Using a Review of Literature to Derive Conclusions and Implications for Research, Evidence Based Practice and Quality Improvement Part 2

Sue Barnason PhD, RN, APRN-CNS, FAAN
October 14, 2019
Start with Clear Concept ---
WHAT ARE YOU TARGETING?

<table>
<thead>
<tr>
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<th>Definition</th>
<th>Impact on Practice</th>
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<tr>
<td><strong>Research</strong></td>
<td>A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge.</td>
<td>Generates new knowledge for practice and adds to our professions’ knowledge base through the literature</td>
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<td><strong>Evidence-Based Practice</strong></td>
<td>A <a href="https://example.com">lifelong approach to clinical practice</a> that integrates a systematic search, appraisal and synthesis of relevant research, clinical expertise, and patient preferences and values.</td>
<td>To translate knowledge with a goal of improving practice</td>
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<td><strong>Quality Improvement</strong></td>
<td>The combined and unceasing efforts of everyone—healthcare professional, patients and their families, researcher, payers, planners, educators—to make changes that will lead to better patient outcomes, better system performance, and better professional development.</td>
<td>To improve patient care processes and outcomes in specific healthcare settings</td>
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Understanding Research*

- Generate New Research OR Validate existing Knowledge Based on Theory
- How does it begin...
  - A compelling or “burning” question
  - What do we know about the phenomenon
- Comprehensive Review of Literature
  - Identifying knowledge gaps to provide the impetus for developing specific research question

- Quantitative Research
- Qualitative Research

* To develop new knowledge----when reviewing systematic review----What is the GAP in the research or evidence>
Understanding Evidence-Based Practice*

- EBP is the use the best evidence available to make patient-care decisions
- Evidence usually stems from research OR
  - May also evolve from clinical expertise as well as patient values
- Involves innovation ---findings and translating the best evidence into clinical practice
- STEPS:
  - Spirit of Inquiry
  - Ask clinical question
  - Collect best evidence
  - Critically appraise the evidence
  - Integrate evidence with clinical expertise, patient preference and values to make practice change
  - Evaluate the practice change
  - Disseminate the EBP results

* Seeks and applies the best clinical evidence (research) to make patient-care decisions-----Need to make determination about decision to MOVE forward
The purpose of QI projects is to **correct workflow processes, improve efficiencies, reduce variations in care, and address clinical administrative or educational problems.**

An example is assessing and implementing urinary catheter removal policies with a goal of removing catheters within a defined timeframe.
Exercises for Using Integrative/Systematic Reviews
Understanding Quality Improvement

- Purpose of QI: use a systematic, data-guided approach to improve processes or outcomes

- QI Methods—FOCUS-PDSA
  - Find a process to improve
  - Organize an effort to work on improvement
  - Clarify current knowledge of the process
  - Understand process variation and performance capability
  - Select changes aimed at performance improvement
  - Plan changes aimed at performance improvement
  - Plan the change; analyze current data and predict the results
  - Do it; execute the plan
  - Study (analyze) the new data and check the results
  - Act; take action to sustain the gains

*Uses systematic processes to improve processes and patient outcomes*
Evidence Based Practice....
Decision Point....

Is there enough evidence?

- Indications to conduct Research....
  - Themes repeated in several articles
  - Same citations & conclusions repeat among references
  - Can organize citations by similar themes
  - A number of articles have “high” quality study design
  - Availability of clinical practice guideline

- Indications to Move Forward....
  - No evidence of safety, or risks high or unknown
  - Untested in high-risk populations
  - No confidence in effect estimates
  - High burden
  - Incompatible with other values or preferences
Systematic reviews serve a key purpose in critically and objectively synthesizing all available evidence regarding a focused clinical question and can inform clinical practice and clinical guidelines.

Systematic reviews seek answers to specific questions, and the development of this question provides the basis for the search, selection and synthesis of studies.

* Uses systematic review to determine gaps in research to delineate and design research (“discovery of new knowledge”)
# JHNEBP Evidence Rating Scales

## STRENGTH of the Evidence

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<tr>
<th>Level</th>
<th>Description</th>
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<tr>
<td>Level I</td>
<td>Experimental study/randomized controlled trial (RCT) or meta-analysis of RCT</td>
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<td>Level II</td>
<td>Quasi-experimental study</td>
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<td>Level III</td>
<td>Non-experimental study, qualitative study, or meta-synthesis.</td>
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<td>Level IV</td>
<td>Opinion of nationally recognized experts based on research evidence or expert consensus panel (systematic review, clinical practice guidelines)</td>
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<tr>
<td>Level V</td>
<td>Opinion of individual expert based on non-research evidence. (Includes case studies, literature review, organizational experience e.g., quality improvement and financial data; clinical expertise, or personal experience)</td>
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## QUALITY of the Evidence

### A High

| Research | consistent results with sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence. |
| Summative reviews | well-defined, reproducible search strategies, consistent results with sufficient numbers of well defined studies; criteria-based evaluation of overall scientific strength and quality of included studies; definitive conclusions. |
| Organizational | well-defined methods using a rigorous approach; consistent results with sufficient sample size, use of reliable and valid measures. |
| Expert Opinion | expertise is clearly evident |

### B Good

| Research | reasonably consistent results, sufficient sample size, some control, with fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence. |
| Summative reviews | reasonably thorough and appropriate search; reasonably consistent results with sufficient numbers of well defined studies; evaluation of strengths and limitations of included studies; fairly definitive conclusions. |
| Organizational | Well-defined methods; reasonably consistent results with sufficient numbers; use of reliable and valid measures; reasonably consistent recommendations. |
| Expert Opinion | expertise appears to be credible |

