THE KANSAS NURSING INITIATIVE 2008 ANNUAL REPORT





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The Kansas Nursing Initiative



EXECUTIVE SUMMARY

Genesis of Nursing Initiative

In 2004, the U.S. Department of Labor identified Registered Nursing (RN) as one of the top occupations in terms of job growth through the year 2012. The Kansas Occupational Outlook, published by the Kansas Department of Labor in 2005, identified RNs experiencing a projected growth of 31.2 percent, or 6,890 additional RN positions needed by 2010. At a September 2005 conference in Topeka, nursing program directors from across the state identified four major barriers that limited increased enrollment and subsequent graduation of more registered nursing students. These barriers were: (1) an insufficient number of qualified nursing faculty, (2) competition among programs for clinical placement sites, (3) classroom and laboratory space constraints, and (4) additional equipment needs. In January 2006, The Kansas Board of Regents (KBOR) submitted a report to the Governor and the Legislature describing the resources required to increase the capacity of the state higher education system to accommodate up to 250 more nursing students annually. In spring 2006, the Legislature responded to the report by investing \$3.4 million dollars in grant funds, as part of a 10-year commitment, to begin addressing each of the four barriers to nursing education program expansion. The Legislature authorized KBOR to distribute these funds in three specific areas based on the key barriers identified in the report.

Nurse Educator Service Scholarships: \$200,000 with a required match of \$1 per \$2 awarded
Nursing Faculty Salaries and Supplies: \$1,200,000 with a required match of \$1 per \$1 awarded *
Nursing Equipment / Facility Upgrades: \$2,000,000 with a required match of \$1 per \$2 awarded **

* For FY 2008, the Kansas Legislature increased the grant appropriation for Nursing Faculty Salaries and Supplies by \$600,000 for a new total of \$1,800,000. Each institution submitted a supplemental grant proposal for a portion of these additional funds.

** This particular grant appropriation was established for one year only, and was terminated at the end of FY 2007.

In response to the legislative appropriation, KBOR created and released in June 2006, a Nurse Educator Service Scholarship announcement, a Nursing Faculty Salaries and Supplies request for proposals, and a Nursing Equipment and Facility Upgrades request for proposals.

Snapshot of Success

Nursing Initiative Achievements in its first two years:

- 1) 833 Additional nursing students admitted (FY07 507 & FY08 326)
- 2) 65 Full-time and 44 part-time total additional nursing faculty hired
- 3) 66 Nurse Educator Service Scholarships awarded, and
- 4) 27 Human patient simulators placed into nursing classrooms

The Nurse Educator Service Scholarship Program

The goal of the service scholarship program is to increase the availability of qualified nursing faculty in Kansas postsecondary nursing education programs. Scholarships are awarded to applicants who agree to engage in the full-time (or the equivalent to full-time) teaching of nursing in a Kansas nursing program after receiving their master or doctorate degree in nursing. This ten-year investment requires a \$1 match for every \$2 of state funding, subject to annual appropriation from the Kansas legislature.

An annual total of \$300,000 is available (\$200,000 grant funding plus \$100,000 required match) for distribution to the five eligible institutions that provide Master of Nursing or Doctorate in Nursing degree programs. Institutions indicate the number of service scholarships requested and agree to all conditions in the scholarship announcement.

The Nurse Educator Scholarship Program, after only two years, has proven to be a wise investment for the state. As of June 30, 2008, \$397,930 in scholarship funds has been committed, 66 service scholarships have been awarded, and 10 individuals have graduated and are employed as nurse educators in Kansas. An insufficient number of nursing faculty continues to be a major barrier for program expansion. This scholarship incentive will complement the Nursing Faculty Salaries and Supplies Grant by increasing the availability of qualified nursing faculty, which in turn will continue to support program expansion.

The Nursing Faculty Salaries and Supplies Grant

The goals of this grant program are to increase the number and retention of qualified nursing faculty, and provide funding for consumable supplies needed for laboratory and classroom instruction in nursing programs. This is a ten-year investment, requiring a one-to-one match, subject to annual appropriation from the Kansas Legislature. All 22 publicly-funded educational institutions in the state with approved RN programs were encouraged to apply. Initially, this grant made available a total of \$2.4 million (\$1.2 million grant funds plus \$1.2 million in required matching funds) to provide funding to hire additional nursing faculty and secure additional instructional supplies. In FY 2007, sixteen publicly-funded institutions submitted applications and were awarded funding. For FY 2008, the Kansas Legislature appropriated an additional \$600,000, thus increasing the grant amount from \$1.2 million to \$1.8 million annually (\$3.6 million total with required match).

Each institution was invited to submit a supplemental grant proposal for this additional grant funding.

Many full-time and part-time positions still remain unfilled due to the ongoing faculty shortage. A total of \$3,416,800 (grant with required match) was expended for additional faculty. Due to difficulty recruiting and hiring additional faculty at the beginning of the fiscal year, combined with positions still unfilled or re-vacated due to turnover, \$239,605 (grant with required match) remains encumbered by the institutions to be expended as additional faculty are hired.

A total of \$89,610 (grant with required match) was expended on classroom supplies. Salary and supply funds expended, plus the salary funds encumbered, total \$3,746,015. This amount includes \$146,017 expended by five institutions in excess of the minimum required match (See Appendix III).

Increased Enrollment in Kansas Nursing Education Programs

The primary goal of the Kansas Nursing Initiative, is to increase the enrollment in and the graduation from publicly-funded RN education programs, thus helping alleviate the state nursing shortage. Increased student enrollment has positively impacted the waiting lists of qualified students seeking admission into these programs. Additionally, several nursing programs placed added resources toward reducing student attrition. Based on data submitted to KBOR, these funded nursing programs have admitted 507 additional nursing students in the first year, and 326 additional nursing students in the second year, for a total of 833 additional nursing students admitted. The goal of the Legislature was to increase enrollment over the ten year life span of the initiative by 25 percent or 250 students, a goal which the programs have exceeded. The full impact of this initiative will begin to manifest itself next year, when these additional students begin to graduate and become employed as registered nurses in Kansas.

