ABSTRACT
Curricular innovation is an ever-present element of nursing education. It is incumbent for nurse educators to evaluate their curricula and its outcomes to ensure quality nursing education. This article describes a comprehensive student-centered outcome evaluation of the Clinical Immersion Model. This model and the foundational components unique to the curricular design and the senior clinical immersion are described. Several methods of evaluation, including National Council Licensure Examination for Registered Nurses pass rates, exit surveys, alumni surveys, and a senior nursing student focus group, are presented. Implications of this evaluation and future directions are explored to inform potential implementation and adaptation of this effective curriculum by other schools of nursing.

In 2004, our School of Nursing embarked on the most ambitious journey since its inception—the implementation of a novel curricular approach for baccalaureate education (Diefenbeck, Plowfield, & Herrman, 2006). Originally named the Nurse Residency Model, it is now referred to as the Clinical Immersion Model to avoid confusion with other post-baccalaureate residency programs. This new curriculum responded directly to the National League for Nursing’s (NLN) (2004) call for reform, which “urged nursing education to move from a content-focused reform effort to a major paradigm shift in how education is delivered” (Forbes & Hickey, 2009, p. 3). At that time, other major stakeholders (American Nurses Association, 2002; Institute of Medicine [IOM], 2001, 2003; Robert Wood Johnson Foundation, 2002) were identifying related priorities, such as expansion of the nursing workforce, increased collaboration between education and practice arenas, reinventing the education of nurses to address the changing health care system, and enhancing the incorporation of safety in the nursing curriculum. Since then, continued calls for reform have been mounted (Benner, Sutphen, Leonard, & Day, 2009; IOM, 2010; NLN, 2005). These groups have sounded the alarm that innovative redesign of the nursing curriculum is necessary to respond to rapid changes in the health care landscape.

The Clinical Immersion Program provides a unique model of nursing education in which students complete a comprehensive curriculum prior to immersion in the clinical arena. Since its implementation 5 years ago, 583 traditional and accelerated (second-degree) baccalaureate students have graduated from the Clinical Immersion Program. Philosophical principles upon which the program was developed include enhanced socialization, improved transition to practice, and increased student accountability. Additional unique and appealing aspects of this curricular model included its resource efficiency (both faculty and clinical sites) and increased emphasis on patient safety.

Nursing students participate in liberal arts courses, the sciences, foundational nursing courses, and courses addressing nursing specialties during their first 3 years of study. The nursing curriculum begins in the first semester freshman year and builds in a step-wise fashion each semester thereafter. All nursing courses include didactic simulation and laboratory ex-
periences and field experience components. Students are given increasing responsibility and accountability as they acquire increasingly complex knowledge and skills. In addition, a commercially available, standardized National Council Licensure Examination for Registered Nurses (NCLEX-RN) preparation package is integrated throughout the curriculum. Students progress to the clinical area after passing all didactic courses, completing laboratory scenarios, mastering psychomotor skills, and achieving the objectives set forth as required prior to clinical placement.

As the Clinical Immersion Program was planned, an apparent concern was the clinical experience in the senior year. Faculty debated the possibility that students could not discover that they were unable to perform in the nursing role or that they did not like the work of nursing until their senior year. Four strategies (field experience, simulation laboratory, work requirement, and teaching assistant program) were integrated into the foundational course work to enhance exposure to patients, health care systems, nursing roles, and clinical experiences. In each nursing course, students participate in a wide variety of noninstructor-accompanied field experiences based on course objectives (Table 1). These experiences replace those that used to occur during clinical rotations, ensuring that clinical time involves direct patient care. Field experiences reinforce course content and provide context for nursing practice, and the associated field experience write-ups ensure that students meet objectives and make important connections with class content.

Another innovation is the simulation resource center. Realistic patient scenarios promote clinical decision making and performance, knowledge about cause and effect, client safety, and psychomotor skills. Standardized patients, provided through collaboration with the university’s theater department, provide enhanced and affordable simulation experiences. Collaboration with the physical therapy department provides an interdisciplinary opportunity for students during the simulation experiences.

A work requirement course represents the third intervention. The course requires students to work or volunteer 160 hours in a health care setting, half of which must be in direct patient care and must be completed prior to entering senior-year immersion. This course awards one college credit for each 80 hours worked. The students take this course twice, for a total of two work requirement credits. A faculty member is assigned this course as part of his or her workload and actively monitors student progress and coordinated outside experiences.

