Health Care
Workforce Technical Advisory Committee

CODE BLUE:

Workforce in Crisis

May 2001

Letter From the Advisory Committee

STATE OF GEORGIA
Health Strategies Council

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May 2001

Members, Health Strategies Council
Members, Board of Community Health
Commissioner Russ Toal
State Policy Makers and Interested Parties

Ladies and Gentlemen:

On behalf of the Health Care Workforce Technical Advisory Committee, we are pleased to present our final report for your review and consideration. This report represents many hours of information collection, challenging discussions and thoughtful deliberations by the Committee and the partners who have worked closely with us.

As we hope the report clearly conveys, Georgia is presently experiencing a serious shortage of nursing, allied health and behavioral health care professionals. As supply is shrinking, demand for these professionals is increasing. Without swift action on a variety of fronts, Georgia risks potentially catastrophic shortages in the near future. The workforce crisis, particularly with respect to nursing fields, is mirrored throughout the country. The factors contributing to the shortage are numerous and complex. Addressing the problems will require a blend of strategies focusing on both supply and demand issues as well as instituting systems for ongoing data analysis and policy development. We encourage state leaders and health care advocates to work together in implementing the policies and securing the resources necessary to assure that Georgia and her citizens have accessible, quality health care services well into the future.

We extend our appreciation to the Health Strategies Council for commissioning our work and convening such a talented and diverse group of committee members. The Committee applauds the Georgia Department of Community Health for the staffing and support provided to our efforts. We also commend the efforts of the health care providers, professionals, educators, and public agency representatives who offered great insight and dedicated participation.

We believe the Committee's report represents a credible and important first step towards addressing Georgia's health care workforce shortages. The recommendations put forth are sound and doable, and can serve as a foundation for action—we cannot afford to wait.

Sincerely,

Ken B. Beverly, President
Archbold Medical Center
Committee Co-Chair

Charlene M. Hanson, EdD, FNP, CS, FAAN
Professor, Georgia Southern University
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Executive Summary

Faced with increasing shortages of nursing, allied health and behavioral health care professionals, Georgia health care educators, providers, professionals and planners came together over a nine-month period to analyze the multitude of factors contributing to the problem and to consider short and long-term solutions. The Health Care Workforce Technical Advisory Committee has issued this final report to document the many factors contributing to the shortage and to outline suggested strategies to begin addressing the problem. Some contributing factors are driven by population changes and are uncontrollable; others are financing and workplace issues developed to solve one problem but which have resulted in another set of more challenging conditions. The policies and strategies needed to address the shortages are many and varied, and they must be implemented over time with recognition that results will be slow in coming.

There is an insufficient number of nurses and other key health care professionals in the current workforce. Vacancy rates in hospitals, nursing homes and public sector programs are ranging between 10% and 20%. More disturbing is the outlook for the future. Demand for and the clinical sophistication needed in health care is increasing while the supply of professionals is decreasing. The ranks of educators are withering and fewer advanced degree professionals indicate any desire to fill these gaps. Young people have other professional options. The health care work environment is deterring new recruits and forcing current professionals to other employment or to reduce their hours of work.

The Technical Advisory Committee recommends a variety of program enhancements and policy interventions designed to:

- improve both the perception and the reality of work in health care;
- recruit new professionals who also bring greater diversity and cultural competence;
- make health care education desirable and affordable;
- retain skilled caregivers by promoting workplace improvements through increased dialogue, understanding, respect and professional rewards;
- promote ongoing policy guidance through appointment of a standing advisory council focusing on nursing, allied health and behavioral health care workforce issues;
- develop and institutionalize a system of data collection to support this policy work and prevent future unforeseen shortages; and
- establish a forum to ensure that providers, professionals, educators, payers and consumers find common ground and work cooperatively to present to policy makers solutions that represent the best outcomes for all concerned.

These strategies are discussed in detail in the report that follows. The solutions to the health care workforce shortages come with a price tag—new financing streams and incentives will be required to bring and keep more professionals in the workforce. However, the failure to address these many problems comes with a much steeper price—decreased quality of care, dwindling access to care, comprised patient safety, increased costs resulting from poor outcomes, and diminished ability to treat and care for Georgia's citizens. There is no question which set of costs is greater. Georgia must attract and keep more professionals in the health care workforce. This Final Report seeks to document why and how.

Introduction

Georgia and the nation may be facing the worst shortage of non-physician health care professionals in history. Evidence from numerous sources indicates that the system's ability to meet current needs for health care services is in jeopardy. If trends in workforce dynamics are not addressed, the country could witness a substantial shrinkage in the number of nurses, allied health and behavioral health professionals while experiencing an explosion in the demand for health care services that is the product of substantial population growth and longevity.

Shortages in health care professions are nothing new. However, based on the available information, the current crisis is more complex and varied in composition than previous ones. In past shortages, a few factors could be isolated and addressed to provide for simple, quick and effective responses. The current shortage lacks this simplicity. As with previous shortages, demand is rising as the population grows in size and health care systems become more sophisticated and diverse. Further, the growth in population has additional components that complicate matters involving the workforce. More people are living longer, increasing the demand for health care services more markedly than pure population growth might suggest. In addition to demand factors, issues concerning the supply of health care professionals may have long-term impact. Evidence shows that the workforce may already be staffed at levels too low to meet current demand. Adding to this problem is the fact that the current health care workforce is aging rapidly, and younger, potential replacements are seeking work outside of health care. The output of key health care professional education programs, with dropping numbers of new recruits and graduates, validates this concern. Finally, with decreasing revenues and staffing shortfalls, the workplace itself appears to be a growing liability and may be driving potential recruits as well as veteran health care professionals away from health care.

Regrettably, planners failed to learn the lessons of previous shortages—little, if any, ongoing data collection, analysis, forecasting, and policy development have occurred to prepare the state to meet the current challenges. Now, Georgia, like the nation, must act swiftly. To do so, Georgia must gain an understanding of the forces driving the current shortage. Any analysis must consider all aspects of the health care market, accounting for changes in supply and demand, as well as the forces that are driving the growing chasm between supply and demand. The analysis must lead to the creation of a comprehensive set of strategies that account for and effectively counter the forces behind the current shortage, bringing the supply and demand for health care services back into equilibrium. The end goal must be the creation and ongoing maintenance of a viable workforce of health care professionals that can meet Georgia's current and future health care needs.

In August 2000, the Health Care Workforce Technical Advisory Committee *(TAC)* was established by the Health Strategies Council and the Georgia Department of Community Health *(DCH)* to undertake this critical analysis. The committee was comprised of leaders representing the entire spectrum of health care professions, workplace settings, vital education providers, and key ancillary services. This group was charged with considering short and long-term solutions to the growing shortage of health care professionals, focusing on the fields of nursing, allied health and behavioral health. In charging the committee, DCH Commissioner Russ Toal encouraged the group:

- To consider solutions that address the current shortages as well as the long-term dynamics that drive workforce supply and to make recommendations to the state and the health care industry on actions needed to ensure that an adequate supply of health care workers is available to Georgians in the near future and for coming generations.
- To analyze supply-side factors such as education, recruitment and retention, as well as demand-side strategies such as community networks, job integration, and new technologies.
- To maximize the impact of the TAC's work by building on the work already done by other groups, states and the federal government.
- To ensure, through the Committee membership and participation, that a broad range of stakeholders affected by the health care workforce shortage is included in the development of the committee's recommendations.
- To realize the roles all private and public organizations must play in addressing these shortages and assign appropriate responsibilities.

The group met monthly, in full committee and subcommittees, to obtain information on the health care workforce crisis in various settings and professions. During these meetings, the TAC deliberated on proposed strategies and initiatives and ensured that needed linkages were developed and maintained among relevant partner agencies. Through these efforts the TAC was able to grasp the extent and nature of the current shortage and develop a set of strategies designed to address the forces driving the shortage.

The results of the analytical review and the information that the TAC received are included in the following pages, along with the comprehensive set of strategies developed to address the current crisis.

Defining the Shortage

Under optimal conditions, the provision of health care services operates in equilibrium; demand for services is matched by a supply of professionals that is sufficient to meet the demand, yet not too abundant to leave components of the workforce idle or underutilized. Factors contributing to the levels of demand and supply include the base population and its demographic make-up, the number of professionals active in the workforce, the education pipeline that feeds the workforce, and factors that impact the real and perceived viability of health care professions.