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The Kansas Nursing Initiative An Investment in the Value of Nursing



A SHORTAGE OF NURSES

States have historically been the guardians of public health, and they constantly seek new strategies to enhance healthcare access and quality for their citizens. A major impediment to the delivery of quality healthcare has been a growing shortage of healthcare providers, with the largest shortage in the area of nursing.

In 2002, The American Hospital Association Commission on Workforce for Hospitals and Health Systems stated, "Among the many issues facing the field of healthcare, none is more important to its long-term future than solving the growing workforce crisis." Hospitals and other facilities that provide patient care are threatened by a chronic shortage of nurses. Multiple reasons explain the nursing shortage; these include

- An aging population that will require increased utilization of the healthcare system
- An increase in the number of nurse and other healthcare professional retirements
- Fewer potential workers to replace those who are retiring; and
- Attrition of existing healthcare professionals due to an increased workload and faster pace, which results in dissatisfied caregivers with less bedside time.

What this implies is that an aging population will be placing greater demands on the healthcare system at the same time that many healthcare professionals will be retiring.

In 2004, the U.S. Department of Labor identified Registered Nursing as one of the top occupations in terms of job growth through the year 2012. According to a U.S. Department of Health and Human Services study, by 2010 the shortage of qualified healthcare workers is expected to reach 12 percent nationally, and by 2020 this shortage is expected to grow to 29 percent. This translates to a need for 1,101,000 additional registered nurses nationally to meet the demand by the year 2012.

The outlook in Kansas is similar to the national trend. The Kansas Occupational Outlook, published by the Kansas Department of Labor in 2005, identified the top ten occupations for projected growth through 2010. Registered Nurse is listed second, with a projected growth of 31.2 percent, or 6,890 more RN positions needed by 2010. Coupled with 4,460 RN replacements needed due to retirements in the same time period, the total projected need for RNs will exceed 11,350 by 2010.

LONG WAITING LISTS: A LACK OF CAPACITY

As a result of intensive ongoing efforts to encourage students to pursue careers in healthcare, the issue of educational program capacity and growth became paramount. Admission data provided by the Kansas Board of Nursing (KSBN) for 2005 indicated that almost all nursing programs have full admissions and some programs report waiting lists of qualified students. Applicant data was also obtained from the Kansas State Nurses Association (KSNA) study, "Nursing Shortage: Environmental Assessment of Nursing Education and Faculty in Kansas," published in August 2005 and revised in November 2005. The KSBN and KSNA data, which included information from both public and private nursing programs, demonstrated more qualified applicants than program capacity. Data reported by institutions responding to a community college nursing survey conducted by the Kansas Association of Community College Trustees (KACCT) in 2005, also indicated that the number of qualified applications consistently exceeded the current admission capabilities of nursing programs at Kansas community colleges. Finally, in a Kansas Board of Regents (KBOR) survey of academic deans of institutions with nursing programs conducted in 2006, the vast majority stated that they could not accommodate more nursing students unless more qualified nursing faculty are available, facilities are expanded, and the issue of clinical access is addressed.

BARRIERS TO INCREASING PROGRAM CAPACITY

On September 15, 2005, a conference was held in Topeka for nursing and allied health educational program directors. Ninety nursing and allied health program directors representing one-, two-, and four-year programs from across the state, were asked to identify barriers that currently prevented them from admitting additional students into their respective educational programs. Their primary responses included: (1) an



insufficient number of available qualified faculty, (2) competition among programs for clinical placement sites, (3) classroom and laboratory space constraints, and (4) additional equipment needs.

Barrier I: An Insufficient Number of Qualified Faculty
In 2005, the National League for Nursing estimated 92,000
qualified applicants were not admitted to entry-level nursing
programs. The primary reason given was a shortage of qualified
faculty. In 2006, nearly 63 percent of full-time faculty members at
the nation's nursing schools were between the ages of 45 and 60.
Another 9 percent were over the age of 61. In Kansas, KSNA
surveyed deans and directors of nursing programs to project
retirements based on their knowledge of individual faculty. The

results indicated that the median age of nursing faculty in Kansas is in the fifties, with a projected retirement of 32 MSN and/or PhD- prepared nursing faculty by 2010. Additionally, 123 MSN and/or PhD- prepared nursing faculty indicated that they will retire by 2016. Contributing to the shortage of qualified nursing faculty is the salary disparity between nurse educators and advanced practice nurses. Results of the same KSNA study showed that salaries of masters-prepared faculty, with a nine month contract

pro-rated to twelve months, fell within a range of \$44,947 to \$60,000, which was well below the average masters-prepared nurse salary of \$70,642 in Kansas (American Academy of Nurse Practitioners, 2004). The length of time required to obtain the degrees required for full-time faculty, combined with a significant salary disparity between education and practice, have created a disincentive for many nurses to enter teaching.

NOTE: Updated wage estimates from the Bureau of Labor Statistics/2007 State Occupational Wage Estimates and the Kansas Occupational Outlook 2014 place the average wage in Kansas of an MSN Nurse Educator at \$53,340 and an Advanced Nurse Practitioner at \$78,958. These are mean statewide wages, which do not reflect geographic regions, rank or other differentials.

Barrier II: Clinical Access

Many nursing programs have not been able to accommodate more students due to competition for specific clinical education sites. Competition also exists among nursing and allied health education programs for access to established clinical sites. Additionally, students in nursing programs located in several rural areas of the state are required to drive significant distances, sometimes out-of-state, to obtain their required clinical training. Program directors did indicate human patient simulators could be a tool to reduce the time demand on clinical sites by better preparing students in specific techniques before these students enter clinical training, and also would expose students to a wider scope of patient conditions than they may see during their clinical education.

