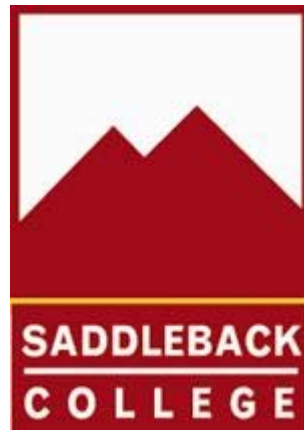


# **Saddleback College Nursing Program Review**



**Submitted on  
March 16, 2009**

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- Student Demographic Report

## **Program Review Team Members and Approvals**

Program Review Team Chair:

**Diane Pestolesi**

Program Review Team Members:

**Tammy Rice**

**Johe Morris**

**Jennifer Forouzesh**

**Linda Gleason**

**Lisa Austin**

**Janet Jacob**

**Catherine Ayad**

**Ryan Brooks**

## Program Review Checklist

Date Completed	Action
N/A	Contact Program Review Chair for orientation
February 2009	Form Program Review Team
February 2009	Gather documents (Org Chart/Staffing Profile/AUO Assessment Forms/Data Sets)
February 18, 2009	Solicit input from faculty and students
February 2009	Determine if additional research is needed
N/A	Contact College Research Analyst if necessary
February 2009	Write Program Review report
March 13, 2009	Submit report to Dean or Program Review Chair for approval
	Report submitted to Academic Senate
	Report submitted to President and Vice President of Instruction
	Report posted to the IE web site
	Presentation to the Planning and Budget Committee

## Section I: Nursing Program Overview

### A. The Mission of the Unit and its Link to the College's Mission and Goals

**Our College Mission:** to provide access to learning opportunities that promotes student success; to foster intellectual growth, individual expression and character development; and to support a dynamic and diverse environment of innovation and collegiality.

**Health Sciences and Human Services (HS & HS) Mission:** to provide quality career, technical and sign language education for our students and to support the mission and vision of Saddleback College.

**The Saddleback College Nursing Program Mission is to:**

- provide high quality, innovative education,
- to support student success,
- to instill in the learner the need for life long learning and professional development and
- to prepare competent entry level registered nurses to meet the changing needs of health care in the community.

Institutional Mission/Goal Reference	Nursing Program Outcomes	Means of Assessment and Criteria for Success	Summary of Data Collected	Use of Results
<p>The Nursing Program supports the College's goals to: provide a meaningful general education program including baccalaureate-level transfer and occupational curricula.</p> <p>Nursing Program Goal: Produce graduates who integrate knowledge from their general educational preparation and nursing courses to provide nursing care for health care consumers and families</p>	<p>The graduate will relate biopsychosocial theories and concepts, critical thinking, and the nursing process to promote adaptation for the health care consumer and family</p> <p>The graduate will promote and maintain a safe environment by synthesizing nursing process and skill competency to intervene therapeutically for the health care consumer</p> <p>The graduate will effectively employ communication skills (verbal, nonverbal, interpersonal or technological) to manage and coordinate care for the health care consumer in collaboration with other health care professionals</p> <p>The graduate will implement the role of the professional nurse within the community as defined by the California Nurse Practice Act and standards of nursing practice</p> <p>Program Attrition &lt; 15% &gt; 90% of students will successfully complete the NCLEX exam</p>	<p>Students who successfully complete each nursing course will meet the clinical course critical objectives on the clinical evaluation tool related to :</p> <p>Safe care,</p> <p>Communication and</p> <p>Professional role development</p> <p>Monitor attrition per BRN and NLN guidelines Goals 1. Attrition &lt; 15% Retention &gt; 85% 2. &gt; 80% of graduates will score &gt; 90% predictive of success on the ATI NCLEX predictor test 3. &gt; 90% of all graduates will pass the NCLEX (1<sup>st</sup> attempt).</p>	<p>Clinical attrition F 2007 = 4 Clinical attrition Sp 08 = 6 <b>2007/08 clinical attrition 10</b></p> <p>16 students referred to skills lab for practice and the computer lab for case review. 8 student failures based on safe care in 07/08</p> <p>Students continually work on communication skills through patient care planning and documentation as well as in verbally reporting on patient status and care. No clinical failures based on communication alone</p> <p>2 student failures based on professional role issues.</p> <p>Theory Attrition F 07 = 5 Theory Attrition S 08 = 7 <b>2007/08 theory attrition 12</b> <b>1. Total attrition = 22</b> <b>NLN = 12%, 88% retention</b> <b>BRN = 18%, 82% retention</b> <b>2. 75% scored &gt; 90% predictive of success on the ATI test</b> 3. NCLEX success</p>	<p>Continue to monitor student clinical performance weekly and advise as indicated.</p> <p>Clinical Teaching assistants used throughout the first 3 semesters of the program to support student clinical performance. New student referral form implemented.</p> <p>Email and use of the internet to research topics and take tests required by all students added to the new student orientation and to the Student Success Class.</p> <p>Student policies related to professional responsibility added to student handbook, students referred to BRN website for Nurse practice act</p> <p>Fostering Student Success Grant (FSS) in place. Risk assessment ongoing. FSS paid for low score students to take the Saddleback NCLEX review class (29 in S 08). Many others participated in NCLEX remediation courses outside of Saddleback College. Continue to monitor per BRN report</p>

## **B. Historical Background and Unique Characteristics of the Nursing Program**

The first Associate Degree Nursing Class started at Saddleback College in 1971 and graduated in 1973. The California Board of Registered Nursing (BRN) approved the original curriculum and has continued to accredit the nursing program since. The most recent BRN accreditation was in 2003 and occurs every 8 years. The Saddleback College Associate Degree Program has been accredited by the National League for Nursing (NLN) continuously since 1988 and is due for accreditation again in fall 2010.

The nursing program is highly respected in the community with 95% of our graduates employed as Registered Nurses within 6 months of graduation. Our program admits 60 students each semester and graduates between 54 – 60 students each semester. Our program is also well respected across the state with pass rates on the NLEX exam that exceeds both state and national averages. The program admits Licensed Vocational Nurses on a space available basis to the second or third semester of our four semester program.

## **C. Progress Since the Last Program Review**

This is the first program review of this type for the Nursing Program which has historically completed an end of semester evaluation, each semester, and maintains files and records that align our annual program evaluation with the reporting required by the Board of Registered Nursing (BRN) and the National League for Nursing (NLN) who are our nursing accrediting agencies. The formal Saddleback College Program review will provide our program with an in depth review which will assist the nursing program to prepare for the upcoming National League for Nursing Accreditation and will align our program review and assessment with the processes used throughout the college. (See Appendix for Nursing Program Evaluation and Timeline)

## **D. SLO Use in the Nursing Program**

The Nursing Program has used student learning outcomes to guide program development and improvement over the past 5 years. As a program the SLOs have consistently looked at student success in the program and on the National Licensing Exam (NCLEX). As a result the program has secured grants to address the attrition and retention in our program which has improved from 28% attrition (72% retention) to 18% or 82% retention. The program has also used statistics on success to change its admission criteria, and to increase the use of clinical teaching assistants in the first three semesters of the nursing program. Student learning outcomes have been used to increase the use of peer mentors and case based clinical software in the computer lab and online. SLOs are also used to increase the use of high fidelity clinical simulation.

## **E. Current Strengths, Opportunities, and Challenges**

### **Opportunities**

Nursing is the nation's largest health care field with 2.7 million registered nurses nationwide. The U.S. Bureau of Labor Statistics projects that employment for registered nurses will grow faster than any other occupation through 2012. The state of California ranks forty nine out of fifty in nurses per capita and the average age of the practicing Registered Nurse in California is 47.1 years of age. (BRN). It is projected that by 2020 there will be a shortfall of 110,000 Registered Nurses in California. Since patient outcomes, morbidity and mortality statistics, and health care

costs have been directly correlated to the nursing shortage, it is of critical importance to put resources into alleviating the nursing shortage as quickly as possibly.