As with any sector, staffing for health care services cycles through periods of equilibrium and disequilibrium. Information reported from a variety of sources warns that Georgia and the nation are experiencing another shortage; one that is potentially more disastrous than previous shortages. Regrettably, these sources also indicate that the factors contributing to this shortage are numerous, varied and complex and represent concerns stemming from both demand and supply. The following pages capture the crisis that Georgia is facing with its health care workforce. The volume of information, the pervasive nature of problems confronting the workforce and the diversity of sources reporting on it provide a striking picture of a workforce in decline. The sheer preponderance of evidence provided in this document can lead to only one conclusion: under present conditions, Georgia's health care workforce will likely be unable to meet the growing demand for services. Further, the evidence mandates that swift and decisive action be taken to address the problem to ensure that Georgia has a viable workforce to care for its residents today and in the future.

Great efforts were taken to develop a picture of supply and demand issues for all health care professions. Data, research, and analysis were gathered for nurses, allied health and behavioral health professions. However, the majority of data collected concerned the registered nurse workforce only. In large part, this is due to the maturity of research and intense interest the public has displayed in the RN workforce. A substantial body of research exists for nursing that has not been matched for most other professions considered in this report. While this makes discrete documentation more difficult, it does not prevent useful extrapolation into the conditions confronting all professions. Strong similarities are identified throughout this report in demographic and environmental factors among nursing, allied health and behavioral health professions. These similarities have been used, where appropriate, to discuss the conditions of the entire health professions workforce. This method has enabled the development of a more comprehensive picture of the current state of the workforce.

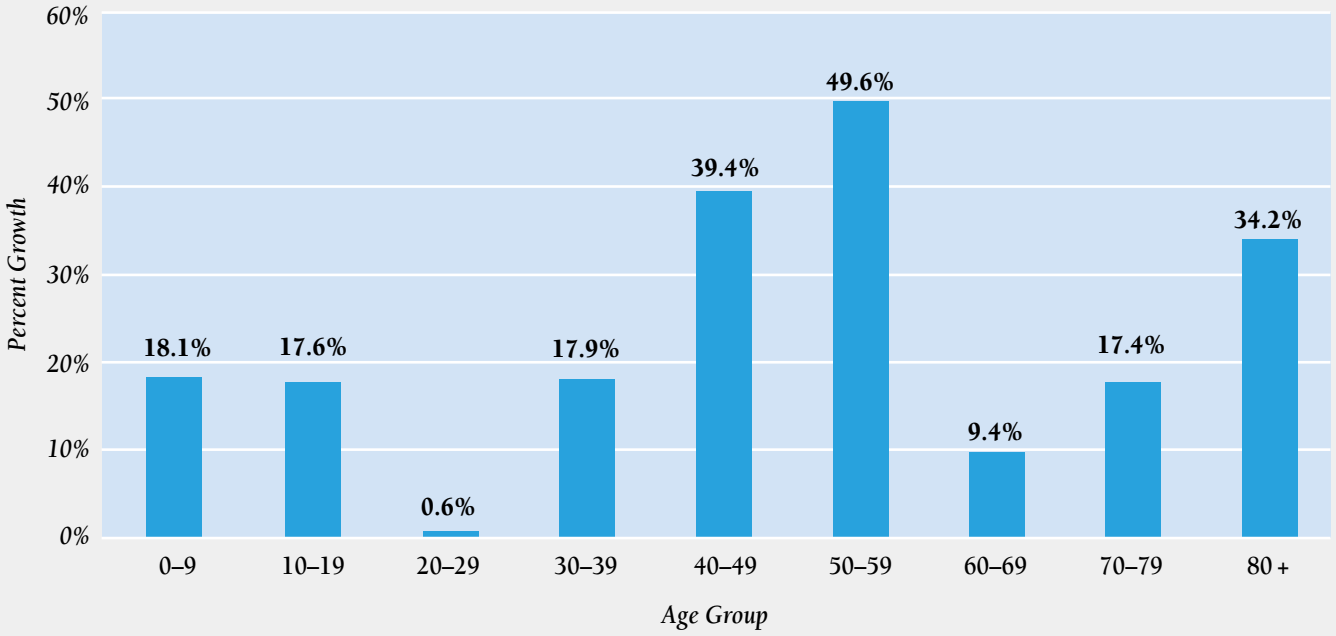
Demand for Health Care Services

Perhaps the most important underpinning to the current crisis is Georgia's substantial population growth in the 1990s. According to the 2000 U.S. census Georgia saw a 26.4% growth in population, increasing to 8,186,453 people from only 6,478,216 in 1990. With basic population representing a key indicator of demand for health care services, the increase in Georgia's population implies a subsequent increase in demand for health care to meet the new needs of the more than 1.7 million new Georgia residents.

Beyond this residual demand for services, evidence from a previous census estimates hints at a larger increase in demand for services than the total increase in population would indicate. The cause for this exceptional increase is the aging of Georgia's population. Overall the state's population witnessed moderate aging. The median age increased from 31.5 to 33.4 between 1990 and 2000. This modest increase belies substantial increases in various age cohorts in the population. The respective growth rates for ten year groupings of the population are shown in ***Graph 1*** and highlight the extensive growth of the older population that has resulted from the aging of the baby-boom generation. The implications of this fact are profound, as this increase means that at least 1,035,063 individuals over 40 now call Georgia home, representing more than 1 in every 8 Georgians. It is also important to note that these figures are likely to be conservative as they are based on 1999 biennial census figures that predicted a smaller total population increase than is shown in the 2000 figures. Given that utilization of health care services is highly correlated to age, as demonstrated by a recent Salomon Smith Barney report, *Hospital Staffing; Brother Can You Spare a Nurse,* this predicts a larger increase in demand for health care services than the population increase implies. Additionally, it is likely that this increased demand for services will involve chronic illness and long term care, involving greater staffing requirements for an increase in the average duration of care commitments.

Adding to the growth is the change in the racial mix of the Georgia population. The general population in 2000 has become substantially more diverse than it was in 1990, as is indicated in ***Table 1***. African American, Hispanic and other minority communities grew substantially. Non-Hispanic whites saw the smallest percentage growth and witnessed a decrease in their overall representation in the total population. This group now represents 62.6% of the total population, down from 70.1%, while African Americans, Hispanics and other minorities now account for more than one-third of the total population. This changing face of Georgia has certain implications for health care services, requiring that the health care workers be more culturally competent and reflective of the general population.

GRAPH 1 *PERCENT GROWTH OF GEORGIA'S POPULATION BY AGE GROUP 1990–1999*



Source: U.S. Bureau of the Census, 1990 U.S. Census Data, 1999 Annual Time Series of State Population, Estimates by Age and Sex

TABLE 1 *RACIAL MAKE-UP OF THE GEORGIA POPULATION*

	1990		2000		
	Population	Percent of Population	Population	Percent of Population	Percent Change 1990–2000
Non-Hispanic White	4,543,425	70.1%	5,128,661	62.6%	12.9%
Black or African American	1,737,165	26.8%	2,331,465	28.5%	34.2%
American Indian or Alaska Native	12,621	0.2%	17,670	0.2%	40.0%
Asian or Pacific Islander	73,725	1.1%	174,791	2.1%	137.1%
Hispanic (any race)	108,922	1.7%	435,227	5.3%	299.6%
Other race	2,358	0.0%	11,275	0.1%	378.2%
Two or more races	NA		87,364	1.1%	NA
Total	6,478,216	100.0%	8,186,453	100.0%	

Source: U.S. Bureau of the Census, 1990 Decennial Census, 2000 Decennial Census

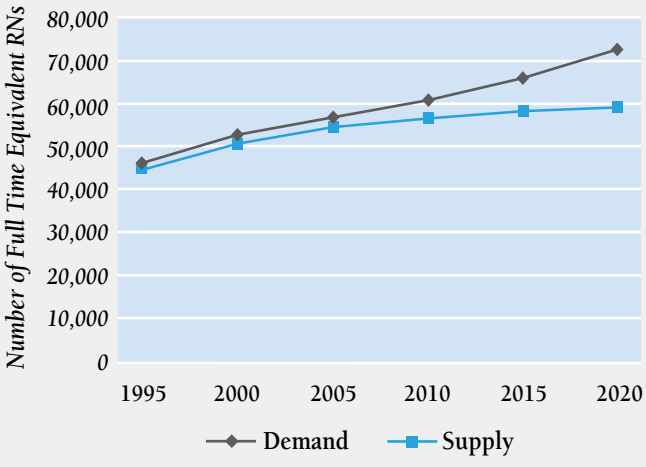
According to numerous reports, the ethnic composition of the workforce is remarkably out of balance with that of the general population. With the exception of only a few professions, non-Hispanic whites constitute 85%–95% of the workforce—far above the 63% of the population that they represent. While this fact is not necessarily a factor in the current crisis, it certainly has implications on future actions. Georgia is clearly not making the best use of its potential workforce. Georgia needs to develop mechanisms to better tap into the minority populations that are growing fast in Georgia. Doing this will likely reap quick benefits by introducing much needed workers into the workforce.

