

THE SYNERGY MODEL IN PRACTICE

Promoting Synergy in Progressive Care

Margaret M. Ecklund, RN, MS, CCRN, APRN-BC
Deborah C. Stamps, RN, MS, GNP

Progressive care units (PCUs) are serving as a safe portal for patients who are transferred from the intensive care unit (ICU). Recently, patients who are now cared for in PCUs were cared for in the ICU. However, health-care systems have changed. In the past decade, challenges for resources occurred, which, combined with the aging population and accompanying healthcare risks, have limited the ICU environment to extremely ill patients.

PCUs in each hospital have a predetermined mission with a written structure for care. Specific admission criteria determine what patients are appropriate for care in the PCU. Specialty units may be for telemetry, with cardiac focus, or ventilator-dependent patients and those with complex pulmonary needs. Classification tools are used to record the amount of time nurses spend caring for a specific patient; for example, the amount of time to

bathe the patient, get him or her out of bed, ambulate, and administer treatments and medication. The time needed to reassure the patient and family, provide emotional support, and develop a plan of care is not included in these classifications.

In this article, we describe a 26-bed pulmonary step-down unit in a 526-bed community hospital in western New York. The patient profile for this unit includes hemodynamic stability with ongoing need for supervision of airway needs, such as patients who have undergone surgery or survived a critical illness and have ongoing need for ventilator support, and with a tracheostomy tube in place. The patient profile also includes those with a respiratory illness who require frequent assessment, treatments, medications, and complex oxygen delivery such as noninvasive assisted ventilation (eg, continuous positive airway pressure or bilevel positive airway pressure).

NURSE COMPETENCIES

The Synergy Model reflects nursing care that integrates knowledge, skills, experience, and attitudes to meet the needs of patients and families. Synergy is created when a patient's characteristics are matched with the nurse's competencies (Tables 1A and 1B).

Because of recruitment of novice nurses to the PCU, the trend of turnover to other care areas, and the demographics of the nursing shortage, a review of the profile of nurse competencies is imperative with the Synergy approach. Recruitment to the PCU often involves a high number of new graduates or nurses with fewer than 3 years of clinical experience. The learning curve of entry into practice is steep. To provide a context for the discussion, in the past 10 years, nurses employed in the PCU demonstrated level 3 and level 5 competencies (Table 1A). In the past year, the PCU was faced with nurses who had level 1 and level 3 competencies. Expertise and clinical judgment varied from shift to shift. The level 1 and level 3 nurses were seen mainly on the day and evening shifts and the level 5 nurses were scheduled for the night shift.

Clinical judgment falls between levels 1 and 3. The novice nurse performs best with structure, matching formal knowledge with clinical events to make decisions. The primary focus of new graduates is to complete tasks. Nurses with a level 5 competency encourage nurses who are at level 1 to meet patient goals and unit-specific goals. As the nurse gains confidence and knowledge, he or she can progress toward more complex data acquisition and will be able to grasp the bigger picture.

Margaret M. Ecklund is an acute care nurse practitioner at Via Health - Rochester General Hospital in Rochester, NY.

Deborah C. Stamps is a nurse manager at Via Health - Rochester General Hospital in Rochester, NY.

To purchase reprints, contact The InnoVision Group, 101 Columbia, Aliso Viejo, CA 92656. Phone, (800) 809-2273 or (949) 362-2050 (ext 532); fax, (949) 362-2049; e-mail, reprints@aacn.org.