The Saddleback College Nursing Program mission, vision and goals are aligned with the goals of the California Institute for Nursing and Healthcare (CINHC) which is dedicated to collaboratively developing statewide solutions to the critical nursing shortage and related nursing issues that affect the health of all Californians. The Saddleback College Dean has participated in the development of a White Paper that was published by CINCH, funded by the Gordon and Betty Moore Foundation, and cosponsored by the American Nurses Association\California (ANA\C); California Organization of Associate Degree Nursing Program Directors, North and South (CO-ADN); Association of California Nurse Leaders (ACNL); California Association of Colleges of Nursing (CACN); and California Board of Registered Nursing (BRN) which identified seven critical areas for strategic nursing education redesign:

- Forging strong academic and health care service partnerships
- Establishing core professional and clinical role competencies
- Developing a model for educational advancement to BSN and advanced degrees
- Collaborating to recruit, develop and retain a diversified faculty
- Integrating simulation, technology and informatics into curriculum
- Supporting graduate transition into clinical practice
- Creating a centralized nursing education resource, data, and research center

The Saddleback College Nursing program has the opportunity to participate with CINHC and its nursing and healthcare partners to collaboratively work to alleviate the critical nursing shortage in California. In an effort to produce more entry level registered nurses, Saddleback's Nursing Program has grown from 44 students/ semester in 2004 to 60 students per semester.

This growth was made possible by grant funds and partnerships that have been secured by Tammy Rice, the Nursing Program Director over the past 5 years. Tammy has secured grants through the State Chancellor's Office in the following areas: WIA LVN to RN funds, Enrollment Growth grants yearly since 2002, The Fostering Student Success Grant, and Allied Health Equipment Funds. Partnerships exist between Saddleback College and Hoag, Mission, and Saddleback Memorial Hospitals, who frequently fund faculty positions to allow us to sustain our increased enrollment.

## **Challenges**

The primary challenge that the nursing program faces today is keeping up with the workforce need, and continuing to fund expansion, as well as programs and services that have allowed us to graduate 45% more nursing students a year for the past 3 years.

In the past 5 years California State University Fullerton, Concordia University, Chapman University and the University of California in Irvine have started new entry level Registered Nursing Programs in Orange County. Saddleback, Santa Ana and Golden West Colleges have received categorical funds to expand their Associate Degree registered nursing programs as well. This has caused extreme crowding in clinical facilities and makes it increasingly difficult for students to have consistent exposure to high quality patient clinical experiences. The change in the number of students being placed through the Orange County Consortium in clinical facilities has grown approximately 50% in the past 5 years.

Since overcrowding in clinical agencies doesn't allow quality patient care experiences consistently, the Nursing Program has been forced to rely on human patient simulators for simulated patient care experiences. The human patient simulators typically cost from \$30,000 - \$50,000 per simulator and require software that can cost anywhere from \$2,000 to \$40,000. Although a very expensive instructional strategy, simulated patient care has been found to improve a student's ability to transfer theory to clinical practice, and improve critical thinking and clinical judgment in a safe nonthreatening environment.

In addition to the expense of using Human patient simulators, a significant amount of training, medical expertise and practice with the simulators is required to run a simulated patient experience realistically. The transfer of theory to clinical practice seamlessly relies more and more heavily on the ability to realistically simulate clinical experiences. Currently we do not have the technical assistance to effectively use and service the simulators. The simulation currently being used is being done by the clinical faculty with the assistance of a part time skills specialist and the faculty member responsible for the skills lab. A full time Health Science laboratory technician and a skills laboratory assistant are needed to run the human patient simulators and assist faculty in simulation.

A second challenge for the nursing program is in record keeping, tracking and in communication with the students. The Nursing program is accredited by the National League for Nursing Accrediting Commission (NLNAC) and the Board of Registered Nursing (BRN). These accreditations require a great deal of record keeping and reporting on curriculum, resources, equipment, attrition, retention, student outcomes, job placement, and success on licensure exams.

Record keeping is also required by the Board of Registered Nursing to track faculty approvals and qualifications for teaching, as well as clinical site evaluation, approval and contracts. Record keeping in regards to the approvals of faculty and clinical facilities is maintained by the administrative unit in the Health Sciences Division office.

Nursing students are required to have background checks, preadmission testing, liability insurance and CPR certification, as well as verification that they have completed their physical assessments and immunizations. A great deal of time is spent by the division and nursing department administrative assistants communicating with students, tracking and verifying admission and reentry requirements of our program. To account for growth and to maintain the level of service required to operate effectively, the three categorically paid classified positions in the HS & HS administrative unit that also support the nursing program need to be institutionalized and funded by the college.

A third challenge for our division is in regards to facilities and space. Although we just moved into the Health Sciences building four years ago, the tremendous demand for growth in Health Sciences and Human Services has resulted in program growth and development that will soon exceed what the building can accommodate, especially in regards to office, lab and simulation space.

A final challenge for the Nursing Program is not having a permanent dedicated Nursing Program Director. The current Nursing Director is an "Acting Assistant Dean, Nursing Program Director." The Board of Registered Nursing regulation 1424e states that "a sufficient period of time shall be set aside by the institution, exclusively for the use of the director or his designee in the administration of the program". The National League for Nursing requires that "the nurse administrator has the authority and responsibility for the development of the program and has

adequate time and resources to fulfill the role responsibilities.” In California nursing programs that don’t have full time Nursing Directors dedicated to their programs have been placed on warning status when accredited. The next interim BRN accreditation is due in fall 2009 and the NLN full accreditation is fall 2010.

## **Strengths**

The Saddleback College Nursing Program has been a successfully accredited (BRN) program in Orange County for thirty-three years. The program has maintained NLN accreditation since 1988. The nursing program has an excellent reputation in the community, the state, and has been recognized nationally by the Carnegie Foundation for Advancement of Teaching as a school of excellence. The program is very popular, impacted, and typically has 350 to 500 students apply for admission twice a year. The retention data for the Saddleback nursing program in 2007/2008 as reported to the Board of Registered Nursing is 82%, or 18% attrition. The attrition data for nursing programs across the state often exceed 25%. (See Excerpt BRN report appendix) The student pass rate on the Licensing exams (the NCLEX) has been from 94 – 100% over the past 3 years and exceeds the state (87%) and national pass rate averages (86%) for registered nursing programs. (NCLEX Pass Rates State of California see appendix)

Saddleback nursing students surveyed after graduation report being very satisfied with the quality of the educational experience they received at Saddleback. The clinical facilities report > 90% satisfaction with the students, student preparation and faculty working with students in the clinical facilities. Clinical facilities who participate on our advisory board consistently report positively on their experiences with our program, students and faculty.

The faculty of the nursing program consistently demonstrate a high degree of commitment to their students and the nursing program. 100% of the faculty are members of the National League for Nursing and most of our faculty maintain specialty certification in their respective nursing fields. Phyllis Kucharski was recognized by Nurse Week as a “Teacher of the Year,” for her classroom instruction and dedication to the Student Nurses’ organization which under her leadership tripled in size and has won numerous awards at the state and national level. Dr. Terri Whitt has been recognized for her outstanding contributions to nursing education for the development of her website “Assisted Learning for All” which allows students to download pod casts of clinical skills before performing those skills on real people. Professor Samantha Venable has authored the third edition of her Pharmacology text that is used in our program and similar programs around the country. Professor Margaret Huang is a regular presenter at conferences for the American Society of Aging and National Council of Aging. Janine O’Buchon was Saddleback College Teacher of the year in 2008. Diane Pestolesi was recognized by the Carnegie Foundation for the Advancement of Teaching, (Benner et. al), as one of three paradigm cases of expert teachers in nursing in the “National Nursing Education Study.” Tammy Rice, Linda Gleason, and Diane Pestolesi are 3 of the only 21 Certified Nurse Educators in the state of California.

The Interim Health Sciences and Human Services Dean Tammy Rice is very active at the state level as the President of the California Organization for Associate Degree Nursing Directors. Tammy participated extensively in the ADN Model curriculum development and writing. She is also active on many committees including: Association of California Nurse Leaders, Chair of the Professional Practice Committee, California Community College Nursing Advisory (3CNAC), National Nursing Education Capacity Team, and Statewide Allied Health and Nursing Board Member. Tammy’s extensive involvement, commitment and grant writing have made it possible

for our program to grow and obtain resources that have resulted in increased enrollment and improved student and program outcomes and success.

Section II: Review Report  
**A. Staffing and Organizational Structure**



## **A. Faculty and Staff**

### **Health Sciences & Human Services (HS & HS) Dean**

The HS & HS Dean administers to the needs of the division as well as oversees the accreditations of the Medical Lab Technician, Nursing and Paramedic and Phlebotomy programs. She is responsible for directing and evaluating the departments assigned to the division including: American Sign Language, Emergency Medical Technician, Human Services, Medical Assisting, Phlebotomy, and the newly approved Mental Health Worker programs. The Dean works with the community agencies that provide clinical placements for students in the Health Sciences and Human Services division. In consultation with the academic chairs, the Assistant Dean, Director of the Nursing Program faculty and staff, the dean develops the schedule of classes, manages the HS& HS facilities, prepares long range plans, manages the budget for equipment, technology, supplies and personnel, and directs and approves curriculum.