DEMAND FOR HEALTH CARE PROFESSIONALS

Highly related to the demand for services, provider agencies must maintain a workforce of professionals adequate to meet the health care needs that confront them. As the population and its health care needs grow, hospitals, long-term care facilities, home health agencies, public health agencies, community mental health facilities, prisons/jails, public/private school systems, and other providers will need to secure additional professionals to meet the rising demand. Based on information reported by several sources, it appears as though Georgia has not done an adequate job of keeping pace with increasing demand and is already facing substantial shortages.

In 1997, the National Advisory Council on Nurse Education and Practice *(NACNEP)* issued its *Report to the Secretary of the Department of Health and Humans Services on the Basic Registered Nurse Workforce.* This report described the condition of nurse education and practice, comparing projected need for registered nurses to the supply from 1995 to 2020. These data *(see* ***Graph 2****)* demonstrate that Georgia is already running a deficit in the RN workforce of 2,000 RNs, and that this shortfall is expected to grow over time. It is also likely that these figures under-report the shortage. The Health Resources and Services Administration *(HRSA)* recently reported that Georgia had only 49,746 FTE RNs in 2000, which is nearly 1,500 full time equivalents *(FTEs)* less than what NACNEP projected in 1997. Additionally, it is likely that staffing requirements were underestimated due to the use of more modest population growth projections than indicated by the 2000 census.

GRAPH 2 ***GEORGIA'S PROJECTED SUPPLY AND DEMAND FOR REGISTERED NURSES***



Source: National Advisory Council on Nurse Education and Practice, *Report to the Secretary of the Department of Health and Human Services on the Registered Nurse Workforce,* 1996

Figures being reported by major health care providers in Georgia appear to validate the NACNEP projections. Recently, the Georgia Hospital Association, the Georgia Division of Public Health and the Georgia Department of Community Health have conducted surveys reporting shortages in the workforce. Each of these surveys covers different health care sectors, including hospitals, public health departments and nursing homes, yet each reports similar findings. According to recent data *(see* ***Table 2*** *and* ***Graph 3****)* each system is experiencing difficulty in finding and/or retaining nurses. Importantly, the Georgia data shows problems in securing licensed practical nurses *(LPNs)*, certified nurse aides *(CNAs)* and allied health professionals, as well as RNs. While data reporting demand for allied and behavioral health professions has been limited, the Georgia data indicates that the workforce crisis extends beyond the nursing workforce.

Demand for these professionals is not likely to taper off in the future. The NACNEP information highlights the continued growth in demand for RNs. This report projects a 59% increase in the requirements for FTE RNs from 1995 to 2020. Figures from the Georgia Department of Labor *(DOL)* also show explosive growth in demand for RNs, as well as for other health care professions *(see* ***Graph 4****)* between 1996 and 2006. According to DOL projections, nine of the 20 fastest growing professions are in the field of health care, with eight of these nine involved in direct patient care. Not included in this graph are three professions which will see large numbers of new positions created by 2006, but whose percentage growth is smaller due to the large number of positions already existing. The RN, nurse aides/orderlies and social work professions are predicted to experience large growth, witnessing the addition of 19,780, 11,590 and 8,050 new positions, respectively. Given that many current positions are now vacant, the possibility for meeting this significantly expanded demand is questionable.

While the DOL data make no attempt to compare overall demand for professionals with their supply, information provided by the Office of the Secretary of State shows a declining trend in the issuance of new licenses for RNs. This declining trend is alarming when compared to the projected explosion in demand. This concern results from the combination of numerous factors, including turnover in existing positions and decreased full-time work by many health care professionals. Regarding RNs specifically, the DOL estimates that Georgia will need 27,000 new RNs between 1996 and

TABLE 2 *STAFF VACANCY RATES IN PARTICIPATING HOSPITALS AND NURSING HOMES*

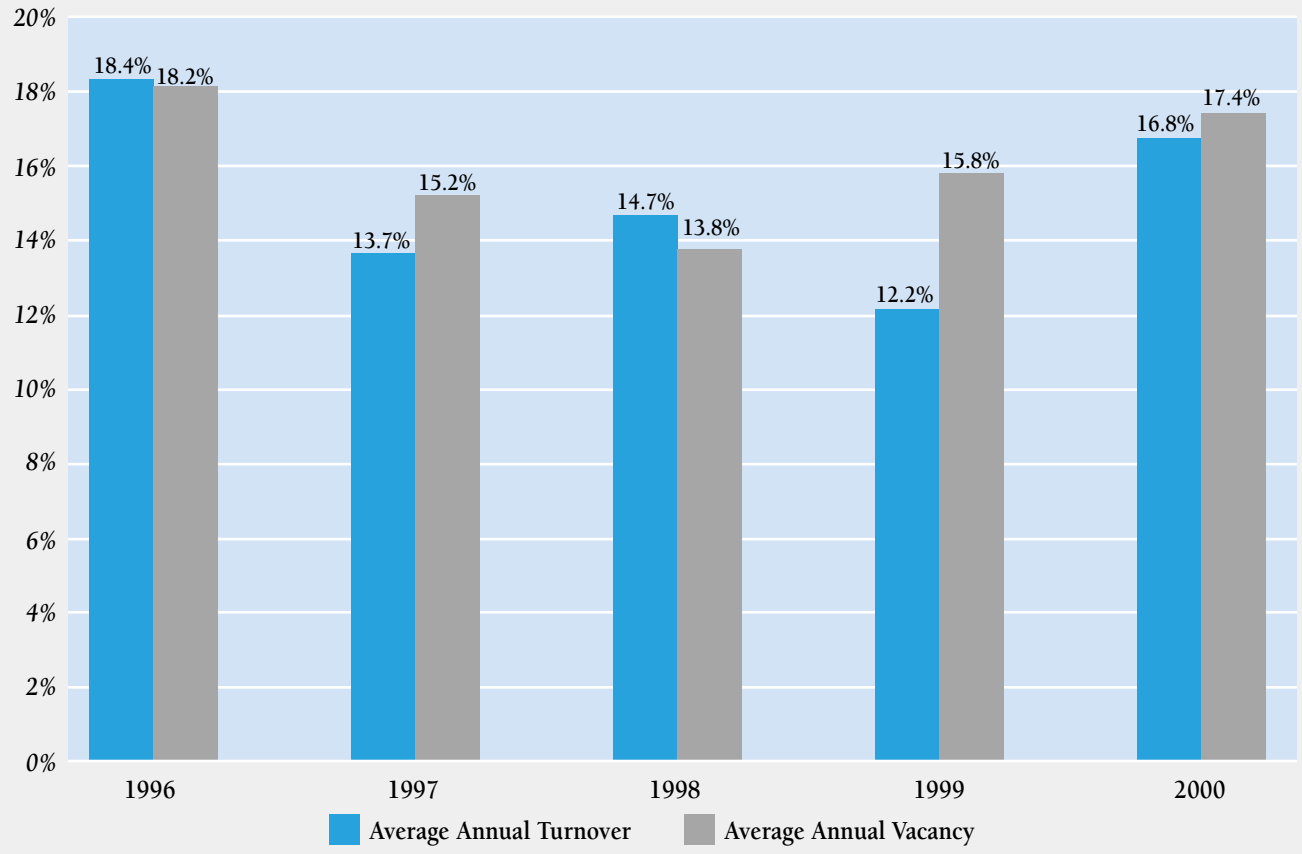
Hospital Staff Vacancy Rates N=115 Hospitals			
	FTE*	Vacancies	Vacancy Rate
RN	16,759	2,185	13.0%
LPN	3,104	260	8.4%
CNA	3,922	437	11.1%
Allied Health	11,178	1,014	9.1%

Source: Georgia Hospital Association, 2000 Hospital Personnel Manpower Survey: Summary of Major Findings
*Data reported as full time equivalents (FTEs)
Vacancy rates as reported as of winter/spring 2000

Nursing Home Staff Vacancy Rates N=318 Nursing Homes			
	FTE*	Vacancies	Vacancy Rate
RN	1,564	240	15.4%
LPN	4,438	633	14.3%
CNA	11,934	1,499	12.6%

