**Texas Nursing:
Our Future Depends on It**

A Strategic Plan for the State of Texas
To Meet Nursing Workforce Needs of 2013

Developed by:

TEXAS TEAM

Addressing Nursing Education Capacity

In Collaboration with:
Texas Board of Nursing
Texas Higher Education Coordinating Board
Texas Nurses Association
Texas Center for Nursing Workforce Studies
Texas Hospital Association
Texas Workforce System
AARP–Texas Office
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A. Summary

The nation and Texas face a shortage of nurses predicted to worsen over the next twenty years as baby boomers age and the need for health care grows. Texas schools of nursing, like others across the nation, face significant barriers to increasing capacity and output of graduates. Nursing schools face the challenge of revising curricula and educational approaches to better match the realities of clinical practice in the 21st century, including the need to continuously improve the quality and safety of nursing and health care delivery across the state.

The purpose of this Strategic Plan to Address Nursing Education Capacity in Texas is to provide comprehensive strategies which address the complexity of nursing education capacity for the State of Texas and the need to increase the number of graduates to meet demands projected for 2013 and ultimately 2020 by the Texas Center for Nursing Workforce Studies (TCNWS).

This strategic plan supports growth, regionalization and partnerships as the primary framework to operationalize actions needed by Texas to meet this overwhelming challenge. With the critical shortages of nurses and nurse educators, schools of nursing must double enrollments or the state risks being left behind. Regionalization has many benefits, not the least of which is an increased ability to operate efficiently. Currently, there are almost one hundred schools of nursing across the state. The only traditional stumbling block to regionalization is the fear of giving up autonomy. The fear of change can be a strong motivator to maintain the status quo. To meet the workforce needs of the state, regionalization and support from health consumer and system partners appears to be primary mechanisms which can assure local control while maximizing resources.

Texas must strive for synergies, partnerships, disruptions and innovation in order to meet the goal of producing sufficient initial RN licensure graduates.

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B. Background

Texas began addressing the reemerging nursing shortage in 1999 under the leadership of the Texas Nurses Association – joined by the Texas Hospital Association, Nursing Education Policy Coalition (no longer in existence), and the Greater Houston Partnership. These stakeholders developed a legislative agenda which resulted in the passage of the Nursing Shortage Reduction Act (NSRA) of 2001 (77th Texas Legislature). During the 2003 Texas Legislative Session (78th), the Texas Center for Nursing Workforce Studies was established. Each subsequent year, the legislature has continued to fund and expand the NSRA, resulting in significant investment by the state in addressing the nursing shortage. Multiple reports have been produced in response to legislative requests including the 79th and 80th Texas Legislatures.

This plan was developed by the Texas Team in coordination with the Office

of the Governor for the State of Texas and in response to a call to action by the Center to Champion Nursing in America – a joint initiative of AARP, the Robert Wood Johnson Foundation, U.S. Health Resources and Services Administration (HRSA), and the U.S. Department of Labor. The Texas Team was selected to join 16 other states at a national Nursing Education Capacity Summit (June 2008) hosted by the Center to Champion Nursing in America. The Texas Team eagerly worked to develop a strategic plan which designs new approaches to increase nursing education capacity in the State of Texas. Coordination and collaboration among all public and private producers of nurses and consumers of nurses will be critical as Texas plans to meet the healthcare needs from 2013 through 2020.

The Texas Team held seven meetings in 2008 – June through December – to discuss nursing workforce issues, nursing education capacity issues and to specifically identify strategies which address the "bottle neck" occurring in nursing education. The Texas Team's work was augmented by the work of Texas Center for Nursing Workforce Studies, the Texas Higher Education Coordinating Board Advisory Committee on RN Nursing Education (ACORN), the Texas Nurses Association, the Texas Hospital Association and the Texas Board of Nursing. Specifically, the Texas Team integrated components from reports and work plans generated by all these collaborating partners.