### **Assistant Dean/Nursing Program Director**

The Hs & HS Assistant Dean is responsible for administration of the division in the dean's absence but has primary responsibility for administration of the Nursing Program. The Board of Registered Nursing Regulation 1424(e) states that "a sufficient period of time shall be set aside by the institution, exclusively for the use of the director or his designee in the administration of the program." The director does all full time nursing faculty evaluations as well as monitors the approvals of all part-time faculty and clinical facilities. The Assistant Dean, Director of the Nursing Program coordinates, directs and participates in all activities involved in developing, implementing and managing the Associate Degree Nursing Program. She serves as a liaison to the Board of Registered Nursing and the National League for Nursing. She maintains program compliance with the accreditation and legal standards of the Board of Registered Nursing and the National League for Nursing. She directs data collection and analyses for annual reports, self studies and site visits. She coordinates enrollment and recruitment efforts, outreach and systematic program evaluation and assessment of student success. She is responsible for seeking new off campus clinical placements for nursing students and maintaining partnerships with clinical agencies that meet community and program needs.

### **Faculty**

The Nursing program has 18 full time faculty. One full time faculty position is paid by categorical funds. There are 6 part- time faculty teaching in the program and currently 19 Clinical Skills Specialists who work in the clinical facilities as Clinical Teaching Assistants (CTA's) under the guidance of a full time faculty member to assist in the instruction and supervision of nursing students. The Clinical Skills Specialist positions are paid by categorical funds and allow us to take more students into the program. The current full to part-time staffing with the clinical specialists has allowed the program to identify students at risk to fail in clinical and provide increased support and ultimately success. In order to continue to decrease our attrition we would like to institutionalize the use of Clinical Skills Specialists.

In addition to their responsibility through the Master agreement to participate in one hour a week of College committees the Nursing program faculty also participate on at least one and often up to three department committees. The department has the following committees that meet a

minimum of once a semester; the Emergency Care Committee, the Curriculum Committee, Enrollment Management Committee, California Nursing Student Association, Resource Committee and Policy committee. These committees provide the faculty the opportunity to participate in planning, decision making, resource allocation and curriculum development to support the nursing program and student outcomes as well as to improve the program's effectiveness.

### **Senior Administrative Assistant Health Sciences & Human Services**

The division senior administrative assistant is responsible for curriculum, payroll, hiring full time, part time, short term temporary and classified employees and development of the spring, summer and fall schedules. She also processes all adding and canceling of classes as requested by the division faculty. She assists the divisions in finding classrooms for faculty, reviewing faculty load summaries, and reviewing classes for correct OSH and she handles any projects assigned her by the Dean. She also manages the division staff and division meetings.

### **Senior Administrative Assistant Nursing**

Under general supervision of the Assistant Dean the senior administrative assistant for nursing works extensively with faculty and staff, and assists the assistant dean in maintaining compliance with Board of Registered Nursing and National League for Nursing Accrediting Commission regulations and standards. She manages nursing faculty meeting and advisory meetings. She also provides for tracking attrition and retention, maintains student files, schedules student rotations for first semester students, and provides orientation to the students for their clinical health clearance and legal requirements. She answers all calls regarding the nursing program and student physicals, background checks, liability insurance, and TB testing. She is responsible for releasing students to register for classes and scheduling appointments for the Assistant Dean.

### **Administrative Assistant Division**

The administrative assistant for the division is in charge of technology, equipment, facility upkeep, and budget. She maintains employee syllabi, employee health requirements, licenses, certifications, and manages the material fees. This position is responsible for ordering division supplies and instructional materials.

### **Program Specialist Health Sciences and Human Services**

The program specialist is responsible for Human Services, Phlebotomy, Medical Assisting, Medical Laboratory Technician, and American Sign Language Programs. She maintains records and assists with facility correspondence, advisory meetings, and special events such as Red Ribbon Week.

### **Program Specialist EMS/Paramedics**

The program specialist for EMS and Paramedics is responsible for maintaining student records and files for documentation of compliance with regulatory requirements and facility requirements for clinical laboratory participation. She orders equipment and provides for skills testing stations, advisory meetings, and graduation ceremonies. This position assists the department chair for EMT and the Paramedic Program Director in special projects and accreditation.

### **Program Assistant (Categorical)**

The program assistant assists students who call or enter the division office, of which there is an average of 30 students a day and 50 or more on Wednesday. The division office also receives up to 100 phone calls a day from students seeking information about the programs or courses. In addition, this program assistant manages contracts for the 222 clinical facilities utilized by the students of the HS & HS Division, prepares class climate surveys for most courses, and submits and follows up on work orders related to facility maintenance.

### **Student Success Grant Assistant (Categorical)**

The grant assistant for the Fostering Student Success Grant along with the division dean manages the budgets, activities and reports for four grants. She also works with the Assistant Dean/Nursing Program Director in maintaining BRN faculty approvals and facility approvals; she is the main contact with the clinical sites and provides schedule information each semester to each clinical site.

### **Health Sciences Lab Technician (Categorical pending hire)**

This full time employee would report to the Assistant Dean and would be responsible for assisting in skills lab especially with any faculty or student support related to using simulation. This position will allow nursing, EMT and Paramedic students extra guided practice in simulation and ultimately, we hope it will allow us to increase our enrollments in these impacted programs.

### **Clinical Skills Specialist (Categorical)**

This part time temporary employee works 24 hours/week and maintains the skills lab under the supervision of the faculty assigned to the skills lab. This skills specialist sets up and breaks down the skills lab before and after classes. This skills specialist is responsible for ordering and maintenance of supplies and equipment in the skills and computer labs as well as for monitoring the use of both labs.

### **Program Assistant (Categorical pending hire)**

This part time 20 hour/week position would be supportive of the Nursing Program. The responsibilities of this position are to assist with receipt of nursing applications and to collate data related to our admission criteria, attrition and retention and student success. This program assistant will also assist with the administration of computerized tests and will help to manage the data derived from our online tests and reports due to our licensing and accrediting agencies.

The administrative, faculty and classified staffing structure of the Nursing Program currently meets the needs of the students, and supports the mission and goals of the Nursing Program. It is critical to note however that the Dean of the Health Sciences Division is an Interim at present, and that the Assistant Dean, Nursing Program Director is an "Acting" position. It is also critical to note that one full time nursing faculty position and one part time faculty position are paid for by categorical (grant) funds. The Clinical Skills Specialist, the Health Sciences Lab Technician, the Grants Specialist and the Program Assistant are all positions that are paid for by categorical funds. In order to effectively continue to operate and to allow for growth in other areas of the Health Sciences and Human Services Division, it will be necessary to institutionalize these classified positions.

## **B. Curriculum and Instruction**

The Nursing Program at Saddleback College offers an Associate Degree in Nursing. Students who complete the Nursing Program are eligible to take the National Licensing exam (NCLEX). Upon successful completion of the NCLEX exam graduates are able to work as entry level Registered Nurses. Students who complete the program requirements and meet the requirements for the Associate Degree are eligible to transfer to colleges and universities to obtain either Bachelors Degrees or Masters Degrees in Nursing.

Student learning outcomes are evaluated in each nursing course and are used to improve courses and student learning. Course level student learning outcomes are evaluated in course exams, by nationally normed content exams offered by Assessment Technology Institute (ATI), with class climate surveys, and in the clinical area by performance evaluation criteria in the clinical evaluation tools. The program evaluates its outcomes by our NCLEX results, with our attrition/retention data and student success statistics. Student learning outcomes have been evaluated and reported to our accrediting agencies since the program inception.

Instructional strategies have evolved over the years to include the increased use of technology. All nursing courses use the Blackboard course platform, PowerPoint presentations in class, and are augmented by the use of online software programs and software programs available in the Health Sciences computer lab. The software programs allow the students to practice nursing care in an interactive way as well as to take practice exams. The instruction provided in the nursing courses is also supported by the use of high fidelity human patient simulation in the nursing simulation/skills laboratory.