Barrier III: Limited Classroom, Laboratory, and Equipment Availability

Nursing and allied health program directors also voiced concerns regarding the lack of adequate physical space, both classroom and laboratory, as a barrier to increasing student capacity. Insufficient space overcrowds students and results in an inadequate learning environment. Many program directors indicated another primary deterrent to increasing student enrollment was a lack of sufficient technologically advanced equipment, and the increased stress placed on existing equipment.



"Kansas has received well-deserved recognition at the national level for the initiatives taken in response to the nursing shortage. The morale of nursing educators in Kansas has been positively affected by this very public and practical response to a critical need that, until this grant initiative, many educators believed were facing alone."

Dr. Juanita S. Tate, Chairperson, School of Nursing and Associate Dean of College of Health Professions, Wichita State University

A CHARGE FROM THE LEGISLATURE

The Legislative Budget Committee expressed concern over the shortage of nurses in Kansas and recognized that the problem will only become worse as the current workforce nears retirement. The Committee requested that the Board of Regents submit a report to the Governor and the 2006 Legislature addressing the resources needed to increase the capacity in the state higher education system for educating registered nurses by 25 percent or 250 students.

RESPONSE FROM THE KANSAS BOARD OF REGENTS

In developing a plan to increase the capacity of state nursing programs, KBOR focused on the following methodologies:

- Reviewed the number of nursing program admissions and graduates over the past several years and compared that data with the Department of Labor projected need for additional nurses.
- Calculated the number of additional nursing program graduates needed annually to meet the Department of Labor projections over a ten year period.
- Reviewed the research and data from the KBOR, KSNA, and KSBN on barriers to increasing the capacity of state nursing programs.
- Surveyed academic deans of institutions with nursing programs to identify the resources and associated costs needed to increase program capacity by 25 percent.
- Established a collaborative partnership among organizations with a vested interest in nursing education and workforce issues. These partners offered comments and suggestions, served as information resources, helped assure reporting accuracy, and assisted with evaluations of grant funding proposals from educational institutions. These partners included KSBN, KSNA, Kansas Hospital Association (KHA), Kansas Association of Homes and Services for the Aging (KAHSA), Kansas Health Care Association (KHCA), and Kansas Organization of Nurse Leaders (KONL).
- Convened a meeting of nursing program directors from state universities and Washburn University, to discuss future nursing faculty preparation.
- Developed an implementation timeline assisting institutions with nursing programs to put needed additional resources in place, provide staff development, hire additional qualified nursing faculty, and implement facility modifications where necessary.

RECOMMENDATIONS FROM THE KANSAS BOARD OF REGENTS

Providing nursing education programs the capability to accommodate more students, specifically admitting and graduating up to 25 percent more RN students annually, required an array of strategies to address multiple barriers. Based on methodologies previously outlined; focused meetings with directors from one-, two-, and four-year nursing programs; and input from representatives from KHA, KSBN, and KSNA, the following key areas were recommended as solutions in A Report Addressing the Resources Needed to Increase the Capacity of the Kansas Board of Regents System for Educating Registered Nurses. KBOR submitted this report to the Governor and the Legislature in January 2006.

Recommendations to Address Barrier I: (Faculty)

- A. Develop a targeted service scholarship program that provides tuition forgiveness as an incentive. The objective is to encourage current BSN- prepared nurses to obtain an MSN degree and become a nurse educator. As a condition of participation in this program, service scholarships recipients would agree to become nurse educators in Kansas postsecondary institutions for a specified period of time after obtaining their MSN degree. Projected costs of this service scholarship program would be \$200,000 per year for a ten- year period.
- B. Provide funding to hire additional nursing faculty. Based on the survey KBOR conducted of academic deans of institutions with nursing programs, an additional 31 nursing faculty would be required, with a projected initial investment of \$1,500,000 per year. KBOR and the academic deans also recognize that salary disparities between clinical practice and education have had an impact on faculty recruitment.

Recommendations to Address Barriers II and III: (Access, Space and Equipment)

- A. Provide funding to assist with obtaining additional equipment and supplies needed to accommodate at least a 25 percent increase in nursing students. Because of the limited availability of clinical education sites and competition among healthcare programs for existing sites, nursing programs were encouraged to increase the utilization of human patient simulators and establish simulation laboratories. Clinical simulation laboratories effectively extend and enhance student clinical education experience, thus reducing the burden on clinical sites. Projected costs for human patient simulators and additional equipment and supplies will be \$3,087,260.
- B. Provide funding to assist with facility enhancements to accommodate additional nursing students. Several state nursing programs need some facility renovations to accommodate an increase in student enrollment. Also, the increased use of simulators requires the creation of additional simulation laboratories. Projected costs for facility renovations will be \$750,000.

A LEGISLATIVE APPROPRIATION

The Legislature responded to the KBOR report by investing \$3.4 million dollars in grant funds to begin addressing barriers to program expansion and increasing the capacity of the state's registered nursing programs. The Legislature authorized KBOR to distribute these funds in the following three specific areas based on the key barriers identified in the report:

Nurse Educator Service Scholarships: \$ 200,000 with a required match of \$1 per \$2 awarded

Nursing Faculty Salaries and Supplies: \$1,200,000 with a required match of \$1 per \$1 awarded *

Nursing Equipment/Facility Upgrades: \$2,000,000 with a required match of \$1 per \$2 awarded **

- * For FY 2008, the Kansas Legislature increased the grant appropriation for Nursing Faculty Salaries and Supplies by \$600,000 for a new total of \$1,800,000. Each institution submitted a supplemental grant proposal for a portion of these additional funds.
- ** This particular grant appropriation was established for one year only, and was terminated at the end of FY 2007.