C. Coordination and Implementation

The strategic plan is designed to provide guidance over the next four years to state and local nursing workforce planners, hospitals, community colleges, universities, and schools of nursing by communicating the necessary steps needed to address nursing education capacity challenges facing the state. The plan is designed as a living document that will be updated over time as the nursing education and workforce environments change and as the priority actions are addressed and implemented.

Under this plan, state agencies and partners represented by the Texas Team are responsible for strengthening coordination and collaboration among the nursing workforce partners – governmental agencies, community colleges, universities, health sciences centers, local and regional workforce entities, hospitals, health professional associations, businesses and other private/public foundations and entities – to implement the priority actions and achieve the goals set forth in the plan. The Texas Team and endorsing organizations will also serve as the forum for discussion and as the decision making body for changes to the strategic plan.

Under the plan, all nursing education capacity planning and development activities will be tracked and performance measured to guarantee progress is achieved. Nursing workforce funding streams – federal, state, local, and private – will be identified, coordinated, and linked to the strategic plan to ensure maximum return on investment.

Nursing education capacity is a broad term which describes the national need to educate and graduate a professional nursing workforce to sufficiently meet the nation's future need for nurses.

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D. Endorsing Organizations and Plan Availability

Stakeholders provided input into the development of this plan during fall 2008. Those organizations and stakeholders that have endorsed this plan agree with the content, and agree to support and promote initiatives within their own organizations to implement the plan. The plan is a living document and can be accessed along with updated materials and a list of stakeholders at
http://www.dshs.state.tx.us/chs/cnws/default.shtm.
The Texas Team wishes to thank all those stakeholders who have engaged in development, support, and implementation of the plan.

E. Key Findings and Recommendations

- Texas and the nation are facing a critical shortage of registered nurses (RN). According to a recent report by the TCNWS, Texas will not produce sufficient RNs to meet the healthcare demands of Texans through 2020 without major interventions to increase RN supply.

- Between 2005 and 2020, demand for RNs is expected to increase by 86% and supply by only 53%.

- Texas schools of nursing turned away 41% (7,765) of qualified applicants to nursing schools in 2007. In 2007, 85 initial RN licensure nursing programs reported a need for 265 additional full-time and 159 part-time faculty and 93 clinical assistants to increase enrollments by 20%.

- Texas schools (86 initial licensure programs) produced 7,031 RN graduates in 2007. For supply to meet demand, the number of new graduates must grow to 9,700 in 2010; 15,199 by 2013; 18,000 in 2015; and to 25,000 in 2020.

- Although Texas has already implemented multiple strategies via a variety of partnerships and legislative initiatives to meet demand by 2020, additional support is necessary to achieve these goals.

- Increasing capacity in nursing programs will involve:
  - Acquiring the financial resources to recruit and retain additional qualified faculty and students
  - Acquiring additional clinical instruction sites
  - Fostering innovative public-private partnerships
  - Developing other educational modalities (e.g., simulation centers).

- Texas schools of nursing are not all equal. They differ in size, in ability to expand capacity, in graduation and retention rates, in efficiencies in producing graduates, and in availability of resources. Consequently, a single across-the-board approach to increasing RN graduates is not likely to work.

GRADUATES NEEDED FOR SUPPLY TO MEET DEMAND

Year	Graduates Needed
2010	9,700
2013	15,199
2015	18,000
2020	25,000

- With a critical shortage of nurse educators, schools of nursing must change or the state risks being left behind. The state must educate, recruit and retain a sufficient nursing faculty workforce. New educational modalities and regional sharing of resources are required to assist in addressing the faculty shortage.

- Regionalization appears to be a primary mechanism which can assure expanded capacity while maintaining local control and maximizing limited resources.

- Not all schools will be able to or will want to increase production of initial RN graduates. However, all schools must be incentivized to produce the maximum number of nursing graduates possible and to support regional efforts to meet the goal of doubling the number of initial RN graduates by 2013.

- A strong need exists for alignment of the State's resources around a shared vision and plan.