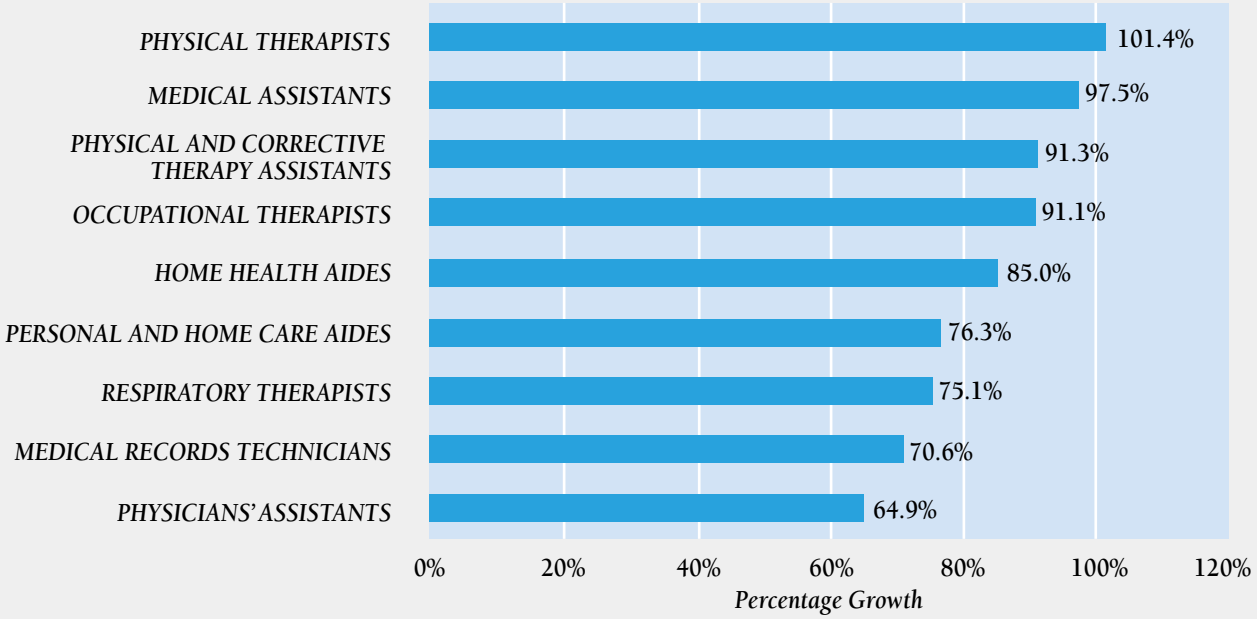
Source: Department of Community Health Annual Nursing Home Survey
Vacancy rates as of November 2000

GRAPH 3 *GEORGIA PUBLIC HEALTH NURSING ANNUAL TURNOVER AND VACANCY RATES*



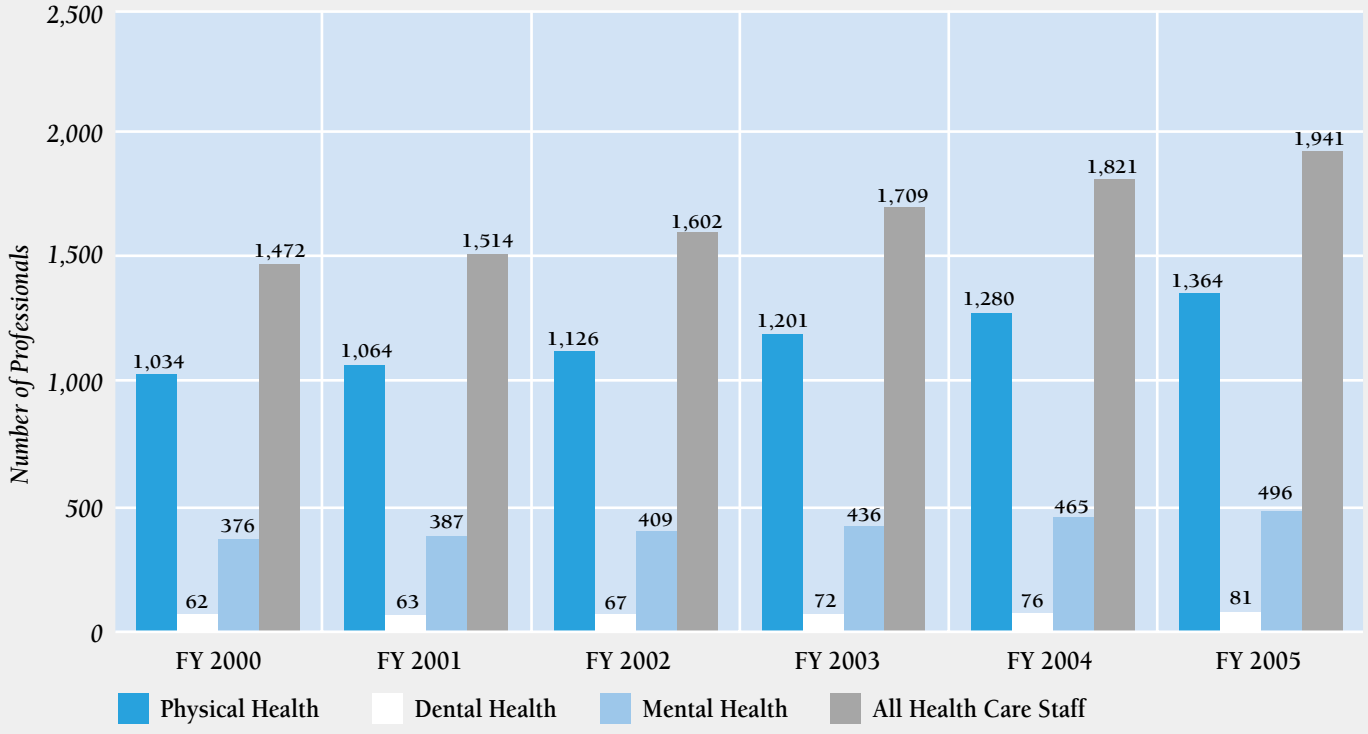
Source: Georgia Division of Public Health, Georgia Department of Human Resources

GRAPH 4 *HEALTH CARE FIELDS PROJECTED TO EXPERIENCE HIGHEST PERCENTAGE GROWTH IN GEORGIA 1996–2006*



Source: Georgia Department of Labor, *Planning for Tomorrow: Industry and Occupational Outlook*

GRAPH 5 *PROJECTED GROWTH IN HEALTH CARE STAFFING NEEDS FOR THE GEORGIA DEPARTMENT OF CORRECTIONS*



Source: Georgia Department of Corrections, *The Future of Health Services in the Georgia Department of Corrections: A Five Year Projection of Personnel and Bed Space Needs,* March 2000

2006 to fill new and existing positions. With fewer new RNs entering the workforce and more current licensees working decreased hours, it is doubtful that the nursing workforce will reach required strength.

Bolstering the case made by the DOL, similar increases in demand are predicted for health care services in other sectors. The Georgia Department of Corrections *(GDC)* recently released a report outlining the increase in requirements for health care staffing. The GDC data, reported in ***Graph 5***, indicates a steady growth in demand for dental, behavioral and physical health professionals. This increases reflects a rise in the inmate population, attributed to stricter sentencing requirements and penal code, as well as general population growth.

SUPPLY OF HEALTH CARE PROFESSIONALS

CURRENT SUPPLY: In December of 2000, HRSA issued a report on health professional staffing patterns for each state, entitled the *HRSA State Health Workforce Profiles.* The data reported in this compendium derive from numerous national sources: the HRSA Division of Nursing; Bureau of Labor Statistics; American Dental Association; National Council on State Boards of Nursing; the Bureau of the Census; and others. The use of national data allows for comparison across state boundaries. Although discrepancies may exist between national data and state data, the use of national data avoids complications that would result from inconsistencies in the manner and type of data collected by each state. Typically, the data reported indicate the supply of professionals as of 1998, although the supply of certain professions is reported based on data from 1996.

The picture of Georgia's supply of health care professionals, as it is depicted in this report, is alarming *(see* ***Table 3****)*. Georgia is in the bottom 20% of states in the number of RNs, dentists, dental assistants, psychologists, speech-language pathologists and home health aides per 100,000 population. Although the HRSA data is the only identified source to report workforce levels on such an extensive array of professions, other sources limited to nursing agree with these figures or describe even more troubling ones. The HRSA, 2000 RN survey and the Salomon Smith Barney report on the nursing workforce contend that Georgia ranks either 40th or 44th out of 51 states *(including the District of Columbia)* respectively.