### C Low quality or major flaws

| Research | little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn |
| Summative reviews | undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results; conclusions cannot be drawn |
| Organizational | Undefined, or poorly defined methods; insufficient sample size; inconsistent results; undefined, poorly defined or measures that lack adequate reliability or validity |
| Expert Opinion | expertise is not discernable or is dubious |

*A study rated an A would be of high quality, whereas, a study rated a C would have major flaws that raise serious questions about the believability of the findings and should be automatically eliminated from consideration.*

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EXEMPLARS
An Integrative Literature Review of Psychiatric Rapid Response Teams and Their Implementation for De-escalating Behavioral Crises in Nonpsychiatric Hospital Settings

Kristen R. Choi, PhD, MS, RN
Anna K. Omery, DNSc, RN, NEA-BC
Anne Marie Watkins, DNP, MSHCA, RN, CENP

OBJECTIVE: To synthesize articles exploring the implementation of psychiatric rapid response teams (RRTs) for behavioral crises in hospital settings.
## Psychiatric Rapid Response Teams

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<th>Implementation:</th>
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<tr>
<td>Citation</td>
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<tr>
<td>Pestka, E. L., Hatbera, D. A., Larson, L. A., Zwygart, A. M., Cox, D. L., &amp; Borgon Jr, E. E. (2012). Enhancing safety in behavioral emergency situations. Medsurg nursing, 21(6), 355.</td>
</tr>
<tr>
<td>Hospital Campuses: Community Hospital System in New Jersey Level 5/A</td>
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<tr>
<td>1 240-bed community hospital in Massachusetts</td>
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<td>1 500-bed Magnet facility in Southern California; piloted on medical pulmonary unit and then implemented in full hospital</td>
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Behavioral emergency response team (BERT) implementation improves patient safety, staff safety, and staff collaboration.

**Level 5A**

1. Military treatment hospital in Virginia, piloted on 1 unit and then expanded to 2 additional units.

**Behavioral emergency response team (BERT)**

- Patient responding to auditory or visual hallucinations or other impairments of reality, impeding staff’s ability to reason or effectively communicate with patient.
- Concern the patient’s psychotropic condition is deteriorating and that the patient and/or others may be in impending danger.
- Agitated, disruptive, threatening, and/or lashing out.

**Implementation**

- Used Iowa Model of Evidence-Based Practice (Iowa).  
- Training of CNS.
- In-service to medical unit from psychiatric MI nurse practitioner reviewing signs of behavioral escalation and early intervention and communication techniques to keep the patient and staff safe.

**Staff knowledge**

- Staff knowledge, confidence, and support varied for psychiatric patients.

**Assaults and security intervention**

- Assaults and security intervention decreased by 83%.
- Restraint usage decreased by 80%.

**Security**

- Security was often needed, when the BERT leader was able to quickly assess and determine if the situation could be deescalated safely without security intervention.

**Challenges**

- Gaining staff and leadership buy-in, particularly on the MI unit.
- Maintaining staff knowledge of the BERT and buy-in when staff frequently rotate due to deployments.
- Building support between BERT and staff.

**Verbal de-escalation**

- Therapeutic calming techniques.

**Non-physical environmental interventions**

- Implemented Iowa Model of Evidence-Based Practice.

**Mental health RN**

- Psychiatrist technician.
- Primary resident.
- Primary RN.
- Security (not often needed); security reported to the charge nurse, and within 10-15 minutes the BERT leader or charge nurse made the decision if security needed to stay for a show of support or if they could be dismissed.

**MH charge RN**

- Serves as the team leader and consults with a psychiatrist or primary provider as needed.
- Primary nursing staff administer medications or other interventions recommended by BERT RN.

**MH charge RN**

- The charge nurse for the patient’s unit notifies all BERT members of activation; the MI is provided a description of the situation.

**Group debriefing**

- After incident, primary RN completes a follow-up assessment 4-6 hours after the incident.

**MH charge RN**

- Participates in the debriefing, and potential issues are identified and discussed to prevent future incidents.
| 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). | 1458-bed level 1 trauma hospital in St. Paul, Minnesota | Level 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 | Medications Verbal de-escalation Restraints Consulting psychiatry team Transferring patient to psychiatric unit | Mental health nurse Mental health associate Security | Violence risk assessment tool was built into the nurses’ current workflow Direct care staff were trained using the online education program about the MIAHTAPS assessment tool | Staff assaults PERT calls Restraint usage | Physical restraints were reduced by 5% 75% of nurses used MIAHTAPS and 73% believed it was useful Nurses 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 have consistency in medication orders as well as increase the time of getting medication Orders Ongoing training for direct care staff with the education on behaviors to assess |
Nursing handovers: An integrative review of the different models and processes available

Shannon Bakon RN BN Lecturer  |  Lisa Wirihana RN BN RM MN Critical care Grad Cert. Senior Lecturer  |  Martin Christensen BSc(Hons) PG Cert (ICU) MSc MA PhD Associate professor  |  Judy Craft PhD Grad Cert. Senior lecturer

2.1  |  Aim

Taking into account the issues identified when an inadequate handover is received by an integrative literature review was undertaken to explore the different handover models and processes available and their efficacy in improving handover communication within nursing practice.
# Nursing HANDOVERS