- Engaging a broader base of stakeholders is necessary to create new partnerships and successes.

- Texas businesses, including hospitals and health plans, have a vested interest in assuring healthy Texans and can play a significant role in solving this state wide nursing shortage. It behooves Texas businesses to take a proactive approach to mitigate these costs wherever possible. Texas businesses must engage as partners in solving the nursing shortage.

- Education, health care sectors, private sectors (including businesses), policy and regulation must be linked together to address the shortage of nurses in a synergistic effort to increase the capacity of nursing schools across the state.

F. Goals and Objectives

This strategic plan communicates high-level goals and strategic objectives, while priority actions are presented in a more detailed action plan.

Three goals serve as the foundation for the strategic plan:

Goal 1: Support Growth and Accountability

By 2013, double the number of graduates from

Texas Nursing Schools to 15,199.

Strategy 1.1: Support the strategies recommended by the Texas Nursing Workforce Shortage Coalition to seek funding in the 81st Texas Legislature which supports doubling initial RN licensure graduates by 2013.

Support Growth and Accountability By 2013, double the number of initial RN graduates from Texas Schools of Nursing to 15,199.

Develop Regional Academic Partnerships Create new efficiencies and innovations in nursing education through development of regional partnerships which support doubling the number of initial RN graduates.

Leverage New Partnerships Establish new relationships and partnerships with health care consumers, system participants (e.g., hospitals, health plans, and business communities) and academic institutions to support development of the nursing workforce.

PRIMARY LEAD: Texas Nursing Workforce Shortage Coalition (A joint effort of: Arlington Chamber of Commerce, Brazos Valley Chamber of Commerce, Dallas-Fort Worth Hospital Council, Deans & Directors of Texas Schools of Nursing, Greater Houston Partnership, Greater San Antonio Hospital Council, Teaching Hospitals of Texas, Texas Association of Business, Texas Hospital Association, Texas Nurses Association, and Texas Organization of Rural & Community Hospitals).

The Nursing Workforce Shortage Coalition represents a broad based group of stakeholders representing business, education, and consumers of healthcare. The coalition agrees that the best way to approach the goal of doubling the number of initial RN licensure graduates by 2013 is via expansion of the Nursing Shortage Reduction Program (initially passed by the legislature in 2001).

Phase I of the Nursing Shortage Reduction Program included $14.7 million per biennium. Even with this level of funding, it is estimated that by 2013 production will lag behind demand by approximately 5,000 RNs per year. The initial $14.7 million has produced a cumulative 55 percent growth in nursing graduates. However, the Coalition believes that further investment of state funds into the Nursing Shortage Reduction Program is necessary to reach the goal of 15,199 initial RN graduates in 2013 in order to meet the needs of Texas citizens.

Coalition members support strategies created by regional coalitions of nursing schools and community partners, while being accountable for producing more nursing graduates. All funding supporting such strategies should be based on a business plan and provide evidence of outcomes related to goal achievement. Accountability for those receiving additional state and/or private funding must be linked to productivity outcomes (i.e. production of graduates).

Strategy 1.2: Establish targets and measure progress on producing graduates utilizing "business model" concept.

PRIMARY LEAD: TCNWS & Texas Higher Education Coordinating Board (THECB)

To meet growth projections, Texas must establish target numbers for graduates and monitor progress toward meeting those targets to assure that the state has sufficient resources to meet the nursing health care needs of 2013 and beyond. All schools of nursing in the state must respond to the need for growth and set strategic goals to reach the overall number of graduates needed to meet workforce demands. This plan supports the concept of regionalization, and recommends that the state be divided into regions, and that each region of the state be given a target goal or "fair share" of the total number of graduates needing to be produced by Texas schools of nursing. Each region would then utilize strategies identified within this plan and/or potential other strategies not identified in order to achieve the established target number of RN graduates by 2013.

Strategy 1.3: Calculate graduation rates and promote best practices.

