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| Supplement 1: Evidence Table |
| **Citation** | **Design/Sample/Setting, Evidence Level and Quality**  | **Team description** | **Activation Criteria** | **Team Interventions** | **Team Members** | **Implementation**  | **Measures** | **Outcomes** | **Lessons learned** |
| Pestka, E. L., Hatteberg, D. A., Larson, L. A., Zwygart, A. M., Cox, D. L., & Borgen Jr, E. E. (2012). Enhancing safety in behavioral emergency situations. *Medsurg nursing*, *21*(6), 335. | 6 general medical unitsLarge midwestern hospital Level 5/A | BERT (behavioral emergency response team)Led by RN; psychiatrist carries BERT pager and is available as needed. Security provides hand-on de-escalation assistance as needed.Assessment, select interventions, develop care plan, team debriefingPhone call to unit 4 hours after event to assess effectiveness of interventionEducation plan for medical units to understand how and when to utilize BERT  | A staff member is worried about the patient’s behavior Threats or perceived threats against self, another person, or property Sexual threats/issues/assaults and/or any other unwanted physical contact (spitting, intentional exposure by patient to bodily fluids) Concerns about behaviors related to placement of a 72-hour(involuntary) hold Disruptive behavior upsetting unit function | Verbal communicationCalming techniquesEnvironmental changesMedicationRecommending an individual assignmentRestraints (last resort) | PsychiatristPsychiatric NurseSecurity  | Psych RNs assigned shifts to respond to BERT callsPrimary provider notified when BERT is activatedPsychiatrist makes recommendations for meds but primary provider orders. Online and in-person training classes for RNs to understand BERT responsibilities; included simulation scenariosOngoing annual safety training for RNs.Less intensive training for physicians/security | RRT form: CallerDateTime of dayLocationLength of responseSBAR summaryInterventions usedProcess needsLearning needsSatisfaction of callerOther feedback | 39% of calls on days39% of calls on evenings21% of calls on nightsM response length: 43.5 minutes (range= 5-220)Hyperactive delirium was the most common reason for calling, followed by alcohol/nicotine withdrawal, psychosis, suicidality, disruptive behavior, intention to leave AMAMost common interventions: Verbal (75%), calming techniques (48%). Meds ordered in 53% of events.99% of interventions were effective and remained effective 4 hours later.  | Role modeling from BERT psych RN, psychiatrist, and security was valuable; learning from the BERT responses reduced reactive need for assistance over timeLed to greater awareness of assessing, diagnosing, and treating symptoms of acute delirium.Increased focus on identifying patients with a history of alcohol abuse or dependenceChallenges: how to ensure psychiatric nurse and physician responders are available when there are requests for the teamImproved satisfaction, collaboration, and staff perception of safety  |
| Jones, C. D., Manno, M. S., & Vogt, B. (2012). Tier one alert! A psychiatric rapid response team. *Nursing management*, *43*(11), 34-40. | 2 hospital campusesCommunity hospital system in New JerseyLevel 5/A  | Tier one alertEmphasis on understanding one’sown behaviors (both nurse andpatient), a patient’s active involve-ment in problem solving, andpromoting the interpersonal pro-cess (relationship)Tier one alert responder (RN) acts as the team leader and communicates with the patient. Security offers support and hands-on intervention if situation becomes violent. Pharmacist evaluates patient’s medication profile to identify interactions or adverse reactions that might be contributing to the situation.  | An individual’sbehavior represented imminent or actual danger tothemselves or others. | Verbal communicationMedication changesPhysical management if necessary  | Tier one RN SecurityNursing supervisorPharmacistPrimary RN | Designated tier one responder on a particular nursing shift by unit (RN) trained8-hour training program for all team members; 4 hours of this were hands-on behavior management practicePrimary RN activates team  | Number of code grey and tier one events | Reduced code grey events (39% reduction); overall reduced behavioral health events 21% reduction)Increase in patients awaiting transfer to psychiatric units within medical units | Overall reduction in behaviorally disruptive events attributed tier one staff who utilized the skills learned through tier one alert training and found application to a variety of patients and non-tier one staff members who observed and participated in tier one interactionsChallenges: Inconsistent training; staff attrition/turnover resulting in new staff who had not received training |