The HRSA Workforce Profiles do not include an explanation of how state workforces should be deployed. However, the Salomon Smith Barney report cautions that the age of the population should be considered when determining appropriate staffing levels, citing the correlation between age and health care expenditure, which implies an increasing use of health care service as people age. Given that the 2000 census indicates that Georgia's population is aging, it is probable that the state's already low staffing levels will fall far short of covering its current and growing health care needs.

Consideration must also be given to the extent to which Georgia's numbers are below national figures. Such a perspective provides additional clarity to the extent of the shortage in some fields. RNs are somewhere between 80 to 100 staff per 100,000 below the national average, according to various HRSA reports or the Salomon Smith Barney report. Other professions, which are near the middle third in terms of state rank are substantially low in terms of the number of professionals. For example, while Georgia ranks 34th for nurse aides/orderlies, it is off national figures by nearly 50 professionals per 100,000. It is important to bear in mind when considering these figures that Georgia now ranks 10th in the nation in total population.

The consideration of potential shortages cannot be limited to a simple count of professionals. Geography and economic factors also affect the supply in certain professions. Thus, while the numbers of certain professionals in Georgia will show up favorably in a national analysis, maldistribution and changing market behaviors portend future difficulties.

Social workers and pharmacists represent two such professions. These professions appear to have kept pace more closely with national rates, but are scarce in wide geographic tracts of the state or in certain health care settings. Social workers, for which Georgia ranks 33rd and falls short of the national rate by only 20 per 100,000, are alarmingly scarce in certain areas. Recent work done by the State Office of Rural Health Services indicates that over half of the counties in Georgia are mental health professional shortage areas. These shortages are occurring simultaneously with an explosion in new diagnostic and treatment techniques.

Pharmacists, for which Georgia ranked 12th in the nation in 1998, are increasingly difficult to secure in direct care settings. A recent report, *The Pharmacy Workforce: A Study of the Supply and Demand for Pharmacists,* issued by HRSA on the state of the national pharmacist workforce indicates that just over a third *(38%)* of pharmacists practice in settings involving patient care. The Georgia pharmacist workforce is further limited by its educational capacity, having only one private school and one public school, and a sagging capacity in rural areas. Future challenges are certain as HRSA and health care experts predict a rapid increase in reliance on pharmaceuticals for diagnosis and treatment.

THE AGING WORKFORCE: An issue of critical importance regarding supply is the aging of the workforce. In 1980, according the HRSA *National Sample Survey of Registered Nurses,* some 53% of the national RN workforce was estimated to be under 40. In 2000, less than a third of the workforce is under that age. This fact presents a clear message: the number of new recruits is shrinking as the current nursing workforce ages. A look at the youngest group of nurses underscores this problem. Between 1980 and 2000 the RN population under the age of 30 dropped from 25% to less than 10% of the total RN population.

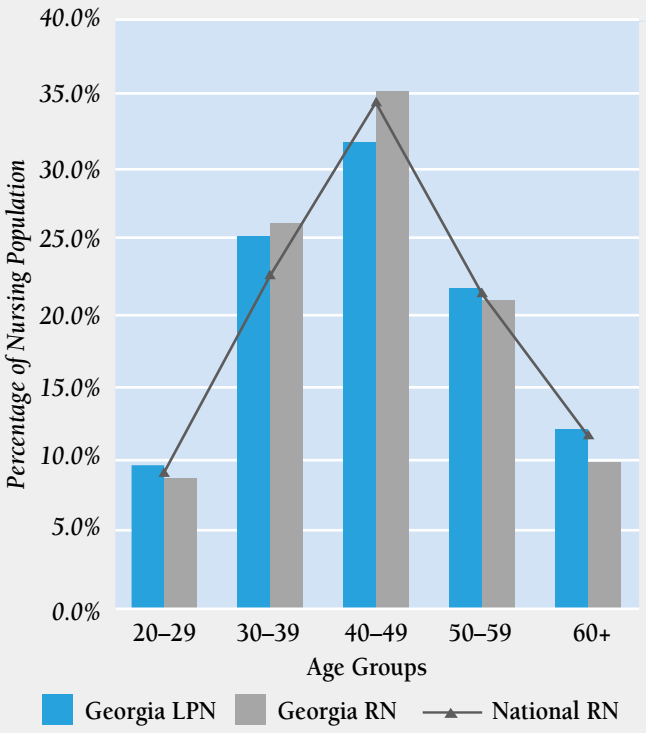
Georgia is tracking the national trend. Data reported in *Georgia's Nursing Workforce,* issued by the Statewide Area Health Education Center *(AHEC),* show the age distribution of nurses. The data is based on responses to the 1999–2001 licensure renewal surveys. According to this data, *(see* ***Graph 6****)* the age

TABLE 3 *SUMMARY OF HEALTH PROFESSIONAL STAFFING LEVELS, 1998*

	GA Numbers	Per 100,000 Population			Rank
		Georgia	Region IV**	U.S.	
Nursing					
RNs*	52,323	712.5	769.9	797.7	40/50
Nurse Practioners	1,584	20.7	23.8	26.3	34/50
LPNs	21,310	279.1	287.7	249.3	17/50
Dentistry					
Dentists	2,672	35.0	38.1	48.4	46/50
Dental Hygienists	3,800	49.8	46.4	52.1	32/50
Dental Assistants	5,090	66.7	72.4	85.6	45/50
Pharmacy					
Pharmacists	5,530	72.4	67.6	65.9	12/50
Pharmacy Aides and Technicians	5,180	67.8	70.2	64.7	19/50
Behavioral Health					
Psychologists	1,450	19.0	24.8	31.2	40/50
Social Workers	15,040	196.9	201.6	216.0	33/50
Allied Health Therapists					
Physical Therapists	3,160	41.4	39.1	41.3	25/50
Physical Therapy Assistants	1,820	23.8	27.4	28.3	38/50
Occupational Therapists	1,730	22.7	21.9	24.0	28/50
Occupational Therapy Assistants	480	6.3	6.3	7.5	32/47
Speech-Language Pathologists and Audiologists	1,950	25.5	26.2	32.7	41/50
Respiratory Therapists	2,400	31.4	36.0	31.4	24/50
Technicians and Technologists					
Emergency Medical Technicians	5,450	71.4	60.7	53.8	12/50
Radiologic	4,450	58.3	61.5	58.3	31/50
Clinical Laboratory	8,560	112.1	109.1	105.4	19/50
Medical Records	2,520	33.0	37.0	33.1	28/50
Dieticians and Nutritionists	1,150	15.1	15.8	16.6	32/50
Auxiliary Health					
Home Health Aides	6,610	86.6	137.8	159.3	43/50
Nurse Aides, Orderlies and Attendants	31,870	417.3	444.9	465.5	34/50

Source: Health Resources and Services Administration, State Health Workforce Profiles, November 2000
*Reflects data from 1996
**Includes Kentucky, Tennessee, North Carolina, South Carolina, Louisiana, Mississippi, Georgia and Florida

GRAPH 6 ***AGE DISTRIBUTION OF NURSES***



Source: Health Resources and Services Administration, *The Registered Nurse Population: National Sample Survey of Registered Nurses, Preliminary Findings, February 2001*
Georgia Statewide Area Health Education Center, *Georgia's Nursing Workforce: A Summary of the 1999–2001 Licensure Renewal Surveys of the Georgia Board of Nursing and the Georgia Board of Examiners of Licensed Practical Nurses,* May 2000

of Georgia's current nurse workforce nearly mirrors that of nurses at the national level. As with the national data, the vast majority of nurses in Georgia are 40 and over, with less than 10% of nurses being under the age of 30.

The problem of the aging professional workforce cuts across all health care fields. At the 2001 Georgia Society for Clinical Lab Sciences Manager's Conference on Manpower, information was disseminated that indicated that clinical and medical lab technicians, as a group, may be aging as well. The data provided at this conference showed a large jump in certifications issued in the early 1970s. This jump was followed by a continuing sharp decline in certifications. Hospitals validate this information with reports of rising vacancies and recruiting difficulties.

Beyond the problems of replacing current workers, the growing age of the workforce has numerous implications for the provision of services and the long-term capacity of the workforce. Older workers may be less able to perform the often physically demanding and stressful jobs common in health care. This fact, combined with other environmental factors, may encourage older, experienced workers to leave work settings that involve direct care. This may already be playing a factor as can be seen in figures reported in *The Nurse Shortage: Perspectives from Current Direct Care Nurses and Former Direct Care Nurses.* This report indicates that the age factor is exacerbated by environmental conditions and that many RNs have considered leaving patient care to seek less stressful and/or physically demanding work or to secure more regular hours and/or schedules.