Table 1A Nurse competencies¹

| | | | |
|---|---------|-------------------|---|
| Clinical judgement Level 1 Competent | Level 3 | Level 5 Expert | Clinical reasoning, which includes clinical decision making, critical thinking, and global grasp of the situation, coupled with nursing skills acquired through a process of integrating formal and experiential knowledge |
| Advocacy/moral agency Level 1 Competent | Level 3 | Level 5 Expert | Working on another's behalf and representing the concerns of the patient, family and community; serving as a moral agent in identifying and helping to resolve ethical and clinical concerns within the clinical setting |
| Caring practices Level 1 Competent | Level 3 | Level 5 Expert | The constellation of nursing activities that are responsive to the uniqueness of the patient and family and that create a compassionate and therapeutic environment, with the aim of promoting comfort and preventing suffering. These caring behaviors include, but are not limited to, vigilance, engagement, and responsiveness |
| Collaboration Level 1 Competent | Level 3 | Level 5 Expert | Working with others (eg, patients, families, and healthcare providers) in a way that promotes and encourages each person's contributions toward achieving optimal and realistic patient goals. Collaboration involves intra- and interdisciplinary work with colleagues |
| Systems thinking Level 1 Competent | Level 3 | Level 5 Expert | The body of knowledge and tools that allows the nurse to appreciate the care environment from a perspective that recognizes the holistic interrelationship that exists within and across healthcare systems |
| Response to diversity Level 1 Competent | Level 3 | Level 5 Expert | The sensitivity to recognize, appreciate, and incorporate differences into the provision of care. Differences may include, but are not limited to, individuality, cultural differences, spiritual beliefs, gender, race, ethnicity, disability, family configuration, lifestyle, socioeconomic status, age, values, and beliefs surrounding alternative/complimentary medicine involving patients, families, and members of the healthcare team |
| Clinical inquiry or innovator/evaluator Level 1 Competent | Level 3 | Level 5 Expert | The ongoing process of questioning and evaluating practice, providing informed practice and innovating through research and experiential learning. The nurse engages in clinical knowledge development to promote the best patient outcomes |
| Facilitator of learning or patient/family educator Level 1 Competent | Level 3 | Level 5 Expert | The ability to facilitate patient and family learning |

Novice PCU nurses show a level 1 ability to resolve ethical and clinical concerns. As they gain more experience, level 3 abilities are developed and patients' values are integrated in the plan of care, even when these values differ from the nurses' own. As nurses achieve a higher level of competency, patients' ability to participate and vocalize care

choices is higher. Advocacy is a characteristic that is taught by level 5 nurses to the level 1 and level 3 nurses.

Caring practices include nursing activities that are responsive to the uniqueness of the patient and family and that create a compassionate environment. Nurses promote comfort and presence, using vigilance, engagement, and

responsiveness. At level 1, the novice nurses look at the standard of care, progressing toward level 3 by responding to more subtle needs and changes. The more seasoned nurse tailors the caring practice to the individual, rather than to the routine.

The nurse characteristic of collaboration, working with others to promote and encourage participa-

THE SYNERGY MODEL IN PRACTICE

Table 1B Patient characteristics¹

| | | | | |
|----------------------------------|---------------------------------|----------------------|--|---|
| Resiliency | | | | The capacity to return to a restorative level of functioning using compensatory coping mechanisms; the ability to bounce back quickly after an insult |
| Level 1 | Level 3 | Level 5 | | |
| Minimally resilient | Moderately resilient | Highly resilient | | |
| Vulnerability | | | | Susceptibility to actual or potential stressors that may adversely affect patient outcomes |
| Level 1 | Level 3 | Level 5 | | |
| Highly vulnerable | Moderately vulnerable | Minimally vulnerable | | |
| Stability | | | | The ability to maintain a steady state equilibrium |
| Level 1 | Level 3 | Level 5 | | |
| Minimally stable | Moderately stable | High stable | | |
| Complexity | | | | The intricate entanglement of two more systems (eg, body, family, therapies) |
| Level 1 | Level 3 | Level 5 | | |
| Highly complex | Moderately complex | Minimally complex | | |
| Resource availability | | | | Extent of resources (eg, psychological, social) that the patient, family, and community bring to the situation |
| Level 1 | Level 3 | Level 5 | | |
| Few resources | Moderate resources | Many resources | | |
| Participation in care | | | | Extent to which the patient and family engages in aspects of care |
| Level 1 | Level 3 | Level 5 | | |
| No participation | Moderate level of participation | Full participation | | |
| Participation in decision making | | | | Extent to which the patient and family engages in decision making |
| Level 1 | Level 3 | Level 5 | | |
| No participation | Moderate level of participation | Full participation | | |
| Predictability | | | | A summative characteristic that allows one to expect a certain trajectory of illness |
| Level 1 | Level 3 | Level 5 | | |
| Not predictable | Moderately predictable | Highly predictable | | |

tion from family and team members, is evident in the novice nurse through learning and participation in discussions. As the nurse reaches level 3, he or she seeks out the opportunity to be taught, coached, or mentored and is an active participant in team meetings and conferences. Collaboration is a competency that senior nurses possess at levels 3 and 5.