IMPLEMENTATION OF NURSING INITIATIVE

In response to the legislative appropriation, KBOR created and released a Nurse Educator Service Scholarship announcement, a Nursing Faculty Salaries and Supplies request for proposals, and a Nursing Equipment and Facility Upgrades request for proposals in June 2006. The expected outcomes of the Nursing Initiative are:

- (1) A 25 percent overall increase in the number of qualified nursing students admitted into registered nurse educational programs in Kansas.
- (2) An increase in the number of nursing students graduating and passing the National Council Licensure Examination (NCLEX); culminating in
- (3) An increase in the number of graduates working in the field of nursing in Kansas.

KBOR sent the Nurse Educator Service Scholarship announcement to all 5 publicly-funded postsecondary educational institutions in Kansas engaged in providing a Masters in Nursing or a Doctorate in Nursing degree. These institutions include: Fort Hays State University, Pittsburg State University, The University of Kansas Medical Center, Washburn University, and Wichita State University. Funding proposals received in July 2006 indicated the number of scholarships requested and an agreement to all conditions outlined in the announcement.

A Nursing Initiative Grant Review Committee (See Appendix I), comprised of representatives from KONL, KHCA, KSNA, KHA, KAHSA, and KSBN, formed to review the proposals submitted for the Nursing Faculty Salaries and Supplies grant and the Nursing Equipment and Facility Upgrade grant. This committee made funding recommendations to KBOR staff, which subsequently determined final allocations. Notification of the funding awards was sent to all participating institutions on July 19, 2006.

This committee also reviewed supplemental proposals submitted for the additional \$600,000 funding allocated by the Legislature for the Faculty Salary and Supplies Grant for FY 2008. Notification of these supplemental funding awards was sent to participating institutions on July 20, 2007.

NURSE EDUCATOR SERVICE SCHOLARSHIP PROGRAM

"The Nurse Educator Scholarship initiative was highly successful. The 15 graduate students that received these awards are grateful and committed to nursing education in their future."

Dr. Cynthia Hornberger, Dean, School of Nursing, Washburn University

The goal of the service scholarship program is to increase the availability of qualified nursing faculty in Kansas postsecondary nursing education programs. Scholarship funds are awarded to applicants who agree to engage in full-time, or the equivalent to full-time, teaching in a Kansas program after receiving their Master or Doctorate degree in Nursing. This ten-year program is subject to annual appropriation from the Kansas Legislature.

An annual total of \$300,000 dollars is available (\$200,000 grant funding plus \$100,000 required match) for distribution to five eligible institutions that provide Master of Nursing or Doctorate in Nursing degree programs. Institutions indicate the number of service scholarships requested and agree to all conditions in the scholarship announcement. Individual scholarship amounts cannot exceed 70 percent of the cost of attendance (tuition, fees, required supplies and text) for an academic year.

The Nurse Educator Scholarship Program, after only two years, has already demonstrated to be a wise investment for the state. As of June 30, 2008, the actual service scholarships awarded are:

Actual Nurse Educator Service Scholarships Awarded in FY 2008

Institution	Number of Awards*	Total AY 2007- 08 Award	Program of Study	Number of Graduates***
Fort Hays State University**	8	\$0	8 MSN	1
Pittsburg State University	4	\$13,577	4 MSN	3
University of Kansas Medical Center	14	\$44,714	5 Ph.D; 9 MSN	1
Wichita State University	20	\$57,512	20 MSN	3
Washburn University	20	\$18,532	20 MSN	2
Totals	66	\$134,335	In Progress	10

^{*}Includes scholarship recipients from FY07

Note: Adding FHSU encumbered funding to total AY 2007-08 awards brings actual total to \$171,940.

^{**}FHSU is not requesting additional scholarship funds for FY08. Funding encumbered from FY07, (\$37,605) will fund their eight FY08 students.

^{***}As of September 2008

Placement of 2008 Graduates Table

	Number of	
Institution	Graduates	Place of Employment
Fort Hays State University	1	Baker University
Pittsburg State University	3	Pittsburg State University (all)
University of Kansas Medical Center	1	University of Kansas Medical Center
Wichita State University	3	Wichita State University (2) & Barton County Community College (1)
Washburn University	2	Washburn University (all)
Total	10	

Summary of Nurse Educator Service Scholarships for FY 2008

The demand for more nurse educators, combined with the appeal of this service scholarship program, which attracts students in need of financial assistance while pursuing their graduate education, has resulted in 66 service scholarships awarded in the first two years of this ten-year project. Of these 66 service scholarship recipients, ten have graduated as of September 2008. The growing popularity of this service scholarship program has a real potential to ease the nursing faculty shortage by assisting with the production of new nurse educators. This grant does not, however, address disproportionate salary differences between nurse educators and practitioners, which has contributed greatly to the shortage of nursing faculty.

"These partnerships are essential for us to increase the number of students in our nursing programs. The outcomes are evident in the enrollments in our programs and the rise in the number of graduate students interested in becoming faculty."

Dr. Helen R. Connors, Associate Dean, University of Kansas Medical Center, School of Nursing

NURSING FACULTY SALARIES AND SUPPLIES GRANT

As with the Nurse Educator Service Scholarship Program, the primary goal of this grant is to increase the availability of qualified nursing faculty in Kansas postsecondary nursing education programs. A second goal of this grant is to increase funds for consumable supplies necessary for laboratory and classroom instruction to accommodate a 25 percent increase in



nursing student enrollment. This is a ten-year grant, subject to annual appropriation from the Kansas Legislature. All 22 publicly-funded educational institutions in the state with approved RN programs were encouraged to apply.