The final strategy is a teaching assistant program described by Herrman and Waterhouse (2010). Students who have mastered course content assist faculty, laboratory personnel, and underclassmen with content review, mentor, manage course work and laboratories, proctor examinations, and provide student support.

Following exposure to and successful completion of the first 3 years of study, students advance to immersions in six clinical specialties, including psychosocial nursing, adult health I and II, community health, maternal-child nursing, and a preceptorship. Students participate in a 4-week rotation at each site, in which 24 to 30 hours per week are spent preparing for and working in the clinical area, totaling at least 84 hours in each rotation. Senior students return to campus for clinical integration seminars and nursing electives. The senior-year clinical immersion paves the way for transition to professional nursing practice.

In higher education, there is a move toward outcomes assessment as a way to measure program effectiveness. Referred to as performance improvement or continuous quality improvement, this approach is already used by our health care agency colleagues. Although the need to address quality improvement through measurement of outcomes is evident, most schools of nursing tend to focus on accreditation requirements without considering an overall quality improvement stance (Sauter, 2000). Anderson, Cuellar, and Rich (2003) suggested that academia could benefit from a culture of continuing quality improvement and a spirit of performance improvement.

To assess the program’s effectiveness 5 years after implementation, the first phase of a continuous quality improvement was implemented. The purpose of this article is to evaluate the student-centered outcomes of the Clinical Immersion Program.

**METHOD**

**Evaluation of Student-Centered Outcomes in the Clinical Immersion Program**

Continuous quality improvement addresses student-focused, curriculum-focused, school-focused, and university-focused outcomes (Anderson et al., 2003). Some examples of student-focused outcomes include program satisfaction, attrition rates, involvement in student organizations, standardized testing scores, and service to the community. NCLEX-RN pass rates and alumni and employer satisfaction are considered school-focused outcomes. Within the context of continuous quality improvement, data retrieved from these outcome measures provide information to guide improvement of the program (Dulski, Kelly, & Carroll, 2006). Each outcome criterion must be aligned with specific measures to obtain the data needed for the continuous quality improvement plan.

Both quantitative and qualitative methods were used to determine the effectiveness of the Clinical Immersion Program compared with our traditional program. The outcomes selected for this assessment included NCLEX-RN pass rates; student and alumni perceptions of overall program effectiveness using

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**TABLE 1**

<table>
<thead>
<tr>
<th>Sample Field Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observational experiences (operating department, PACU, emergency department, ICU)</td>
</tr>
<tr>
<td>Teaching projects in community settings</td>
</tr>
<tr>
<td>Conducting home and hospice visits</td>
</tr>
<tr>
<td>Witnessing self-help groups, attending outpatient mental health program group counseling sessions</td>
</tr>
<tr>
<td>Collaborating with school and community health nurses</td>
</tr>
<tr>
<td>Short-term mentoring experiences with specialty nurses</td>
</tr>
</tbody>
</table>

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 1**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 2**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 3**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 4**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

---

**Figure 5**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

---

**Figure 6**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 7**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*

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**Figure 8**

Sample Field Experiences

- Observational experiences (operating department, PACU, emergency department, ICU)
- Teaching projects in community settings
- Conducting home and hospice visits
- Witnessing self-help groups, attending outpatient mental health program group counseling sessions
- Collaborating with school and community health nurses
- Short-term mentoring experiences with specialty nurses

*Note. PACU = Post-anesthesia care unit; ICU = intensive care unit.*
TABLE 2
Focus Group Questions
What are your thoughts about your nursing education?
What do you believe are the positive aspects of the University of Delaware's School of Nursing Clinical Immersion Program?
What do you believe are the areas for improvement of the University of Delaware's School of Nursing Clinical Immersion Program?
How has the program prepared you for nursing practice?
What changes do you recommend and why?

Educational benchmarking; and senior students’ perceptions of the program components, readiness for the clinical immersion year, and readiness for entry-level general nursing practice. Whenever possible, preimplementation and postimplementation results are compared. A description of the approaches and the type of outcome data follows.