## Handover Models:

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## Handover Processes:

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## Improvements in Handover Communication:

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<tr>
<td>Anderson et al., (2015).</td>
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<td>Bradley &amp; Mott, (2013)</td>
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<td>Burleton, (2013).</td>
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<td>Johnson, Jefferies &amp; Nicholls, (2011)</td>
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<td>Johnson, Sanchez &amp; Zheng, (2015)</td>
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<td>Kerr, D., Klim, S., Kelly, A., &amp; McCann, T. (2016)</td>
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<td>Lim &amp; Pajarillo, (2015)</td>
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<td>Liu, Manias &amp; Gerdz, (2011)</td>
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<td>McFetridge et al., (2007)</td>
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<td>Meth, Bass &amp; Hoke (2013)</td>
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<td>Porteous et al., (2009)</td>
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<td>Tucker and Fox, (2013)</td>
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Nursing Handoffs: A Systematic Review of the Literature

Purpose: To identify all articles on nursing handoffs in the United States, conduct a systematic review of research studies, identify the mnemonics used, and conduct a qualitative review of barriers to and strategies for effective handoffs that were mentioned in any of the articles.

• American Journal of Nursing
• 2010 Vol 11, No. 4
• DOI: 10.1097/01.NAJ.
# Nursing Handoffs

