Development of a Tele-ICU Postorientation Support Program for Bedside Nurses

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The end of the formal unit orientation program is a stressful time of adjustment for nurses hired into critical care without previous critical care experience. Although most units offer reassurance that experienced colleagues will provide the needed guidance, consistent support may not be available for many reasons. Development of a structured postorientation program designed to provide support and ongoing feedback to bedside nurses who have completed orientation is one strategy to assist nurses through this period of adjustment. The experience and expertise of the tele–intensive care unit nurse are excellent resources that can be called on to provide the needed support. (Critical Care Nurse. 2015;35[4]:e8-e16)

Although telemedicine dates back to the 1970s, when hospital caregivers reached out to off-site experts for consultation, it has only recently become a subspecialty of critical care practice (the tele–intensive care unit, or tele-ICU). Today, the tele-ICU operates with the goal of providing a “safety net” of additional surveillance and support to hospital-based critical care staff and to ultimately enhance outcomes for critically ill patients. Advocate Health Care, a 12-hospital Midwestern health care system with 15 critical care units, has had a functioning tele-ICU for more than 10 years. The tele-ICU staff includes 45 tele-ICU nurses (eRNs); is typically staffed with 7 eRNs, 2 physicians, and 2 clerical assistants; and routinely monitors up to 250 patients on each shift. Over the years, the focus of the tele-ICU has evolved from the management of and intervention in crises to the implementation of standardized evidence-based practices and the monitoring of key result areas. The bedside nursing staff and the eRNs have developed a collaborative relationship and the bedside nurses appreciate the additional expertise and support provided by the eRNs. In this article, we describe a postorientation program that was developed to meet the needs of novice nurses who have successfully completed their critical care unit orientation with a preceptor but who lack confidence in their performance and feel a need for additional support. We discuss not only how the need for this program arose, but also strategies for designing and implementing the program and the lessons learned from its operation.
Program Need and Development

The need for the program was first identified when the managers of 2 critical care units with a spike in 1-year turnover rates identified from exit interviews that lack of support after the formal orientation program was a key factor contributing to nurses’ resignations. Research supported this finding. A survey of nurses’ perceptions of first-job experiences revealed that 30% of new-to-practice nurses left within the first year and more than one-half left within the first 2 years. One of the factors most often cited as influencing a nurse’s decision to leave the field was a stressful work environment that offered little guidance and support.

Although it is common to have structured orientation and internship programs in place to support novice critical care nurses for a defined period of time, it is rare to have programs in place to support nurses after their orientation period has ended. However, it is this immediate postorientation period that is often the most overwhelming for still-novice nurses who are unaware of their knowledge deficits and who lack in areas of clinical competency. According to Benner’s model, a novice nurse progresses to the “advance beginner” level of nursing practice after gaining some clinical experience, but progresses to the “competent” level only after about 2 years of practice. Given the increase in 1-year turnover, it was thought that a structured support program following the formal orientation would meet the needs of the “advanced beginners” and help novice nurses feel more confident as they began their practice after orientation.

All of the health care system’s critical care units provide a competency-based critical care unit orientation with a preceptor. The length of the orientation is dependent on the orientee’s previous experience and his or her ability to complete orientation competencies. Before development of this postorientation program, once an orientee finished the orientation program, the orientee immediately began practicing without any formal support program in place for guidance.

The idea for the postorientation program first occurred when the managers of the 2 units with the greatest need collaborated with the tele-ICU manager. Together the development of an innovative, structured postorientation support program for select nurses was explored that used the eRNs’ expertise to provide coaching and support to novice nurses. After developing a pilot program between the 2 units and the tele-ICU, the program was presented to the leadership of the eICU and the 2 pilot units. After leadership support was obtained, the program was immediately implemented.

Program Objectives

The goal of the program is to support novice critical care nurses as they transition out of orientation and into a more advanced level of practice and self-confidence. Unlike the orientation program, which focuses on validating competencies at the bedside, the postorientation program focuses on providing novice bedside nurses who lack critical care experience with a structured coaching relationship with experienced eRNs working in the remote tele-ICU immediately upon completion of orientation.

Program objectives, identified to meet the goal of moving the nurse to a higher level of practice, are based on the nurse competencies from the AACN Synergy Model for Patient Care.

