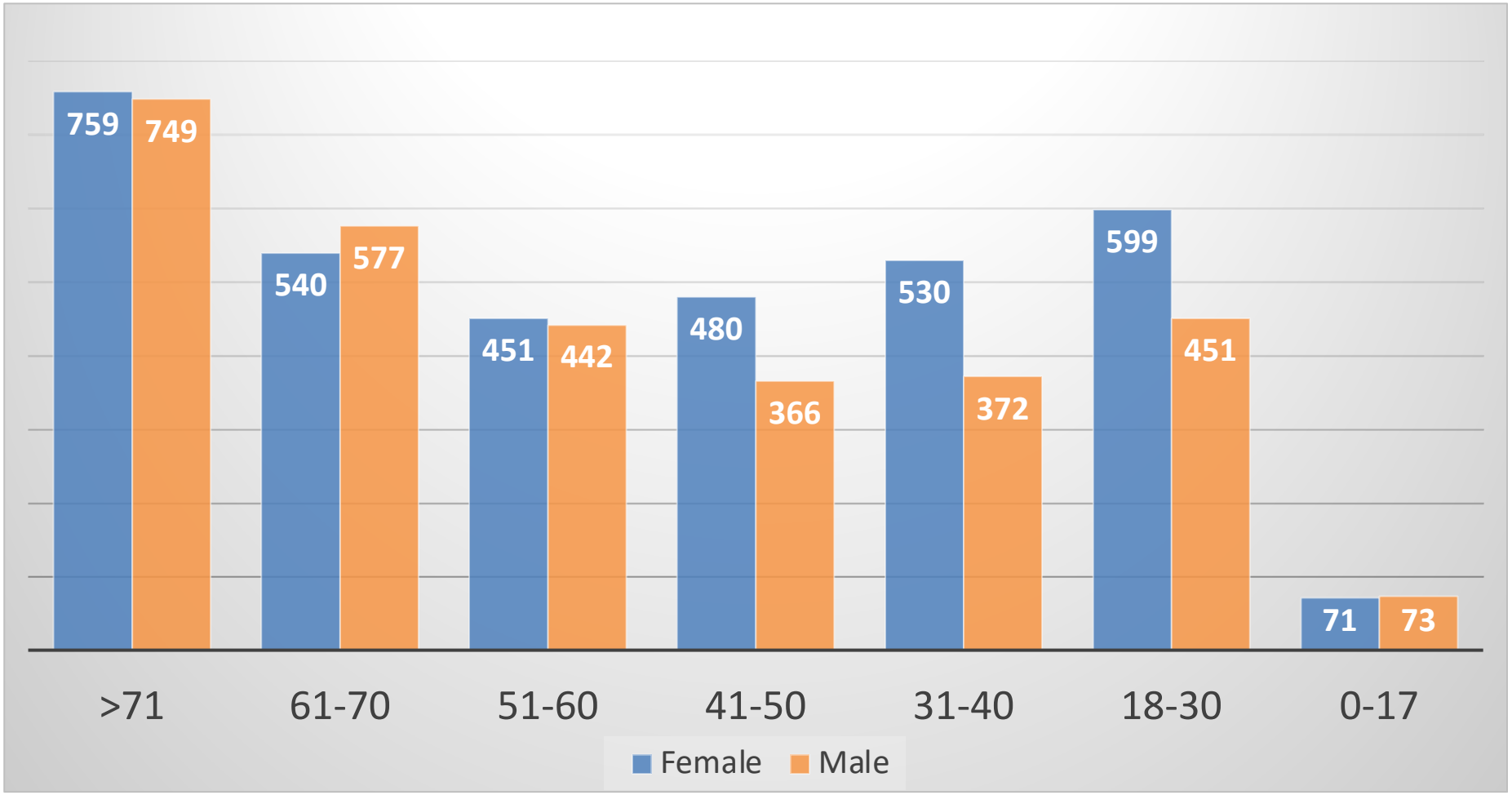
- Data variables collected from EHR per patient
  - Demographics: age range (10 - year increments) & gender
  - Compliance tracking instrument usage on day/night shift
  - Total Brøset Violence Checklist score per patient
  - Track individual scored components of BVC per patient scoring ≥ 3
  - Redocumentation Scores for BVC scores ≥ 3
  - Medications used for agitation
- Data analysis was performed 2-months post-implementation

