The chaotic world of the nursing program director

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SUMMARY

Aim: The environment of the nursing program dean or director within a community college or state university can be politically, fiscally, and emotionally challenging. There are few studies that investigate that environment. The purpose of this study was to describe the major barriers and incentives facing these nursing deans or directors as they implemented their proposed interventions related to the Central Valley Nursing Diversity Project. Additionally, we sought to identify successful strategies used to keep the programs competitive for resources and status within their institutions and within their local communities.

Methodology: The study is descriptive; the data collection method was structured interviews and data were analyzed using content analysis.

Findings: Findings indicate that among the most difficult barriers faced by the directors and the faculty was the over subscribed status (more applicants than positions) of the programs. The deans or directors described three significant points that acted as barriers. These were 1) limited space in science laboratory pre-requisite courses, 2) limited classroom space in nursing courses, and 3) limited space in clinical (hospital) sites. The largest single external pressure reported was the reduction in funding and all deans or directors indicated they had difficulty hiring qualified or credentialed faculty.

Conclusion: Colleges must manage more effectively student demand by modifying admissions criteria to be more selective and admit students with greater likelihood of graduating; encourage innovative partnerships between employers and schools of nursing; and increasing funding for nursing faculty salaries, classrooms, and laboratories.

Keywords: Nursing education; Nursing program; Nursing director; Nursing student.

El mundo caótico del director(a) de un programa de enfermería

RESUMEN

Objetivo: El ambiente de un(a) decano(a) o director(a) o de un Programa de Enfermería en un colegio comunitario o una universidad estatal puede ser un reto político, físico y emocional. Hay pocos estudios que investiguen ese ambiente. El propósito de este estudio fue describir las principales barreras e incentivos que enfrentan las(os) decanas(os) o directoras(es) al implementar las intervenciones del Proyecto de Diversidad en Enfermería en el Valle Central. Adicionalmente, se identificaron estrategias exitosas para mantener competitivos a los programas en cuanto a recursos y estatus en las comunidades locales.

Metodología: El estudio es descriptivo; la información se recolectó mediante entrevistas estructuradas y fue analizada mediante análisis de contenido.

Hallazgos: La barrera más difícil fue la demanda exagerada de los programas. Las(os) decanas(os) o directoras(es) describieron tres barreras significativas: 1) espacio limitado en laboratorios de ciencias para los cursos pre-requisito, 2) espacio limitado en los salones de clase para los cursos de enfermería, 3) espacio limitado en los sitios de práctica clínica. La principal presión externa fue la reducción de financiación, lo que produce dificultades para conseguir docentes calificados.

Conclusión: Las instituciones deben manejar más efectivamente la demanda estudiantil, modificar los criterios de admisión para hacerlos más selectivos y admitir estudiantes con mayor posibilidad de graduarse; promover alianzas innovadoras entre empleadores y escuelas de enfermería e incrementar la financiación para salaries de docentes, aulas de clase y laboratorios.

Palabras clave: Educación en enfermería; Programas de enfermería; Director(a) de enfermería; Estudiante de enfermería.

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Modern nursing in the United States (US) is generally considered to have started in the mid 1860s or 1870s, as this is the time when formal training of nurses began\(^1\). The formal training programs were based in hospitals and student nurses were used as unpaid labor for the hospitals. After the student graduated she was generally not hired into the hospital, rather, she worked as private duty nurse in a patient’s home\(^1\). The training programs were frequently managed as a department in the physician dominated hospital under the direct control of a nurse matron or superintendent who oversaw the students and their work.

Near the turn of the century there was a beginning effort to locate nurse training in colleges and universities with the introduction of a course aimed at educators and supervisors on «hospital economics» at Teachers College Columbia University\(^2\).

Today, there are no hospital training (diploma) programs in California and few in other states as the majority of registered nurse pre-licensure education is now located in colleges and universities\(^3\). Usually, nursing programs are organized as schools or departments in colleges and universities under the direction of a department head, dean, or director. But as in the past, there is still a need for these academic administrators to understand the «economics» and other management issues associated with administering a nursing program within a college or university and for them to be cognizant and to skillfully interact with professional constituents both in their institutions and other entities in their external environments.

