

The Future of Health Care in Florida: An Environmental Scan



Conducted by
the State University System of Florida
Board of Governors

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The Problem: Why Does Florida Need to Be Concerned about Its Health Care Future?

The future of health care is changing. This is especially the case in Florida where “baby boomer” in-migration contributes to an increasing number of people with health care needs in the nation’s third largest state, with over 19 million persons in an area that covers more than 800 miles from Pensacola to Key West, spanning huge urban areas such as Miami and sparsely populated rural areas such as Liberty County in North Florida.



Unlike many states, Florida’s population is projected to continue to grow – to approximately 24 million by the year 2030. But even though Florida’s proportion of residents over age 65 is the highest among all 50 states, seniors are not fueling the demand for health care all by themselves. Those over 65 account for less than 10% of new Florida residents arriving in the last several years. In fact, more than half of the new arrivals were between 25 and 64 years old, according to U.S. Census data. Almost 2/5s of them were under age 25, with different – but equally as important – needs for health care. Another recent trend shows that more people about a decade away from retirement are moving to Florida, with health care issues that are just beginning to manifest themselves. Florida’s population is also very diverse and health care needs and delivery to these groups can require specialized understanding and education.

The Future of Health Care in Florida:

Text Box

The health care industry has a huge impact on Florida's economy. In 2014, Florida's health care industry was estimated to account for a little under one million jobs – 881,330 jobs, to be exact, counting ambulatory health care services, hospitals, and nursing and residential care facilities (and excluding health insurance or health equipment manufacturing). Health care industry occupations are projected to account for 23% of the growth in the state over the next 8 years - with an estimated 200,000 new jobs. In 2014, new wages for Florida's health care industry totaled \$50 billion.

How Can Florida's State Universities Help?

To better align higher education's health programs with Florida's changing demographic, geographic, and environmental factors, the Board of Governors of the State University System of Florida created the Health Initiatives Committee. During 2014-2015, the Board of Governors Health Initiatives Committee undertook an environmental scan to assess the status of health care in Florida – and to proactively prepare the 12 state universities to better meet the future needs of Floridians regarding health care. Via the use of hard data, surveys of universities and health care providers, and other national and state data sources, the results of the 2014-15 Environmental Scan identified key take-aways regarding health education, health care delivery and health-related research.



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This brochure, which summarizes the results of the environmental scan for health care in Florida, asked these critical questions:

1. Does Florida's current bachelor's and graduate degree production of the health care workforce align with the estimated need through the year 2030 given pending changes in population and practice? (health education)
2. What are the emerging and evolving trends in health care delivery? Will they affect the health care education curriculum? (health care delivery)
3. What are the specialized areas of health care research conducted by Florida's universities? Are there critical areas of research that are not being addressed? (research in health)



If Florida is to effectively respond to the future health care needs of an estimated 24 million persons by 2030, its state universities need to align bachelor's and graduate degree production with the projected needs of the health care workforce given pending changes in population and practice. The universities also have a major role to play regarding critical areas of research and in responding to emerging and evolving trends in health care delivery.

Text Box

Are We Producing Enough of the Health Care Professionals that Florida Will Need in the Future?



To answer this question, the Board of Governors undertook a “gap analysis” of Florida’s future workforce needs in health care, which examined “demand” by occupation and “supply” by education program (number of bachelor’s and graduate degree completers being produced by Florida postsecondary institutions). This gap analysis used accepted forecast methodology for labor, including adjustment factors by the U.S. Bureau of Labor Statistics that takes into account expected occupational change and retirements, total annual openings that includes new job growth and job replacements due to retirements of separations from the labor force.

Among the 21 occupational groups presented in the report (http://www.flbog.edu/about/_doc/health-initiative-committee/gap-analysis-report.pdf) Florida will definitely face a shortage of nurses and physicians. Regarding physicians, the bottleneck to meeting the demand in Florida is most likely based upon a lack of available residencies, which is a required and critical part of any physician’s training.