Program Development

Initially, the establishment of a mentor-mentee relationship between the bedside nurses and the eRNs was considered. Mentoring relationships can enhance a nurse’s success in practice and have been linked to ongoing quality standards and nursing professionalism. However, because the eRNs and the unit’s nurses primarily work 12-hour shifts, their schedules could not be consistently matched; therefore a mentor-mentee relationship, which requires an ongoing long-term and consistent commitment, was not possible. Instead, a select group of eRN “coaches” who could provide structured support to the nurses in the participating unit was identified. The tele-ICU manager selected 10 eRN coaches for the program. The selected eRN coaches all have prior experience as critical care preceptors and have a mean of more than
The advanced beginner is beginning to discern patterns in clinical situations but is inconsistent in relating important data about a patient to prioritizing care. According to Benner’s model, the advanced beginner has some clinical experience and is beginning to discern patterns in clinical situations but is inconsistent in relating important data about a patient to prioritizing care. Benner advises that effective strategies for development of the advanced beginner include monitoring performance, which ensures that important information about a patient is not forgotten; assisting nurses in establishing priorities on the basis of the patient’s clinical needs; and providing nurses with an opportunity to reflect on their experiences. The program format provides eRN coaches with an opportunity to meet these needs.

Before assuming the role of coach, the eRNs were provided with the program goals and objectives, an overview of the AACN Synergy Model for Patient Care, directions for using the daily evaluation tool, and an explanation of the program’s structure.

Before the Program

Two weeks before the end of the unit orientation, a meeting is scheduled with the orientee, the clinical nurse manager of the orientee’s unit, the tele-ICU manager, and the unit advance practice nurse (APN) or educator. This meeting is designed to introduce the orientee to the program and to review the program’s goals and objectives. Each orientee is provided with a welcome letter and a copy of the daily evaluation tool (Figure 1), which is used by the eRN coaches throughout the program. The unit APN/educator and the orientee each independently complete the postorientation assessment (Figure 2). These assessments are then compared to identify the bedside nurse’s educational needs, to plan coaching by the eRNs, and to guide the APN/educator in making patient-care assignments for the bedside nurse.

In addition, a 4-hour structured session in the tele-ICU is scheduled before the end of the unit orientation to provide the bedside nurse with a better understanding of tele-ICU resources. The session includes a 1-hour didactic overview that is conducted by the tele-ICU manager or a charge nurse to discuss the tele-ICU team’s roles, responsibilities, and workflow. System-wide and individualized unit/tele-ICU initiatives are reviewed and specialized technology is explained. During this session, the bedside nurse also spends time with an assigned eRN coach at his or her workstation and completes planned activities. The bedside nurse evaluates the objectives of the 4-hour experience (see Table) and receives continuing education hours for the session. This experience at the tele-ICU provides the foundation for the ongoing collaborative relationship between the unit nurse and the tele-ICU staff.

Program Implementation

The postorientation program begins with the first shift that the bedside nurse works after orientation without the preceptor. The eRN coach refers to the completed postorientation assessments in order to focus on the individual needs identified for the bedside nurse’s professional growth. The eRN notifies the unit’s charge nurse that support and collaboration will occur throughout the shift. The eRN contacts the bedside nurse both at the beginning and the end of the shift. The purpose of the first shift contact is to review and discuss patient problems, shift priorities, and the plan of care for the unit nurse’s assigned patients. The purpose of the end-of-shift contact is to review the plan of care to determine if the shift goals were met, to discuss what may have been learned, and to identify any areas for further professional development. The unit nurse is encouraged to call the eRN coach at any time during the shift to ask questions, to get advice on procedures, to discuss family dynamics, or even to request visual supervision with equipment setup or nonemergent procedures. The calls at the beginning and end of shift are initiated by the eRN, and the times are incorporated into both the tele-ICU and unit workflows. These calls generally last about 5 to 10 minutes, and they have effectively met the needs of the bedside nurses. The coaching provided by the eRN does not detract from the assistance that is available from unit resources; rather, it is another layer of support guaranteed to be there no matter how busy the unit may get. Occasionally the eRN coach needs to address urgent tele-ICU responsibilities and an alternative eRN coach
## Daily evaluation tool.