The purpose of this inquiry was to provide a description of how nursing deans or directors and faculty address challenges in a time of fiscal exigency while attempting to implement innovative programs. The second part of this inquiry was to ascertain whether or not the programs would be able to sustain any innovations introduced by externally funded initiatives when those funding sources end. Specifically, to what extent can the institutions and nursing programs sustain the success and momentum resulting from externally supported initiatives when such support is withdrawn. A comprehensive evaluation of an initiative funded by The California Endowment (TCE) was conducted. The initiative called the Central Valley Nursing Diversity Project is a comprehensive, regional nursing workforce diversity funding program designed to increase the number of registered nurses in California’s Central Valley, as well as to increase the diversity of the nurse workforce\(^1\). Funding from TCE provided resources for six nursing programs to test interventions to increase the number of graduating nurses and increase the diversity of the graduates. Funding also provided scholarships for students, recruitment efforts aimed at potential students, resources to improve the governmental policy environment for nursing programs, and resources to improve faculty skills in working with ethnic minority students.

As a component of that effort, the evaluation team carried out a series of structured interviews with nursing deans or directors in six colleges that were implementing interventions as part of this initiative. The interviews were designed to systematically investigate barriers and opportunities identified by the deans and directors that were associated with their ability to successfully complete the work of the initiative and function in their jobs.

Based on interactions with schools and programs, it was observed that the institutions in which the nursing programs were based were highly complex and hampered by competing demands for scarce resources and a considerable amount of political tension. It was also noted that the nursing deans or directors had varying success when dealing within the power structures of their own campuses or systems. However, it was unclear how effective these nursing leaders were in maneuvering successfully in their organizational and community environments.

**BACKGROUND**

A rich body of literature exists on the organizational culture of professional organizations including hospitals and colleges and universities\(^4\)-\(^13\). Organizational culture can be thought of as a collection of basic assumptions shared by a group that have worked well and allowed the group to adapt and survive\(^4\). But in times of severe resource constraint, these group assumptions often break down.

Publicly funded education institutions in California face constrained economic resources because of the ongoing state fiscal crisis. Since the majority of nursing programs in California are in publicly funded institutions, nursing programs are not exempt from this crisis\(^14\). The limitations in state financial support, coupled with the extended nurse shortage\(^15\), has had a profound negative impact on nursing education capacity at a time when California needs to educate more nurses. External sources of funding have been secured by some nursing programs, but these funding sources are typically time limited.
METHOD

The conceptual model of the TCE initiative evaluation was based on work completed by Cross\textsuperscript{16} and Pascarella\textsuperscript{17}. The design of this part of the evaluation used structured interviews with the program deans and directors in the participating nursing schools. Data were analyzed using content analysis of themes based on field notes of the interviews.

The sample included two California State University (CSU) programs preparing students with a bachelor of science in nursing (BSN) and four California Community College (CCC) programs preparing students with an associate of science (AS) or an associate of arts (AA) in nursing. The nursing programs were selected for inclusion in this initiative because of their location in this geographic area, commonly called the California central valley. This area is known for its rapid population growth and a more pronounced nursing shortage than other regions of California. Additionally, the targeted geographic area has one of the most racially and ethnically diverse populations in the state as well as one of the most rapidly growing populations in the state. The major factors sustaining this growth include high birth rates, immigration from Latin America and Southeast Asia, as well as more affordable housing (relative to other parts of California).

Between January and July 2004, two project investigators conducted structured interviews with nursing program deans or directors at the six intervention pre-licensure nursing programs in the study. In some cases, the participants were accompanied by an assistant or other faculty members, resulting in more of a group of individuals responding to the questions and providing collective responses. This resulted in a richer discussion since several people provided perspectives and input.

The structured interviews were designed to explore issues in detail that had been raised by other forms of data collection, including student surveys and interviews with faculty and students involved in the initiative. Such issues included, but were not limited to, faculty and deans or directors’ concerns about diminishing state financial support to the programs; navigating an externally funded initiative within the organizational complexity of their campuses; barriers to the dean or directors’ ability to hire qualified faculty; the widening gap between the number of applicants to nursing programs and the limited capacity of the programs, and the uncertainty about the future of the nursing program when external funding sources were due to end.

