Health care continues to face a significant shortage of registered nurses. This problem is not new and is a constant threat to the nursing profession (Donelan, Buerhaus, DesRoches, Dittus, & Dutwin, 2008). Increasing nurse retention and satisfaction by creating a culture of professional development in health care institutions is one way to combat this shortage. Professional development refers to a constant commitment to maintain one’s knowledge and skill base. Increasing professional development opportunities in the health care setting has been shown to affect nurse retention and satisfaction. Several approaches have been developed to increase professional development among nurses. However, for the most part, these are “one size fits all” approaches that direct nurses to progress in lock step fashion in skill and knowledge acquisition within a specialty. This article introduces a milestone pathway tool for registered nurses designed to enhance professional development that is unique to the individual nurse and the specific nursing unit. This tool provides a unit-specific concept map, a milestone pathway template, and a personal professional development plan.


abstract

The nursing shortage continues to be a significant threat to health care. Creating a culture of professional development in health care institutions is one way to combat this shortage. Professional development refers to a constant commitment to maintain one’s knowledge and skill base. Increasing professional development opportunities in the health care setting has been shown to affect nurse retention and satisfaction. Several approaches have been developed to increase professional development among nurses. However, for the most part, these are “one size fits all” approaches that direct nurses to progress in lock step fashion in skill and knowledge acquisition within a specialty. This article introduces a milestone pathway tool for registered nurses designed to enhance professional development that is unique to the individual nurse and the specific nursing unit. This tool provides a unit-specific concept map, a milestone pathway template, and a personal professional development plan.


Health care continues to face a significant shortage of registered nurses. This problem is not new and is a constant threat to the nursing profession (Donelan, Buerhaus, DesRoches, Dittus, & Dutwin, 2008). Increasing nurse retention and satisfaction by creating a culture of professional development in health care institutions is one way to combat this shortage.

Professional development refers to a constant commitment to maintain specific skill levels and career paths. This commitment ensures that a nurse’s skills and knowledge are current and relevant (Lannon, 2007). Professional development allows nurses to increase skill levels and advance through the levels of competence as described by Benner (1984). Competence implies that a nurse is accountable to society for an ongoing commitment to remain current and safe in the profession of nursing (American Nurses Association, 2000). Professional development can be as specific as skills training or as broad as enhanced personal development. The commitment to professional development is essential for a nurse to be able to deliver safe and effective health care (Gould, Drey, & Berridge, 2007). Professional development requires a personal pledge to lifelong learning (Lannon). Each nurse must take responsibility for personal, professional development (Twaddell & Johnson, 2007).

Professional development is significant to nursing and health care institutions. Meaningful professional development opportunities offered at nurses’ places of employment may increase nurse retention (Ulrich, Buerhaus, Donelan, Norman, & Dittus, 2005). In a national nursing survey reviewed by Ulrich et al., 64% of the nurses who planned on leaving their positions in the next 3 years responded that they would consider staying if their employer offered more opportunities for professional development. Retention is imperative. By the year 2020, the deficit of registered nurses may be as great as 285,000 (Donelan et al., 2008). Much effort has been made to recruit new nurses. Sign-on bonuses, extra paid vacation time, and tuition reimbursement plans have been offered and have been effective. However, many
experienced nurses stop working around the age of 53 (Buerhaus, 2007). Retention efforts are essential to help maintain the nurse work force (Ulrich et al.).

Andrews (2004) reported that continuing opportunities for professional development must be provided for nurses to have the skills necessary to provide quality patient care. Professional development is needed so that nurses can keep up with the technological and scientific changes that are occurring in health care settings. In a literature review, Erenstein and McCaffrey (2007) determined that encouraging professional development and increasing professional development opportunities for nurses leads to a positive work environment and may increase nurse retention.

Professional development also increases job satisfaction. This is important to health care institutions because nurses who have higher job satisfaction levels have been reported to provide quality, safe, cost-effective patient care (Buiser, 2000; Perry, 2008). Nurse satisfaction rates can be a predictor of turnover rates (Sochalski, 2004). Employers who understand this relationship can take purposeful action to promote job satisfaction and retain their nurses (Perry).