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Physical Therapists, Occupational Therapists, and Dentists are also on a “watch list.” Contextual factors indicate that, although these professions are “right-sized” in 2015, a gap could be created if in-migration of the professionals to Florida decreases, or if a high percentage chooses not to work—or to work only part-time—in the field, or if demand increases above the projections or if third party reimbursement policies change.

Occupations most likely under-supplied	<ol style="list-style-type: none"> 1. Nurses (RN, ARNP, Nurse Anesthetists) 2. Physicians (Some specialties & specific regions)
Occupations with a sufficient supply because of new licensees (with in-migration to Florida)	<ol style="list-style-type: none"> 3. Physical Therapists* 4. Occupational Therapists 5. Veterinarians 6. Pharmacists
Occupations with a sufficient supply from new or overlapping sources	<ol style="list-style-type: none"> 7. Dentists 8. Marriage & Family Therapists 9. Rehabilitation Counselors 10. Art & Music Therapists

In several more occupations, such as Marriage and Family Therapists, in-migration of professionals from other states and/or considerable overlap with other professions indicates sufficient supply both now and into the foreseeable future.

**Although the supply of health care professionals in the shaded boxes above appears adequate for the present, constant monitoring of these occupations is advised. Several occupations are on the “watch list” because of changes in current conditions which could result in an under-supply in the near future.*

Research in Health: What Do We Need to Know for Florida's Future?

While State University System's health-related research is a vast enterprise with great strengths, it has the potential to become even stronger. The "Three F's" – Funding, Faculty, and Facilities – present both challenges and opportunities. A survey of the universities revealed the following:

- Funding for research is becoming increasingly competitive.
- The SUS clearly has stellar faculty working in health-related areas. But more must be done to recruit faculty where they are most needed—and to retain the best faculty.
- Although the SUS has some state-of-the-art facilities, universities have pressing needs for new and updated facilities in critical research areas.
- Universities collaborate on health research – and are seeking new ways to do even more.
- Florida's State University System is currently exploring ways to build a shared computing system that allows researchers to easily collaborate, store enormous quantities of data securely and be more competitive for federal grants. This data infrastructure would allow Florida to be a destination for clinical research, comparative effectiveness research, and implementation science.



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- Florida's universities are also exploring ways to promote technology transfer of the results of their research. The challenge most often articulated was the absence of seed capital and proof-of-concept funds for prototypes and pre-clinical drug development. Florida's universities identified over 25 research areas in health which were unaddressed or not adequately addressed, including neuroscience, disease prevention/healthy lifestyles, health disparities among minorities, obesity, geriatrics, early and middle childhood health, mental and behavioral health, autism, and genomic and personalized medicine.

How Is Health Care Delivery Changing?

Providing future health care to Florida's growing population will be both exciting and daunting. New trends, such as telemedicine and genomics, hold the promise of reaching more of the population, no matter where they live, and better attending to their needs. How will health care change over the next decade or two, and how can Florida's universities help?

The Future of Health Care in Florida:

A review of the literature on emerging and evolving health care and a survey of Florida's state university Colleges of Medicine and Colleges of Health suggests that there are at least five key trends: (1) an increase in collaborative models of practice that require a patient-centered, team-based approach; (2) a change in training settings from traditional hospital-based to community settings; (3) a greater employment of physicians in practices owned or managed by hospitals or other organizations; (4) an expanded role for Advanced Registered Nurse Practitioners, Physicians' Assistants, and other health care delivery personnel other than physicians; and (5) the emergence of personalized medicine and genomics.



Health care in the United States has evolved from the days of the solo physician practice to more collaborative models of practice. Advances in technology, the complexity and prevalence of chronic disease management, and the complicated health care reimbursement process have all led to the need for a more systematic approach to the provision of health care. Almost all of the new models of care require a more patient-centered, team-based approach, using emerging technologies. More and more physicians are employed in practices owned and/or managed by hospitals, managed care organizations, or some other entity. An emerging emphasis on outcome-based reimbursement, on chronic disease management, and on a medical model that focuses on prediction and prevention, rather than “repairing” patients, is becoming evident.