Patient Population

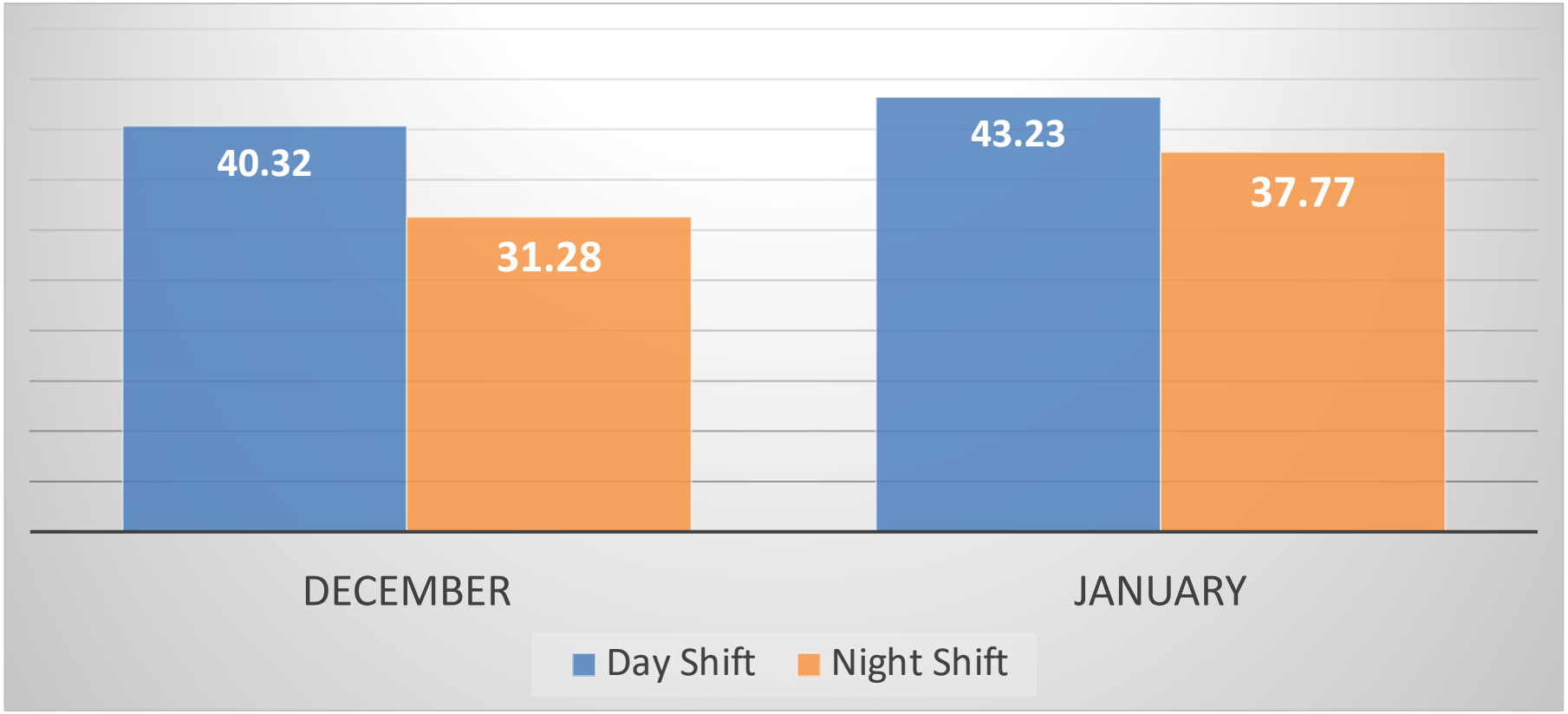
- *n* = 6,463 patients
  - *Males* = *3031*
  - *Females* = *3432*