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<th>Barriers:</th>
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<th>Strategies:</th>
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<p>| GAPS in Research: |</p>
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<tr>
<td>Anderson CD, Mangino RR, Nurs Adm Q 2006;3(2):112-22</td>
<td>Implementation of bedside reporting on 1 unit. Researchers collected pre- and postimplementation patient- and staff-satisfaction data and financial data (measured as time over shift).</td>
<td>Nurses and patients on a 32-bed adult acute care unit at a 600-bed urban medical center; no counts were provided.</td>
<td>Observed a decrease in time over shift by more than 100 hours for 4 consecutive pay periods. Data on nurse and patient satisfaction were reported using bar graphs, which for the most part depicted improvements. However, no actual numbers, percentages, or statistical comparisons were reported.</td>
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<td>Baldwin L, McGinnis C, Nurs Manage 1994;29(9):61-4</td>
<td>A pilot study of change in shift report style from verbal to automated written. After in-service instruction, the written report process was pilot tested for 4 weeks. Then an 8-item questionnaire was used to assess satisfaction. The results were summed to create a total score.</td>
<td>Nurses on 1 medical and 1 surgical unit at Memorial Medical Center, Jacksonville, FL; no counts were provided.</td>
<td>High scores indicated staff acceptance. The mean score was 32 out of a possible 40 points. An informal survey of the pilot unit managers indicated that as much as 60% of incident end-of-shift overtime had been eliminated. A second questionnaire was given after additional changes were implemented. Results indicated that 85% preferred the written to the verbal report. Self-reported compliance with use of the new system was 90%.</td>
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<td>Barbara ML, et al, Nurs Manage 1998;29(6):66-7</td>
<td>6-month, 3-phase implementation of a new report system. Instead of taped report, all pertinent patient information was recorded in a binder located directly outside each patient’s room. Researchers collected pre- and postimplementation data.</td>
<td>Nurses; no counts were provided.</td>
<td>Patients’ medical histories were written on the Kar deserve 55% of the time before implementation and 100% of the time in phase 3. Required flow-sheet compliance went from 45% before implementation to 100% in phase 3. No catheter insertion dates were recorded 75% of the time before implementation and 95% of the time in phase 3.</td>
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<td>Bokak MS, Fugate K, Med surg Nurs 1994;30(2):128-32</td>
<td>6-step quality improvement project: 1. Identify intershift content 2. Identify current practice 3. Determine nurse satisfaction 4. Identify issues 5. Identify relevant and irrelevant data 6. Implement specified changes Time spent reporting was measured before and after implementation. Satisfaction with report was measured before implementation only.</td>
<td>Nurses on a 35-bed acute medical unit; 24 RNs were surveyed before implementation; 8 reports were randomly selected for follow-up audit; no other counts were provided.</td>
<td>Baseline (step 2): length of time spent reporting on individual patients varied from 5-13 minutes at designated hour. Baseline (step 3): two hours after receiving report, 24 RNs on 2 consecutive days were asked to describe satisfaction with report, quality of information received, and timeliness of report process; 87.5% indicated they were satisfied with report. The satisfaction survey wasn’t repeated after changes were implemented. After changes reports were completed “in a timely fashion”; and included less irrelevant data nurses stated that the nurses care plans were more useful. Eight reports were randomly selected for follow-up audit; these documented that nurses spent an average of 2.4 minutes per patient reporting at 8 am, 21.2 minutes at 3 pm, and 3.1 minutes at 11 pm. These time differences were not statistically significant.</td>
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- Identify the mnemonics used
- Barriers to handoff
- Strategies for effective handoffs
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<tr>
<td>Brown Lazzara PA, <em>Nurs Manage</em> 2004;35(8):48A-48B, 48D</td>
<td>Implemented an ED written report. Measured success and satisfaction after implementation.</td>
<td>ED nurses giving report to nurses on other units at Northwestern Memorial Hospital in Chicago; no counts were provided.</td>
<td>Use of the ED written report “yielded a 95% success rate in process completion and accuracy in 2002 and 97% in 2003. Delays related to telephone report [were] eliminated. In the 6 months following the initiative, a 70% improvement was noted on inpatient satisfaction surveys for the indicator ‘ speed of admission.’”</td>
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<td>Fraser LE, et al, <em>J Pediatr Nurs</em> 1991;6(5):310-6</td>
<td>Implemented the use of nursing care plans as the basis for intershift report. Collected post-implementation data.</td>
<td>16 of 25 nurses on a 25-bed medical-surgical school-age unit in a 331-bed urban children’s hospital in southern CA. Patients on the units were 4-12 years of age and had various acute and chronic diseases.</td>
<td>Questionnaire was administered 3 weeks after implementation. 10 respondents felt they could obtain most of the needed information from the care plan during the report; 15 felt that nurses used the care plan “since viewing the video and attending the class,” 11 felt they were more careful in checking work sites and solutions; 15 felt “there had been a significant improvement with the report, including the staff’s attitudes.” Two nurses felt that using the care plan was difficult when the RN was responsible for many patients. 6 months after implementation, a quality assurance evaluation was performed and, at this point, 10 nurses were questioned about their use of the care plan at intershift report. “Results showed there was 100% compliance” with the new system.</td>
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<td>Haig KM, et al, <em>Jt Comm J Qual Patient Saf</em> 2006;32(3):167-75</td>
<td>Preimplementation phone survey, implementation, and post-implementation data collection. Pre- and postimplementation data were collected but not concerning the same things.</td>
<td>Staff members at OSF St. Joseph Medical Center in Bloomington, IL; preimplementation phone survey included 10 staff members; no counts were provided for postimplementation data.</td>
<td>Baseline (before implementation): respondents to the phone survey were able to correctly describe the use of the mnemonic SBAR (Situation, Background, Assessment, Recommendation) 60% of the time. Authors report that use of SBAR reached a mean of 96% in fiscal year 2005 but do not describe how that was assessed.</td>
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<td>Hamilton P, et al, <em>Nurs Admin Q</em> 2006;30(3):295-9</td>
<td>4-hour classroom intervention to teach SBAR techniques. Pre- and posttest data were collected using the Agency for Healthcare Research and Quality survey on communication and patient safety, supplemented with 18 items on nurse-physician communication; 2 items measuring satisfaction with decision making, 7 items related to critical events, and additional single questions.</td>
<td>10 RN-to-baccalaureate nursing students and 13 labor and delivery nurses (total = 23) in a large metropolitan area in the Southwest participated in the intervention. Paired pretest and posttest data were available for 14 subjects.</td>
<td>None of the paired pretest–posttest differences was statistically significant.</td>
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<td>Kalisch BJ, et al. <em>Nurs Manage</em> 2007;38(4):16-18</td>
<td>Survey to determine what would constitute an effective shift report tool, followed by a 3-month period of using the new tool. A different survey designed to assess use and effectiveness was administered after the new tool had been used for 8 months</td>
<td>All nurses on 3 medical-surgical units at Parish Medical Center, Titusville, FL. The authors report a 50% return rate for the preimplementation survey, but do not report counts or return rate for the postimplementation survey.</td>
<td>In the postimplementation survey, 84% of the staff nurses felt that the tool “provides useful patient information” and 76% felt it “assists them in gaining a broad picture of the patient.” Regarding the 3 communication problems the tool was designed to address, 66% to 73% of nurses “noted an improvement.” Interviews “revealed that the tool resulted in more accuracy and less confusion,” “was highly efficient and saved [the nurses] time,” and made nurse-physician communication more effective. Nurses who felt the tool hadn’t been helpful “noted that [it] contained too much information” and some “felt certain information was repetitive.”</td>
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<td>Mikos K. <em>Nurs Manage</em> 2007;38(1):21-6</td>
<td>Implementation of a customized telephone-based handoff system. Collected time per patient report, before and after implementation. Nurses on a 55-bed unit at Provena Saint Joseph Medical Center, Mokona, IL; no counts were provided.</td>
<td>“The decrease in interruptions and distractions during handoffs reduced report time by nearly 70%, from an average of more than 6 minutes to less than 2 minutes per report. This has had a significant effect on incremental overtime, representing an annual savings of nearly $120,000.”</td>
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<td>Morahan ML, et al. <em>Nurs Manage</em> 1988;19(2):80</td>