The nursing curriculum underwent a major curriculum change in 2006. The faculty conducted student surveys to assess the students' impressions of the impact the required nursing courses had on student success in the program. The students disclosed that they preferred a more interactive and integrative approach to education as well as more clinical time. They also reported that the program was extremely stressful and that if they took one nursing at a time that they felt the program would feel less demanding. Based on the student input and feedback that faculty had obtained over previous years, as well as a desire by faculty to ensure that the curriculum was up to date, evidenced based and reflected new trends in health care, an extensive evaluation was completed and the curriculum was revised. The major revisions included having the students enrolled in only one nursing course at a time, increasing clinical time, integrating community health, nutrition and cultural care as well as the development of a standardized approach to preclinical paperwork and care planning throughout the curriculum.

Presently Saddleback College Nursing students have a 94% success rate on the NCLEX and are a welcome addition to the nursing staff at all area hospitals. The nursing program faculty and administration will continue to monitor changes in health care, and in student success rates to determine the need for further curriculum revision or changes.

## **C. Student Success**

In 2005 the nursing program was awarded a Fostering Student Success (FSS) Grant. The focus of the 5 year grant was to improve retention and decrease attrition. In 2005 the attrition (key indicator of success) was 28%. In an effort to decrease attrition and improve retention a case management model was developed with a preliminary risk assessment completed to identify factors that put a student at risk for failure. The case management model has one faculty member who is responsible to manage the high risk students and four faculty who each

follow a case load of students intervening with students who are at risk or whose grades or performance indicate risk for failure. This model has been very effective in helping students to take advantage of campus based resources including financial aid, counseling, ESL remediation, math remediation, peer mentors, tutors and clinical teaching assistants. Since the inception of the Fostering Student Success Grant, early risk factor identification, and resource referral the attrition in our program has decreased from 28% to 18%. It would be beneficial if this process was institutionalized across the campus especially in highly competitive impacted programs.

After a comprehensive review of student success data, with the help of the college researchers, a new admission process was developed and implemented in spring 2007. The goal of the new admission process was to further decrease attrition by admitting students who are more likely to succeed. This process selects 75% of students based on an academic score that is correlated with success and 25% from lottery of all students who meet admission criteria.

Although progress has been made to improve retention and to decrease attrition, the program is still falling short of the goal of attrition to be 15%. A new law was passed that allows the use of a multi-criteria process to be used to evaluate students for admission to nursing in the community college. The multi-criteria process involves looking at factors such as work experience and life experiences when evaluating for admission. In order to use the new multi-criteria as a screening process for admission to the nursing program we will need the research analysts to look at the data we have collected over the past few years to ensure proper application of multi criteria in a way that will yield those students most likely to succeed once they are admitted.

### **Constituency Satisfaction**

Each nursing theory course and clinical section conducts surveys every semester using the Class Climate online survey system. Students are surveyed to monitor their satisfaction with instruction, the courses, the program and the clinical agencies. The student survey results and any actions taken as a part of the surveys are maintained in the Division Office in the Nursing Survey book, as well as with the course and program level SLOs, as appropriate. It is very typical to have > 90% satisfaction with all aspects of instruction, the course and clinical agencies each semester.

Students are also invited to have input into the nursing program by participation in monthly nursing department faculty meetings as well as in meetings at the end of each clinical rotation with the clinical teaching teams to provide feedback, to ask questions and offer suggestions for course, clinical and program improvement. Nursing graduates are also surveyed 6 months after graduation to determine how well Saddleback's nursing program prepared them for the workforce.

Surveys are also conducted of our clinical agencies and their staff regarding their satisfaction of the students, graduates, and faculty each semester. Our clinical agencies to report > 90% satisfaction on all aspects surveyed. Every year the Saddleback College nursing program invites representatives from each clinical agency to an advisory meeting to solicit feedback and obtain information about changes that have the potential to impact students and instruction.

The final constituencies of the nursing program are the California Board of Nursing (BRN) and the National League for Nursing (NLN). As mentioned earlier, the nursing program has been BRN approved and accredited since 1970, was granted full accreditation for 10 years in 2003

and exceeds state and national pass rates on the NCLEX licensing exam consistently. The nursing program has been NLN accredited since 1988 and received full accreditation without recommendations in 2002.

#### **D. Facilities, Technical Infrastructure, and Resources**

Although the Health Science and Human Services Division is in a four year old building that has excellent technical infrastructure, the growth in Health Sciences and Human Services has resulted in program growth and development that will soon exceed what the building can accommodate, especially in regards to office, lab and simulation space.

The information technology available to the nursing students is adequate to meet the student needs because of the increase in online data bases in the library (CINAHL), and as a result of purchases through the technology committee and basic aid and grant funds. There is a need for continued growth in the availability of online programs to support nursing skills and student performance.

Office space will be needed for faculty and support staff for the growing health sciences programs. There isn't available office space for the Nursing Program Assistant and the Health Sciences Lab Technician who are pending hiring at present. There is a need for more space for high fidelity simulation using human patient simulators especially for medical surgical and advanced medical surgical nursing simulation. Finally there is a need for larger classrooms or at least more strategic scheduling to accommodate the increased enrollments from 44 – 60 students each semester in the core nursing course. A scheduled maintenance plan will have to be developed to maintain the relatively new Health Sciences building.

Other resources that are needed are an increase in academic advising and counseling as well as increased flexibility in student testing through special services.

#### **E. Service, Community Outreach and Economic Development**

The HS & HS Division has contracts with 222 clinical facilities that provide our students the learning opportunities required to meet their course and program objectives. Fourteen acute care and over twenty community facilities are dedicated to contracts for nursing students.

The nursing program director holds information sessions about the Nursing Program and participates in college wide job fairs and family nights. Annually, the Capistrano District junior highs and high schools bring their students for tours and demonstrations through our division. Nursing has collaborative partnerships with Hoag Memorial Presbyterian Hospital, Memorial Care, and Mission hospitals. The nursing program is actively pursuing collaborative education efforts with the University of California Irvine, Concordia University and with a variety of clinical facilities through the Orange County Long Beach Consortium.

## **Section III: Needs Assessment and Annual Update**

### **A. Human Resource Needs**

To support the current division needs and to allow for growth in the HS & HS Division and nursing program, the following positions need to be institutionalized:

- The Interim Dean of Health Sciences and Human Services
- The Acting Assistant Dean, Nursing Program Director position needs to become a full time permanent position in order to administer effectively to our program and to meet regulatory requirements of our accrediting agencies.
- The categorically funded nursing faculty position need to become institutionalized
- HS Laboratory Technician to effectively incorporate simulation in the curricula.
- HS & HS Division Program Assistant to manage student calls, questions, and clinical contracts.
- The HS & HS grants specialist

### **B. Instructional/Service Needs**

Supplies are required on a regular basis to replace disposable supplies used while practicing in the nursing skills lab. Outdated or obsolete skills lab supplies including intravenous pumps, mock code supplies, manikins, simulation equipment and skills trainers need replacing every few years.

### **C. Research Needs**

The nursing program would benefit from research related to attrition, retention and student success, especially since new state laws regarding admission may require Saddleback to change the admission criteria. A new nursing data base that interfaces with the current or an updated student data base is required to facilitate data retrieval for accrediting agencies, and to track student admission and reentry data. The current system of student data management and retrieval is outdated and does not interface with the college wide data base. This results in duplication of efforts and an inordinate amount of time in data entry and retrieval for the senior administrative assistant for nursing and the counselors.

### **D. Technical, Equipment and Other Resource Needs**

The HS & HS Division needs to maintain our current computer lab, including 31 computers, and discipline specific software. Many of our courses are supported by software programs that are accessed online and require annual licenses and contract renewals for maintenance and upgrades.

Our skills lab has very expensive medical equipment, which although most is only 4 years old now, needs scheduled maintenance and often repairs to stay in good working order. The Nursing program needs 5 new low fidelity simulators to replace old manikins. There is also the need for 2 new defibrillators with pacing capabilities as well as 2 intubation manikins and 5 intubation kits for Mock Code in Advanced Medical Surgical Nursing

### **Facilities Needs**

The Nursing Program needs more dedicated space for simulation and would benefit greatly if HS 141 could be converted to a high fidelity simulation lab which could be shared with the Emergency Medical Technician and Paramedic Programs for Advanced Cardiac Life Support type of simulations. HS 141 could also be partitioned to provide office space for the Health Sciences Lab Technician. The program would also benefit if there was extra office space for faculty and staff and larger classrooms to accommodate our increased enrollments.

