The Salus University Pennsylvania College of Optometry and the La Salle University School of Nursing and Health Sciences have partnered in health professional education and collaborative patient care by developing and implementing an interprofessional healthcare model in which graduate nurse practitioner students participate in eye and vision patient care at The Eye Institute, a community-based healthcare facility in Philadelphia, Pa.

A nurse practitioner is a registered nurse who has a graduate degree and advanced knowledge. Nurse practitioners have didactic and clinical education that prepares them to practice in advanced areas of primary or acute care. Nurse practitioners examine, diagnose, manage and educate patients in primary care settings.

**Project Description**

The Family Nurse Practitioner Coordinator at La Salle University identified the need to expand ophthalmic patient care experiences for nurse practitioner students. Nurse practitioner students typically enter graduate programs without previous registered nurse experience in ophthalmic care/assessment of patients. Collaborating with The Eye Institute at Salus University was one solution to support nurse practitioner students gaining more clinical experience in this important area.

Beginning in August 2013 and following the execution of a Memorandum of Understanding, family and adult-gerontology nurse practitioner students were assigned to The Eye Institute (TEI) on a voluntary basis for active clinical observation of assessment, differential diagnosis, treatment and management/follow-up care. The clinical observation activity is scheduled in the Primary Care Optometric Suites and one or more Specialty Services at TEI. Fourth-year optometry students, graduate nursing students, optometry residents and optometry faculty members collaborate in the following areas: assessment and care of patients with hypertension, diabetes and other systemic conditions, including ocular manifestations of systemic disease; the differential diagnosis of patients with ocular urgencies; the clinical presentation and management of glaucoma; and the ophthalmic evaluation of the pediatric patient. A total of 74 nurse practitioner students engaged in the new clinical education program over 18 months.

From August 2013 to March 2015, a nonprobability, convenience sample of nurse practitioner students was invited to participate in a 10-item Likert scale Student Experience Survey. Participants were informed that because the program was new, their feedback would be valuable in the continued collaborative relationship between Salus University and La Salle University. Signed consent was obtained at the end of the survey, and data were kept confidential. The Family Nurse Practitioner Coordinator invited participation during a class and noted that participation was voluntary and would not affect grades.

The 10 items on the Student Experience Survey addressed the knowledge base of the optometry students and faculty member optometrists; ease of communication and responsiveness to nurse practitioner student questions; knowledge of optometric assessment, diagnosis, and medication side effects; application to nurse practitioner clinical experience; frequency of optometrists’ explanations; satisfaction with the clinical experience; and likelihood of recommending the experience and using the experience in nurse practitioner work. (Table 1) The survey was administered on La Salle University’s learning management system immediately following the clinical activity at The Eye Institute.

**Results/Conclusion**

Table 1 - Student Experience Survey (distributed to La Salle University nurse practitioner students following their clinical assignments at The Eye Institute)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How knowledgeable were the providers?</td>
</tr>
<tr>
<td>2</td>
<td>How knowledgeable were the fourth-year optometry students?</td>
</tr>
<tr>
<td>3</td>
<td>How easy was it to talk to the staff about questions?</td>
</tr>
<tr>
<td>4</td>
<td>How often were you able to apply what you learned in classes at La Salle to the clinical experience?</td>
</tr>
<tr>
<td>5</td>
<td>How responsive was the staff to your questions?</td>
</tr>
<tr>
<td>6</td>
<td>How often did the staff explain assessment findings, diagnoses, medication side effects or plan of care?</td>
</tr>
<tr>
<td>7</td>
<td>How often did the providers provide explanations in a way you could understand?</td>
</tr>
<tr>
<td>8</td>
<td>Were you satisfied with the clinical experience?</td>
</tr>
<tr>
<td>9</td>
<td>How likely are you to recommend this experience to others?</td>
</tr>
<tr>
<td>10</td>
<td>How likely are you to draw on this experience in your work as a nurse practitioner?</td>
</tr>
</tbody>
</table>

The survey was administered on La Salle University’s learning management system immediately following the clinical activity at The Eye Institute.
Student responses to the survey items were scaled using the following choices: 5 = Extremely/Always, 4 = Very/Most, 3 = Moderately likely/About half the time, 2 = Slightly/Once in a while, and 1 = Not at all/Never. Nurse practitioner students reported the greatest satisfaction with provider knowledge (mean 4.53) and responsiveness of staff to their questions (mean 4.32). They reported satisfaction with this clinical experience (mean 4.05). The lowest scale related to ability in applying classroom material to their clinical experience (mean 3.74). The responses to this survey item may have been low if a student had attended the experience months after the content was delivered in the classroom. Student experience responses were very positive overall. (Table 2)

Qualitative feedback about this initiative has also been positive, as evidenced by these samples of nurse practitioner student comments:

“The examinations were very interesting.”

“I really learned a lot at this site.”

“The residents were very helpful.”

“I feel more comfortable with the eye exam.”

“I am learning a lot about the eye.”

Additional qualitative feedback was received from an optometry faculty member at The Eye Institute:

“I want to tell you how much I have enjoyed working with the nurse practitioner students. They are all very mature students and eager to learn. They ask questions that show a good depth of knowledge and learn quickly. An additional plus, if we are having blood pressure problems, or any systemic issues with a patient, including medications, they have stepped in and helped. Keep this program, it helps us and them.”

Health professional education has recognized the importance of interprofessional education and practice, and has responded with a variety of initiatives, projects and events aimed at improving communication, addressing challenges and barriers, and enhancing the effectiveness of teams.

The Salus University - La Salle University collaboration has provided an opportunity for students from the professions of optometry and nursing to gain a more direct understanding of each profession’s contribution to patient care. This collaboration has yielded significant improved knowledge for nursing students about caring for patients with eye disorders and also the availability of referral services. This clinical educational collaboration is an ongoing one with a continuing positive community impact on patient care. Anecdotal feedback indicates that graduates of the nurse practitioner program who are practicing locally have referred patients to The Eye Institute, thereby creating virtual care teams in follow-up to the in-person team experience. Salus University and La Salle University remain committed to the enhancement and expansion of effective community-based health professions education, interprofessional education and collaborative patient care.

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