<td>Implemented walking rounds, with formal evaluation after 5 months. Nurses and patients at the University Hospitals of Cleveland, OH; no counts were provided.</td>
<td>Questionnaires were returned by 95% of staff, “all overwhelmingly in favor of continuing the new system.” Incidental overtime was reduced by about 50%. Interviewed patients were reportedly “very positive about the nurses coming to their rooms.”</td>
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<td>Relay PJ, Stegniewicz SS. <em>Nurs Manage</em> 1989;20(9):54-6</td>
<td>Implemented a new reporting system using a written, problem-oriented form. Conducted retrospective and concurrent chart audits after implementation, administered staff survey and the head nurse conducted observations. Nurses on a 37-bed general medical unit and a 44-bed general surgical unit at Beth Israel Hospital, Boston. 54 nurses completed the survey; 10 randomly selected charts from each unit were reviewed before implementation and 10 more from each unit were reviewed after implementation.</td>
<td>After implementation of the new written form, nurses were initially dissatisfied. Identified problems included the following: “1. nurses experienced less of a sense of what the patients’ problems were; 2. writing was too time-consuming; 3. information was forgotten because it was read and not indexed.” After 3 weeks, positive feedback began to outweigh the negative. 10 randomly selected charts were reviewed on each unit from discharges occurring 3 months before the reporting change, and 10 more were reviewed after the change. The authors observed “a significant increase in the number of problem-oriented notes,” with this percentage rising from 37% to 71% on one unit and from 29% to 57% on the other. The percentage of narrative notes decreased to 3% on one unit and to 0 on the other. 4 months after implementation, 94% of staff felt that with the new system their reports were more concise; 91% felt it improved their ability to finish their work on time; 92% felt they were using time previously spent on report more effectively; 94% felt that call lights were answered more promptly; and 94% “declared themselves very pleased with the new system.” Only 1 respondent wanted to return to the old system. Regarding a concern that the change in format “might lead to poor staff relations,” 90% of staff didn’t think this had occurred. Head nurse assessments were favorable.</td>
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<tr>
<td>Shendell-Falik N, et al. J Nurs Adm 2007;37(2):95-104</td>
<td>Appreciative inquiry used to engage staff in identifying and building on their most effective handoff experiences. Collected preimplementation data in February 2005 and postimplementation data in June 2005 and again in August 2005.</td>
<td>ED nurses and nurses on an inpatient telemetry unit at Newark Beth Israel Medical Center, a 673-bed hospital in Newark, NJ; no counts were provided.</td>
<td>Patient satisfaction scores increased 10.2% overall, 9% with regard to nursing, 6.6% with regard to “personal issues,” and 23.3% with regard to ED nurses. The percentage of dialysis patients receiving nutritional assessment within 24 hours of arrival at the ED rose 11%. Completion of skin assessment in the ED went from 0 to 70%. Compliance with the cardiac enzyme regimen increased 9.2%, and medication administration—record compliance increased 81.8%. The percentage of telemetry patients who could be transported without a cardiac monitor went from 0 to 60%, saving “67.5 hours of nursing time in one month.” Nurses’ satisfaction and teamwork improved between 2.4% and 9.3%.</td>
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| Sidlow R, Katz-Sidlow RJ. Jt Comm J Qual Patient Saf 2006;32(1):32-6 | Nurses given electronic access to physicians’ computerized sign-out program and surveyed 1 month later. | Nurses on a pilot general medical unit at Jacobi Medical Center, a 538-bed hospital in Bronx, NY; 19 of 20 nurses responded to a survey. | Nurses were asked to rate the impact of “having access to and use of the computerized housestaff sign-out reports” in several areas, using a 5-point Likert-like scale (1 = worsened, 2 = slightly worse, 3 = no impact, 4 = somewhat improved, and 5 = greatly improved). Average ratings were as follows:  
- [ability to] identify responsible physician, 3.8  
- [ability to] identify patients’ do-not-resuscitate and medication allergy status, 4.4  
- [ability to] identify patients’ reason for admission, 4.8  
- [ability to] identify patients’ active clinical problems, 4.6  
- [ability to] identify anticipated changes in patients’ clinical status, 4.4  
- [ability to] develop an accurate daily nursing plan of care, 4.3  
- general ability to care for patients, 4.5  
- overall communication between physicians and nurses, 4.6  
- overall nursing morale, 4.3 | 8 |
<p>| Wilson NJ. Medsurg Nurs 2007;16(3):201-6, 200 | Implemented a handover template to be used with a telephone-based recording system (VoiceCare). 3 units were evaluated over a 5-month period beginning 1 month after forms were distributed, with no further intervention. The other 2 units received ongoing encouragement from the unit director, nursing educators, and the researchers. Data on report content were collected after implementation. | Nurses from 5 units at UPMC Shadyside Hospital, Pittsburgh, PA (262 shift reports). | Of 63 nurses informally surveyed, only 1 knew the written guidelines for report. The 262 shift reports, which came from all 5 units and from all shifts, were listened to by 4 volunteer nurses who recorded the presence of 13 predetermined items expected to be in each report. Results ranged from 10% presence to 100% presence. No statistical comparison by unit was conducted. | 7 |</p>
<table>
<thead>
<tr>
<th>Source</th>
<th>Design</th>
<th>Subjects</th>
<th>Results</th>
<th>Quality Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolanos R, Nurs Spectr (Fla Ed) 2008;16(2):22-3</td>
<td>Introduced bedside reporting. After 6 months, a 10 item questionnaire was given to parents of pediatric patients to determine how they felt about bedside reporting. To qualify, parents had to have participated in bedside reporting on at least 2 occasions.</td>
<td>50 sets of qualified parents of children on a pediatric medical-surgical unit at Miami Children's Hospital, Miami, FL, chosen at random.</td>
<td>Most (94%) parents &quot;strongly agreed that bedside reporting was informative,&quot; in terms of their child's &quot;condition and needs&quot;; 98% of parents strongly disagreed that the presence of another patient in the room affected their participation in bedside reporting.</td>
<td>6</td>
</tr>
<tr>
<td>Hays MM, South Online J Nurs Res 2002;3(3):1-14</td>
<td>Observed verbal and nonverbal behaviors and patterns of 16 nurse leader-follower dyads during shift report to identify supportive behaviors.</td>
<td>4 charge RNs (leaders) and 13 staff RNs (followers) from the 12-hour evening shift in a medical-surgical unit in the Southeast.</td>
<td>16 shift reports were videotaped in 19 days. In the 162 interactions, no supportive behaviors were demonstrated by the charge RN leaders; 11 supportive behaviors (6.8%), all nonverbal head nods, were demonstrated by the followers. No verbal statements of praise, support, reassurance, or concern were observed.</td>
<td>12</td>
</tr>
<tr>
<td>Keenan G, et al, Stud Health Technol Inform 2006;122:5804</td>
<td>3-phase cohort design: but because all the data reported here were collected at one point in time, this article is categorized as cross-sectional. Full design included the following: 1. baseline evaluation of the units; 2. training sessions; and 3. &quot;go live&quot; and continuous evaluation of the electronic care-planning method, Hands-on Automated Nursing Data System (HANDS). HANDS is an electronic database used to create dynamic nursing care plans that are updated at the end of each shift and used during shift report.</td>
<td>14 nurses.</td>
<td>After training sessions in the use of HANDS, 14 nurses were observed giving report in 3 of the 4 study units. All observed nurses continued to use the pre-“go live” report forms and none used HANDS.</td>
<td>8</td>
</tr>
<tr>
<td>Source</td>
<td>Design</td>
<td>Subjects</td>
<td>Results</td>
<td>Quality Score</td>
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</table>
| Richard JA.  
*Image J Nurs Sch* 1988;20(1):46 | Monitored intershift reports for congruence and omissions of predetermined pertinent items. The investigator listened to intershift report and then went to see each patient. | 57 intershift reports were observed on 19 medical-surgical units in an 800-bed metropolitan hospital. 534 patients were visited, and 2,952 entries were obtained for analysis of congruence. | Overall congruence was 70%, with 70% congruence for the day, 72% for the evening, and 68% for the night shifts. Overall omission rate was 11.76%—9% for the day, 10% for the evening, and 16% for the night shifts. The number of omissions on night shift reports was significantly higher ($\chi^2 = 22.50, df = 2, P = 0.005$). The most common omission was in the category of intake and output. Overall incongruence was 12.36%—14% for the day, 12% for the evening, and 11% for the night shifts. The most common incongruence was in the category of IV sites. The rate of omissions resulting in incongruence was 5.99%, with 5% for the day, 7% for the evening, and 6% for the night shifts. There was a significant relationship between the mode of report and lack of congruence ($\chi^2 = 9.24, df = 2, P = 0.01$). Taped reports were more likely than were the face-to-face reports to produce omissions, although taped reports were less likely to produce incongruence. | 11 |