### **Marketing and Outreach Needs**

The Nursing Program will need continued support for updating brochures for our nursing program. The nursing program would benefit by increasing the amount of program related information online to meet the growing demand and to minimize workflow disruptions for the Program and Administrative Assistants to the Nursing Program.

### **Retention Needs**

The Nursing Program currently has a comprehensive student success plan (grant funded) that addresses retention and attrition. Our preliminary data demonstrates approximately a 10% reduction in attrition (28 – 18%). This plan has been successful, but needs further research to support and publish findings. The college should institutionalize the student success case management approach for nursing all programs.

## **Section IV: Appendices**

- A. Five-Year Program Staffing Profile**
- B. NCLEX Summary Report**
- C. NCLEX Pass Rate California**
- D. Excerpts from BRN Report**
- E. Student Demographic Report**

### Five-Year Program Staffing Profile

Position	Staffing Levels for Each of the Previous Five Years					% Change from Year 1 to Year 5
	2004	2005	2006	2007	2008	
Administration	2	2	2	2	2	0
Bargaining Classified Staff FT	4	5	5	5	5	25%
Bargaining classified Staff PT	0	0	0	0	0	0
Non-bargaining Classified Staff FT	0	0	0	0	0	0
Non-bargaining Classified Staff PT	0	0	0	0	0	0
Student Workers	1	3	3	2	3	200%
Faculty FT	22	22	23	24	26	18%
Faculty PT	20	20	20	22	22	10%

**SADDLEBACK COLLEGE ASSOCIATE DEGREE NURSING PROGRAM**  
**Nursing Master Program Evaluation Results**  
**Academic Year 2007-2008**

Criteria to Evaluate	Evaluation Questions	Tool	Counselor	Frequency of Evaluation
<b>1. Entering Students</b>	<b>A. Pre-Nursing Students:</b>			
	1. Are student screened for general education requirements?	Transcripts Saddleback College Catalogue, Web site	Counselor	On-going Met benchmark
	2. Do students meet all 4 prerequisites? a. Bio 15 b. Bio 11 c. Bio 12 d. English 1A	Student academic record	Evaluation Clerk Admissions and Records Division Administrative Assistant	Every semester Met benchmark
	3. Is the established academic scoring system appropriate for admission criteria?	Student academic record Application Pool Program completion $\geq 80$	Evaluation Clerk Admissions and Records Division Administrative Assistant	Every Semester Met benchmark
	4. Is the student body a cross representation of the cultural diversity within the student population?	Admission Application	Division Administrative Assistant Nursing Program Director	Yes Annually Met benchmark
	5. Do entering students have a readiness evaluation?	ATI tests Test of essential Academic Skills (TEAS) Self Assessment Critical Thinking	Nursing Program Director	Every Semester 100% of entering students
	<b>B. Advanced Placement Students:</b> Are admission criteria of LVN students being met?	Transcripts Nursing Certificate	Division Administrative Assistant Nursing Program Director	Every semester Met benchmark
	<b>C. Are students matriculated?</b>	Transcripts Matriculation Exams	Matriculation Staff	On-going Met benchmark
<b>II. Continuing Students</b>	Are the knowledge base nursing skills and student learning outcomes of students evaluated prior to progression within the program?	Clinical Evaluation Tools Course grade ATI Content Mastery	Clinical and Didactic Instructor	On-going Met benchmark
	Are students taking required courses in sequence?	Transcripts - Admissions and Records Evaluation for AS/AA Student Academic Record	Nursing Admissions and Records Clerk Nursing Program Director	Yearly Met benchmark
	Are student issues/complaints addressed?	Files in Directors' office. Communication channels & policy in Handbook	Nursing Program Director Faculty VP Student Services	On-going Met benchmark

Criteria to Evaluate	Evaluation Questions	Tool	Counselor	Frequency of Evaluation
<b>III. Returning Students</b>	Is the knowledge base and nursing skills of students evaluated prior to returning to the program?	Student Academic Record Remediation plan	Nursing Program Director	On-going Met benchmark
	Is the recommended remediation met?	Interview or documentation from student	Nursing Program Director	On-going All Met
<b>IV. Graduating Students</b>	Do students feel they have met the program objectives by the end of the program?	Student Survey	Enrollment Management Committee	Every semester Met benchmark
	Are graduating students evaluated against national norms?	ATI GNCP Test NCLEX and reports	Outside Consultant Nursing Faculty Nursing Program Director	Every semester Met benchmark
<b>Program</b>				
<b>I. Program Philosophy</b>	Does the philosophy reflect the beliefs of the nursing faculty?	Philosophy	Nursing Faculty	YES Yearly, met benchmark
	Does the philosophy reflect changes in nursing and society?	Philosophy	Nursing Faculty	YES Yearly, , met benchmark
<b>II. Curriculum</b>	<u>1. Program Objectives</u> Is the curriculum organized and internally consistent?	Review of first and second level objectives and course objectives	Curriculum committee Nursing faculty	YES 2 Years, met objectives
	Does the curriculum reflect changes in nursing and society?	Course outlines	Nursing Faculty	YES Every semester met benchmark
	Is the curriculum consistent with the mission of the nursing program?	Course outlines	Nursing Faculty	YES Every semester met benchmark
	<u>2. Course Objectives</u> Do course objectives relate to first and second year objectives?	Review of course syllabi	Curriculum committee	YES Every semester met benchmark
	<u>3. Course Content</u> Is there duplication or omission of course content in the nursing courses? Does the course content build upon previous knowledge?	Review of course syllabi Review of curriculum topics	Curriculum committee Nursing Program Director	Annually NO  YES
	4. Do didactic classes and clinical experiences meet course objectives?	Class Climate Surveys Clinical teaching appraisal tool	Nursing Faculty	YES, At the completion of every course met benchmark

Criteria to Evaluate	Evaluation Questions	Tool	Counselor	Frequency of Evaluation
<b>III. Clinical Facilities</b>	Do clinical facilities meet the initial and ongoing requirements for use as a clinical site per the BRN?	Clinical facilities approval form & class climate surveys	Nursing Program Director	YES, , met benchmark Annually Documentation in facility notebook & survey book
	Do clinical facilities provide the types of clinical learning experiences to meet the objectives?	OCLB Nursing Consortium Schedule End of semester reports & Class Climate Surveys	Nursing Program Director	YES, Ongoing Every semester met benchmark

<b>Resources</b>				
	Are resources adequate for teaching students? (Skills lab, library, computer lab?)	Class Climate course Evaluation Tools Wish list review	Resources committee Nursing Faculty	YES Every semester met benchmark
	Are resources adequate for faculty development and grants?	Faculty Feedback Conference Budgets	Nursing Program Director	YES Yearly met benchmark
<b>Faculty</b>				
	Are faculty achieving expectations regarding teaching effectiveness, college/community service?	Faculty evaluation	Nursing Program Director	Every 2 years after tenure. 1 <sup>st</sup> semester then every 2 years for non-tenured faculty. <u>All evaluations are current</u>
	Do all faculty hold an active RN license and CPR card?	Faculty files, AHA Records	Administrative Assistant	YES Annually, met benchmark 100%
	Do faculty provide a challenging, non-threatening learning environment in the clinical area?	Student Input Class Climate	Nursing Faculty Nursing Program Director	YES Every semester met benchmark

Criteria to Evaluate	Evaluation Questions	Tool	Counselor	Frequency of Evaluation
<b>Alumni</b>				
<b>I. Graduates</b>	How do graduates of the program evaluate their educational preparation 6 months after graduation?	Graduate survey Assessment & Associates	Enrollment Management	Every semester
<b>II. Employers of Graduates</b>	Do employers of graduates of the program indicate graduates of the program perform satisfactorily in their work settings?	Preceptor satisfaction survey	Enrollment Management	YES Every semester met benchmark
<b>Administration</b>				
	Does the nursing program director facilitate attainment of the Nursing Program's and Colleges mission and goals?	Statement of Nursing Program and College mission and goals California BRN Administrator Evaluation	Dean Vice President of Instruction Board of Trustees	YES Annually met benchmark
	Does the Dean provide effective leadership in meeting the mission and goals of the program?	Administrator Evaluation	Vice President of Instruction Board of Trustees	YES Annually met benchmark