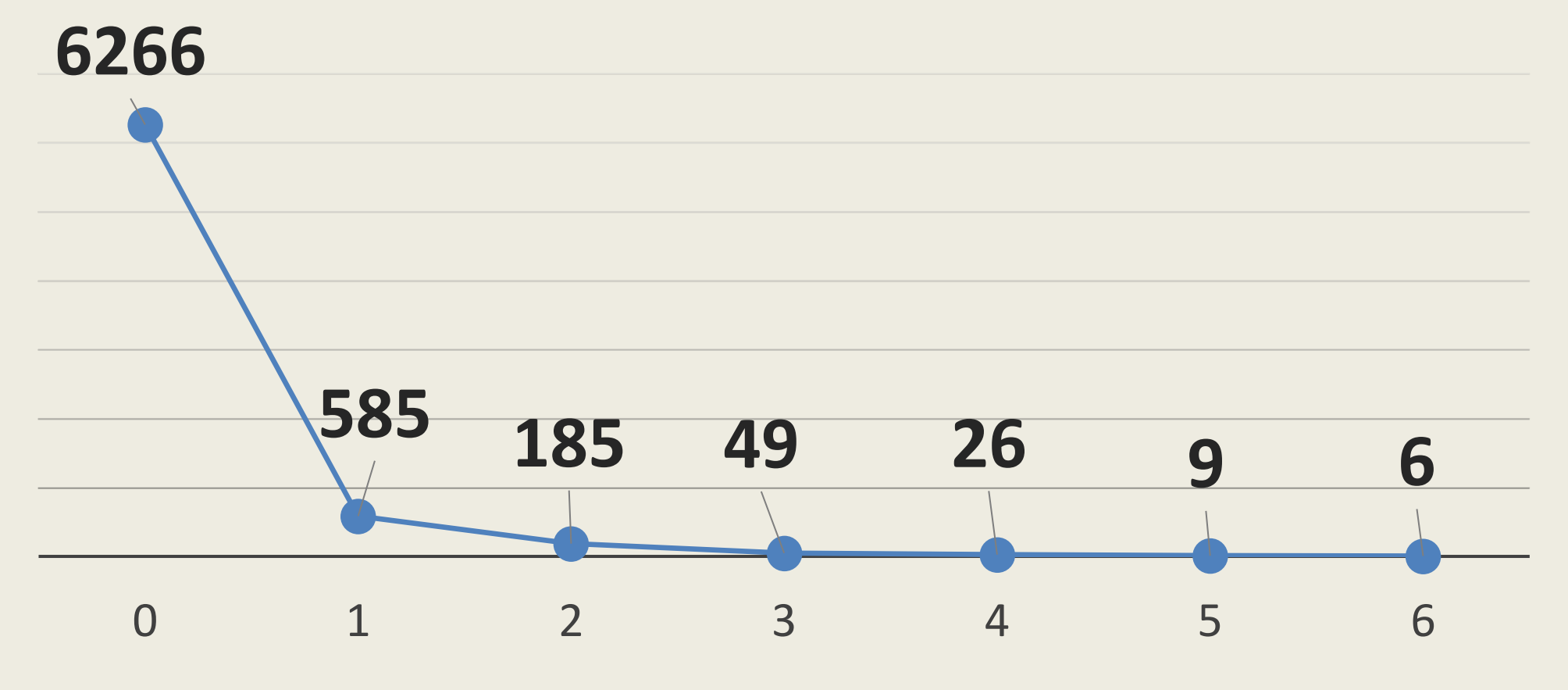
Demographics by Age



Nursing's Compliance Rate % with BVC