PRIMARY LEAD: THECB and Texas Board of Nursing (TBON)

Ensuring the graduation of nursing graduates from Texas Schools of Nursing is a critical strategy toward goal achievement of doubling the number of graduates. The TCNWS 2007 Update on Professional Nursing Programs reported additional resources were needed to retain students. Graduation rates will be calculated for all schools in the state and best practices will be promoted across schools by the THECB and BON. Examples of best practices include ACE (Achieving College Excellence) which provides academic support through tutorial services, peer advising, and workshops to enhance academic performance and student development (i.e., time management, stress reduction, study skills and test-taking skills). Retention strategies should be coordinated across designated regions, assuring that schools with low graduation rates are mentored/supported by partner regional schools.

Goal 2: Develop Regional Academic Partnerships

Create new efficiencies and innovations through development of regional academic partnerships.

Strategy 2.1: Create regional nursing school/academic partnerships which support rapid growth of high quality educational programs.

In order to double the number of initial RN graduates by 2013 followed by the needed four-fold increase in graduates by 2020, a strategically coordinated response must be launched which engages all existing and future schools of nursing in the state. Texas currently has 94 schools of nursing along with a growing number of new schools preparing initial licensure graduates. To increase the supply of nurses to meet healthcare needs of a growing and diverse population presents unique challenges in a large state such as Texas.

Regionalization is envisioned as the backbone to success in achieving this goal. Regionalization provides opportunities for a unified, strategic approach to address the nursing shortage and to overcome nursing education capacity issues in order to meet the states needs. By creating regional innovation systems that can drive expansion of nursing schools, assets – human, capital, institutional and community – can be leveraged to address the critical shortage of nurses. A systematic regional process can be utilized to identify innovation assets or develop strategies to ensure that these assets are sufficiently linked and leveraged.

The fear of change can be a strong motivator to maintain the status quo. But with critical shortages of nurses and nurse educators, schools of nursing must change or the state risks being left behind. This strategic plan supports regionalization of Texas Schools of Nursing. Regionalization has many benefits, not the least of which is an increased ability to operate efficiently. As of November 2008, there were 94 schools of nursing across the state. To meet the nursing workforce needs of the State regionalization appears to be one primary mechanism by which local control can be assured while maximizing resources and leveraging regional assets/strengths.

Sub-Strategy 2.1.1: Support curriculum model/s for RN nursing education in Texas which promotes regional sharing of resources.

PRIMARY LEAD: THECB

Beyond the challenge of increasing capacity to educate a sufficient number of qualified RN graduates, Texas nursing schools are also challenged to make curriculum revisions. The 2003 Institute of Medicine Report, "Health Professions: A Bridge to Quality", calls for educational institutions to ensure that their health educational programs help students "develop and maintain proficiency in five core areas:

- Patient safety coupled with patient-centered care;

- Working as part of interdisciplinary teams;

- Practicing evidence-based nursing;

- Focusing on quality improvement; and

- Using information technology.

The Robert Wood Johnson Foundation funded Quality and Safety Education for Nurses (QSEN), to assist programs to integrate these competencies into the undergraduate nursing curricula.

This Texas plan supports "A New Curriculum Model for Initial RN Licensure Programs" developed by the THECB in fall 2008 which utilizes the five core competencies identified by the Institute of Medicine (IOM) and QSEN strategies for integration into the nursing curricula. Regional application of this or similar models of nursing education curricula would facilitate regional sharing of resources, including shared faculty through joint or adjunct appointments and shared expertise in curricular design.

Sub-Strategy 2.1.2: Create and implement a plan which aligns regional faculty resources and development initiatives.

PRIMARY LEAD: Designated Regional Leaders in Collaboration with Regional Schools and Partners

The nurse faculty shortage presents a significant barrier to increasing a school's enrollment capacity. Efforts to increase the number of Texas faculty have focused on expansion of masters/doctoral education programs and targeting clinical practice nurses for faculty extension/clinical education support roles. This plan further endorses collaboration among community colleges, universities and health sciences centers to leverage scarce faculty resources. Schools of nursing, hospital partners, and other health care entities located in identified regions of the state should work together to "share faculty" among regional schools/hospitals/entities, collaboratively designing and implementing a plan to "grow their own", and initiate developmental activities which leverage a regional approach.