Reviewed 5/05  
Revised 4/07  
Reviewed 5/08  
Revised 6/2/08

NCLEX Summary

Academic Year - July 1 to June 30

Year	Sep-N	Sep-%Pass	#Pass	Dec-N	Dec-%Pass	#Pass	Mar-N	Mar-%Pass	#Pass	Jun-N	Jun-%Pass	#Pass	Av Pass/yr
2000 - 01	32	78.13%	25	3	100.00%	3	27	100.00%	27	12	91.67%	11	89.19%
2001 - 02	44	93.18%	41	4	50.00%	2	25	96.00%	24	16	81.25%	13	89.89%
2002 - 03	32	87.50%	28	6	100.00%	6	29	86.21%	25	10	90.00%	9	88.31%
2003 - 04	32	93.75%	30	5	80.00%	4	40	100.00%	40	13	92.31%	12	95.56%
2004 - 05	37	91.89%	34	6	66.67%	4	39	94.87%	37	13	92.31%	12	91.58%
2005 - 06	31	93.55%	29	3	100.00%	3	44	97.73%	43	16	100.00%	16	96.81%
2006 - 07	33	96.97%	32	4	100.00%	4	43	100.00%	43	25	100.00%	25	99.05%
2007 - 08	42	85.71%	36	1	100.00%	1	53	98.11%	52	28	100.00%	28	94.35%
2008 - 09	38	94.74%	36	1	0.00%	0	0	#DIV/0!	0	0	#DIV/0!	0	92.31%
2009 - 10	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!
2010 - 11	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!
2011 - 12	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!
2012 - 13	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!
2013 - 14	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!	0	#DIV/0!
<b>Total</b>	321		291	33		27	300		291	133		126	93.39%

## NCLEX Pass Rates State of California

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
Allan Hancock College	22	81.82%	17	88.24%	23	78.26%	33	87.88%	34	82.35%
American River College	53	88.68%	62	95.16%	113	89.38%	122	81.15%	100	84%
American University of Health Sciences	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Antelope Valley College	69	94.20%	95	92.63%	104	87.5%	78	94.87%	156	82.69%
Azusa Pacific University - BSN	54	85.19%	62	80.65%	63	87.3%	79	88.61%	88	84.09%
Azusa Pacific University - MSN	N/A	N/A	N/A	N/A	1	100%	25	92%	20	80%
Bakersfield College	66	84.85%	68	69.6%	105	89.52%	97	93.81%	156	87.82%
Biola University	23	95.65%	28	78.57%	27	88.89%	42	95.24%	21	90.48%
Butte College	28	96.43%	38	84.21%	18	77.78%	66	78.79%	59	67.80%
Cabrillo College	38	94.74%	43	88.37%	41	95.6%	55	87.27%	61	93.44%
California Baptist University - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
California Baptist University - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Bakersfield - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	53	71.70%
CSU Bakersfield - MSN	38	89.47%	24	83.33%	36	86.11%	66	75.76%	3	100%
CSU Channel Islands	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Chico	58	86.21%	55	85.45%	65	80%	64	95.31%	76	82.89%
CSU Dominguez Hills	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU East Bay	41	85.37%	63	84.13%	58	89.66%	66	90.91%	83	89.16%
CSU Fresno - BSN	94	82.98%	103	80.58%	133	75.19%	124	83.06%	101	86.14%
CSU Fresno - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	49	83.67%
CSU Fullerton - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Fullerton - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Long Beach - BSN	71	87.32%	86	82.56%	118	77.6%	155	84.52%	197	94.42%
CSU Long Beach - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Los Angeles - BSN	61	95.08%	81	90.6%	72	90.28%	80	92.5%	70	81.43%
CSU Los Angeles - MSN	N/A	N/A	N/A	N/A	N/A	N/A	1	0%	37	91.89%

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
CSU Northridge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Sacramento - BSN	116	78.45%	125	87.20%	131	91.6%	99	94.95%	135	92.59%
CSU Sacramento - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	90%
CSU San Bernardino	62	87.10%	90	73.33%	80	77.5%	102	77.45%	80	83.75%
CSU San Marcos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CSU Stanislaus	N/A	N/A	5	80.00%	21	85.71%	40	82.5%	38	92.11%
Cerritos College	115	83.48%	122	81.97%	110	81.82%	96	85.42%	90	81.11%
Chabot College	31	93.55%	24	91.67%	31	100%	44	100%	34	97.06%
Chaffey College	59	88.14%	55	98.18%	53	98.11%	49	100%	44	95.45%
Citrus College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	100%
City College of San Francisco	66	84.85%	80	76.25%	66	90.91%	71	85.92%	108	84.26%
College of Marin	45	75.56%	40	80.00%	50	90%	36	80.56%	22	81.82%
College of San Mateo	58	93.10%	31	87.10%	51	90.2%	56	80.36%	41	80.49%
College of the Canyons	58	77.59%	97	89.69%	59	89.83%	89	80.9%	84	83.33%
College of the Desert	63	84.13%	71	91.55%	118	88.14%	114	84.21%	67	82.09%
College of the Redwoods	27	92.59%	35	94.29%	35	82.86%	69	89.86%	43	88.37%
College of the Sequoias	86	75.58%	60	86.67%	132	87.6%	77	74.03%	141	75.89%
College of the Siskiyous	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	100%
Concordia University Irvine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Contra Costa College	38	94.74%	28	100%	43	97.67%	75	96%	81	91.36%
Copper Mountain College	N/A	N/A	N/A	N/A	N/A	N/A	1	0%	33	75.76%
Cuesta College	27	96.30%	26	96.15%	30	96.67%	64	96.88%	46	95.65%
Cypress College	68	91.18%	73	97.26%	65	95.38%	92	98.91%	79	97.47%
De Anza College	74	79.73%	72	80.56%	67	86.57%	82	80.49%	73	73.97%
Dominican University of California	47	59.57%	35	82.86%	51	92.16%	59	89.83%	74	81.08%
East Los Angeles College	64	90.63%	68	72.06%	74	85.14%	111	75.68%	90	64.44%

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
El Camino College	56	91.07%	69	94.20%	95	80%	115	81.74%	95	85.26%
El Camino College - Compton Education Center	20	35.00%	19	42.11%	17	52.94%	34	85.29%	17	88.24%
Everest College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Evergreen Valley College	48	77.08%	41	92.68%	57	91.23%	54	92.59%	68	88.24%
Fresno City College	161	86.34%	167	74.25%	173	74.57%	235	85.11%	303	79.87%
Gavilan College	12	83.33%	19	84.21%	13	100%	28	96.43%	12	83.33%
Glendale Community College	61	90.16%	44	90.19%	57	87.72%	94	87.23%	90	95.56%
Golden West College	80	85.00%	111	92.79%	113	91.15%	103	90.29%	123	93.50%
Grossmont College	92	84.78%	154	76.62%	101	86.14%	135	91.85%	145	79.31%
Hartnell College	50	72.00%	30	76.67%	16	100%	N/A	N/A	18	94.44%
Humboldt State University	36	88.89%	29	72.41%	40	82.5%	55	92.73%	46	82.61%
Imperial Valley College	32	68.75%	40	62.50%	55	80%	60	78.33%	56	66.07%
InterAmerican College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kaplan College	70	85.71%	85	77.65%	97	73.2%	99	81.82%	110	73.64%
Loma Linda University - ADN	82	81.71%	76	76.32%	85	91.76%	138	84.06%	104	93.27%
Loma Linda University - BSN	10	90.00%	21	71.43%	26	73.08%	21	85.71%	11	72.73%
Long Beach City College	84	96.43%	120	88.33%	111	92.79%	106	88.68%	91	92.31%
LA City College	17	100.00%	24	66.67%	38	86.84%	57	91.23%	33	66.67%
LA County College of Nursing & Allied	122	84.43%	105	81.90%	106	83.96%	89	94.38%	135	91.11%
LA Harbor College	51	92.16%	49	97.96%	67	100%	97	94.85%	95	93.68%
LA Pierce College	71	85.92%	64	68.75%	73	72.6%	68	73.53%	69	82.61%
LA Southwest College	55	63.64%	45	55.56%	51	58.82%	30	73.33%	34	88.24%
LA Trade-Tech College	39	71.79%	45	73.33%	52	73.08%	48	62.5%	49	61.22%
LA Valley College	86	79.07%	106	75.47%	98	77.55%	75	84%	73	87.67%
Los Medanos College	47	82.98%	53	96.23%	55	92.73%	34	85.29%	46	82.61%
Mendocino College	N/A	N/A	14	78.57%	9	88.89%	18	83.33%	19	89.47%