Frequency Of Scores Using The BVC



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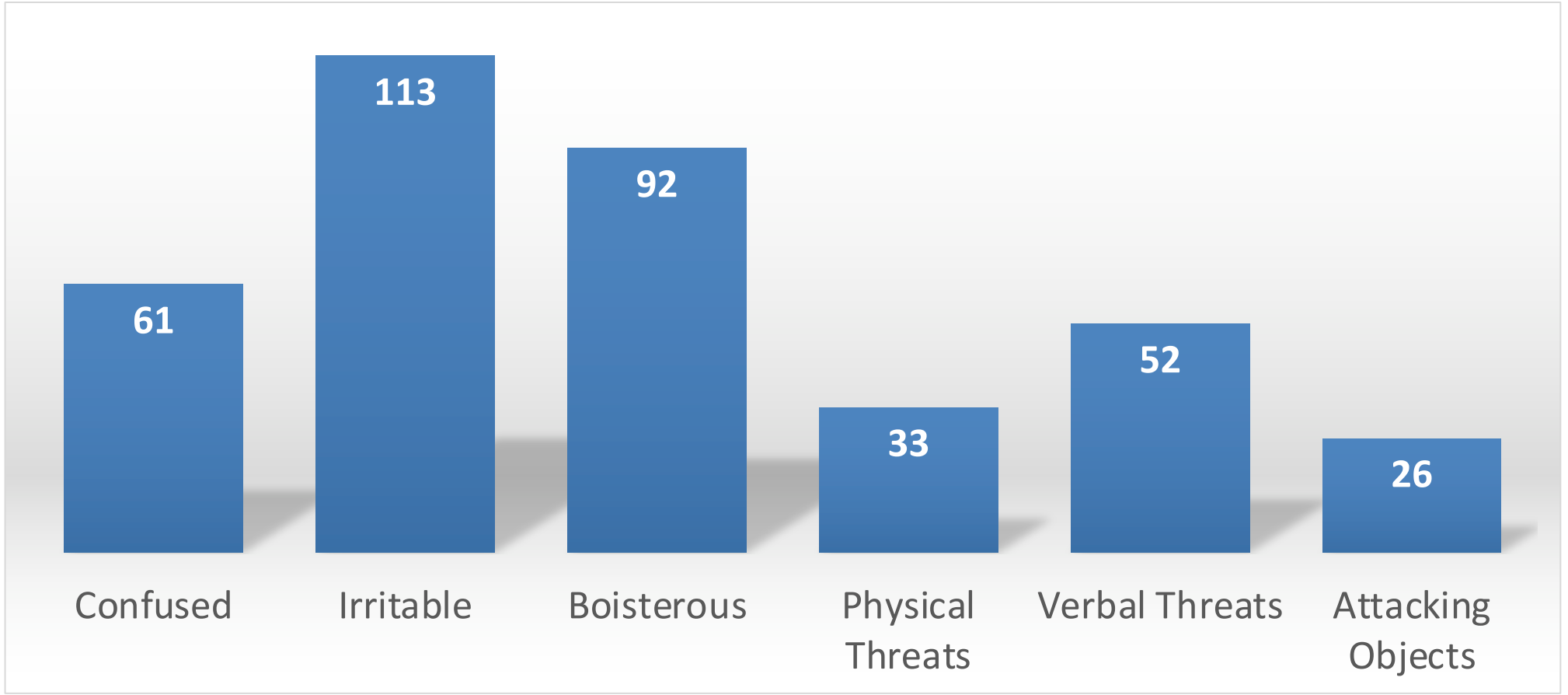