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For the universities, these trends manifest themselves in terms of greater use of Electronic Health Records, the use of telemedicine, increasing opportunities for inter-professional/interdisciplinary training and care, new faculty practice plan development, and the expansion of primary and specialty care services. In addition, changes in the way we train doctors, nurses and other health care providers, including new criteria in which “EQ” (emotional quotient) might actually be more important than “IQ”, will be necessary to better prepare graduates for the changing health care delivery system.

Universities themselves are big providers of health care. In the 2013-14 fiscal year alone, universities reported nearly 3,000,000 inpatient and outpatient visits. This number is likely to grow. Universities tend to provide health care services close to home; extending services beyond the local area is the exception rather than the rule. Sites of services exhibit a wide variety of settings, including outpatient clinics, federally qualified health centers (FQHC), county health departments, private physician practices, community hospitals, correctional facilities, academic health centers, VA hospitals and clinics, nursing homes, rehabilitation centers, and student health centers.



When asked to describe the greatest areas of health care needs, the #1 area most cited by Florida's universities was *access to care*. Other needs included preventive and acute health care services to the underserved, mental health care/substance abuse services, primary and specialty care physicians, and population health.

Barriers to delivery of health care most frequently cited by Florida's universities include lack of adequate numbers of clinical faculty, increased workload requirements, Graduate Medical Education funding, and the availability of preceptors for health care programs. Critical health care delivery areas that Florida's universities are unable to adequately address include mental health, access to affordable health care and physician shortages, lack of residency positions, and care of the elderly.

What Emerging and Evolving Trends Will Be Important in the Future of Health Care in Florida?

As part of its environmental scan, the Health Initiatives Committee and Advisory Group considered emerging and evolving health occupations that will require new skills and competencies in the health care workforce. These trends include personalized medicine and the need for a workforce with practice-oriented and increasingly complex biomedical knowledge and skills.





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Florida will also need graduates prepared for the practice of personalized medicine, in subjects like Genetics, Pharma-cogenetics, and Bioinformatics. In the future, Florida may need more Genetic Counselors and more medical science graduates with practice-oriented skills in personalized medicine.

Pharmacogenetics may also be an emerging area where student and workforce demand will grow as new technologies are developed. Preventive and population health are also clearly important for Florida's future and there will be an increasing need for community-based health workers.



Where Do We Go from Here?

In Health Care Education, the State University System needs to focus on high-demand occupational areas that are clearly demonstrating a future shortage, especially physicians and nurses. One of the best strategies for doing so is for Florida to establish a competitive program for universities to expand or grow new programs in these occupational areas. A competitive program would use an RFP-type process to allow the best programs to win grants, provided through non-recurring funds, to quickly ramp up the production of professionals for high demand health care jobs. After the programs are established, they would become self-supporting.

The Future of Health Care in Florida:

Regarding Health Care Education, funding is needed for State University System programs to provide cutting edge educators, facilities, and equipment; and to address the longstanding shortage of medical residency programs and slots in Florida.



In Health-related Research, the State University System has some stellar faculty, facilities, and research agendas. More needs to be done, however, to provide the infrastructure for the universities to add value by ramping up collaboration amongst themselves and with other research entities. Such collaboration is a key mechanism for the State University System to effectively compete for major federal funding opportunities. Here, a highly effective strategy has been the Centers of Excellence program, a competitive endeavor to create world-class research centers with one-time, non-recurring dollars. Since its inception in the early 1990s, the 11 State University System Centers of Excellence have returned \$523M on an initial Florida investment of \$78.4M.