PENDING RETIREMENT: The aging of the workforce also indicates that retirement will be a critical factor affecting supply. According to the U.S. Department of Labor, Bureau of Labor Statistics *(BLS),* 331,000 RNs across the country will retire between 1998 and 2008. This figure represents almost 13% of the national RN workforce reported in the 2000 HRSA National Sample Survey of RNs.

Georgia figures indicate that the state will see an even larger percentage of professionals retiring in the near future. According to the Statewide AHEC's report on surveys of licensees, nearly 13% of RNs responding to the 1999-2001 licensure renewal surveys indicated that they planned to retire within five years. An additional 13.2% indicated they had plans to retire within six to 10 years. These figures indicate that Georgia could lose more than one quarter of its RNs to retirement in the next decade. It is important to note that Georgia nurses are not required to complete the renewal survey in order to receive a new license. Some 84% of RNs voluntarily completed the survey, but since data is missing from more than 10,000 licensees, it is difficult to make reliable assumptions.

Though surveys are underway, retirement data is not presently available for other professions. It is not unreasonable to assume that common age and gender cohorts will behave in a similar manner.

WORK STOPPAGE IN DIRECT CARE: Compounding this problem is the propensity of certain professionals to leave the workforce for reasons other than retirement. Many professionals leave direct care settings to pursue work in other fields. The Statewide AHEC report on licensure surveys indicate that 19.1% of LPNs and 13.7% of RNs were not working in nursing. HRSA's 2000 survey of RNs cited similar findings. According to HRSA, almost 18% of Georgia RNs reported that they were not employed in nursing, including those retired from nursing *(see **Table 4**)*.

Additionally, a substantial percentage of nurses reported working part time. The AHEC survey identified that only 56.9% of RNs and 63.4% of LPNs were working full time in Georgia. The HRSA survey cited that just over three-fourths of Georgia's RNs who reported working in nursing were doing so on a full-time basis *(see **Table 4**)*.

Perhaps most alarming in the area of work stoppage is data reported in *The Nursing Shortage.* According to this report, one-half of active RNs have "considered leaving the direct patient care field for reasons other than retirement" in the past two years. Although many of these RNs will remain in the workforce for the foreseeable future, this report

TABLE 4 ***WORK AND WORK STOPPAGE IN THE RN WORKFORCE***

		Employed in Nursing		Not Employed in Nursing		Employed in Nursing Per 100,000 Population
	Total Nurse Population	Number	Percent	Number	Percent	
U.S.	2,696,540	2,201,813	81.7%	494,727	18.3%	782
Georgia	67,958	55,881	82.2%	12,077	17.8%	683

		Employed Full Time		Employed Part Time		FTEs*
	Total	Number	Percent	Number	Percent	
U.S.	2,201,813	1,576,675	71.6%	625,139	28.4%	1,889,244
Georgia	55,881	43,612	78.0%	12,269	22.0%	49,746

Source: Health Resources and Services Administration, *The Registered Nurse Population: National Sample Survey of Registered Nurses–Preliminary Findings February, 2001*
*Data reported in terms of full time equivalent

cautions that nursing faces the serious risk of losing one in five of current RNs for reasons other than retirement.

Given that this exodus stems from workplace environmental factors common to most health care delivery settings, we should assume that this condition is present in the other professions as well.

GENDER IMPACTS: Two recent reports, HRSA's report on the state of the pharmacist workforce and *The Implications of an Aging Registered Nurse Workforce,* reported in the *Journal of the American Medical Association,* indicate that the gender composition of a particular profession may affect the propensity for these professionals to work full time. Both reports are illustrative of the entire health care workforce. Though substantial changes mean women enjoy greater access to the job market, they still bear a larger burden in child rearing and maintaining the family than do men. This fact may encourage women to work fewer hours outside the home per week than men. This issue has implications for workforce capacity, since professionals in nursing and many other health care professions tend to be women *(see **Table 5**)*. It may, in part, account for the high percentage of RNs working only part-time, as reported in ***Table 4***.

ATTRACTING NEW PROFESSIONALS: The current undersupply of many health care professionals indicates the system's failure in recruiting, educating and maintaining needed health care professionals. This continuing trend can be seen in data provided by the Georgia Board of Nursing, which shows decreasing numbers of new licenses awarded to RNs each year. According to their figures, nearly 1,000 fewer licenses were issued in FY 2000 than in FY 1996. This drop in licensure rates is part of a five-year trend that may continue.

TABLE 5 ***GENDER OF TOTAL LICENSEES OR DEGREE RECIPIENTS*****

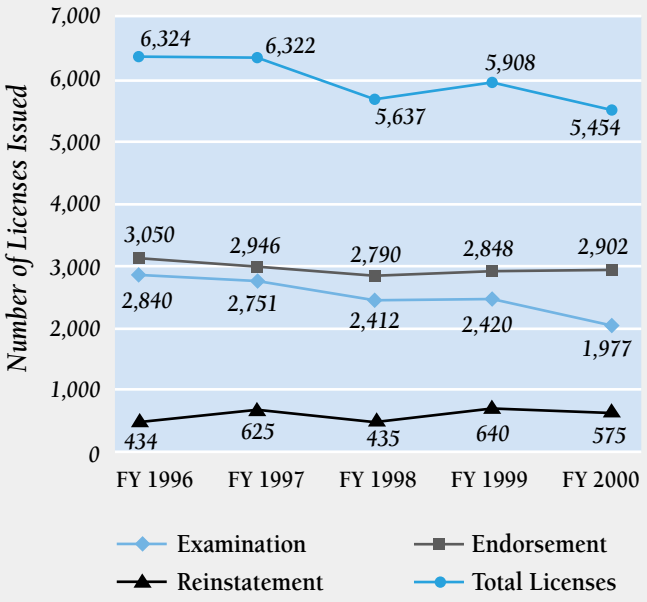
	Female	Male
RN*†	94.2%	5.8%
LPN*†	95.6%	4.4%
Dentist	35.3%	64.7%
Dental Hygienist	98.0%	2.0%
Dental Assistant	96.3%	3.7%
Pharmacist	65.0%	35.0%
Pharmacy Technologist	93.0%	7.0%
Psychology	72.0%	28.0%
Social Work	89.0%	11.0%
Physical Therapist	76.8%	23.2%
Occupational Therapist	93.5%	6.5%
Speech/Language Pathologist	94.0%	6.0%
Respiratory Therapy Technician	68.3%	31.7%
Georgia Population	51.4%	48.6%

Source: Health Resources and Services Administration, State Health Workforce Profiles, 2000
*Unless otherwise noted, figures reflect degree recipients
*Source: Statewide Area Health Education Center, *Georgia's Nursing Workforce, May 2000*
†Figures reflect licensed professionals, not recent degree recipients, as of May 2000.
**Unless otherwise noted, figures reflect degree recipients in academic year 1997

The drop in licensure appears to be driven by a decline in the number of licenses given through examination *(see **Graph 7**)*, the licensure route of recent nursing graduates. Judging from information provided by the University System of Georgia *(USG)*, a potential reason for this drop may be the marked decline in the enrollment numbers for USG undergraduate nursing programs. The USG produces the vast majority of students with the education to qualify for the national licensing exam for RNs. Data from the USG shows a substantial decline in the number of undergraduate nursing students over a 10-year period. After peaking in FY 1993 at nearly 15,000 students, USG schools have a total enrollment of less than 8,000 students in FY 2001 *(see **Graph 8**)*. The drop in USG enrollment appears to be attributable entirely to the drop in enrollment in associate degree programs. Although favor is currently given to baccalaureate degrees, consideration must be given to developing methods to account for the decline in associate degree nursing students.