RESULTS

Descriptions of the findings are organized based on the themes that were identified in the interviews and include internal forces and external forces that impinge upon the program, faculty and students, and organizational complexity and bureaucracy. The notion of successful leadership strategies was woven throughout discussions of the other major themes. The findings suggest that nursing deans or directors face numerous challenges as they attempted to achieve the goals of the initiative. The respondents indicated that their major goal was to increase the numbers of students who enter and successfully complete nursing degrees at either community colleges or state university programs. The second highest reported goal was to increase the number of individuals from underrepresented minority groups among the enrolled and graduated students. In discussing the series of steps that make up the pathway toward either an associate or baccalaureate nursing degree, it is hoped to illuminate the pressure points that impede the nursing education process in these schools.

In each program the respondents reported the development of specific activities to meet the overall initiative goals. Included in most program plans was an aggressive recruitment effort reaching out to the targeted minority groups. Once enrolled in college, targeted student groups received an array of academic enhancement activities to develop academic skills needed to succeed in the prerequisite courses for entry into the nursing program or to assist those students enrolled in the nursing programs that needed additional help to successfully complete course work. Other programs offered clinical and laboratory skills assistance to students. In all cases, the respondents reported increased total numbers of students enrolled since the implementation of TCE funded initiatives in late 2002, and with the exception of one program, the funding resulted in increased numbers and percentage of minority students.

INTERNAL PRESSURES

Among the most difficult barriers faced by the directors and the faculty was the over subscribed status (more applicants than positions) of the programs. The deans or
directors described three significant points that acted as barriers. These were 1) limited space in science laboratory pre-requisite courses, 2) limited classroom space in nursing courses, and 3) limited space in clinical (hospital) sites. At the time of the initiative, all but one of the nursing programs had the maximum numbers of students enrolled, with waiting lists, which in some instances, numbered twice those admitted. All deans or directors recounted examples of well-qualified students being denied admission because of limited capacity.

Before potential nursing students can enter a nursing program, the required pre-requisite courses must be successfully completed. This proved to be a formidable barrier because even pre-requisite courses were found to have extensive waiting lists. With the state fiscal crisis, colleges and universities were reducing the number of laboratory sections offered for science and other courses. As student numbers increased, deans or directors reported that they «scrambled» to hire nursing classroom and laboratory instructors and assign or formulate agreements for clinical sites and clinical site preceptors.

As part of the expansion of managed care in the 1990s, California hospitals have experienced a decreased length of hospital stay and a transfer of some traditionally inpatient activities to the outpatient setting. Consequently, there are fewer inpatient clinical sites available for schools of nursing to educate students.

Salaries for hospital nurses in California are generally much higher than for nursing faculty. Finding qualified instructors in a limited nurse labor market was reported to be a problem by several of those interviewed, as hospitals and clinics have proven to be formidable competitors for would-be nursing instructors. On some campuses, additional classroom and laboratory facilities or updated technology for classrooms and laboratories were also needed to accommodate increased enrollments and new training needs.

EXTERNAL PRESSURES

The largest single external pressure reported was the reduction in state funding to the college or university and to the nursing programs. The deans or directors who characterized their efforts as being effective, attributed their success to the extent to which they managed the demands made upon them by numerous outside agencies, including state legislative and regulatory agencies, system-wide and district-wide policies, and other laws and regulations.

The community college deans or directors expressed frustration with the California Community College Chancellor’s Office (CCCCO) regulation that allowed part time faculty to work no more than 60% time in a faculty position and that required at least 50% of all state dollars be dedicated to salaries for direct instruction. This policy is especially problematic for hiring clinical faculty. Because of the way clinical hours are calculated, many clinical rotations typically require the faculty member to work 66% if the rotation lasts for an entire semester and is taught by one faculty member. The California Board of Registered Nursing has regulations requiring a majority of faculty in a nursing program to be full time but the CCCCO regulation appears to be the most onerous.

California nursing programs have come to be increasingly dependent upon external funding sources in order to offer quality nurse training. In all instances, the deans and directors reported that they were successful in securing external grants from hospitals, foundations and government programs in addition to the funds received from this initiative. Such external funding resulted in greater visibility and influence on the respondents’ respective campuses. One campus administrator reportedly lauded the efforts of the dean or director for her ability to secure external grants to support the program and noted that, after liberal arts, the nursing student enrollment was the largest on campus. With the fiscal pressures faced by the colleges and universities, the external funding brought in by the nursing department allowed the nursing dean or director to attain greater influence for securing greater institutional resources and support for the nursing program.

External funds also gave programs greater flexibility for expanded offerings to better meet the unique needs of their students. Multiple funding sources gave the programs greater autonomy and flexibility in contrast to other units in the institutions that rely upon single or a limited number of funding sources.