Magnet status is given to hospitals that meet the guidelines set out by the American Nurses Credentialing Center (ANCC, 2008a). Fourteen forces of magnetism are listed and considered essential for excellence. To provide a clear model of the essentials, the ANCC has streamlined these 14 forces into five components (ANCC, 2008b). Professional development is listed as one of the essential forces in the structural empowerment component. Magnet hospitals have demonstrated better patient outcomes, safer patient care, increased autonomy, and greater nursing satisfaction (Funderburk, 2008; Laschinger, Almost, & Tuer-Hodes, 2003). Gould et al. (2007) state that professional development is important because it increases safe nursing care.

Nurses face barriers in advancing their professional development. Night work, staff shortages, heavy workloads, poorly defined concepts of nursing, and personal commitments all create barriers to professional development (Gould et al., 2007; Jantzen, 2008). Given these barriers, it is crucial that health care institutions provide guidance to help nurses develop personalized, unit-specific professional development plans (Tourigny & Pulich, 2005). Partnerships between health care institutions and their nurses will increase the success of such plans (Tweddell & Johnson, 2007).

An institutional culture must be created that encourages professional development. Culture is the sum of the beliefs and values that shape an organization (Nelson, 2006). Culture can dictate how work is completed. An organizational culture that values professional development is essential (Bally, 2007). For a health care institution to create a culture of professional development, all stakeholders must agree that such a culture has value. Also, an infrastructure must be created to support this culture. Professional development in the hospital setting assumes a partnership between the institution and the individual that promotes lifelong learning. Professional development activities can enhance knowledge and ensure that skills and abilities remain current and relevant. Effective professional development activities are self-motivating and valued by individuals. They are perceived as mutually beneficial to the nurse and the institution.

THEORETICAL FRAMEWORK
Knowles’ Adult Learning Theory

Knowles’ (1978) Adult Learning Theory claims that adults learn differently from children. This difference should be identified and addressed in professional development for health care workers. Knowles’ Adult Learning Theory is applicable to the development of learning opportunities for registered nurses.

Knowles labeled the differences in adult learning andragogy. Andragogy deals with how science and art assist adult learners in a special way. The goal of educators should be to guide adult learners to meeting their learning needs and reaching their goals. There are six basic assumptions of andragogy (Knowles, 1978). The first assumption is called self-concept. This means that adults need to be self-directed. The second assumption addresses the issue of experience. Adults bring their past experiences to the learning environment. The third assumption is readiness to learn. Adults learn when they feel the need to know the information or when they feel the increase in knowledge will help them accomplish a task more effectively. The fourth assumption is orientation to learning. As adults mature, they apply knowledge learned immediately. Adults learn based on an immediate problem or task, and this is related to the fifth assumption—motivation. As adults mature, the motivation to learn becomes intrinsic. The sixth assumption is the need to learn. To be motivated, adults must know the reason why they should learn something.

These six assumptions are essential to the creation of the milestone pathway tool. They drive the creation of the tool that helps facilitate forming professional development goals that are significant to the individual and specific to the nursing unit. The tool encourages self-direction and takes into account experience level. Understanding the assumptions allows creation of a tool that is appropriate for adult learners.
Figure 1. Milestone pathway concept map for an intensive care unit. ICU = intensive care unit; RN = registered nurse; CE = continuing education; EKG = electrocardiogram; CRRT = continuous renal replacement therapy; IABP = intra-aortic balloon pump; VAD = ventricular assist device; CABG = coronary artery bypass graft surgery; ECMO = extracorporeal membrane oxygenation.
For educators of adult learners, Knowles suggested a specific process to facilitate learning. O’Shea (2002) outlined that this process would include creating an inviting environment or atmosphere; developing a means for mutual planning; evaluating learners’ needs and interests; enabling learners and educators to work together to create learning objectives based on learners’ needs and interests; designing activities to achieve objectives and manage a pattern of learning opportunities; and evaluating with learners how objectives have been achieved.