| Qualitative study | Qualitative study of 12 videotaped shift reports, using a dramaturgical focus on emotions and social roles. | 12 evening shift reports, with 4 charge nurses and 13 staff nurses on a medical-surgical ICU in an urban hospital in the southeast. | All reports contained a ritualized opening and closing. The analysis revealed that during report, staff played roles "according to their personalities, the expectations of their roles, and the role patterning within the group." It also showed that the charge nurses controlled the report by "guiding the interactions and directing the length of time spent on individual patients, the duration of report, and the emotional ebb and flow." | 5 |
Summary.......
RRT Structure:
- Psych RN or Trained RN’s
- RN +Security Staff+ Provider/ Pharmacy Staff

Team interventions:
- De-escalate/least restrictive
- Medication Management
- Physical Management

Outcome Measures/Results
- # of RRT calls/ Security Calls
- Types of Interventions---e.g., seclusion
- Staff injuries
- Staff knowledge, attitudes, confidence r/t managing behavioral crises

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Table 1. Psychiatric RRT Activation Criteria

<table>
<thead>
<tr>
<th>Behavioral/Psychiatric Activation Criteria</th>
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</thead>
<tbody>
<tr>
<td>Staff members are concerned with, worried about, overwhelmed with, or threatened by patient’s behavior</td>
</tr>
<tr>
<td>Disruptive behavior upsetting unit function</td>
</tr>
<tr>
<td>Sexual threats/assaults and/or any other unwanted physical contact (spitting, intentional exposure by patient to bodily fluids)</td>
</tr>
<tr>
<td>Patient behavior representing imminent or actual danger to themselves or others</td>
</tr>
<tr>
<td>Failure to respond to redirection</td>
</tr>
<tr>
<td>Threats or perceived threats against self, others, or property</td>
</tr>
<tr>
<td>Actively agitated patients (ie, yelling, threatening, demanding, cursing)</td>
</tr>
<tr>
<td>Patient responding to visual and/or auditory hallucinations or other impairment of reality impeding staff’s ability to redirect or effectively communicate with patient</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biomedical/Pharmacological Activation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient in distress with deteriorating condition</td>
</tr>
<tr>
<td>Patients who are unable to maintain control of their behavior in the clinical environment (confusion, delirium, chemical impairment)</td>
</tr>
<tr>
<td>Drug or alcohol withdrawal leading to withdrawal symptoms or acting out behavior</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Activation Criteria</th>
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</thead>
<tbody>
<tr>
<td>Concerns about behaviors related to placement of a 72-h (involuntary) hold</td>
</tr>
<tr>
<td>Threatening to leave hospital against medical advice</td>
</tr>
<tr>
<td>Elevated scores on a violence risk assessment tool</td>
</tr>
</tbody>
</table>
Nursing Handover