It was evident that external support comes with a price. Although external funding is viewed as a lifesaving resource and seems essential to managing various program demands, all interviewees reported additional pressures. For example, different funding agencies have varying reporting requirements and other demands that require substantial administrative support. These demands included such activities as completing multiple progress reports during
the grant periods, meeting deadlines for submitting reports, data collection and report writing, incorporating multiple activities into crowded daily schedules, financing grant management reports and evaluation. The respondents described the difficulty of identifying the exact relationship between specific student and program outcomes and a specific funding source.

Another issue faced by the deans or directors and faculty is their obligation to various clinical sites, including hospitals and clinics. As the number of clinical sites decline, there is increased competition among programs for student placements. In several instances, it was learned that the deans or directors struggle with maintaining relationships with these external agencies to ensure continued support for student clinical placements. On the other hand, several commented that developing the strong professional and personal ties with their professional constituents served to strengthen their standing on the campus.

Another source of external funding has come from local hospitals but these funds frequently arrive with «strings attached». In some instances hospitals have funded faculty positions in exchange for that hospital’s employees being given consideration for admission to the nursing program earlier than non-hospital employees. For example, if the program admits students using the first come-first serve method, the hospital employees would be moved to the head of the queue.

Based on the activities in the different proposals, the deans or directors used the external dollars to provide varying services, including increasing faculty hours for tutoring students to improve retention, adding part time or full time nursing faculty for lectures and clinical supervision, providing NCLEX review, funding career counselors, expanding skills laboratory hours or adding skills laboratories, creating targeted recruitment campaigns, adding skills lab and other teaching equipment, and funding full time equivalent (FTE) positions for other departments to increase the number or sections of prerequisite courses. The funding used toward other departments was primarily provided for the science faculty, including chemistry, anatomy, physiology, and microbiology. One director commented, «We now have input into the hiring of English and math faculty FTEs and the nutrition department wants us to name one of their courses a prerequisite.» It became apparent that having a course listed as a prerequisite to the nursing program ensured a substantial enrollment in the course and ongoing work for that department’s faculty. This highlighted one of the barriers to creating a standardized set of prerequisite courses for all CCC nursing programs. Local faculty in non-nursing departments insisted on keeping a course as a nursing prerequisite in order to ensure faculty FTEs.

All deans or directors indicated that when the current external funds expired, there was no ability to continue the programs that have been started. With the dire fiscal status of California, there is considerable angst over the ability to continue «extra» programs or the program growth.

California community colleges have a history and philosophy of having «open access» which means that the colleges admit any person who is 18 years of age or older and is a California resident. Understandably some college programs including nursing programs, wish to restrict entrance to the most academically qualified student applicants, particularly when the programs are over subscribed. But since 1993, regulations that have restricted the implementation of prescreening of applicants using prerequisites or other sources have been in effect for all California community college programs. The regulations have been interpreted by colleges to mean that there is an open access policy to all programs, as well as open access to the college. Some programs have used a lottery system to admit any student who had completed the nursing prerequisite courses.

In 2002, a rigorous study was completed demonstrating that certain prerequisite course grades, overall GPA, and number of times the science prerequisites were attempted, predicted success or failure in community college nursing programs. Although the study applied to all California community college nursing programs20, the state legislature required that, before a nursing program could use these predictors to screen applicants, each school must produce a study that determined whether using these validated predictors would place a disproportionate burden on any minority student group in their geographic area. All community college nursing deans or directors were interested in trying to institute the predictors for admission to the nursing programs. However, the colleges have limited and varying ability and resources to perform such a study on their own students so the validated prerequisites have been implemented in only a few schools and the lottery system is still being used, or the criteria are being used without validation.
FACULTY AND STUDENTS

The nursing programs were staffed by 9 to 17 full time faculty and varying numbers of paid and volunteer part time faculty. All deans or directors indicated they had difficulty hiring qualified or credentialed faculty. The average age of California nursing faculty varied between 51 and 56 years\(^1\), and all of the programs reported being faced with numerous retirements in the near future. Being unable to hire qualified faculty was one of the principle reasons that the directors were impotent to increase capacity in the programs. Competing with hospital salaries has made hiring faculty more difficult as wages for hospital nurses have increased substantially while faculty salaries have remained constant and non-competitive.