| Kelley, E. C. (2014). Reducing violence in the emergency department: a rapid response team approach. *Journal of emergency nursing*, *40*(1), 60-64. | 1 240-bed community hospital in MassachusettsLevel 5/B | De-escalation Team/Code S Primary RN leads de-escalation with team standing by when Code S is initiated. Goal is to initiate early, before behavior escalates. If the primary caregiver escalatesduring the situation, they are “tapped out” by the firstresponder, who takes report and continues the communicationwith the patient. | Staff members feeling overwhelmed or threatened when dealingdirectly with an escalating individualIndividuals who are unable tomaintain control of their behavior in the clinical environment (confusion, chemical impairment,mental illness, difficult emotions) | Verbal de-escalation techniquesSeclusion or restraints as a last resort.  | PhysicianNurseSocial workerTechnicianSecurity Human resourcesAdministrationRisk management staff | Crisis prevention training for all ER staff, which teaches that caregivers are better able tomaintain a de-escalating demeanor, thus controlling the situation, when the patientand the caregiver know that ample support is standing by. | Team utilizationRestraint and seclusion useStaff injuries  | 650 usages in ERBefore: 30% of behavioral health hours were spent in locked seclusionAfter: 1% (restraint) and 2% (seclusion) of behavioral health hours Reduction in take-downs and staff injuries (data not available)  | Concerns: Excessive drain on ER resources |
| Loucks, J., Rutledge, D. N., Hatch, B., & Morrison, V. (2010). Rapid response team for behavioral emergencies. *Journal of the American Psychiatric Nurses Association*, *16*(2), 93-100. | 1 500-bed Magnet facility in Southern California; piloted on medical pulmonary unit and then implemented in full hospital Level 5/A | Behavioral emergency response team (BERT)Trained and experienced psychiatric nurses take de-escalation and milieu management skills to nonpsychiatric hospital units where patients with psychiatric conditions were exhibiting risky or scary behaviorsStaff on unit call Behavioral Health Services (BHS); BHS staff will alert house supervisor that BERT has been called.After the incident, BERT team de-briefs with unit staff and provide teaching as needed.  | -Acutely agitated patient [i.e., yelling, threatening, demanding, cursing, responding to hallucinations or delusions]-Patient in distress with deteriorating condition-Patient at risk for: danger to self, danger to someone else-Patient who is confused and threatening to leave hospital Against Medical Advice.-Patient experiencing drug/alcohol withdrawal signs or symptoms, and exhibiting acting out behavior. | BHS RN will assess patient condition and facilitate stabilization of patient behavior.-BHS Clinical Coordinator/Charge Nurse will collaborate with assigned RN to modify or implement appropriate plan of care.-BHS Clinical Coordinator/Charge Nurse will document briefly in progress notes regarding consultation call utilizing SBAR and will complete BHS BERT form. | BHS nurse with Management of Assaultive Behavior Designation to write 72 hour holdsBHS social worker BHS clinical coordinator  | Used Iowa Model of EBP for implementationOn-duty BHS staff comprise BERT team Promote awareness of BERT among MDs through committees, Medical Staff Briefs, etc.; awareness of BERT among nurses promoted through staff meetings, unit newsletters, daily hospital newsletter, flyers, and Nurse Leadership Team, etc. | -Positive feedback from physicians and staff-Monthly trending of numbers of patients treated and stabilized.-Staff surveys regarding knowledge/attitudes -Debriefings of BERT calls  | 54% of nurses (N=39) have a good understanding of BERT31% report their level of comfort with psychiatric patients is high14% involved in a BERT call; 100% of those believed the patient’s needs were met  | Role modeling of psychiatric interventions to nonpsychiatric personnel occurs, which may enhance skills in medical–surgical staff members and promote their confidence in addressing similar issues in the future |
| Wong, A. H., Wing, L., Weiss, B., & Gang, M. (2015). Coordinating a team response to behavioral emergencies in the emergency department: a simulation-enhanced interprofessional curriculum. *Western journal of emergency medicine*, *16*(6), 859. | 1 large public hospital in New York City Level 5/B | Interprofessional education intervention for behavioral crises in the EDSimulation-enhanced patient safetycurriculum targeting staff attitudes toward patient aggressionand interprofessional collaboration during the managementof patients with behavioral emergencies in the EDDidactics: crisis management principles, de-escalationtechniques, roles & responsibilities, and proper application of restraintsStandardized patients and simulation with two case studies that both escalate to restraint application | NA | NA | ED staff: Physicians NursesPatient care techniciansHospital police officers | Engaging and securing administrative supportTrainings delivered during established training times for physicians and nurses Nursing: incorporated into annual competency training | Management of Aggression andViolence Attitude Scale (MAVAS) | Internal factors, external factors and situational/interactional perspectives on patient aggression improved post-interventionStaff attitudes toward managementof patient aggression did not significantly changeStaff participants overwhelmingly endorsed andwelcomed the SPs in the hands-on components of thecourse and frequently commented on how having SPs in thesimulations significantly increased fidelity and helped recreatea realistic scenario for them. | Challenges: Time and resource-intensive trainingCore team of physician, nursing, and police educators was needed to ensure consistency in training Requires a robust simulation center  |