Systems thinking is the body of knowledge that allows a nurse to appreciate a care environment from a perspective that recognizes the holistic relationships that exist within healthcare sys-

tems. This body of knowledge is limited at level 1, because at this level the novice nurse sees the patient and family as isolated within the environment. At level 3, nurses develop strategies based on components and connections to negotiate and use resources beyond themselves. At level 5, nurses can help coach other nurses to develop this attribute.

In responding to diversity, novice nurses (at level 1) can assess cultural diversity and deliver care according to their own belief. As nurses mature in practice and approach level 3, the ability to

inquire and adapt care to diverse needs is demonstrated. Some nurses may be at level 3 and level 5 with clinical competence but at level 1 with cultural diversity.

Clinical inquiry, the ongoing process of questioning practice and innovation through research and experimental learning, is most commonly seen at level 1. At this level, standards and guidelines are followed and problems and changes are recognized. As nurses progress to level 3, they question policy and guidelines and seek information and guidance to improve care by comparing alternatives.

As the facilitator of learning for patients and families, at level 1, nurses follow planned programs and education as a task, with a limited knowledge of the totality of learning needs. At level 3, they are able to adapt planned programs and can integrate different levels of teaching.

PATIENT CHARACTERISTICS

Using the Synergy Model definitions,² the patients in the PCU have a profile of moderate to minimum resiliency, level 1 to 3 (Table 1B). They are moderately vulnerable, yet somewhat protected. Moderate stability is the characteristic in which a steady state is maintained for a limited period with increasing response to therapies. Patients demonstrate moderate to high complexity with patient and family dynamics, relative to the ongoing nature of illness and less predictable outcome. Family dynamics become altered as a result of prolonged hospital stays or repeated hospital admissions. Resource availability varies depending on the patient's finances, social system, and knowledge. Patient participation in care is at a moderate to full level in progressive care; the patient and family dependency is relative to the complexity of the patient's needs. There is a moderate to full ability to participate in decision making, depending on complexity of illness. Predictability can vary greatly, with a moderate to more uncertain range (level 1 to 3), when the individual does not follow a pathway or predicted course.

STRATEGIES FOR SUCCESS

The manager of the unit hires nurses who wish to work with this challenging patient population. During orientation, basic competency is verified through the adult learning process. Preceptors optimally are at a level 3, or higher, to provide an optimal learning plan.

In assessing the staff for implementation of the Synergy Model, the manager determined that primary nursing did not meet the needs of patients, because of the less developed ability and skill. The skill mix, including novice registered nurses (RNs), licensed practical nurses, and unlicensed assistive personnel, was not sufficient to meet the needs demonstrated by the patient population (Table 2).

Care delivery redesign focused on implementing a modified team approach and utilizing the principles of the Synergy Model.² The following support people assisted in implementing the synergy effect:

- A nurse manager with a master's degree and 17 years of nursing experience demonstrated level 5 competencies. Her role was to coach, support, and guide all staff members, ensuring that staff had appropriate education, tools, and resources necessary to deliver safe patient care. The nurse manager provided input into patient care and implemented creative ways to staff the unit. Educational offerings for all staff members, which are cornerstones to the Synergy Model, were team building and delegation. Future educational offerings will be cultural

diversity and research utilization. Performance improvement for this year involved the entire staff. Staff provided education, data collection, and reports to track improvements. The manager advocated nursing care that led to optimal outcomes for patients and families, and offered staff satisfaction.