Currently enrolled nursing students in the six programs varied in number from 60 to 260. Estimates ranged from 1000 to 2000 currently enrolled pre-nursing students who were in varying stages in the sequence of their prerequisite course work to enter nursing programs. A frequently expressed concern was the wide variation in qualifications and abilities of students admitted to the programs. Compelled by the open access policy, some nursing programs reportedly experienced exceptionally high attrition rates for students in the first semester of coursework. Deans or directors confided that they were frequently forced to use the first semester in the nursing program to screen students since they were unable to prescreen applicants using GPA or prerequisite course grades. Consequently, the community college deans or directors were very interested in using the predictors mentioned previously.

Political constraints also affected the ability to use the validated predictors. One community college director reported that a local faculty member had written a negative critique of the validation study done by Phillips et al.\(^2\) and, therefore, the program was unable to proceed with the study that was necessary in order to use prerequisite performance as a screening tool\(^2\). At the time of the interview, the director had been unable to convince college administrators to agree to perform a local study to provide recommended prerequisites for admission into the nursing program.

The state universities, on the other hand, have their own minimum requirements for admission to the university. An applicant meeting those requirements must complete additional and more stringent requirements to be admitted to the nursing program, if the program is designated as «impacted». Effective October 1, 2004, if a particular campus is deemed to be «impacted», meaning having more qualified applicants than positions in the program\(^2\), the nursing program can require higher academic standards than those required for university admission. During the time of the interviews, one of the programs was in impacted status while the other was not, resulting in variable admission requirements. In the impacted status program, admission decisions were based solely on grade point average.

In the fall of 2004, the California State Universities were scheduled to implement the «core 8», referring to eight standardized prerequisites developed for all nursing programs in the state university system. Although this would make prerequisites consistent throughout the system, impacted status schools would still be able to have different admission requirements. An aspiring student with nursing as a career goal would therefore increase his or her chances of admission by applying to the non-impacted programs.

The current US nurses shortage has generally been defined to have started in 1998 and there have been numerous successful attempts to encourage young people to choose nursing as a career path\(^2\). All nursing programs reported having student waiting lists that had increased in the last two to three years. The oversubscribed community college nursing programs typically used a first come-first serve or lottery system for admission. One faculty member observed, «Some applicants spend the night waiting in line to try to be one of the first in the first come-first served admissions to the nursing program.» One director indicated that the college had received several «angry» phone calls from applicants, physicians and parents about the long wait lists to enter both the prerequisite courses and the nursing courses. However, two programs in the same geographic area which had the shortest waiting lists reported that the creation of a waiting list was a relatively recent development.

COMPLEXITY AND BUREAUCRACY

A colleague once observed that «California is a place where all the rules have been written» (personnel communication, H. W. Kuartei, March 1986). There is no doubt that California has many laws, regulations, and governing bodies that oversee state educational institutions. All the deans or directors reported that over the years, the
individual campus organizations have increased in bureaucracy and complexity. The colleges and universities in our sample reported having between 5,000 and 25,000 total enrolled students. To a considerable extent, the greater the student enrollments, the greater the organizational complexity. However, complexity has resulted from numerous sources including additional requirements and regulations that come from external local, state and federal agencies, including systems’ chancellors’ offices. Many of the regulations center on affirmative action and security issues, student privacy and other student rights, faculty rights and unions, and nursing and nursing education regulations.

All deans or directors indicated that having external funding had increased the status and power of the nursing program among the faculty and professional constituents in the community. The external funding allowed the deans or directors to be more creative in implementing new ideas and strategies for their programs. Often, because of the need to create reports for granting agencies, deans or directors reported having to be increasingly aware and vocal about the size and needs of their programs. Most nursing programs, when including the pre-nursing students, were the second or third largest major area of study on the campus. Often it was the largest major after the «liberal arts» or «undeclared» major.

The demand by the declared nursing majors for the prerequisite courses provided the need for a consistent number of faculty FTEs to teach those courses. Having to report on the external grants has given the deans or directors explicit statistical data to argue for the needs of their programs within the institutions. Because of the necessity of providing accurate data for grant submissions and post award grant reports, the nursing deans or directors began to have program data more readily available. These data have allowed the nursing program administrators to demonstrate both the size and importance of the programs and to make the programs more visible to the rest of the institutional administrators and college faculty.