Regional partners should also support students and graduates to progress up the nursing career ladder – from high school to certified nursing assistant, to licensed vocation nurse, to registered nurse, to baccalaureate preparation, and on to the highest levels of education – including supporting those who

seek to become nurse educators. Each region should assess mechanisms to assure sufficient numbers of nursing faculty and create methodologies/strategies to develop a robust faculty pipeline needed to double initial RN licensure graduates by 2013.

Sub-Strategy 2.1.3: Create regional interdisciplinary clinical simulation centers which expand clinical education capacity and support new models of clinical education.

PRIMARY LEAD: THECB

The utilization of clinical simulation centers as a venue for clinical education in the health professions is growing. The aviation industry was on the forefront of creating "simulated environments" with the advent of "flight simulators" in training pilots to fly before venturing into the sky with hundreds of customers. Historically health professionals have learned to "fly" in real health care settings (i.e. hospitals, clinics, operating rooms) with real patients. New evidence based educational outcomes are emerging which validate the value of clinical simulation as a safe and highly effective strategy in the education of nurses and other health care providers. These centers provide health professions students an opportunity to learn in a simulated environment before delivering care to actual patients. Simulation is used to improve clinical decision making, psychomotor skills, communication techniques, and improve teamwork. Students are able to make mistakes and learn from those mistakes without risks to patients, allowing the learner to review and practice procedures as often as required to obtain proficiency without harm to patients. Some believe that in the future at least 50% of all nursing clinical education can be provided in clinical simulation centers, while conserving already overcrowded and congested clinical sites for expanding numbers of students.

Clinical simulation centers are designed to replicate a clinical setting. Cost of building simulation centers vary according to design, equipment and volume of planned usage. A regional approach should be utilized to share this type of valuable resource in order to reduce cost and maximize production of initial RN graduates across the state. Regionalization of clinical simulation resources can be realized through academic and community coordination, regional arrangements to share faculty and technical resources, collaborative and innovative models of education, and the commitment of partnerships that can bring creative funding which promotes excellence in nursing education, patient safety and interdisciplinary teamwork.

Sub-Strategy 2.1.4: Develop regional clinical placement of students to maximize competency attainment and faculty resource sustainability.

PRIMARY LEAD: Regional Partners with support from THECB and TBON

As a practice oriented profession, nurses learn to provide care in actual care

This strategic plan supports growth, regionalization and partnerships as the primary framework to operationalize actions needed by Texas to meet this overwhelming challenge.

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delivery settings — hospitals, clinics, community centers, etc. (clinical affiliates) — under the supervision of faculty. Texas schools of nursing consistently report insufficient space in clinical affiliates as a barrier to expanding enrollments and graduations. To meet the goal of doubling graduates by 2013, an efficient method of managing clinical placement is essential to increase the capacity for enrollments. Some areas of the state utilize computerized/standardized clinical placement tools and methodologies. Regions should develop systems which maximize collaboration and increase clinical placement availability, including clinical placement in regional clinical simulation centers.

Sub-Strategy 2.1.5: Develop regional portal/pathway education systems to increase nursing school admissions, promote retention activities, and seamless transition between associate and baccalaureate education.

PRIMARY LEAD: Regional Partners with support from THECB and TBON

Lack of standardized application systems result in duplication of applications, vacant admission slots and the inability to utilize resources to assess, track and retain "at risk students". Texas is currently funding two pilots through the 2008-2009 Nursing Innovation Grant Program to address both a common application portal and a robust retention portal. Strategies being tested include a standardized student application portal; centralized student database which addresses student background, academic and environmental variables; protocols for identifying at-risk students at point of entry into nursing school; standardized intervention protocols; and collection of data to assess effectiveness of intervention strategies employed to retain students. These two pilots should be considered "alpha" testing and lessons learned should be applied on a larger statewide, regional "beta testing" in other areas of the state.