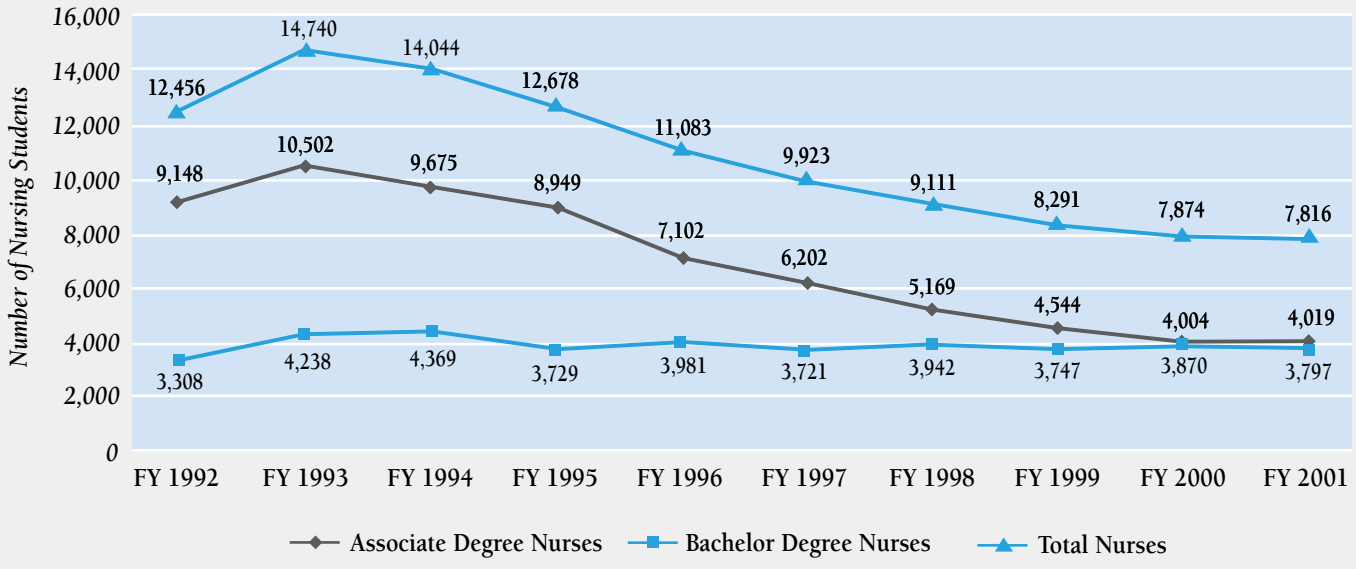
This trend exists in other professions trained through USG schools. Data reported by the USG *(see **Table 6**)* seem to indicate hopeful trends with certain professions outside of nursing, including social work, allied health fields and health and medical assistants. However, looking at the USG graduation rate per 100,000 Georgia residents indicates that little real growth has taken place in the health care fields covered by the USG system. Dentistry, for which Georgia currently ranks 46th in the nation, has seen no growth, while dental hygiene, nursing and pharmacy have witnessed a per capita decline in

GRAPH 7 GEORGIA LICENSURE TRENDS FOR REGISTERED NURSES



Source: Office of the Secretary of State, Professional Licensing Boards Division, Georgia Board of Nursing

GRAPH 8 ENROLLMENT IN UNIVERSITY SYSTEM OF GEORGIA NURSING PROGRAMS



Source: Board of Regents, University System of Georgia, Office of Research and Policy Analysis
Note: Data depicted does not include masters and doctoral level students

TABLE 6 ***UNDERGRADUATE DEGREE/CERTIFICATES AWARDED UNIVERSITY SYSTEM OF GEORGIA***

	Fiscal Year									
Professions*	1991	1992	1993	1994	1995	1996	1997	1998	1999	1900
Allied Health	336	382	360	451	491	588	686	634	642	531
Dentistry**	42	41	41	45	42	56	51	53	52	48
Dental Hygiene	149	155	149	133	149	152	186	181	165	143
Health and Medical Asst.	16	17	30	29	30	95	185	142	125	109
Nursing***	1,671	1,962	2,178	2,416	2,544	2,268	2,224	1,871	1,718	1,359
Pharmacy†	153	146	152	159	148	181	144	132	98	123
Social Work	224	226	267	282	328	304	330	367	331	335

GRADUATION RATES FROM UNDERGRADUATE PROGRAMS UNIVERSITY SYSTEM OF GEORGIA

	Number of Graduates		Graduates per 100K	
Professions*	FY 1991	FY 2000	FY 1991	FY 2000
Allied Health	336	531	5.1	6.5
Dentistry**	42	48	0.6	0.6
Dental Hygiene	149	143	2.3	1.7
Health and Medical Asst.	16	109	0.2	1.3
Nursing ***	1,671	1,359	25.2	16.6
Pharmacy	153	123	2.3	1.5
Social Work	224	335	3.4	4.1

Source: Board of Regents, University System of Georgia, Office of Research and Policy Analysis
*Generally, data exclude doctoral and masters level graduates
**Includes only D.D.S and D.M.D. graduates
***Includes only degrees awarded for basic R.N. and LPN training
†Includes only B. Pharm. and Pharm D. degrees

graduation levels. Those fields that did witness a growth in their graduation rates may not have seen enough growth to compensate for existing problems already confronting them. Given the general aging of the workforce, other factors that contribute to turnover and part-time work, geographic maldistribution of certain professions and the current low supply of Georgia's workforce, it is quite possible that these increases will be inadequate. Further, many of these disciplines have only one or two education programs with limited enrollment. Thus, they are constrained in their ability to produce more graduates per year.

The Department of Technical and Adult Education *(DTAE)* shows a somewhat more optimistic picture in its graduation figures. DTAE data *(see **Table 7**)* shows that the total number of graduates from all health care professions has more than doubled since FY 1992. However, a few notable examples indicate problems concerning certain professions. LPN and respiratory therapy technician graduation numbers were lower in FY 2000 than in FY 1992, while those for dental assistants remained largely unchanged. Otherwise, graduation numbers appear to be rising across the spectrum of health care professions. However, when the growth in population is considered, the picture is less optimistic. The gains in dental hygiene, occupational therapy assistant, pharmacy assistant/technologist, physical therapy assistant, radiologic technician, nursing, and respiratory therapy represent only a slight increase in the number of graduates

TABLE 7 *NUMBER OF HEALTH CARE GRADUATES DEPARTMENT OF TECHNICAL AND ADULT EDUCATION*

	Fiscal Year								
Professions	1992	1993	1994	1995	1996	1997	1998	1999	2000
Certified Nurses Aide/Assistant	0	0	0	0	0	0	33	141	133
Dental Assistant	72	60	70	93	77	85	100	64	75
Dental Hygiene	13	12	0	0	0	15	35	39	50
Emergency Medical Technician	0	13	173	503	267	565	573	572	626
Licensed Pratical Nurse	1,017	1,117	1,175	1,181	1,141	1,066	1,070	908	919
Nursing (RN)	0	17	35	27	22	29	34	28	33
Occupational Therapy Assistant	0	0	0	0	0	0	0	16	37
Pharmacy Assist/Tech	0	0	16	11	22	41	32	50	57
Physical Therapy Assistant	25	30	47	46	47	52	51	37	45
Radiologic Technician	86	108	122	129	143	153	132	153	150
Respiratory Therapist	10	10	13	33	11	49	52	51	56
Respiratory Therapy Technician	79	62	62	49	39	26	36	31	16
All Professions†	1,895	2,124	2,600	3,361	3,495	4,233	4,212	3,770	3,935

GRADUATION RATES FROM HEALTH CARE PROGRAMS DEPARTMENT OF TECHNICAL AND ADULT EDUCATION

	Number of Graduates		Graduates per 100,000	
Professions	FY1992	FY2000	FY 1992	FY 2000
Certified Nurses Aide/Assistant	0	133	0.0	1.6
Dental Assistant	72	75	1.1	0.9
Dental Hygiene	13	50	0.2	0.6
Emergency Medical Technician	0	626	0.0	7.6
Licensed Pratical Nurse	1,017	919	15.0	11.2
Nursing (RN)	0	33	0.0	0.4
Occupational Therapy Assistant	0	37	0.0	0.5
Pharmacy Assist/Tech	0	57	0.0	0.7
Physical Therapy Assistant	25	45	0.4	0.5
Radiologic Technician	86	150	1.3	1.8
Respiratory Therapist	10	56	0.1	0.7
Respiratory Therapy Technician	79	16	1.2	0.2
All Professions†	1,895	3,935	28.0	48.1

Source: Department of Technical and Adult Education, Division of Planning and Information Services
†The total figure includes professions not listed above

per 100,000 population. Nearly one-third of the total growth in graduates is due to the growth in the number of EMT graduates. Combined with the other caveats that apply to the USG data, it appears that the increases are merely helping the state keep pace at current levels. Addressing the problem will require a significant influx of new graduates.

FACULTY ISSUES: Compounding the issue of educational output is evidence warning that Georgia's capacity to educate health care professionals may be eroding. This problem is particularly acute for the USG nursing faculty. Figures recently reported by the USG Nursing and Allied Health Committee indicate that the nursing faculty is already insufficient to meet current demand and is likely to shrink in numbers as the need for more health care professionals grows. According to the committee, the average age of nursing faculty in Georgia is just over 51. Some 39% of the states nursing faculty indicated that they plan to retire by 2005. If these individuals are not replaced, only 149 nursing faculty will be left to cover 27 programs, representing an average of 5.5 faculty per program.