<table>
<thead>
<tr>
<th>Independent = I</th>
<th>Minimal coaching = MIN</th>
<th>Maximal coaching required = MAX</th>
<th>Comments/Examples</th>
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<td></td>
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<td>AACN Synergy Model Rate Level (1/3/5)</td>
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### Clinical Judgment
- Provides a succinct review of patient problems, plan of care, shift priorities, eg (SBAR)
- Collects and interprets patient data (assessment, labs, diagnostic tests).
- Demonstrates ability to focus on key elements of the patient’s case and sort out extraneous details.
- Recognizes limits and seeks help appropriately.

### Clinical Inquiry
- Recognizes change in patient situation (eg, deterioration, crisis; seeks help as needed to identify patient’s problem).
- Responds appropriately to changes in condition.
- Articulates the rationale for patient interventions on the basis of evidence-based practice, policies and procedures, protocols.
- Demonstrates ability to access resources online (policies, procedures, protocols) or others on the interdisciplinary team.

### Advocacy and Moral Agency
- Works on behalf of patient and family; considers patient’s values and incorporates in care, even when differing from personal values; demonstrates give and take with patient’s family, allowing them to speak and represent themselves when possible.
- Advocates ethical conflict and issues from patient/family perspective, able to separate from own.

### Caring Practices
- Creates a compassionate, supportive, therapeutic environment for the patient/family; able to anticipate needs.

### Collaboration
- Maintains appropriate communication with tele-ICU coach.
- Makes appropriate referrals regarding patient care/concerns--Social Work, Case Management, Pastoral Care,…
- Communicates in a timely manner with physicians/ ePhysicians, charge nurse.

### Facilitation of Learning
- Document patient/family education

### Systems Thinking
- Anticipates needs of patients/families during periods of transition, including admission, transport to other units for diagnostic testing or procedures, transfer to other units.

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### Figure 1
Daily evaluation tool.
is asked to coach the unit nurse after being given background information.

The eRN coach completes a daily evaluation of the unit nurse at the end of each shift. The eRN coach reviews the daily evaluation with the tele-ICU manager. The tele-ICU manager then sends the evaluations electronically to the unit APN/educator for review. At the end of each week, the unit APN/educator reviews the evaluations provided by the eRN coaches with the unit nurse. The unit nurse then provides feedback on the program, which specifies their individual professional “wins” and their opportunities for improvement. They also provide the APN/educator with feedback on the effectiveness of the support program. The APN/educator then shares the unit nurse’s feedback with the tele-ICU manager and the eRN coaches to facilitate communication between the staff and leaders of both units. The APN/educator ensures that the nurse’s patient assignments align with the nurse’s postorientation assessment of performance and ongoing weekly evaluations and adjusts patient assignments as needed.

The program has specified “check points” of 30, 60, and 90 days. At these check points, a decision is made about whether or not to continue the postorientation program. The bedside nurse again completes a self-assessment and meets with the APN/educator and tele-ICU manager to discuss the nurse’s progress and to compare the nurse’s initial postorientation assessment with his or her more recent assessment. The decision is then made collaboratively whether to continue or to conclude the program. If the decision is made to continue the program, the unit nurse completes another postorientation assessment, which is then reevaluated at the end of the next 30-day period. When performance gaps have been bridged and the unit nurse expresses confidence in his or her performance, the nurse completes the final program evaluation. The unit manager, tele-ICU manager, APN/educator, eRN coach, and unit nurse meet one final time to debrief and provide verbal feedback on the overall program and postorientation experience of the unit nurse. This is typically a face-to-face meeting with all parties.

**Program Evaluation**

Metrics developed to measure the program’s success include the following:

- Progression of performance demonstrated on the postorientation assessments by unit nurse participants and APNs/educators,
- Progression of performance evidenced on daily evaluations, and
- Retention rates of unit nurse participants.