Goal 3: Leverage New Partnerships

Establish new relationships and partnerships between and among health care system participants (e.g., hospitals, health plans, and business) and academic institutions to support development of nursing workforce.

Strategy 3.1: Support New Producers

PRIMARY LEAD: TBON

Texas currently has 94 schools of nursing preparing initial RN licensure graduates. Recent state and national trends indicate a proliferation of schools of nursing across the country. The challenge of doubling the production of initial RN licensure graduates by 2013 is daunting; and even more so to obtain a four-fold increase by 2020. Texas should support new producers. The TBON – who first learns of intent for new producers to start new programs – should identify mechanisms to assure integration and support for new producers into the various regions of the state. Partner clinical affiliate agencies should strategically assure that current and planned clinical placement of nursing students be managed to maximize production of initial RN licensure graduates while assuring delivery of safe nursing care to patients. Regional leaders should seek integration of new producers into existing systems of education and care delivery, utilizing strategies which leverage regional resources – including faculty, clinical simulation centers, and clinical space.

Strategy 3.2: Develop and expand partnerships between nursing programs and their clinical and community affiliates.

PRIMARY LEAD: Texas Hospital Association (THA)

The state and nursing must have the support of hospitals and other consumers of nurses to reach the goal of doubling the number of initial RN graduates by 2013. Many hospitals and clinical/community affiliates have a long history of supporting nursing education, however all must seriously consider stretching to maximize support of nursing schools in their regions and, when possible around the state. Examples of support mechanisms include traditional methodologies such as provision of scholarship support for students and provision of clinical faculty. All hospitals, clinical and community affiliates must consider leveraging of practicing nurses to serve as clinical faculty; provision of incentives to nursing faculty – such as endowed chairs and professorships, development of practice-scholar roles; provision of scholarships/tuition support for students enrolled in graduate nursing education programs; creation of designated clinical units;

support for clinical simulation centers; and other innovations.

Strategy 3.3: Utilize Asset Mapping to leverage regional public/private partnerships to strengthen educational infrastructure.

PRIMARY LEAD: Regional partners with support of AARP, Center to Champion Nursing, Texas Nurses Foundation

Asset mapping is a tool designed to support development by cataloguing resources, identifying needs, and strengthening or forming new partnerships toward common goals. Asset mapping supports the sharing of knowledge about isolated or underutilized resources. Those resources could be leveraged toward the goal of doubling nursing graduates. As leaders see common interests and organizational links, they may be inspired to strengthen or form new partnerships to build upon the system's assets. Asset mapping should be promoted at a regional level to encourage the realignment of existing efforts in educational, workforce and economic development programs to meet the challenge of doubling initial RN graduates by 2013. Each region will need to ascertain the necessary resources to meet this goal.

Strategy 3.4: Seek support from Texas U.S. Congressional delegation to secure additional federal funding for nursing workforce projects in Texas and identify federal policies and regulations which serve as roadblocks to capacity expansion.

PRIMARY LEAD: Honorable Representative Donna Howard in collaboration with the Texas Office of State-Federal Relations

Texas should provide leadership in educating the Texas U.S. Congressional delegation on the critical impact and economic implications of failing to meet the nursing workforce demands from 2013 through 2020. Leadership is needed that describes policy and regulatory requirements that both facilitate and create barriers to expanding nursing education capacity; describe options for innovation that would further enable capacity expansion; and identify federal funding streams to support capacity expansion.

G. Strategic Action Plan

Appendix A contains a detailed strategic action plan with identified activities and methods of delivery, responsible entities, proposed timelines for achievement, and anticipated outcomes. As previously noted, "A Strategic Plan for the State of Texas to Meet Nursing Workforce Needs of 2013" is a living document that will be updated and continually evolve over time as the nursing workforce and education environments change and as the priority actions are addressed and fully implemented.

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