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
Merced College	23	86.96%	37	94.59%	44	86.36%	39	92.31%	35	68.57%
Merritt College	21	52.38%	39	79.49%	27	96.3%	35	85.71%	43	95.35%
Mira Costa College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	100%
Mission College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Modesto Junior College	110	83.64%	104	93.27%	107	96.26%	160	93.13%	144	93.06%
Monterey Peninsula College	59	94.92%	31	100%	32	90.63%	48	97.92%	44	88.64%
Moorpark College	46	89.13%	77	94.81%	69	95.65%	90	95.56%	70	91.43%
Mount St. Mary's College - ADN	55	72.73%	44	65.91%	77	77.92%	95	66.32%	115	80%
Mount St. Mary's College - BSN	80	91.25%	95	83.16%	103	84.47%	122	89.34%	137	76.64%
Mt. San Antonio College	67	83.58%	56	85.71%	112	88.39%	102	95.1%	120	95.83%
Mt. San Jacinto College	42	92.86%	39	84.62%	61	86.89%	61	91.8%	74	85.14%
Napa Valley College	57	70.18%	64	68.75%	36	86.11%	84	80.95%	81	75.31%
National University - ADN	N/A	N/A	N/A	N/A	10	60%	42	80.95%	59	76.27%
National University - BSN	N/A	N/A	N/A	N/A	38	71.05%	41	78.05%	82	79.27%
Ohlone College	35	85.71%	40	90%	47	97.87%	57	92.98%	50	90%
Pacific Union College	61	77.05%	93	67.74%	87	79.31%	126	80.95%	69	71.01%
Palomar College	62	95.16%	62	98.39%	58	98.28%	67	98.51%	41	97.56%
Pasadena City College	103	82.52%	95	78.95%	107	85.98%	101	94.06%	113	93.81%
Point Loma Nazarene College	44	88.64%	35	82.86%	44	84.09%	48	91.67%	58	91.38%
Rio Hondo College	65	83.08%	71	90.14%	74	72.97%	83	85.54%	88	78.41%
Riverside Community College	114	87.72%	101	94.06%	117	94.02%	131	95.42%	176	88.64%
Sacramento City College	33	87.88%	79	100%	93	98.92%	144	99.31%	143	96.50%
Saddleback College	91	95.60%	96	91.67%	96	96.88%	105	99.05%	125	94.40%
Samuel Merritt College - BSN	111	75.68%	74	78.38%	133	81.95%	178	92.13%	258	92.25%
Samuel Merritt College - MSN	36	94.44%	50	88%	64	92.19%	53	100%	97	95.88%
San Bernardino Valley College	80	83.75%	65	87.69%	107	92.52%	78	85.9%	76	89.47%

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
San Diego City College	51	90.20%	54	83.33%	62	91.94%	62	88.71%	74	93.24%
San Diego State University	126	92.86%	136	94.6%	145	94.48%	169	97.04%	177	92.09%
San Francisco State University - BSN	89	80.9%	65	73.85%	93	76.34%	98	88.78%	126	81.75%
San Francisco State University - MSN	44	86.36%	48	87.50%	37	75.68%	40	82.5%	51	86.27%
San Joaquin Delta College	96	85.42%	97	78.35%	103	82.52%	139	79.14%	132	71.97%
San Joaquin Valley College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	85%
San Jose State University	120	79.17%	126	77.78%	147	68.71%	161	82.61%	164	75.61%
Santa Ana College	76	75.00%	95	94.74%	87	88.51%	104	93.27%	104	86.54%
Santa Barbara City College	37	89.19%	41	78.05%	44	90.91%	41	90.24%	35	88.57%
Santa Monica College	60	85.00%	50	88%	63	87.3%	57	92.98%	74	81.08%
Santa Rosa Junior College	53	83.02%	56	92.86%	86	96.51%	68	97.06%	76	93.42%
Shasta College	53	83.02%	39	92.31%	58	81.03%	86	90.7%	92	91.30%
Sierra College	46	97.83%	33	100%	68	98.53%	23	100%	54	98.15%
Solano Community College	25	76.00%	46	80.43%	70	85.71%	31	70.97%	28	82.14%
Sonoma State University - BSN	38	92.11%	22	81.82%	43	79.07%	46	95.65%	38	84.21%
Sonoma State University - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	100%
Southwestern College	37	81.08%	41	80.49%	39	84.62%	50	82%	54	83.33%
Unitek College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	36	69.44%
UC Irvine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UC Los Angeles - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UC Los Angeles - MSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UC San Francisco	71	100.00%	54	98.15%	74	97.3%	68	98.53%	66	93.94%
University of Phoenix at Modesto	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
University of San Diego/Hahn	19	84.21%	33	93.94%	47	93.62%	39	94.87%	15	93.33%
University of San Francisco - BSN	100	91.00%	104	94.23%	84	94.05%	127	96.85%	137	87.59%
University of San Francisco - MSN	1	100%	2	100%	28	100%	47	100%	46	95.65%

School	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass	# Taken	% Pass
Ventura College	65	86.15%	74	87.84%	88	89.77%	75	93.33%	112	89.29%
Victor Valley College	78	84.62%	71	90.14%	76	86.84%	41	87.8%	69	95.65%
West Coast University - Inland Empire - ADN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Coast University - Inland Empire - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Coast University - Los Angeles - ADN	N/A	N/A	N/A	N/A	N/A	N/A	99	82.83%	243	86.83%
West Coast University - Los Angeles - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Coast University - Orange County - ADN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Coast University - Orange County - BSN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Western Career College	N/A	N/A	N/A	N/A	N/A	N/A	7	85.71%	21	76.19%
Western University of Health Sciences	N/A	N/A	N/A	N/A	38	92.11%	37	72.97%	41	92.68%
West Hills College Lemoore	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Yuba College	37	100.00%	26	84.62%	32	100%	35	91.43%	37	89.19%

**Excerpts from the California Board of Registered Nursing  
2007-2008 Annual School Report  
Feb 5, 2009**

Complete report available at <http://www.rn.ca.gov/schools/reports.shtml>

**DATA SUMMARY AND HISTORICAL TREND ANALYSIS**

This analysis presents pre-licensure program data from the 2007-2008 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, student and faculty census data, and the use of clinical simulation by nursing programs.

**Trends in Pre-Licensure Nursing Programs**

*Number of Nursing Programs*

In 2007-2008, California had a total of 131 pre-licensure nursing programs. This represents a net increase of one (0.8%) nursing program since 2006-2007. During the last year, three new programs (two ADN programs and one ELM program) accepted students for the first time. During the same time period, two ELM programs closed. The majority (79.4%) of all pre-licensure nursing programs are public.

**Number of Nursing Programs**

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
<b>Total # Nursing Programs</b>	<b>97</b>	<b>100</b>	<b>101</b>	<b>104</b>	<b>109</b>	<b>117</b>	<b>130</b>	<b>131</b>
ADN Programs	71	72	73	73	76	77	82	84
BSN Programs	22	23	23	23	24	26	32	32
ELM Programs	4	5	5	8	9	14	16	15
Public Programs	83	85	86	87	90	96	105	104
Private Programs	14	15	15	17	19	21	25	27

*Admission Spaces and New Student Enrollments*

Admission spaces available for new student enrollments increased by 4.3% (n=494), from 11,475 spaces in 2006-2007 to 11,969 in 2007-2008. These spaces were filled with a total of 13,214 students, increasing new student enrollment by 4.0% (n=505) from 2006-2007.

**Availability and Utilization of Admission Spaces**

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
Spaces Available	6,610	6,719	7,601	7,797	9,026	10,523	11,475	11,969
New Student Enrollments	6,128	6,422	7,457	7,825	8,926	11,131	12,709	13,214
% Spaces Filled	92.7%	95.6%	98.1%	100.4%	98.9%	105.8%	110.8%	110.4%

Despite the increase in available admission spaces, nursing programs receive more applications requesting entrance into their programs than can be accommodated. There was a 17.9% (n=5,110) increase in the number of qualified applications nursing schools received

between 2006-2007 and 2007-2008. In 2007-2008, 60.7% (n=20,402) of qualified applications to California nursing education programs were not accepted for admission.