Benner’s Practice Levels
Each nurse has unique educational and experience levels. Benner (1984) identified five levels of clinical nursing practice that are important when evaluating educational needs and abilities. They are novice, advanced beginner, competent, proficient, and expert. Understanding these practice levels and determining them for individual nurses are important to effective professional development. Recognition of these practice levels can guide the creation of appropriate education and professional development packages. Nurses are often frustrated with available professional development offerings and support because they do not match their ability and experience level.

A TOOL FOR PROFESSIONAL DEVELOPMENT
A milestone pathway was created to enhance professional development. This milestone pathway provides each nursing unit with a customized tool and each nurse with a personalized professional development plan. The tool was created using the principal assumptions of Knowles’ (1978) Adult Learning Theory and incorporates the practice levels described by Benner (1984). Although Fink (2003) is not included as a theorist, his work involving significant learning experiences is also used in creating this tool.

To implement the program, a project coordinator works with the nurse manager to outline the specific expectations for the unit. To personalize the pathway for the unit nurses, the following information is needed: types of unit-specific experiences of the nurses; progression of tasks and skills; and mandatory learning activities in the unit. The coordinator uses this information to create a personalized milestone pathway. All types of nursing units can use this tool.

Initially, a concept map is created (Fig. 1). This provides a visual of three important concepts: orientation experiences, unit experiences and progress, and leadership opportunities. These three concepts are modified to fit the specific nursing unit, making the tool unique. All nurses enter the unit through an orientation program. Orientation includes classroom activities and precepted clinical rotations. These are followed by clinical days with a mentor. The length of orientation varies by the experience levels of nurses. Educational classes provided by the institution may or may not be required for nurses. Nurses may enroll in classes for educational credit at the institution or regionally and nationally throughout their careers. Regarding unit experiences and progress, as indicated in Figure 1, nurses in the intensive care unit have experiences such as caring for transplant patients or ventricular assist devices. These experiences are unique to that unit. The concept of leadership opportunities examines those at the unit, hospital, and professional levels. Figure 1 emphasizes the many opportunities to enhance professional growth.

A milestone pathway template details the expected professional growth for the nurse (Table). It provides a unit-specific chart that outlines the nurse’s practice level and expected skill base as well as offers suggestions to help the nurse succeed in meeting the expectations. Benner’s practice levels are key in the creation of this template. A nurse with 6 months of experience who is practicing with a mentor is exemplified in the Table. The template outlines for the nurse that caring for a patient with an intra-aortic balloon pump will be expected in the next 6 months. The template offers clear information to lead the nurse to the proper class for meeting this expectation. It also outlines mandatory requirements for the nurse, such as an annual review. The clear, concise chart provides the nurse with valuable information and facilitates professional development activities.

Next, a personal professional development plan milestone pathway is created that allows each nurse to set professional development goals (Fig. 2). Fink (2003) believes that setting goals and using reflective dialogue will increase learning and therefore enhance professional development. The milestone pathway is completed with a facilitator who encourages reflective dialogue about short- and long-term goals. The facilitator can be the coordinator of the project, the nurse manager, or one of the leadership members of the specific unit. Once these goals have been identified, ideas to meet them are generated.

This project is introduced to all of the nurses at staff meetings and online. A review of the unit-specific concept map, milestone pathway template, and personal professional development plan must be completed individually with each nurse. The process begins when a new employee is hired. The pathway is introduced and then maintained for a current employee during the annual review.