NCLEX-RN Pass Rates
The NCLEX-RN pass rates, particularly first-time pass rates, are one of the most common outcomes used to evaluate program effectiveness (Anderson et al., 2003; Dulski et al., 2006; Haleem et al., 2010; Sewell, Culpa-Bondal, & Colvin, 2008; Yearwood, Singleton, Feldman, & Colombraro, 2001). Pass rate outcome data are also required for nursing accreditation (Yearwood et al., 2001). Although Anderson et al. (2003) suggested that NCLEX-RN pass rates are school-focused or university-focused outcomes, others associate pass rates with student success and satisfaction (Sewell et al., 2008; Yearwood et al., 2001). As a student-focused outcome, NCLEX-RN pass rates between 2000 and 2010 were compared, representing 5 years preimplementation and 5 years postimplementation of the program.

Educational Benchmarking: Standardized Undergraduate Exit and Alumni Surveys
Benchmarking is a process whereby educational institutions are compared with other similar institutions to identify strengths and weaknesses and improve quality (Billings, 2007; Matthiesen & Wilhelm, 2006; Yearwood et al., 2001). Benchmarking is closely linked to quality improvement because the process moves organizations toward ongoing performance improvement through goal setting and program evaluation. Two types of benchmarking were used: competitive and longitudinal (Billings, 2007). With competitive benchmarking, similar schools of nursing are compared; longitudinal benchmarking tracks an indicator over time. Student satisfaction is a commonly used benchmarking outcome measure. Benchmarks, a measure of best practice, provide critical quality improvement information.

Since 2005, our school has contracted with Educational Benchmarking Incorporated to obtain standardized undergraduate exit and alumni surveys and to receive data analysis and benchmarking services, which provide valuable data to guide our continuous quality improvement efforts (access http://www.webedi.com for more information). The undergraduate exit and alumni surveys provide a comprehensive assessment of American Association of Colleges of Nursing learning outcomes, institutional resources, and overall educational perceptions. Longitudinal and competitive benchmarking are provided. Competitive benchmarks include three groups: a group of six schools selected by our Educational Assessment Committee as being comparable to our school, the Carnegie classification, and all schools participating in the process.

The Undergraduate Exit Survey, which contains 11 factors, provides a measure of overall program effectiveness (Factor 11). This factor, an indication of students’ satisfaction with the program, addresses the value of the investment in the program and assesses whether the program met students’ expectations and whether students would recommend the program to friends. Factor 6 (Professional Values), Factor 8 (Technical Skills), Factor 9 (Core Competencies), Factor 10 (Role Development), Factor 4 (Facilities and Administration), and Factor 2 (Work and Class Size) were predictors of overall program effectiveness for the 2010 survey. In addition to Factor 11, Factors 6, 8, and 7 were selected for evaluation because these factors were the first three predictors of program effectiveness.

The Undergraduate Alumni Survey evaluates 15 factors. Factor 15, Overall Program Effectiveness, was selected for this evaluation. This factor addresses overall satisfaction through questions related to how well the program prepared students for their first position and their current position; the overall value of the program in terms of program cost and success as a nurse; and whether students would recommend the program to a close friend.

Students’ Perceptions of Program Components
Faculty-Developed Student Surveys. Faculty-developed surveys do not have the ability to provide competitive benchmarking but can be used for longitudinal benchmarking if the survey is deemed reliable and valid. Self-designed tools have limitations but may result in higher return rates if such tools are designed relative to a specific population and program (Story et al., 2010). A survey was devised to assess students’ perceptions of components of the Clinical Immersion Program. Items were developed by representative members of the Undergraduate Curriculum and Educational Assessment committees and were deemed valid by expert consensus. Exiting seniors in the Clinical Immersion Program (graduating May 2010) were administered the student survey. Students were asked to rate the level of importance on a scale of 0 to 5, with 0 indicating not important and 5 indicating very important, of each of the following unique aspects of the program: work requirement, simulation laboratory, field experiences, senior-year clinical immersion, NLN examination testing package, and teaching assistants. In addition, students were asked how well earlier curricular experiences prepared them for later experiences; how prepared they felt to enter the senior-year clinical immersion; and their perceived readiness for entry-level general nursing practice.

Student Focus Groups. Another approach used to elicit student responses about the unique aspects of the program was student focus groups. Focus groups are a qualitative method of thoughtful, planned discussions among participants with simi-
lar experiences (Heary & Hennessy, 2002). A nonthreatening moderator encourages interactions among participants to elicit perceptions about a given problem, area of interest, or topic of study in a relaxed environment (McDaniel & Bach, 1996). Focus groups, usually composed of 4 to 12 participants, generate both descriptive and explanatory data. Recently, focus groups have been used for nursing program evaluation of student perceptions of NCLEX-RN preparation (Pabst, Strom, & Reiss, 2010); performance, abilities, and satisfaction of second-degree students (Moe et al., 2009); and faculty perceptions of a graduate human science curriculum (Lindsay, Jeffrey, & Singh, 2009). Themes are derived from focus group discussions with a group of participants who have similar characteristics.