Initially, this grant made available a total of \$2.4 million (\$1.2 million grant funds plus \$1.2 million in required match) to provide funding to hire additional nursing faculty and secure additional supplies. Institutions applying for this grant provided an implementation plan to demonstrate sustainability, a summative evaluation of the plan's success, and most importantly, an explanation of how nursing program capacity would



increase and eventually graduate more nurses who pass the NCLEX examinations. For FY 2008, the Kansas Legislature appropriated an additional \$600,000, thus increasing the grant amount from \$1.2 million to \$1.8 million annually (\$3.6 million total with required match). Each institution was invited to submit a supplemental grant proposal for this additional grant funding. Institutions applying for these supplemental funds had to demonstrate how they would utilize these additional funds, and were held to the same

accountability criteria as initial grant funds. The same Nursing Initiative Grant Review Committee reviewed the proposals submitted for supplemental funds.

"The Nursing Initiative has provided an opportunity for program capacity in the Nursing Program to expand by 55 students, 40%. The positive reaction from the communities served by the university has been heartwarming. The public is aware of the need for nurses and nurse educators and recognizes the positive partnerships that made the expansion possible..."

Dr. Mary Carol G. Pomatto, Chair, Department of Nursing, Pittsburg State University

Nursing Faculty Salaries and Supplies Grant Data as of June 30, 2008:

Institution	Grant Amount	Match Amount	Total Amount Salaries & Supplies	Total Amount Spent Salaries & Supplies	Additional New Nursing Faculty for FY 08	Encumbered Salary Funds due to Unfilled Positions
Emporia State University	\$65,572	\$65,572	\$131,144	\$131,275*	O New hire left, position Open	0
Fort Hays State University	\$26,066	\$26,066	\$52,132	\$44,086	1 FT	\$8,046
Pittsburg State University	\$194,742	\$194,742	\$389,484	\$363,712	4 FT	\$25,772
University of Kansas Medical Center	\$140,321	\$140,321	\$280,642	\$279,682	3 FT, 1 PT	\$960
Washburn University	\$156,353	\$156,353	\$312,706	\$277,809	3 FT, .75 PT	\$34,897
Wichita State University	\$248,387	\$248,387	\$496,774	\$612,496 *	2 FT, 10 PT	0
Barton County Community College	\$38,280	\$38,280	\$76,560	\$33,290	0 Position Reopened	\$43,270

Institution	Grant Amount	Match Amount	Total Amount Salaries & Supplies	Total Amount Spent Salaries & Supplies	Additional New Nursing Faculty for FY 08	Encumbered Salary Funds due to Unfilled Positions
Butler Community College	\$62,559	\$62,559	\$125,118	\$144,752 *	1 FT,	0
Cloud County Community College	\$56,922	\$56,922	\$113,844	\$113,844	0	0
Colby Community College	\$63,110	\$63,110	\$126,200	\$123,000	2 FT, 1 PT	\$3,220
Dodge City Community College	\$9,675	\$9,675	\$19,350	\$24,230*	1 PT	0
Hutchinson Community College	\$48,104	\$48,104	\$96,208	\$92,042	2 FT	\$4,166
Johnson County Community College	\$176,200	\$176,200	\$352,400	\$329,200	2 FT, 1 PT	\$23,200
Kansas City Kansas Community College/KC Area Technical Center	\$123,402	\$123,402	\$246,804	\$252,454*	5 FT	0
Labette Community College	\$30,000	\$30,000	\$60,000	\$18,926	1 FT	\$41,074
Manhattan Area Technical College	\$44,891	\$44,891	\$89,782	\$46,491	2 FT, 4 PT	\$43,291
Neosho County Community College	\$172,535	\$172,535	\$345,070	\$333,361	4 FT	\$11,709
North Central Kansas Technical College/Hays	\$19,128	\$19,128	\$38,256	\$38,256	1 FT	0
Pratt Community College	\$123,752	\$123,752	\$247,504	\$247,504	4 FT, 2 PT	0
Totals	\$1,799,999	\$1,799,999	\$3,599,998	\$3,506,410		Encumbered: \$239,605

FT = Full Time; PT = Part Time

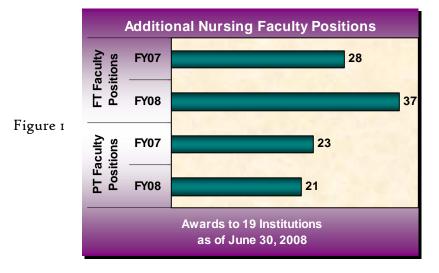
Note: Total Salary and Supplies funds spent, plus salary funds encumbered due to unfilled or re-vacated faculty positions: \$3,746,015. This amount includes \$146,017 expended by several institutions in excess of the minimum required match for salaries and supplies (\$134,700 in Salaries and \$11,317 in Supplies).

Summary of Nursing Faculty Salaries and Supplies Grant for FY 2008

This grant provided educational institutions funding to hire additional nursing faculty and secure additional instructional supplies. Based on fiscal year-end information submitted to KBOR from the 19 institutions that received funding from this grant, 37 full-time and 21 part-time additional nursing faculty have been hired in fiscal year 2008

^{*} Denotes spending by 5 institutions in excess of minimum required match amount.

(See Figure 1). Many full-time and part-time nursing faculty positions still remain unfilled; several positions that were filled again became vacant after a brief time as the individual left.



For FY 2008, the second year of this ten-year grant cycle, institutions reported a total of \$3,416,800 (grant with required match) was expended for nursing faculty. This included faculty hired with this grant in FY07, and are now in their second year of teaching, and the additional 37 full-time and 21 part-time faculty hired in FY08. Due to difficulty recruiting and hiring additional nursing faculty by the beginning of the fiscal year, many faculty positions are still unfilled, and several positions re-vacated due to unexpected turnover. This resulted in \$239,605 (grant with required match) that remains encumbered by the institutions for faculty positions to be expended as faculty are recruited and hired (See figure 2). Some institutions, however, reported spending in excess of their required match (\$134,700 in salaries and \$11,317 in supplies), using institutional or encumbered funds.