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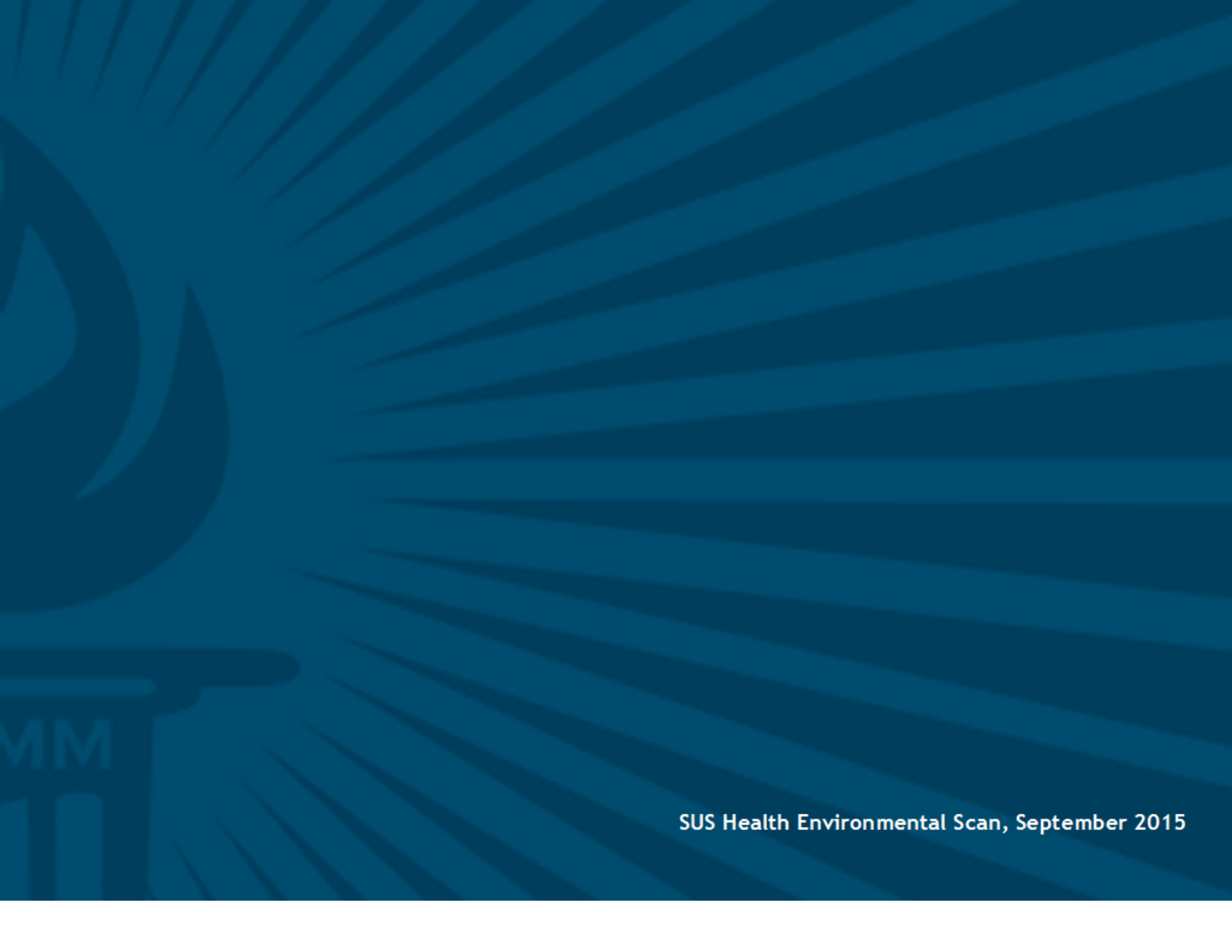


An expanded investment in faculty, facilities, and state-of-the-art equipment would enable Florida to keep abreast of advances being made in the U.S. and internationally. The Centers of Excellence model would assist in making decisions about which investments should be prioritized.

In Health Care Delivery, Florida's expanding population will result in the need for state universities to provide even more health care to patients—beyond the 3 million patient visits they already are providing. More faculty are needed, along with new and improved facilities, and state-of-the-art equipment. Community-based programs, preventive medicine, telemedicine, pharmacogenomics and other emerging trends in health care delivery can help Florida better address the unique health care needs of underserved and rural segments of its diverse population.



Florida is a dynamic, growing state. Its health care delivery infrastructure will be challenged by its demographics in the years to come. It is imperative that the state universities are enabled to provide solutions to the challenges ahead so that all Floridians have the health care that they need and deserve.



SUS Health Environmental Scan, September 2015