The deans or directors expressed varying demands for the nursing program graduates based on community needs. In one area, the only openings in local hospitals were for nightshift work in ICU. In another community, the demand for nursing graduates increased as local hospitals were expanding the number of inpatient beds or building new hospitals.

Many local hospitals had developed partnerships with the colleges or universities to increase capacity of the nursing programs. These partnerships came in the form of direct dollars to fund extra faculty and equipment, allowing hospital staff time to work as clinical faculty or preceptors of nursing students while still on hospital salary, and providing increased access for clinical sites. One director noted that the hospitals in the area had virtually no more open clinical sites for students. Several noted that there were insufficient placement sites for pediatric and psychiatric clinical rotations.

CONCLUSIONS AND RECOMMENDATIONS

One important recommendation we can make based on the study findings is that colleges and agencies should modify external marketing campaigns to provide more accurate information on current challenges in admission to nursing programs and provide guidance to successfully navigate the pre-requisite and admissions processes. All the nursing programs have wait lists and the waits can be long and frustrating, potentially driving students to change to other majors. Accurate information about choosing nursing or other health related fields could be provided by career counselors in the colleges and universities in order to reduce this potential frustration.

Another recommendation is that institutions should more effectively manage student demand. One way to do this is to modify admissions criteria to be more selective and to admit students with greater likelihood of graduating, while not adversely affecting opportunities for underrepresented minorities and other traditionally disadvantaged groups. Although they are required to maintain open access, the community colleges now have a mechanism to implement validated selective admission requirements. This should be used to ensure that students who are admitted to the nursing programs have a high probability of graduating and successfully passing the licensure examination.

Another critical recommendation is to increase overall capacity in the nursing programs. This will require more resources from the California state government and continued use of external sources of funding, even if the sources are time limited. The programs should work with the granting agencies to plan for continuation of promising activities after the grant. Investments from hospitals and other local employers must be negotiated so that the resources are used fairly and avoid the idea of moving
towards «proprietary» nursing education. Ultimately, the state government must provide more money for nursing education.

In considering regulatory issues that some consider barriers, there should be reform in some of the regulations to allow for increased flexibility for hiring part time faculty and other issues identified by the deans and directors. This flexibility would have to be weighed against keeping appropriate standards for an overall faculty and meeting the needs of the students. The deans and directors could be the gatekeepers in judging the appropriate «flexing» of the rules.

Another recommendation that comes from this work would be to encourage innovative programs across colleges and across college systems, such as partnerships between the UC campuses and the CSUs for providing needed educational programs. Because resources are so constrained, rethink the extent to which resources are being devoted to non-entry level RN programs (e.g., RN to BSN and NP programs). Based on need, the community could decide on a balance of training program resources that go to BSN-RN and NP versus those resources going to entry level RN programs. Although both may be needed, the emphasis likely should be weighted more heavily on the entry level programs, at least in the next few years.

Other potential recommendations include 1) predict the demand for nurses, when possible, of major community employers (acute care hospitals, long term care facilities) by assessing population growth, potential new services (inpatient beds), and replacement of nurses (turnover and retirement); and 2) create a community plan to insure that high demand employers (i.e. high turnover or high demand for new services) provide ongoing substantial financial support for the nursing programs, students, and faculty that provide employees for them. The primary nurse shortages exist for bedside nurses, trained nurse managers, and nurse faculty. The initial focus of resources should likely focus on increasing the number of these specific types of nurses.

California faces a future that is and will continue to include a growing population and an increasingly diverse population. Much of that population growth will be in the great Central Valley. It will require many creative strategies to ensure that this state has sufficient health care resources to care for the burgeoning population. As one colleague noted in a discussion of healthcare workers, «the Central Valley needs more of everything» (Personal communication, K. Grumbach, May 23, 2005). In order to provide an environment conducive to the healthy development of all Californians, Californians must look toward the future of the Central Valley.

During the course of the interviews with the deans or directors, nursing faculty and administrators, it was observed dedicated leadership and high energy by these individuals to accomplish their proposed objectives. Their success requires balancing the demands from multiple sources, both from within their complex institutions as well as from external entities. This creates a multiplicity of decision points at different levels inside and outside their campuses to implement new initiatives. Although the financial prospects are grim, we heard optimistic expressions from most of the deans or directors that «we will find a way to keep the momentum going on what we have started». These dynamic leaders will need the help of all Californians to keep the momentum going and ensure we have the nurses to provide adequate health care.

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