Senior students were systematically selected to participate in focus groups. An alphabetical listing of senior students was obtained, and every fourth person on the list was sent an invitation, for a total of 32 students. Eight students agreed to participate in the focus group. Students declining the invitation (n = 24) indicated that the time options for the focus group did not suit their schedules. The focus group was led by a team member (E.R.H.) who was not well known by the students in an effort to promote free sharing of ideas. Areas of focus were identified by an expert panel and were developed into five questions (Table 2). Focus group participants were also provided with the opportunity to ask questions or address other areas.

RESULTS

Evaluation of Student-Centered Outcomes of the Clinical Immersion Program

NCLEX-RN Pass Rates. First-time NCLEX-RN pass rates 5 years preimplementation (2001-2005) and 5 years post implementation (2006-2010) are presented in Table 3. February and May are reported separately because they generally (with some exceptions) represent accelerated and traditional classes, respectively, and comprise differing numbers of graduates. Prior to the implementation of the Clinical Immersion Program, the average February and May NCLEX-RN first-time pass rates were 89.19% and 86.12%, respectively. Since the implementation of the new curriculum, the average February and May NCLEX-RN first-time pass rates were 92.14% and 89.51%, respectively, representing overall improvement.

Educational Benchmarking: Standardized Undergraduate Exit and Alumni Surveys. The 2010 exit survey was administered to all seniors during class (N = 136); the 2005 survey was given online and had a lower response rate (N = 67). Differences between 2005 and 2010 Undergraduate Exit Survey scores showed increases in overall program effectiveness, technical skills, and core competencies (Table 4). Professional values remained essentially unchanged. In 2005, we were slightly below our benchmarking peers in overall program effectiveness. The 2010 benchmarking comparisons have slightly higher mean scores than any of the other schools across all factors examined, including overall program effectiveness.

The Undergraduate Alumni Survey was mailed to 156 alumni from the 2009 class and 192 graduates of the 2005 class. Only 24 of the 2009 graduates responded to the survey, for a response rate of 15.4%; the response rate for 2005 graduates was 9.4%.

Although there was a slight decrease in overall program effectiveness when comparing 2005 and 2009 alumni, the 2009 program effectiveness scores were slightly higher than all external benchmarks (Table 5).

Students’ Perceptions of Program Components

Faculty-Developed Student Surveys. One hundred five surveys were completed and the results are presented in Table 6. In terms of the importance of various components of the curriculum, students rated the senior-year clinical immersion, work requirement, and simulation laboratory the highest, indicating greater levels of importance. Teaching assistants—either serving as one or using one—received the lowest score. The majority of students (76.9%) thought that earlier curricular experiences prepared them for later curricular experiences and thought they were prepared to enter the senior-year clinical immersion (84.8%). Almost all students (93%) thought that they are ready for entry-level general nursing practice upon graduation.

Student Focus Groups. The audiorecording of the focus group was transcribed. Data were coded and filtered, and Ethnograph 6.0 was used to help identify themes. To ensure greater rigor of the analysis, the research team reviewed the transcripts to affirm the identified themes, which included program components, clinical components, ideas for improvement, and preparation for graduation. Examples of comments relevant to each component follow.

The students shared multiple comments supportive of the unique aspects of the Clinical Immersion Program components. Field experiences gave students a view of real practice (“We watched the nurses putting into practice what we were learning in class”). The simulation laboratory provided students opportunities that even the clinical settings did not offer. Students commented, “I did things in simulation lab that I never did in clinical” “The sim lab filled in the gaps and you got out of it what you put into it.” One student lamented not taking some of the earlier coursework and associated laboratory assignments.
more seriously, particularly the health assessment course, stating “I needed it in clinical.” The students made a strong request to faculty to reinforce to the students the importance of taking simulation laboratory, health assessment, and other skills laboratories seriously to build on them during the clinical senior year.

The work requirement was seen as good preparation for clinical rotation. The students found the review sessions conducted by the teaching assistants to be very helpful. Moreover, they liked the NLN examinations, and especially appreciated the versions that provided feedback and rationale. Overall, students noted they received a well-rounded education: “I liked the non-nursing courses, too.... Study abroad was great; glad we had the choice of nursing electives, and I loved research.”