5 | CONCLUSION

The use of an effective handover model can enhance the handover processes to ensure the provision of appropriate patient-centered care. The standardisation of a model within a health care facility that is easily transferable from one specialised area to another is the optimal choice or preference of tool that should be readily implemented and used. Currently, the only model that appears to have been successfully implemented across various specialties is adapted versions of the iSoBAR model in verbal bedside handovers. A structured process may improve communication skills, the accuracy of information transmission, foster critical thinking, and prompt nurses to implement informed evidence-based care that considers patient safety through error prevention.
<table>
<thead>
<tr>
<th>Mnemonic</th>
<th>Disciplines or departments using it</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Ps(^{25})</td>
<td>Nurses</td>
<td>P: Purpose: why is the patient here? What priorities does she or he have? P: Picture: what results are we looking for, both short term and long term? How can we picture the patient’s current condition? P: Plan: what did or didn’t work? P: Part: what part can you play during the next shift?</td>
</tr>
<tr>
<td>5Ps(^{26}), version 1(^{26}), P</td>
<td>General nurses, perioperative nurses</td>
<td>P: Patient: identify P: Plan: plan of care P: Purpose: purpose of plan: clinical findings supporting plan of care P: Problems: abnormal findings, patient scale, vital signs P: Precautions: isolation, falls, etc.</td>
</tr>
<tr>
<td>5Ps(^{26}), version 2(^{26})</td>
<td>Perioperative nurses</td>
<td>P: Patient: identify P: Precautions: allergies, isolation, falls, specialty bed P: Plan of care: fluids, intake, output, vs access P: Problems: assessment, review of systems, pain scale, etc. P: Purpose: goals to be achieved</td>
</tr>
<tr>
<td>AIDC(^{26})</td>
<td>Perioperative and perioperative staff, including nurses, anesthesiologists, physicians, and surgical technologies</td>
<td>A: Acknowledge the patient I: Introduce yourself D: Duration of procedure (estimate it) E: Explanation (explain the process and what happens next) T: Thank you (say “thank you for choosing our hospital!”)</td>
</tr>
<tr>
<td>GONE(^{27})</td>
<td>Nurses</td>
<td>G: Greeting R: Respectful listening R: Review R: Recommend or request more information R: Reward</td>
</tr>
<tr>
<td>I PASS the BARON(^{18})</td>
<td>General nurses, perioperative nurses, physicians</td>
<td>I: Introduction: introduce yourself and state your role P: Patient: name, identity, age, sex, location A: Assessment: present chief complaint, vital signs, symptoms, diagnosis S: Situation: current status and circumstances, including code status, level of certainty or uncertainty, recent changes, response to treatment S: Safety concerns: critical lab values and reports, socioeconomic factors, allergies, alerts (such as for falls, need for isolation) (Ch1) B: Background: comorbidities, previous episodes, current medications, family history A: Actions: details which were taken or are required and provided level estimate T: Timing: level of urgency, explicit timing, prioritization of actions O: Ownership: who is responsible (nurse, physician, team)? Include patient or family responsibilities N: Next: what happens next? (Are there any anticipated changes in patient’s condition or plan of care? What is the plan? Are there any contingency plans?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All</th>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Situation</td>
</tr>
<tr>
<td>B</td>
<td>Background</td>
</tr>
<tr>
<td>A</td>
<td>Assessment</td>
</tr>
<tr>
<td>R</td>
<td>Recommendations</td>
</tr>
<tr>
<td>Q</td>
<td>Questions</td>
</tr>
<tr>
<td>N</td>
<td>Name of patient, diagnosis, room number</td>
</tr>
<tr>
<td>U</td>
<td>Unique variances identified on the individual care plan (such as critical lab values, pain management)</td>
</tr>
<tr>
<td>T</td>
<td>Tubes (i.e., nasogastric tubes, catheters, drains, ostomy tubes)</td>
</tr>
<tr>
<td>S</td>
<td>Safety concerns (such as fall risks, medication reconciliation)</td>
</tr>
</tbody>
</table>

**Table 2.** Handoff Mnemonics Identified in Articles Describing Nursing Handoffs, January 1, 1987, to August 4, 2008

Thirty-three (35%) articles included the use of a handoff mnemonic. Fourteen different mnemonics were identified, with SBAR (for Situation, Background, Assessment, Recommendation) cited most frequently (25 of 33 articles; 76%; for details, see Table 2 online).
Strategies for Effective Handoffs

Strategy Categories
Communication skills
General communication
- Maintain patient and family confidentiality
- Be concise but thorough in conveying essential information
- Convey information clearly; ask questions if something isn’t clear
- Keep report patient centered
Preparation
- Manage your time so that you’re prepared to give report
- Gather necessary materials (such as patient charts, your own shift notes
- Transfer of responsibility
- Verify that the person receiving report understands and accepts
- Delay transfer if there are concerns about patient status or stability
Language
- Speak clearly and at a moderate pace
- Use clear, specific language
- Keep all remarks objective; avoid judgmental statements
- Avoid the use of jargon, acronyms, or abbreviations

Standardization strategies
Standardize the process
- Provide opportunity to ask and respond to questions
- Develop guidelines, tools (templates, forms, checklists, scripts),
- policies, and procedures
- Use a tool to ensure that essential information is consistently
- Tailor report tools as appropriate for different areas or situations
- such as change of shift, patient transfer between units
- Report information in the same order every time
- Use a verification process (such as reading loudly) to ensure that
- information is both received and understood
- Develop a teamwork contract and have team members sign it
- Use a mnemonic:
- During face-to-face communication
- Use interactive questioning
- During handoff rounds or bedside report
- Check equipment
- Check for missing information or ask additional questions
- Include patient and family in discussion of plans and goals
Meeting evaluative or audit the process
- Create an evaluation tool
- Use spot checks
- Provide direct feedback as soon as possible
- Modify the process as needed
- Focus on system problems