One-on-one reflective dialogue is missing from many professional development plans. However, such dialogue
### Intensive Care Unit Milestone Pathway Template

<table>
<thead>
<tr>
<th>Age (in Years)</th>
<th>Practice-level expectations</th>
<th>Suggested ICU skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 6 months</td>
<td>Care for basic ICU patient with preceptor guidance</td>
<td>Preceptor guidance with monitoring, interventions, and independent practice in a simulated environment</td>
</tr>
<tr>
<td>6 months to 1 year</td>
<td>Increasing independence in caring for basic ICU patient with preceptor or mentor guidance</td>
<td>Mentoring and independent practice in a simulated environment</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>Practice guided by policy and procedures</td>
<td>Focus on expanding knowledge and skills in a new environment</td>
</tr>
<tr>
<td>2 to 3 years</td>
<td>Care for basic ICU patient plus beginning to expand to complex patients with help of peers</td>
<td>Consults with unit experts</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>Care for complex ICU patient</td>
<td>Assumes primary role in emergency situations</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>Beginning to be a mentor on unit</td>
<td>Confident in care provision</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>Very involved with patient and family issues</td>
<td>Acts as unit leader and mentor</td>
</tr>
</tbody>
</table>

#### Mandatory experiences and suggested classes

- **Mandatory experiences**:
  - Preceptor workshop
  - Sedation for procedures

- **Suggested classes**:
  - Central lines
  - Pacemakers
  - IABP introductory class
  - Cardiothoracic surgery
  - VAD
  - CRRT
  - Preceptor workshop
  - Sedation for procedures
  - Wound care
  - Spanish for providers
  - Perspectives on pain
  - Research days
  - Writing for publication

**Note.** An annual review is mandatory, as are modules, which change each year according to need. Conferences may include didactic format, case studies, interactive learning. There are evidence-based topics, which are updated yearly. RN = registered nurse; IV = intravenous; ICU = intensive care unit; PA = pulmonary artery; IABP = intra-aortic balloon pump; CT = cardiothoracic; CRRT = continuous renal replacement therapy; VAD = ventricular assist device; ECMO = extracorporeal membrane oxygenation; SQ = subcutaneous; PHTN = pulmonary hypertension.
Figure 2. The personal professional development plan milestone pathway allows each nurse to set professional development goals.
is an important part of creating a culture of professional development. Institutions should have an interest in helping their nurses meet their personal goals. The milestone pathway is one approach to helping nurses meet their goals.

Creating a means for nurses to advance their individual professional development is essential for retention and satisfaction. The milestone pathway gives nurses a personalized plan, knowledge of unit expectations, and methods for meeting personal goals as well as unit goals. The reflective dialogue is a powerful way to increase knowledge and advance individual professional development (Fink, 2003).

Evaluation of the professional development tool is essential. Pre- and postsurveys of the milestone pathway will be completed to assess its impact on individual nurses’ professional development. The surveys will determine whether professional development activities have increased as a result of participation in the project. Many institutions have developed standard retention and satisfaction surveys that will be helpful in evaluating the milestone pathway.

There are limitations to this professional development project. The success of the project is linked to building momentum within the individual nursing unit. The unit nurse must commit to completing surveys, reading professional development materials, and taking part in a one-on-one professional development session to set individual goals. The leadership team of the unit must commit to emphasizing the importance of the tool and facilitating its use. Given the demands on nurses, time will be the greatest limitation.

CONCLUSION
Creating a culture in which nurses feel encouraged to grow professionally should be emphasized in all health care settings. Increasing nurses’ opportunities for professional development has proven helpful in increasing nurse retention and satisfaction and the quality of care provided. The milestone pathway is one tool that encourages such growth.

The milestone pathway produces a customized guideline for each nursing unit. Through personalized plans, nurses are able to establish goals that are specific to their needs and desires. The tool is unique because it is unit specific and also personalized for each nurse. Concepts developed in Benner’s practice levels, Knowles’ Adult Learning Theory, and Fink’s significant learning experiences are merged, creating a plan that is specific and appropriate for individuals. A pilot project study is being conducted in a cardiovascular intensive care unit that will help to determine whether the tool is functional and effective.

**key points**

**Professional Development**

1. Creating a culture in which nurses feel encouraged to grow professionally should be emphasized in all health care settings.

2. Increasing professional development opportunities in health care settings has been shown to affect nurse retention and satisfaction.

3. A milestone pathway tool was developed to enhance the professional development of registered nurses. This unique tool provides a unit-specific concept map, a milestone pathway template, and a personal professional development plan.

**REFERENCES**