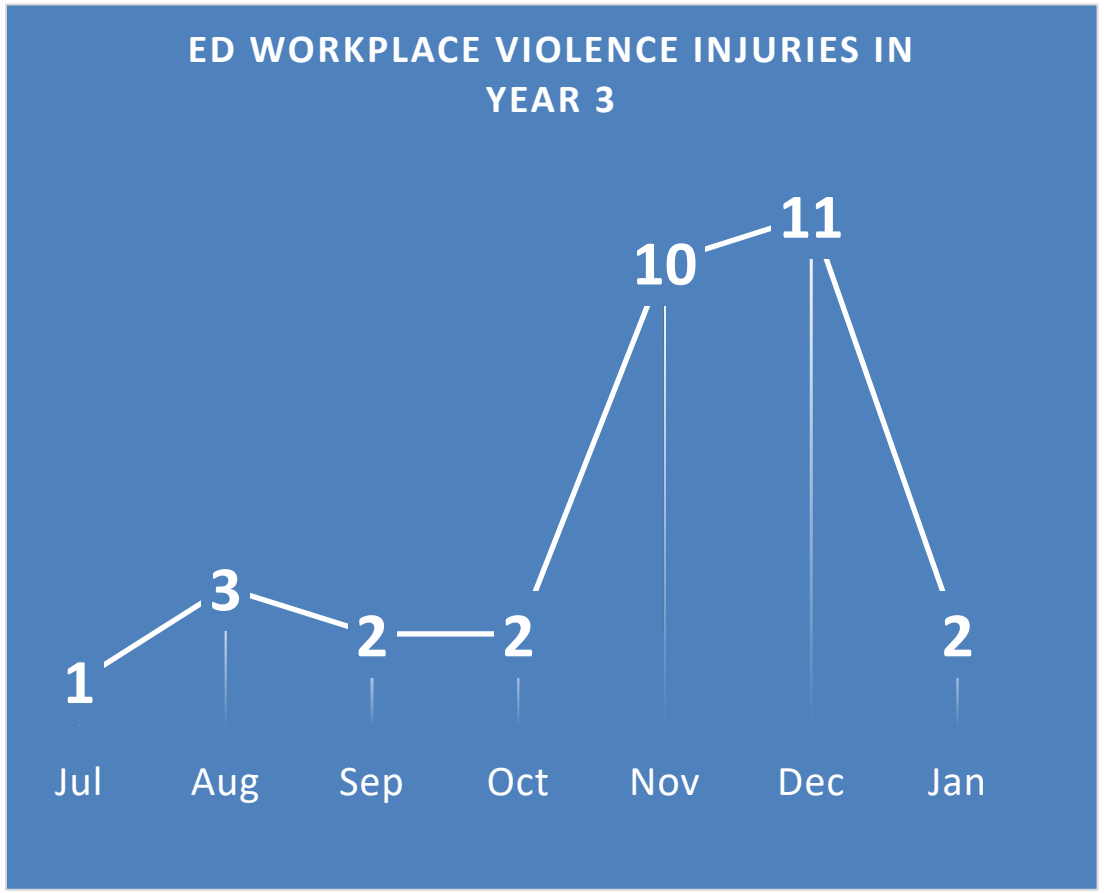
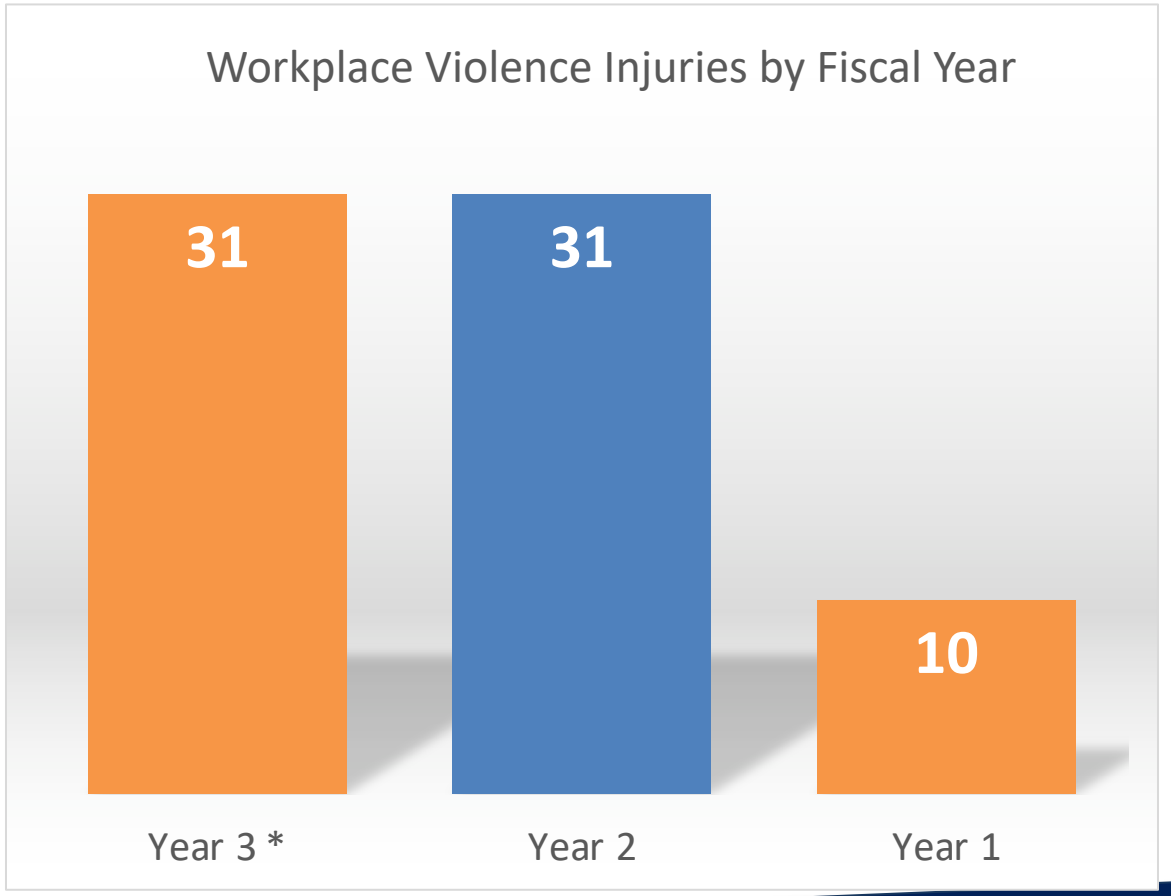
Breakdown Of BVC For Patients Scoring ≥3