Technologic solutions
Use an electronic (computerized) handoff system
- Give report in front of computer (makes it easy to look up relevant
- information)
- Use an audio- or videotaped report
- Plan ahead what you want to say
- Report information in the same order every time
- Stop the recorder when necessary to cut out distractions
- Listen to your taped reports occasionally to identify areas
- for improvement
- Ask a respected colleague to critique your report
- Use a telephone-based voice technology system

Environmental strategies
- Limit interruptions and distractions
- Create a specific place for report that’s well lit and quiet
- Maintain patient and family privacy
- Allow sufficient time

Training and education
- Use real-life examples (scenarios, stories) in class and “what-if”
- scenarios during practice
- Use role-playing to teach effective handoff skills
- Teach attentiveness and listening skills
- Address hierarchical and social issues (for example, by discussing
- how to communicate effectively with those above and below
- you in the hierarchy, how social and cultural norms affect communication)
- Discuss and address human factors (such as stress, fatigue, sensory or information overload)
- Provide adequate refresh training or education
- Create posters, pocket cards, web-based resources, and other
tools to reinforce handoff skills

Staff involvement
- Involve staff in the development of guidelines, tools (templates,
- forms, checklists, scripts), policies, and procedures
- Involve staff in the development of a training program

Leadership
- Have consistent expectations for compliance
- Facilitate nurse–physician dialogue to identify problems and find
- solutions
- Allow adequate time to plan an implementation strategy for a
- new handoff process
- Find early adopters and champions to help demonstrate effective-
- ness
- Link the shift handoff process to performance evaluation
BARRES TO EFFECTIVE HANDOFFS

Barrier Categories

Communication barriers
General communication problems
- Omissions (missing or incomplete information)
- Errors (incorrect, extraneous, duplicate, or irrelevant information)
- Miscommunication (misunderstood information)
- Inaccurate recall of information
- Inability to contact handoff nurse if follow-up questions arise
- Failure to communicate the importance of certain items
- Failure to understand which information is essential
- Report becomes too routine; attention lapses occur
- Disorganized report
- Report relies only on documentation; patient’s current status isn’t shared
- Report includes judgmental statements
- Staff members interrupt each other
- Idle chatting during handoffs
- Illegible handwriting

Social and hierarchical problems
- Relational problems (such as those caused by a lack of peer support, a lack of mutual respect)
- Problems associated with the hierarchical structure of the health care team
- A “culture of blame” that inhibits questioning
- Confusion about roles and responsibilities of team members
- Problems communicating with physicians

Cultural issues
- Language barriers (difficulty understanding each other; culturally different uses of a word or phrase)
- Ethnic barriers (ethnic differences in communication patterns)

Problems associated with standardization
- Lack of standardization (for example, forms in use aren’t standardized; shifts or units use different forms, processes, or documentation systems)
- Problems with the standardized tools or systems used
- Lack of adequate policies and procedures relevant to handoffs
- System in use isn’t clearly defined or understood
- Staff resistance to changes in handoff system
- Lack of handoff research and data to support best practices
- Lack of financial resources to implement recommended changes
- Lack of leadership support

Problems associated with mnemonics (more than one handoff mnemonic in use; inadequate training in or reinforcement for using the mnemonic)

Equipment issues
- Limitations associated with the communication medium (telephone, e-mail, paper, computerized system, audio- or videotape)

Environmental issues
- Interruptions
- Distractions
- Multitasking during report
- Chaotic environment where report is given
- Too much noise
- Poor lighting
- A lack of privacy; difficulty ensuring confidentiality

A lack of or misuse of time
- Time constraints (insufficient time allotted for handoffs)
- Process used is too time consuming
- Report is too long

Difficulties related to complexity of cases or high caseloads
- High-acuity patients or those with severe illnesses (more complex handoffs)
- Too many patients (less time for handoffs)
- Increasing volume of patient information
- Increasingly complex care environment
- Workforce structure doesn’t support adequate handoffs
- Emergent patient condition occurs during handoff

A lack of training or education
- Staff receives inadequate or no training in handoffs

Human factors
- Too few nurses on a shift or unit
- Stressful or overlong shifts (can cause fatigue, forgetfulness)
- Shift changes are busy times; reports may be rushed
- Human limitations (such as the limits of human memory)
- High nursing turnover, resulting in less stable or less cohesive teams, poor team dynamics
- Quality of information can be affected by emotion (such as feeling overwhelmed)
- Sensory and information overload
Areas for Further Nursing Handoffs Research

Outcomes data are needed in the following content domains.

Knowledge
- Document the accuracy of the description of the handoff protocol.
- Document the accuracy of examples of the use of the protocol.

Attitudes
- Report level of satisfaction with the handoff system.
- Report level of comfort with using the handoff system.
- Report level of satisfaction with handoffs received.

Skills
- Demonstrate ability to use the handoff system.
- Document the accuracy of information provided during handoffs.
- Document the extent to which received handoffs contain all needed information.

Process outcomes
- Record usage of handoff system.

- Describe details of the handoff process.
- Document the accuracy of information (its content and quality).
- Using process outcomes, answer the question “What are the best educational and implementation strategies?”

Clinical outcomes
- Describe errors related to handoffs (rates and types of errors).
- Document reduction of handoffs-related errors as a surrogate measure for improved safety.
- Define the elements of handoffs that lead to the best patient outcomes.
- Compare different protocols, educational strategies, or implementation strategies (or a combination of these) to determine which is most effective in which setting.