- An advanced practice nurse, in the nurse practitioner role, offered direct care coordination. She provided coaching, guidance, and feedback, as well as input into direct care decisions. The advanced practice nurse possessed level 5 characteristics and 20 years of clinical experience as a staff nurse. In addition, she had a master's degree.

- A clinical resource nurse, with 6 years of experience and a baccalaureate degree, demonstrated level 5 competencies, provided guidance with orientation, implementation of new procedures, and ongoing staff competency. She was available for

THE SYNERGY MODEL IN PRACTICE

Table 2 Resources for implementing the Synergy Model

Nurse manager
Advanced practice nurse
Clinical nurse specialist
Nurse practitioner
Clinical resource nurse
Charge nurse
Supervisor/off-shift director
Multidisciplinary team
Respiratory therapist
Occupational therapist
Physical therapist
Speech therapist
Care manager/social worker
Clinical preceptors

Other staff members who contributed to synergistic care included licensed practical nurses who possessed a competency level of 3 to 5. Unit technicians, who had a level 3 to 5 competency, provided expert direct care. Many unit technicians were in nursing school. Additionally, unit secretaries possessed level 5 competencies in their contributions to the care of patients, through their support role at the desk.

For this specialty PCU, multidisciplinary therapists contributed to the synergy of holistic care. Respiratory therapists contributed to ventilator management and safe care for complex pulmonary patients. The physical therapist contributed to the mobility needs, assessing and providing a treatment plan for the team to follow for progressive mobility and potential ambulation. The occupational therapist provided an assessment and treatment plan for increased self-care with activities of daily living and fine motor skills. The speech thera-

pist provided assessment and treatment plans for communication and oral intake. Each therapist provided specialized input, which nurses could integrate into the plan of care and facilitate learning.

TEAM NURSING STRATEGIES

Team nursing is one of many options for delivery of care in a PCU. It is necessary to provide intermittent reevaluation for effectiveness and options for best outcomes. Creative options provide a change in delivering synergistic care. Table 3 provides examples of team nursing assignments and synergy.

The unit has a capacity for 26 patients; the patients are divided into 3 groups for staffing on day and evening shifts. Two groups consist of 9 patients and 1 group has 8 patients. The patients may display a range of complexity and care needs.

The staff was divided into 3 teams, caring for each of the patient groups. Team 1 was composed of an RN with 2 years of experience, a licensed practical nurse with 15 years of experience, and a unit technician with 4 years of experience. This team cared for 8 patients: 2 required ongoing ventilator support, 2 required constant supervision to prevent falls, 2 were on telemetry monitoring, 1 was monitored to rule out myocardial infarction, and 1 patient was on a pneumonia pathway. The patient assignment of team 2 was the busiest and most complex. This team cared for 9 patients: 4 patients

required ongoing ventilator support, 1 required tracheostomy collar oxygenation and frequent suctioning, 1 received bilevel positive airway pressure, and 3 patients were in the unit for general medical diagnoses. Team 3 cared for 8 patients: 3 required ongoing ventilation, 2 required tracheostomy collar oxygenation and suctioning, and 3 were admitted with general medical diagnoses.

Team 2 members were able to care for the more complex patients because of their higher-level competency. Team 2 included an RN who was fairly new, with about 2 years of experience, but who was able to direct and give care to the patients. This nurse was paired with a licensed practical nurse who had 6 years of experience and a unit technician who will be a nurse shortly. The team members learned from each other and relied on each other for support and feedback. Team 3, with 2 nurses, would be considered a high-functioning team; each of the 2 RNs had almost a year of experience. They required much support from the charge nurse who had more than 20 years experience and was at a level 5 competency.

When assigning staff, it is imperative to look at the competency level of the nurses on the team. Beginning level nurses are supported with a nurturing environment so that they will develop from novice to expert. Matching the skill competency of the nurse with the complexity of the patient care meets the goal of best patient care and outcomes.