Nursing faculty positions continue to be exceedingly hard to fill. Several institutions reported that they have experienced a new faculty hire leaving after a short period because of competition for nursing faculty among institutions and the disparity between faculty and practitioner salaries.

Of the 22 public institutions with RN programs, including the 19 that received funding from this grant, 18 reported hiring additional nursing faculty. Sixteen programs reported being able to retain faculty while 2 programs were unable to retain faculty who were hired.

- Salary, as well as competition from other schools in recruiting new faculty at the same time, was a major hiring factor.
- The main reasons given for difficulty with faculty retention centered around salary issues, relocation out of state, and retirement.
- Sixty-six graduate nursing students currently receiving funding from the statesponsored scholarship program are pursuing an advanced degree and are planning to become a nurse educator.
- The two major obstacles for faculty recruitment are educational preparation and competitive salary.

- In 2008, the average age of a nursing faculty member is approximately 50 years old.
- Almost all programs (92%) plan to add or hire faculty by 2011.
- As of August, 2008 31 full-time, 11 part-time and 12 clinical faculty positions were open.
- As of August, 2008 twenty-two full-time and one part-time faculty retirements
 were reported within the last year, and twenty-three are vacating positions for
 other reasons. In 2016 it is projected that 28% of current faculty will have retired.

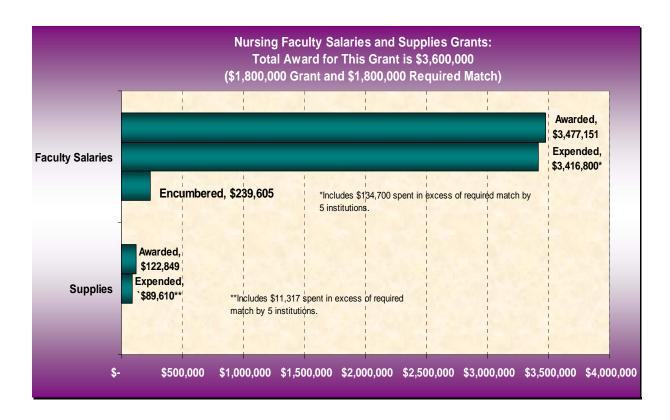
NOTE: not all public nursing programs applied for funding from this grant; however, KSBN surveyed all nursing programs, public and private, so this faculty data reflects statewide trends.

Nursing Supplies

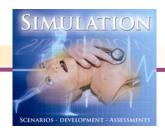
A total of \$89,610 (grant with required match) has been expended on nursing classroom supplies (See figure 2).

The vast majority of classroom supplies obtained consisted of consumable supplies such as gloves, syringes, catheters, surgical dressing kits, gauze, IV bags, chemical testing strips, and other single or limited-use items. These consumable items are necessary for learning proper and safe patient-care procedures.

Figure 2



BUILDING SIMULATION CAPACITY IN KANSAS



"During a simulation experience, a student delivered a medication in the incorrect route. The instructor did not want to stop the student and break the simulation so we in the control room provided an adverse drug reaction to the mannequin. The patient became pulseless. The students recognized there was a problem, but waited longer than three minutes to begin CPR. As we played back the scenario on the screen, the students did not need to be told what they did wrong. They verbalized their own incorrect actions. This method of self-discovery affected even the observing students. Normally, I reiterate information over and over again, but this time I observed less verbal repetition and more references from the simulation to clinical application. This is very encouraging as I thought I've finally discovered a way to make the material meaningful to the student in a way they would remember it. For the first time, I felt like a teacher, not a lecturer or a demonstrator, but a teacher."

Patricia Hutchinson, Dean of Nursing, Allied Health, and Early Childhood Education, Butler Community College

The traditional approach to educating healthcare professionals relies heavily on hands-on training with actual patients in multiple clinical settings. Clinical practice is, and will remain, an integral component of nursing education. It does, however, have its inherent limitations, such as patient safety concerns, limited exposure to the variety of patients and conditions one might encounter at a clinical site, and uneven learning opportunities.



Neosho County Community College Students Working with a Mannequin

Given the challenges of placing more students into a finite number of clinical learning sites, and a desire to promote scenario-based patient simulations to give students more opportunities to practice specific skills, work through clinical problems, and make decisions in a safe and controlled environment, an emphasis was placed on obtaining high-fidelity patient simulators for nursing programs. Human patient simulators are full-body computerized mannequins that provide real-time physiological measurements programmed to reflect a variety of health conditions. These simulators allow students to practice specific clinical

skills repeatedly, evaluate their knowledge base, develop critical thinking and teamwork skills, and gain exposure to scenarios that they might not be exposed to during their actual clinical experiences. Just as flight simulators in the aviation industry proved to be tremendously useful in pilot training and improving overall aviation safety, the use of simulation technology in healthcare proves to be equally useful in educating new students and existing professionals.

As a direct result of the Kansas Nursing Initiative, statewide simulation activity has increased dramatically over the past year. Before the nursing initiative, a few nursing education programs around the state took an early lead in promulgating simulation, and

encouraged others to follow. These faculty were convinced of the validity of incorporating simulations into their respective nursing curricula. In particular, they felt that the application of simulations would yield important gains for their students once they entered clinical facilities. However, the majority of the nursing programs statewide had not purchased high-fidelity human patient simulators, and of those that did, only a few were beginning to use them to their fullest capability. In addition to purchasing the simulators, dedicated space in the form of a simulation laboratory needed to be developed. Nursing program faculty also had to become familiar with the mechanical and programmatic operations of the simulators. They needed to learn how to develop clinically relevant scenarios to enhance the student's education, and assess the student's ability to respond to scenario based challenges.

As a result of this grant, 13 institutions purchased 27 human patient simulators (18 adult, 5 child, and 4 infant units) and related ancillary equipment such as compressors, computers, monitors and audio-visual equipment. Twelve institutions remodeled their nursing facilities to create simulation laboratories which are fully- equipped replicas of clinical settings.