Some of the positive comments about the senior-year clinical immersion component were: “We learned it in classes and then revisited it in clinical in the senior year.... I learned it twice;” and “We weren’t studying for exams. [We] had to research your patients and give everything to the clinical experience.” The preceptor experience was viewed positively; one student shared, “I liked getting to see and do a lot.... My preceptorship was amazing...the cherry on top of the cake.”

Areas for improvement focused on providing some type of clinical experience to prepare them for the work requirement and changing the number of weeks allotted to the clinical courses (specifically community, psychiatric, pediatric, and maternity). One student suggested to “look at where the graduates go to work” as a guide. One student contributed that “it was hard to get a job for the work requirement without a clinical experience prior to the senior year.” A student suggested adding a shortened fundamentals/nursing home clinical experience at the end of the junior year, stating she would feel “more comfortable in clinical if we did morning care on a real patient before senior year” and that “it would help us get jobs if we had clinical before our junior summer.” The student suggested that this clinical experience could be seen as a substitute for the work requirement.

The students felt ready to graduate. “I am ready to transition into that new grad nurse.... I can put all the connections together.... I just need more actual practice.” During a job interview, a student was pleased to be told by the interviewer that “we like to hire [our school’s] students.” One student summed it

### TABLE 4
Comparison of Educational Benchmarking Incorporated Undergraduate Exit Assessment from 2005 and 2010

<table>
<thead>
<tr>
<th>Factor Assessed</th>
<th>2005 Graduates (Mean, Standard Deviation)</th>
<th>2010 Graduates (Mean, Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 11: overall program effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>67 (4.43, 1.45)</td>
<td>136 (5.62, 0.96)</td>
</tr>
<tr>
<td>Select 6</td>
<td>307 (5.37, 1.30)</td>
<td>535 (4.98, 1.56)</td>
</tr>
<tr>
<td>Carnegie classification</td>
<td>4,020 (4.75, 1.52)</td>
<td>4,535 (4.83, 1.53)</td>
</tr>
<tr>
<td>All institutions</td>
<td>11,107 (4.78, 1.52)</td>
<td>20,434 (4.82, 1.53)</td>
</tr>
<tr>
<td>Factor 6: professional values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>67 (6.19, 0.83)</td>
<td>136 (6.13, 0.71)</td>
</tr>
<tr>
<td>Select 6</td>
<td>304 (6.37, 0.84)</td>
<td>535 (6.04, 1.07)</td>
</tr>
<tr>
<td>Carnegie classification</td>
<td>4,021 (6.11, 0.98)</td>
<td>4,507 (5.94, 1.00)</td>
</tr>
<tr>
<td>All institutions</td>
<td>11,087 (6.15, 0.98)</td>
<td>20,362 (5.98, 1.01)</td>
</tr>
<tr>
<td>Factor 8: technical skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>66 (5.86, 1.09)</td>
<td>136 (6.13, 0.69)</td>
</tr>
<tr>
<td>Select 6</td>
<td>302 (6.23, 0.84)</td>
<td>527 (5.98, 1.11)</td>
</tr>
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<td>Carnegie classification</td>
<td>3,896 (5.91, 1.06)</td>
<td>4,439 (5.94, 0.99)</td>
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<tr>
<td>All institutions</td>
<td>10,626 (5.94, 1.08)</td>
<td>19,954 (5.94, 1.05)</td>
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<tr>
<td>Factor 7: core competencies</td>
<td></td>
<td></td>
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<tr>
<td>Program</td>
<td>67 (5.85, 0.98)</td>
<td>136 (5.97, 0.70)</td>
</tr>
<tr>
<td>Select 6</td>
<td>305 (5.96, 1.02)</td>
<td>535 (5.81, 1.07)</td>
</tr>
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<td>Carnegie classification</td>
<td>4,012 (5.77, 1.06)</td>
<td>4,521 (5.70, 1.00)</td>
</tr>
<tr>
<td>All institutions</td>
<td>11,083 (5.82, 1.05)</td>
<td>20,429 (5.74, 1.03)</td>
</tr>
</tbody>
</table>

### TABLE 5
Comparison of Overall Program Effectiveness on Educational Benchmarking Incorporated Alumni Survey of 2005 and 2009 Graduates