Table 3 Assignment plan

| Team 1 | Team 2 | Team 3 |
|-----------------------------------|-----------------------------------|-----------------------------------|
| Registered nurse, level 3 | Registered nurse, level 5 | Registered nurse, level 1 |
| Licensed practical nurse, level 5 | Licensed practical nurse, level 3 | Licensed practical nurse, level 1 |
| Unit technician, level 3 | Unit technician, level 3 | Unit technician, level 3 |

Call-in situations and rising patient acuity create a synergy crisis. If the charge nurse examines the assignments and finds that safe care can not be delivered with current staffing patterns, the nurse manager or off-shift supervisor/director is consulted to determine the best means of securing resources, creating reassignments, and utilizing buddies or resources for caregiving.

CASE STUDY 1

D.S., a 68-year-old man with a history of chronic obstructive pulmonary disease and type 2 diabetes, had had a pneumonectomy 4 months earlier for lung cancer. He had been weaned from the ventilator and still had pulmonary secretions and functional weakness. He had an uncuffed tracheostomy tube, which was plugged to allow him to utilize his upper airway, but still had the airway available for suctioning. He received supplemental oxygen via nasal cannula at 4 L/min.

D.S. developed hypoxia, with an oxygen saturation of 82%; dyspnea; and a rapid heart rate of 135. His electrocardiogram showed atrial flutter. An RN, hired 6 months earlier as a new graduate, recognized the change and notified the nurse practitioner. The nurse practitioner evaluated the patient and ordered a chest radiograph, arterial blood gas analysis, telemetry monitoring, and serum electrolyte test. She also collaborated with the cardiologist and ordered intravenous digitalis. The respiratory therapist hyperinflated and suctioned D.S. for moderate amounts of thick tan mucus and sent a sample for Gram stain and culture. The respiratory therapist also administered albuterol nebulizer as necessary for wheezing and dyspnea.

The charge nurse was alerted to the change in condition, and reevaluated the change in resiliency and stability of D.S. She discussed the needs of the patient with the staff on the team on that shift. An RN, who had 4 years of experience and demonstrated competencies approaching a level 3, was asked to assume a lead role in the assessment and care of D.S.

As the above interventions were initiated, D.S.'s heart rate began to decrease and dyspnea improved. The physical therapist and the speech therapist deferred activity because the patient's condition changed. The family was included in teaching and changes in the plan of care. With this team approach, synergy was created to achieve successful patient care. D.S. became more stable within 24 hours; telemetry monitoring was discontinued after 48 hours of stable heart rhythm and he resumed his path to healing and recovery.

CASE STUDY 2

R.F. had had a coronary artery bypass graft 4 months earlier. Postoperative complications included sternal wound infection and chronic renal failure, requiring hemodialysis. He had been weaned from the ventilator but was functionally deconditioned and required frequent assessment for suctioning of his tracheostomy tube. With a serum albumin level of 17 g/L, R.F. showed malnourishment despite optimal replacement via feeding tube. He required dialysis 3 times a week, and was exhausted after treatments.

The charge nurse and nurse practitioner evaluated R.F. to be a stable, predictable resilient level 1, with some chance for instability because of his airway needs. A nurse who had been an RN for 6 months was caring for him. She was capable of assessing and organizing routine care, but had a more difficult time adapting to the need to accomplish morning activity before afternoon dialysis. A licensed practical nurse on her team, with 15 years of experience, was able to contribute to the synergy of care by helping to organize the team's care and morning activity for R.F. When he was able to exercise before dialysis, he demonstrated increased endurance.

THE SYNERGY MODEL IN PRACTICE

CONCLUSION

With the growing trend of staffing challenges and need for care in PCU, continued creative strategies are needed to deliver safe, effective care to critically ill, yet stable, patients. The Synergy Model is an effective guide for decision making and to evaluate care. Further research into the model will help validate this model for ongoing use. †

References

1. AACN Certification Corporation. The synergy model of certified practice. Available at: <http://www.certcorp.org>. Accessed July 1, 2002.
2. Curley MAQ. Patient-nurse synergy: optimizing patients' outcomes. *Am J Crit Care*. 1998;7:64-72.