Effectiveness: WPV Injuries





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Effectiveness: Chart Review

December

- 37 Patients scored in the high-risk category
    - 49% or 18 pts were rescored after an intervention
    - **61%** saw a reduction in BVC score

January

- 42 Patients scored in the high-risk category
    - 45% or 19 patients were rescored after an intervention
    - **84%** saw a reduction in BVC score

Discussion

- This evidence-based initiative has displayed the effectiveness of this instrument in identifying escalating patient behaviors and quantifying that behavior
- Compliance was sub-optimal, but the BVC successfully identified **79** at-risk patients (BVC ≥ 3) over 2 months.
  - 27 of the 37 pts were rescored with the BVC after an intervention & recorded a decrease in their BVC score (**73% reduction**)
- The majority of the above pts with a BVC ≥ 3, scored a **ZERO** after an intervention
- Additionally, elevated WPV injuries seen in month 1 overlapped with another DNP project aimed at increasing the reporting of WPV events
- This initiative aligns the Emergency Nurses Association (**ENA**), Virginia Hospital & Healthcare Association (**VHHA**), & Occupational Safety and Health Administration (**OSHA**) recommendations for addressing WPV events in the healthcare setting

(OSHA, 2016), (ENA, n.d.), (VHHA, 2022)

Diversity, Equity and Inclusivity

- This assessment instrument was used on all adult patients regardless of race, gender, or cultural background
- All RNs in the ED have CPI training, performed during the onboarding process
- Diversity training for nursing performed during onboarding to unit
- No studies identified that compared the usage of BVC against ethnicity
- BVC is suitable for both men and women

(Lockertsen et al., 2021)

Financial Analysis of BVC

- The U.S. Department of Labor averaged that workplace violence costs on average $250,000 per incident (U.S. Department of Labor, 2022)
- Purchase cost of Broset Violence Checklist licensure agreement
  - 1 year = $ 2,856.00
  - 2 & 3 per/year = $ 2,331.00
- Calculation: $250K - $2,856.00 = $247K in potential savings

Ethical Consideration

- IRB determined this initiative to be EBP, **No** IRB oversight was required
- Collection of patient data from EHR is de-identified aggregated data
- Beneficence
    - Promotion of good patient care, regardless of the situation
- Nonmaleficence
    - The obligation not to inflict harm

Step 6: Integrate & Sustain the Practice Change

Nursing Practice Implication

Integrate and Sustain the Practice of Change

- Integration into EHR can be used after the initiative
  - Expand to the entire healthcare system
- Annual Training to Staff on BVC screening
- Unit champion to track compliance (**underway**)
  - Workplace violence committee formed (**underway**)
- Add mean BVC score to data portal for trend tracking

Step 6: Continued

Emergency Department Nurse Practice Implications

-Use of the BVC can:

- Improve assessment of agitated patients
- Provide RN-driven interventions
- Reduce WPV events

Step 7: Disseminate Results

Step 7: **Disseminate Results**

- Executive summary for hospital administration staff **(provided)**
- Poster Presentation: March 13-16 at 2024 VCNP Conference (**presented)**
- Journal of Interest: Journal of Emergency Nursing

Recommendations

- Reinforce methods to bolster tool compliance to aid data-driven decision
- Incorporate the compliance rate of the BVC on the internal data portal dashboard as a tile
- Growth outside of the department should have overwatch from the BE SAFE committee.
  - Currently, ED manager is overseeing the continuation of the initiative
- Notify security of patients with a BVC ≥ 3 for dynamic rounding
- Incorporate BVC scores in patient hand-offs
- Use BVC scores to determine personnel needed for off ward procedures
- Use BVC scores when determining patient assignments

QUESTIONS?

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