Simulator Workshop, April 2008 Wichita In conjunction with KSBN, a third simulation workshop was conducted in April 2008 to assist nursing and allied health faculty with development of clinically relevant scenarios utilizing patient simulators and to develop reliable student assessment modalities.



Over the past two years, a tremendous surge has occurred in not just the acquisition of human patient simulators by nursing education programs throughout the state, but also in their integration into the curriculum. The use of a human patient simulator is becoming a routine part of nursing and allied health education. Students are utilizing simulations to achieve and reinforce specific learning objectives and concepts, and acquiring skills they would otherwise only have acquired in an actual clinical site. The use of human patient simulators in Kansas has crossed a "threshold point," and faculty are becoming more familiar and comfortable with their use; they are becoming fully embedded in every program curriculum. A map denoting the locations of Kansas nursing programs with human patient simulators is located in Appendix III of this report.

INCREASED ENROLLMENT IN NURSING EDUCATION PROGRAMS

The primary goal of the Kansas Nursing Initiative, funded by these grants and their respective match, is to increase the enrollment in and the graduation from Kansas publicly- funded registered nursing (RN) education programs. Increasing the capacity of nursing programs impacted the waiting lists of qualified students seeking admission into these programs. Many institutions, both two and four year, reported that the number of students placed on waiting lists has decreased as programs were able to accommodate more students. Additionally, some nursing programs placed added resources toward reducing attrition. This will likely contribute to more graduates and more practicing nurses in Kansas.

Data Reported to KBOR for the Purposes of The Nursing Initiative: Additional Nursing Students Admitted Due to Funding Provided by Grants

Institution	Additional Nursing Students Admitted During FY07	Additional Nursing Students Admitted During FY08
	(2006-2007 School Year)	(2007-2008 School Year)
	(Undergraduate and Graduate Students)	(Undergraduate and Graduate Students)
Barton County Community College	5	0
Butler Community College	32	0
Cloud County Community College	4	0
Colby Community College	10	0
Dodge City Community College	0	8
Emporia State University	6 BSN	9 BSN
Fort Hays State University	9 BSN and 17 MSN	23 BSN and 22 MSN
Fort Scott Community College	0	*
Garden City Community College	7	*
Hutchinson Community College	10	9
Johnson County Community College	21	40
Kansas City Kansas Community	25	0
College/KC Area Technical Center		
Labette Community College	n/a	3
Manhattan Area Technical College	16	0
Neosho Community College	40	16
North Central Kansas Technical	5	2
College/Hays		
Pittsburg State University	46 BSN and 9 MSN	14 BSN and 11 MSN
Pratt Community College	50	31
University of Kansas Medical Center	13 BSN and 94 MSN/ PhD	3 BSN and 83 MSN/PhD
Washburn University	32 BSN and 16 MSN	14 BSN and 18 MSN
Wichita State University	40 BSN	20 BSN
Total Number of Additional Nursing	507 (371 ADN/BSN and 136	326 (192 ADN/BSN and 134
Students Admitted	Graduate Students)	Graduate Students)

^{*}Note: Ft. Scott and Garden City Community College did not apply for the Nursing Faculty & Supplies grant. They only applied for and received, Facility and Equipment Upgrades grant funding.

LOOKING TOWARD THE FUTURE

The primary goal of the Kansas Nursing Initiative, which is funded by these grants and their respective match, is to increase the number of practicing registered nurses in Kansas. This is being accomplished by providing state nursing education programs with resources needed to increase student capacity, as well as an incentive for more nurses to become nurse educators through the service scholarship program.

Based on data submitted to KBOR, these funded nursing programs admitted 507 additional nursing students in the first year, and 326 additional nursing students in the second year, for a total of 833 additional students admitted. The goal of the Kansas Legislature was to increase enrollment by 25 percent or 250 students, a goal which the programs exceeded. (See figure 3). Increased enrollment however, did not come without a price. The KSBN has reported over 91 new nursing faculty are classified as "Hire Exception," which means that they have not met all Board of Nursing faculty requirements and are temporarily waived until they meet these requirements. Institutions still have faculty vacancies, and several have experienced turnover among recently-hired faculty due to competition from other educational institutions as well as the healthcare industry. Additionally, an increase in enrollment in the first year of a multi-year educational program translates into an increased enrollment with each subsequent year, as these larger numbers advance through the educational program. Nursing programs have responded exceptionally well to the challenges presented these past two years from increased enrollment, facility modifications, creation of simulation laboratories, obtaining and learning how to use simulators, and mentoring new faculty.

The first year of the initiative was one of challenges, change, and opportunity. The second year was one of successfully accommodating the increase in students in both classroom and clinical sites, integrating simulation technology into the curriculum, and in some cases adapting to enhanced surroundings. The full impact of this initiative on the nursing shortage will begin to manifest itself in the next few years, when these additional students graduate, pass their NCLEX examinations, and become employed as registered nurses in Kansas.

For these initial successes to be fully realized, it is imperative that the nursing programs continue to receive the funding support over the ten-year lifespan of this initiative.