<table>
<thead>
<tr>
<th>Benchmark Category</th>
<th>2005 Graduates (Mean, Standard Deviation)</th>
<th>2009 Graduates (Mean, Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>18 (5.5, 1.24)</td>
<td>26 (5.44, 0.97)</td>
</tr>
<tr>
<td>Select 6</td>
<td>119 (5.47, 1.37)</td>
<td>202 (4.97, 1.26)</td>
</tr>
<tr>
<td>Carnegie classification</td>
<td>249 (5.38, 1.31)</td>
<td>459 (5.08, 1.29)</td>
</tr>
<tr>
<td>All institutions</td>
<td>1,015 (5.55, 1.19)</td>
<td>2,756 (5.22, 1.31)</td>
</tr>
</tbody>
</table>
up by noting, “I am glad I came here…. I would make the same choice were I to do it again; I am excited to be an alum” and another student agreed.

DISCUSSION

Results of the multiple student-centered outcomes measures demonstrate that the Clinical Immersion Program is a successful innovation in baccalaureate nursing education. NCLEX-RN pass rates have improved since the implementation of the new program. These findings are strengthened by the fact that data were aggregated over 5 years on either side of the implementation, confirming the improvement as a legitimate trend and not a temporary improvement. Tanicala (2006) found significant variability in the structure and design of clinical experiences despite similar NCLEX-RN pass rates among sampled institutions, and noted that there is no identifiable best practice in clinical curricula design and implementation. One confounding variable is that our School of Nursing established an NCLEX Task Force 3 years ago. Over the past 2 years, at-risk senior students have been identified and are strongly encouraged to attend a weekly 2-hour remediation seminar focusing on NCLEX-RN test preparation. The relative effect of this remediation initiative on NCLEX-RN pass rates is unclear.

Results of various benchmarking analyses revealed positive improvements in most areas. Undergraduate Exit Survey data revealed that seniors graduating from the Clinical Immersion Program gave higher ratings of overall program effectiveness, technical skills, and core competencies compared with our prior curriculum, as well as all of our competitors. Although ratings of professional values remained essentially unchanged between preimplementation and postimplementation, postimplementation ratings surpass all competitive benchmarks. Strengths of the exit survey data are that there is near 100% participation by students. Moreover, the survey is standardized, which reflects enhanced validity and reliability and provides for opportunities for comparison.

Benchmarking data on program effectiveness for the Alumni Survey demonstrated slight decreases postimplementation. However, overall program effectiveness postimplementation remains above all comparative benchmarks. The results should be interpreted with caution because the response rates were low, and it is possible that the alumni who completed the survey are not necessarily representative of all alumni. Story et al. (2010)

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>5 (Very Important)</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0 (Not Important)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work requirement (n = 105)</td>
<td>35 (33.3%)</td>
<td>43 (41%)</td>
<td>22 (21%)</td>
<td>2 (2%)</td>
<td>2 (2%)</td>
<td>1 (1%)</td>
<td>3.99</td>
</tr>
<tr>
<td>Simulation laboratory (n = 105)</td>
<td>34 (32.4%)</td>
<td>37 (35.2%)</td>
<td>17 (16.2%)</td>
<td>14 (13.3%)</td>
<td>3 (3%)</td>
<td>0 (0%)</td>
<td>3.81</td>
</tr>
<tr>
<td>Field experiences (n = 104)</td>
<td>9 (8.7%)</td>
<td>31 (29.8%)</td>
<td>29 (27.9%)</td>
<td>19 (18.3%)</td>
<td>16 (15.4%)</td>
<td>0 (0%)</td>
<td>2.98</td>
</tr>
<tr>
<td>Senior-year clinical immersion (n = 103)</td>
<td>50 (48.5%)</td>
<td>38 (36.9%)</td>
<td>10 (9.7%)</td>
<td>3 (2.9%)</td>
<td>16 (15.4%)</td>
<td>0 (0%)</td>
<td>4.27</td>
</tr>
<tr>
<td>NLN examination testing package (n = 105)</td>
<td>20 (19%)</td>
<td>42 (40%)</td>
<td>23 (21.9%)</td>
<td>10 (9.5%)</td>
<td>5 (4.8%)</td>
<td>0 (0%)</td>
<td>3.48</td>
</tr>
<tr>
<td>Teaching assistants (n = 104)</td>
<td>8 (7.7%)</td>
<td>29 (27.9%)</td>
<td>21 (20.2%)</td>
<td>24 (23.1%)</td>
<td>13 (12.5%)</td>
<td>9 (8.7%)</td>
<td>2.69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>5 (Very Well Prepared)</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0 (Not at all Prepared)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did you feel earlier experiences in the curriculum prepared you for later experiences? (n = 104)</td>
<td>4 (3.8%)</td>
<td>38 (36.5%)</td>
<td>38 (36.5%)</td>
<td>15 (14.4%)</td>
<td>8 (7.7%)</td>
<td>0 (0%)</td>
<td>3.12</td>
</tr>
<tr>
<td>How prepared did you feel to enter the clinical area in your senior year? (n = 105)</td>
<td>7 (6.7%)</td>
<td>56 (53.3%)</td>
<td>26 (24.8%)</td>
<td>11 (10.5%)</td>
<td>3 (2.9%)</td>
<td>0 (0%)</td>
<td>3.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>5 (Excellent)</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0 (Poor)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now that you are graduating, please rate your perceived readiness for entry-level general nursing practice on the following scale. (n = 100)</td>
<td>9 (9%)</td>
<td>52 (52%)</td>
<td>32 (32%)</td>
<td>5 (5%)</td>
<td>2 (2%)</td>
<td>0 (0%)</td>
<td>3.61</td>
</tr>
</tbody>
</table>