| Zicko, C. D. R., Schroeder, L. C. D. R., Byers, C. D. R., Taylor, L. T., & Spence, C. D. R. (2017). Behavioral emergency response team: implementation improves patient safety, staff safety, and staff collaboration. *Worldviews on Evidence‐Based Nursing*. | 1 military treatment hospital in Virginia; piloted on 1 unit and then expanded to 2 additional unitsLevel 5/A | Behavioral emergency response team (BERT) Timely consultationand intervention, including (a) deescalating individualswho may exhibit potentially violent behaviors; (b) role modelingcrisis intervention skills, which may improve non-MH staffmembers’ abilities and promote confidence addressing similarbehavioral issues in the future; (c) debriefing unit staff afterthe situation is defused; and (d) providing educationMH charge RN serves as the team leader and consults with psychiatrist or primary provider as needed. Primary nursing staff administers medications or other interventions recommended by BERT RN. The charge nurse for the patient’sunit notifies all BERT members of activation; the MHunit charge nurse is provided a description of the situation.Group debriefing after incident; primary RN completes a follow-up assessment 4-6 hours after the incident. | - Patient responding to auditory and/or visual hallucinations orother impairment of reality impeding staff’s ability to redirector effectively communicate with patient-Concern the patient’s psychiatric condition is deteriorating andthat the patient and/or others may be in impending danger-Agitated, disruptive, threatening, and/or acting out behavior isnot responsive to staff’s redirection or other attemptedInterventions-Sexual threats, assault, or unwanted physical contact | Verbal deescalation Therapeutic calmingTechniquesEnvironmental interventions | Mental health RNPsychiatric technicianPrimary residentPrimary RNSecurity (not often needed; security reported to the charge nurse, and within 10–15 minutesthe BERT leader or charge nurse made the decision ifsecurity needed to stay for a show of support or if they could bedismissed) | Implemented using Iowa Model of Evidence-Based Practice Training provided by CNS In-service for medical unit from a psychiatric MH nursepractitioner reviewing signs of behavioral escalationand early intervention and communication techniquesto keep the patient and staff safe | Staff knowledge, confidence, and support caring for psychiatric patientsStaff assaults and injuriesRestraint usageSecurity interventionCode greens | Assaultsand security intervention decreased by 83%Restraintuse decreased by 80%During expansion, the number of assaults,security interventions, and restraints decreased by 90%, 93%,and 87.5%, respectivelyStaffs’ level of BERT knowledge and level of support betweenMH and MS staff both significantly increased, although theirlevel of confidence in caring for psychiatric patients or patientsexperiencing behavioral emergencies was rated as moderate | Security was often not needed, when theBERT leader was able to quickly assess and determine if thesituation could be deescalated safely without security intervention.Challenges: Gaining staff and leadershipbuy-in, particularly on the MH unit (required MH staff to leave their unit); maintaining staff knowledge of theBERT and buy-in when staff frequently turns over due to deployments,duty station changes, and training exercises thatoccur in the military setting; mirroring a medical RRT; staff wait too long to call BERT |
| Mackay, A. (2017). The Critical Role of the Psychiatric Emergency Response Team in the Adoption of a Violence Risk Assessment Tool (Doctoral dissertation, Walden University). | 1 458-bed level 1 trauma hospital in St. Paul, MinnesotaLevel 5/A | Psychiatric Emergency Response Team (PERT) MIAHTAPS (7 points of assessment) violence risk assessment tool completed by RN once per shift; encouraged to page PERT team if patient has potential for violence  | MIAHTAPS score of 3 or higher  | MedicationsVerbal de-escalationRestraintsConsulting psychiatry teamTransferring patient to psychiatric unit | Mental health nurseMental health associate Security | Violence risk assessment tool was built into the nurses’ current workflowDirect care staff were trained using theonline education program about the MIAHTAPS assessment tool  | Staff assaultsPERT calls Restraint usage  | Physical restraintswere reduced by 5%75% of nurses used MIAHTAPS and 73% believed it was usefulNurses still tended to call security first instead of requesting a PERT team | Recommendations: Addition of a Clinical Nurse Specialist or a psychiatrist to the team to haveconsistency in medication orders as well as increase the time of getting medicationOrdersOngoing training for direct care staff with the education on behaviorsto assess |