Figure 3

APPENDIX I

NURSING GRANTS REVIEW COMMITTEE

Grant applications reviewed by the committee:

I. Nursing Faculty and Supplies Grant (reviewed in 2006)

Legislative Appropriation: \$1.2 Million Required Match: \$1 for each \$1 awarded

2. Nursing Faculty and Supplies Supplemental Grant (reviewed in 2007)

Legislative Appropriation: \$600,000 Required Match: \$1 for each \$1 awarded

Committee Members:

Jeff Barton (Kansas Organization of Nurse Leaders)

P.O. Box 2308 Topeka, KS 66601-2308

Cindy Luxem (Kansas Health Care Association)

117 SW 6th Street, Suite 200 Topeka, KS 66603

Mindy Mitchell (Kansas State Nurses Association)

626 North 1600 Road Lawrence, KS 66049-9002

Nancy Mosbaek (Kansas State Board of Nursing) (ex-officio)

900 SW Jackson, Suite 1051 Topeka, KS 66603

Deborah F. Stern (Kansas Hospital Association)

215 SE 8th Avenue Topeka, KS 66603

Deborah H. Zehr (Kansas Association of Homes and Services for the Aging)

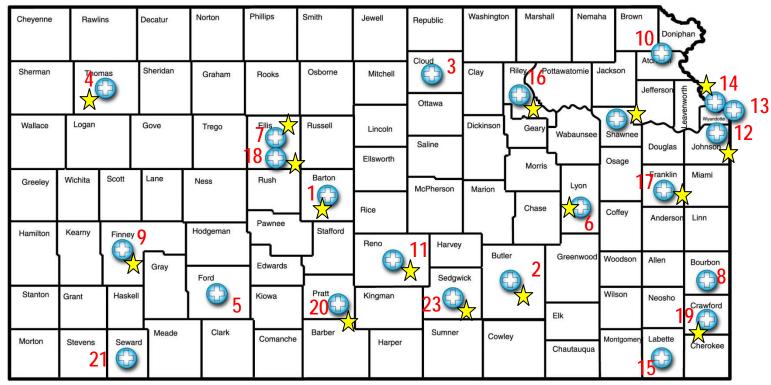
217 SE 8th Avenue Topeka, KS 66603



APPENDIX II

Kansas RN Program Patient Simulator Lab Locations

(Public Institutions)





RN Program Patient Simulator Lab Locations

Simulator labs that received funding from the Nursing Equipment & Facility Upgrade Grant funded by the Legislature

- 1. Barton County Community College
- 2. Butler Community College
- 3. Cloud County Community College
- 4. Colby Community College
- 5. Dodge City Community College
- 6. Emporia State University
- 7. Fort Hays State University
- 8. Fort Scott Community College
- 9. Garden City Community College
- 10. Highland/Northeast Kansas Technical Center
- 11. Hutchinson Community College
- 12. Johnson County Community College

- 13. University of Kansas/KUMC
- 14. Kansas City Kansas Community College/KC Area Technical Center
- 15. Labette County Community College
- 16. Manhattan Area Technical College
- 17. Neosho County Community College/Ottawa
- 18. North Central Kansas Technical College/Hays
- 19. Pittsburg State University
- 20. Pratt Community College
- 21. Seward County Community College/Area Technical College
- 22. Washburn University
- 23. Wichita State University

APPENDIX III

Nursing Faculty Salaries & Supplies

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Institutions	Grant	Match	Total Funds	Salary Expenditures	Supplies/Other Expenditures	Total Expenditures	Encumbered	Notes
Emporia State University	\$65,572	\$65,572	\$131,144	\$131,275		\$131,275		Spent \$131 in excess of required match through institutional funds.
Fort Hays State University	\$26,066	\$26,066	\$52,132	\$44,086		\$44,086	\$8,046	Encumbered funds obligated for faculty, FY09
Pittsburg State University	\$194,742	\$194,742	\$389,484	\$319,704	\$44,008	\$363,712	\$25,772	
University of Kansas Medical Center	\$140,321	\$140,321	\$280,642	\$279,682		\$279,682	\$960	
Wichita State University	\$248,387	\$248,387	\$496,774	\$595,629	\$16,867	\$612,496		Spent \$115,722 in excess of required match through institutional funds.
Washburn University	\$156,353	\$156,353	\$312,706	\$272,759	\$5,050	\$277,809	\$34,897	
Barton County Community College	\$38,280	\$38,280	\$76,560	\$30,580	\$2,710	\$33,290	\$43,270	Encumbered funds obligated for faculty, FY09
Butler Community College	\$62,559	\$62,559	\$125,118	\$134,037	\$10,715	\$144,752		Spent \$19,634 in excess of required match through institutional funds.
Cloud Community College	\$56,922	\$56,922	\$113,844	\$113,844		\$113,844		
Colby Community College	\$63,110	\$63,110	\$126,220	\$123,000		\$123,000	\$3,220	Encumbered funds obligated for faculty, FY09
Dodge City Community College	\$9,675	\$9,675	\$19,350	\$17,439	\$6,791	\$24,230		Spent \$4,880 in excess of required match through institutional funds.
Hutchinson Community College	\$48,104	\$48,104	\$96,208	\$92,042		\$92,042	\$4,166	Encumbered funds obligated for faculty, FY09
Johnson County Community College	\$176,200	\$176,200	\$352,400	\$329,200		\$329,200	\$23,200	Spent \$23,200 in excess of required match through institutional funds.
Kansas City Kansas Community College & KC Area Technical Center	\$123,402	\$123,402	\$246,804	\$252,454		\$252,454		Enhanced match by \$5,650
Labette Community College	\$30,000	\$30,000	\$60,000	\$18,926		\$18,926	\$41,074	Encumbered funds obligated for faculty, FY09
Manhattan Area Technical College	\$44,891	\$44,891	\$89,782	\$44,891	\$1,600	\$46,491	\$43,291	
Neosho County Community College	\$172,535	\$172,535	\$345,070	\$331,492	\$1,869	\$333,361	\$11,709	Encumbered funds obligated for faculty, FY09
North Central Kansas Technical College, Hays	\$19,128	\$19,128	\$38,256	\$38,256		\$38,256		
Pratt Community College	\$123,752	\$123,752	\$247,504	\$247,504		\$247,504		

APPENDIX IV

Nurse Educator Service Scholarship

Scholarship Notes Expenditure

	· ·	
Emporia State University		
Fort Hays State University	\$37,605	FY07 encumbered funds
Pittsburg State University	\$13,577	
University of Kansas Medical Center	\$44,714	
Wichita State University	\$57,512	
Washburn University	\$18,532	
Total	\$171,940	