Note. NLN = National League for Nursing.
share a similar experience about poor alumni survey response rates and suggest innovative Web-based strategies to improve response rates, which will be reviewed by our Educational Assessment Committee.

The faculty-developed survey of senior students in the Clinical Immersion Program demonstrates support for various components of the program, including senior-year immersion, the work requirement, and the simulation laboratory. Moreover, the majority of students reported having felt prepared as the curriculum progressed from year to year, as well as feeling prepared for entry-level general nursing practice. A strength of the survey was the high response rate, with nearly all seniors completing the survey. One limitation of these results includes the fact that the survey was developed by faculty; however, there is no other available method of assessing the unique aspects of our program. Another limitation is the fact that only one cohort of students was surveyed; student survey data for prior years of the Clinical Immersion Program were not available. Moreover, there is no corresponding preimplementation program survey to which to compare. We do not know how students perceived various components of the former program.

Focus group responses for senior students in one year of the Clinical Immersion Program revealed overall satisfaction with various components of the curricular model. The results reflect similar findings of faculty-developed student survey, providing a triangulation of methods. It is possible that students who participated were in some way not representative of the larger student body, although students who declined participation cited scheduling difficulties as the reason for their nonparticipation. Other weaknesses include the fact that the focus group was conducted with only one cohort of the Clinical Immersion Program, and there is no comparative focus group data from the prior curriculum.

CONCLUSION

A quality improvement plan provides an opportunity for schools to market their successes, systematically document achievements, and make improvements where indicated. Our efforts to continually assess and improve our undergraduate nursing program have yielded data that confirm the quality and integrity of the Clinical Immersion Program.

Because quality improvement is a continual process, the data presented are helpful in guiding further refinement of the Clinical Immersion Program. The results of this evaluation process have stimulated ideas for improvement. Students suggested revising the amount of time spent in each clinical specialty area by potentially reallocating time to reflect the realities of job placement upon graduation. Concerns about obtaining the work requirement given the structure of the curriculum were articulated, and suggestions to include a university-sponsored experience (such as a long-term care externship) were made. There are ongoing efforts to promote the evolution of the simulation laboratory, including its interdisciplinary standardized patient simulation scenarios. Moreover, there are efforts to continue integrating additional innovative technologies into our classroom settings. In addition, curricular content evaluation has been ongoing, and the sophomore year foundational nursing courses are currently being revised to reduce duplication of materials, expand course credits allotted to health assessment, and reinforce concepts such as safety, complementary and alternative medicine, and nursing self-care.

Future evaluation efforts must address the deficiency in alumni survey participation. In addition to student-centered outcome measures, it will be important to obtain information from other stakeholders, such as clinical agencies, employers, and faculty. Further exploration of student perceptions of readiness for practice is important; in addition to assessing perceptions, it would be helpful to gain objective data of readiness for practice in the form of competency-based assessments.

Continuous quality improvement is an essential part of ongoing curricular innovation. Using this framework, we have demonstrated that the Clinical Immersion Program is an innovative and effective model for educating future baccalaureate nurses.

REFERENCES