Thus far, 16 nurses have completed the program and 14 of the 16 remain after 1 year of practice. Select comments received on participants’ program evaluations include the following:

- “My conversations with my tele-ICU coach provided a safe haven to discuss questions and concerns.”
- “My coach helped me refine my time management skills.”
Figure 2 Postorientation program assessment.
<table>
<thead>
<tr>
<th>Nurse Competencies*</th>
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<tbody>
<tr>
<td><strong>Caring Practices (Create compassionate, supportive, therapeutic environment)</strong></td>
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<tr>
<td><strong>Level 1 (Competent)</strong></td>
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<td><strong>Level 3</strong></td>
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<td><strong>Level 5 (Expert)</strong></td>
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<tr>
<td><strong>Collaboration (Work with others in a way that promotes each person’s contribution)</strong></td>
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<td><strong>Level 1 (Competent)</strong></td>
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<td><strong>Level 5 (Expert)</strong></td>
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<td><strong>Systems Thinking (Body of knowledge and tools that allow management of resources)</strong></td>
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<td><strong>Level 5 (Expert)</strong></td>
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<td><strong>Response to Diversity (Recognize patient/family differences and incorporate into plan of care)</strong></td>
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</table>
- "I know there is someone on the other side of the camera to help me even when the program is complete."
- "I’m not afraid to call the tele-ICU for help because of my coaches."
- "Coaches have helped me implement appropriate protocols and follow evidence-based practices."
- "I would call my coach before I would call the attending physician in the middle of the night."

**Table**  Objectives of the tele-intensive care unit (tele-ICU) clinical experience

After completing the tele-ICU clinical experience, reading the handouts, and completing the review questions, you will be able to

1. Discuss the goals of a tele-ICU program.
2. Describe primary responsibilities, tasks, role of technology, and the usual workflow of the tele-ICU team.
3. Describe various clinical outcomes monitored by the tele-ICU.
4. Discuss potential barriers to implementation of a successful tele-ICU program and factors most likely to lead to a successful program.
5. Identify strategies your unit might adopt for optimizing the role of the tele-ICU in the management of your patients.
6. Successfully answer the written questions on the basis of the assigned reading and program objectives.
“We could never have on-boarded as many new
novice nurses without the program.” (unit manager)

Incidental positive program results include increased
collaboration between program participants, unit staff,
and tele-ICU staff. The inclusion of the program has also
improved the hospital’s recruitment and retention of
new critical care staff. As with any significant change or
program implementation, leaders’ commitment is essen-
tial not only for program development, but, more impor-
tantly, for program sustainability and success.10

Lessons Learned

Postprogram evaluations and interviews have pro-
vided information for program improvement and modi-
fication. Based on the program reviews, provision of the
eRN coaches with additional education, including edu-
cation on effective coaching skills, communication skills,
adult learning principles, and critical thinking skill devel-
opment is planned. The tele-ICU manager is also part-
nering with the System Organizational Development
Department to arrange for eRNs to attend available
classes on coaching skills. Because it can be challeng-
ing for an eRN to coach more than 2 unit nurses per
shift, the number of unit nurses has been limited to 2 per
eRN coach. Additionally, because of the number of unit
nurses in the program, eICU staff and eRN coaches need
to be flexible in their assignments. At times, this requires
eRN coaches to work with a unit nurse who is not from
the eRN’s assigned unit. The coaching sessions have not
resulted in overtime for either eRNs or unit nurses. Addi-
tional critical care units are seeking to participate in the
program, however, because of the limited availability of
eRN coaches, a method of prioritization for participation is
planned.

The original daily evaluation tool was adapted from a
document in the Philips VISICU Program11; this original
tool was thought to be too similar to the unit’s orienta-
tion skills assessments and was later revised to reflect
competencies included on the postorientation assess-
ment. Accountability for organizing the weekly evalua-
tions and “check point” meetings needed clarification,
and it was determined the tele-ICU manager would be
the best person to oversee these meetings.

Summary

The progression from novice to advanced begin-
ner to competent level of critical care nursing practice
according to the Benner model generally takes at least 2
years of experience in critical care,5 although time alone
does not guarantee competent practice. The eRN is in a
unique position to be an additional team member who
can provide immediate support and guide decision mak-
ing of nurses who have just completed the formal ori-
entation period. Hospitals that use tele-ICUs have the
opportunity to develop a structured program that builds
on the collaborative relationship between the tele-ICU
and the hospital unit for support of nurses during this
important postorientation period. CCN

Acknowledgments

The authors thank the eRN coaches of the Advocate Health Care eICU for their
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None reported.

Letters

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middle column and then “Submit a response.”

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