### Student Admission Applications

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
<b>Qualified Applications</b>	<b>10,021</b>	<b>10,362</b>	<b>13,926</b>	<b>17,887</b>	<b>20,405</b>	<b>28,410</b>	<b>28,506</b>	<b>33,616</b>
ADN	6,924	7,554	9,531	12,585	14,615	19,724	19,559	25,021
BSN	2,635	2,413	3,301	3,964	4,914	7,391	7,004	7,057
ELM	462	395	1,094	1,338	876	1,295	1,943	1,538
% Qualified Applications Not Accepted	38.8%	38.0%	46.5%	56.3%	56.3%	60.8%	55.4%	60.7%

\*Since these data represent applications rather than individuals, the increase in qualified applications may not represent an equal growth in the number of individuals applying to nursing school.

Although new student enrollments in pre-licensure nursing education programs continue to increase, enrollments are growing at slower rates than they have in previous years. The number of students who enrolled in a nursing program in California increased by 4.0% (n=505), from 12,709 in 2006-2007 to 13,214 in 2007-2008. Since 2000-2001, new student enrollments have more than doubled (n=7,086). In the last year, new student enrollment in BSN and ELM programs increased by 17.6% (n=547) and 1.4% (n=10) respectively. Enrollment in ADN programs showed a slight decline (-0.6%, n=52) during the same time period. Despite this decrease in ADN enrollment, the majority of California nursing students continue to be educated in ADN programs.

### New Student Enrollment by Program Type

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
<b>New Student Enrollment</b>	<b>6,128</b>	<b>6,422</b>	<b>7,457</b>	<b>7,825</b>	<b>8,926</b>	<b>11,131</b>	<b>12,709</b>	<b>13,214</b>
ADN	4,236	4,558	5,316	5,547	6,160	7,778	8,899	8,847
BSN	1,732	1,677	1,903	1,960	2,371	2,709	3,110	3,657
ELM	160	187	238	318	395	644	700	710
Private	951	884	980	1,150	1,614	2,024	2,384	2,704
Public	5,177	5,538	6,477	6,675	7,312	9,107	10,325	10,510

### Student Completions

Although the rate of enrollment growth has slowed in recent years, RN programs continue to graduate students at increasing rates. From 2006-2007 to 2007-2008, the number of students who completed a nursing program in California increased by 14.5% (n=1,209), the largest annual increase in student completions in eight years. The majority of students that completed a nursing program in 2007-2008 (68.5%) did so through an ADN program.

## Student Completions

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
<b>Student Completions</b>	<b>5,178</b>	<b>5,346</b>	<b>5,623</b>	<b>6,158</b>	<b>6,677</b>	<b>7,528</b>	<b>8,317</b>	<b>9,526</b>
ADN	3,799	3,826	4,027	4,488	4,769	5,351	5,885	6,527
BSN	1,277	1,394	1,412	1,479	1,664	1,861	2,074	2,481
ELM	102	126	184	191	244	316	358	518

### Retention and Attrition Rates

Of the 9,706 students scheduled to complete a nursing program in the 2007-2008 academic year, 74.2% (n=7,199) completed the program on-time, 9.7% (n=946) are still enrolled in the program, and 16.1% (n=1,561) dropped out or were disqualified from the program. The retention rate has increased 8.0% in the last eight years, from 66.2% in 2000-2001 to 74.2% in 2007-2008.

### Student Cohort Completion and Retention Data

2000-2001	Academic Year							
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	
<b>Enrollment</b>	<b>8,478</b>	<b>6,806</b>	<b>8,208</b>	<b>8,151</b>	<b>8,507</b>	<b>8,208</b>	<b>8,852</b>	<b>9,706</b>
Completed On Time	5,610	4,553	5,621	5,831	6,055	6,047	6,437	7,199
Still Enrolled	1,372	1,184	1,314	1,082	710	849	996	946
Attrition	1,496	1,069	1,273	1,238	1,742	1,312	1,419	1,561
<b>Retention Rate*</b>	66.2%	66.9%	68.5%	71.5%	71.2%	73.7%	72.7%	<b>74.2%</b>
<b>Attrition Rate</b>	17.6%	15.7%	15.5%	15.2%	20.5%	16.0%	16.0%	16.1%
<b>% Still Enrolled</b>	16.2%	17.4%	16.0%	13.3%	8.3%	10.3%	11.3%	9.7%

\*Retention rate = (students who completed the program on-time) / (enrollment)

From 2006-2007 to 2007-2008, attrition rates in ADN and BSN programs remained relatively constant, while rates in ELM programs decreased by 1.7%. Trends in attrition by program type show that ELM programs have lower attrition rates than ADN and BSN programs. Attrition rates in private nursing programs increased by 1.3%, from 7.9% in 2006-2007 to 9.2% in 2007-2008, while rates at public programs remained around 17.7% during the same time period.

### Attrition Rates by Program Type

Program Type	Academic Year							
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
ADN	21.5%	16.9%	19.1%	17.0%	23.7%	18.3%	19.0%	<b>19.3%</b>
BSN	9.0%	14.0%	8.1%	10.8%	11.0%	10.5%	8.7%	8.6%
ELM	3.3%	1.2%	3.2%	4.7%	14.3%	5.0%	7.2%	5.5%
Private	11.7%	12.0%	9.6%	10.1%	15.9%	14.6%	7.9%	9.2%
Public	18.8%	16.5%	16.7%	15.9%	21.2%	16.2%	17.7%	17.6%

There has been fluctuation in the retention and attrition rates over the eight-year period documented in the above tables. There were changes to the survey between 2003-2004 and 2005-2006 that may have affected the comparability of these data over time.

### Student Census Data

The total number of students enrolled in California nursing programs increased by 4.6% (n=1,026), from 22,524 on October 15, 2007 to 23,550 a year later. Of these students, 60.7% (n=14,304) were in ADN programs, 33.8% (n=7,956) in BSN programs, and 5.5% (n=1,290) in ELM programs.

The reported number of pre-nursing students increased by 49.6% (n=7,953) in the last year, from 16,023 in 2007 to 23,976 in 2008. Changes to the survey and fewer nursing programs reporting these data in 2007 (n=26) than in 2008 (n=44) may account for some of the fluctuation in the number of pre-nursing students reported.

### Student Census Data

Program Type	Academic Year							
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
ADN Program	8,236	8,999	9,547	9,939	11,117	12,632	14,191	14,304
BSN Program	4,235	4,254	5,279	5,669	6,285	6,799		7,956
ELM Program	190	148	368	804	659	896		1,290
<b>Total Nursing Students</b>	<b>12,661</b>	<b>13,401</b>	<b>15,194</b>	<b>16,412</b>	<b>18,061</b>	<b>20,327</b>	<b>22,524</b>	<b>23,550</b>
Pre-Nursing Students		28,478		20,980	16,023		23,976	

\*Blank cells indicated that the applicable information was not requested in the given year.

\*\*Changes in the survey may have accounted for the fluctuation in the number of pre-nursing students reported.

### Summary

In the past eight years, the number of California pre-licensure nursing programs has grown by 35.1%, to 131 programs in 2007-2008. Since 2000-2001, new student enrollments have more than doubled (n=7,086). Although admission spaces and new student enrollments in these programs have grown, data indicate that the rate of enrollment growth has declined in 2007-2008 as compared to the past four years. Enrollment growth peaked at 24.7% in 2005-2006 and has declined for the past two years, 14.2% in 2006-2007 and 4.0% in 2007-2008. This decline in enrollment growth may signify a new trend in nursing program expansion in California.

Nursing programs continue to produce a growing number of RN graduates. Between 2000-2001 and 2007-2008, graduations increased by 84.0% (n=4,348). Retention rates in nursing programs have increased by 8.0% since 2000-2001, while attrition rates have remained around 16% since 2004-2005. However, if the rate of enrollment growth continues to decline and retention rates do not improve, graduations from these programs may also decrease.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. Although the number of nursing faculty has grown by 87.3% (n=1,607) since 2000-2001, faculty hires have not kept pace with the growth in California pre-licensure nursing programs. In 2007-2008, 170 faculty vacancies were reported, representing a faculty vacancy rate of 4.7%. Although this vacancy rate is the lowest reported in four years, RN programs will not be able to continue their expansion without more faculty.

## STUDENT DEMOGRAPHICS

### New Student Enrollments by *ethnicity*.

African American	3
American Indian	1
Filipino	10
Non-Filipino Asian/Pacific Islander	23
Caucasian	87
Hispanic	14
Other	3
Unknown	2

### 4a) New Student Enrollments by *gender*.

Male	13
Female	130
Unknown	0

### 4b) New Student Enrollments by *age*:

25 yrs. and younger	33
26-30 years	31
31-40 years	46
41-50 years	31
51-60 years	2
61 yrs. and older	0
Unknown	0