Based on current information, it is unlikely that sufficient replacement faculty is in the pipeline, as only four of the masters students graduating in 1998 expressed an interest in an academic career. The issue driving the limited interest in careers in education is, in part, salary figures. Faculty pay in Georgia does not appear to be competitive with other university systems throughout the nation and this problem only compounds the fact that faculty salaries cannot compete with those offered in the direct care environment. According to the figures reported by the USG committee, the average salary for faculty in baccalaureate schools of nursing is nearly $4,000 below the national average. An additional problem exists when comparing Georgia faculty salaries with the average salaries paid to masters level nurses. With faculty salary figures almost $2,000 below those offered in the clinical marketplace, it is difficult to attract nurses with the appropriate educational background into faculty positions.

FACTORS THAT CONTRIBUTE TO THE CURRENT PROBLEM

Contributing to these supply side problems lies a host of important issues. While not an exhaustive list, these issues include such factors as:

- lack of interest in health care professions among young people;
- historic and recent economic growth;
- compressed salaries; and
- workplace environmental factors.

CHANGING CAREER PATTERNS AMONG YOUTH: In an article entitled *The Implications of an Aging Registered Nurse Workforce* published in the June 14, 2000 edition of JAMA, Buerhaus, Staiger and Auerbach identified the role that population, age/gender and generation cohorts have in determining the composition of the workforce. The effect that age and gender have on work patterns has already been discussed. The population effect on the workforce is simple, and implies that the potential that our youth hold to adequately replace the older workforce as it retires is limited. Even if today's youth chose careers in nursing at the same rate as nurses did in older generations, because youth represent a substantially smaller percentage of the population than do the baby boomers, youth will still represent a smaller component of the workforce than they did in previous decades.

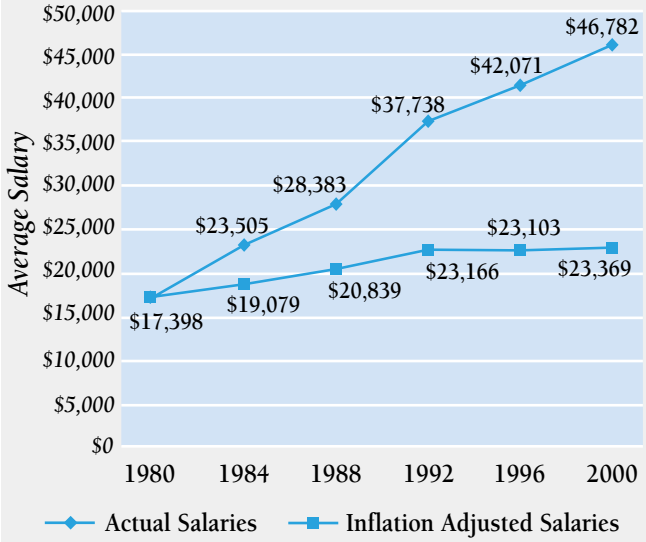
To balance the workforce and maintain its size, efforts must be made to encourage greater numbers of young people to enter the workforce. Absent any effective intervention, this is unlikely, given that today's generation of youth are less inclined to select nursing as a career than were past generations. According to Buerhaus, et al., a "fundamental shift occurred in the RN workforce during the last two decades. As opportunities for women outside of nursing have expanded, the number of young women entering the RN workforce has declined."

None of the three factors cited by Buerhaus et al. are confined to RNs. The aging of the baby boomers, the impact that age/gender have on the propensity to choose full time work and the apparent disinterest in health care careers manifesting in younger generations are universal conditions and their impacts should be anticipated in other health care professions.

THE ECONOMY: Although Buerhaus and his colleagues speak of economic factors influencing the RN workforce, they do not specifically address the economy's impact on the workforce. While no specific study on the impacts of the current economy has been identified, anecdotal evidence seems to indicate that the strength of the U.S. economy through the last half of the 1990s has had a deleterious effect on the health care workforce. This economy saw explosive job growth, the creation of viable new sectors and substantially rising wages for certain professions, such as technology, that were vital to the growing economy. The proliferation of jobs created to serve the economic growth has opened the door to new careers for women, likely increasing their exodus from traditional "women's" careers, such as in health care and teaching. While evidence suggests that health careers were already beginning to decline, the high wages and expanded opportunities offered in the newer sectors of the economy undoubtedly steered more women, and some men, away from health care.

SALARIES: While salaries in other sectors of the economy may have been rising substantially, those in health care appear to have grown little. The HRSA survey of RNs in 2000 presents information regarding the trend in compensation for RNs across the nation (*see* ***Graph 9***). Although wages for RNs have increased, if the data is adjusted for inflation and the relative purchasing power of the dollar, the rise in salary becomes substantially less impressive. Of particular note is the absence of any real salary increases since 1992. The wage

GRAPH 9 ***FULL TIME REGISTERED NURSE SALARIES***



Source: Health Resources and Services Administration, *The Registered Nurse Population National Sample Survey of Registered Nurses, Preliminary Findings, February 2001*

compression has occurred simultaneously with managed care expansion, shrinking reimbursements to health care providers and other cost containment strategies. This lack of salary growth could certainly be playing a factor in youth choosing careers outside of health care as well as current RNs retiring from the workforce. This fact is alluded to in the American Nurses Association national survey, which asked inactive nurses to explain their decision not to work in a nursing position. Twenty percent responded that better salaries were available in non-nursing types of positions.

The lack of long-term strength in nursing salaries, compared to other professions, is reflected in salary figures provided by the USG. According to these figures, the starting salaries for baccalaureate RNs exceeded other, non-nursing baccalaureate graduates by $6,500 *(see **Graph 10**)* However, the salary advantage disappears quickly. Within eight years baccalaureate RNs hold a salary advantage of only $328, compared to their non-nursing classmates.

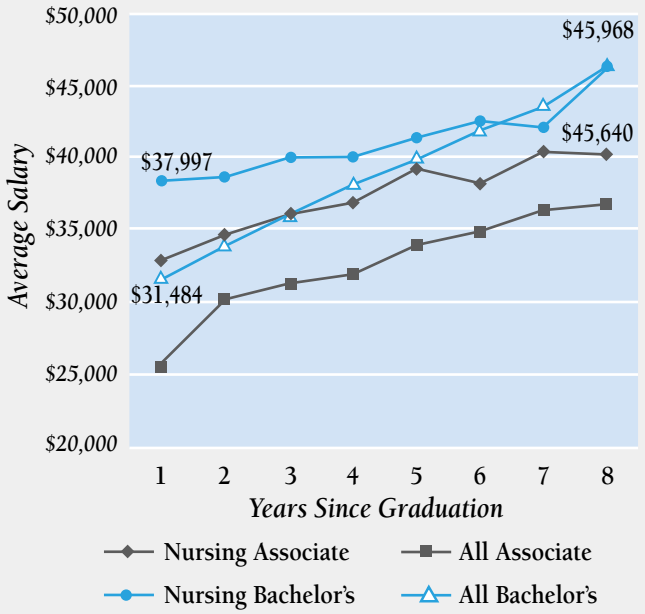
THE WORKPLACE ENVIRONMENT: As important as economic factors may be in drawing potential health care workers into non-health care professions, the current health care environment represents a powerful force that is pushing professionals away. A recent survey by the American Nurses Association *(ANA)* indicates that all is not well in the health care workplace—hospitals, long-term care facilities, home health agencies, public health agencies, community mental health facilities, prisons, and public/private school systems. These environments cover the entire spectrum of health care settings, which are also staffed by professionals outside of nursing. As such, the information included in the ANA survey has implications for all nursing, allied and behavioral health care professionals.

The picture developed from the survey responses shows a very troubled setting. Nurses responded:

- the time they have to engage in direct patient care is dwindling;
- their patient caseloads are simultaneously rising;
- administrative and other non-patient care activities have been assigned to them;
- needed support services are decreasing;
- meals and breaks are skipped to care for patients;
- voluntary overtime is common;
- stress-related illnesses are common;
- they leave work exhausted and discouraged.

When asked their opinion on the trend in the quality of care over the past two years, 75% of the nurses responded that it had declined. When the nurses who indicated that care worsened were asked to explain, roughly two-thirds pointed to inadequate staffing. Alarmingly, well over half indicated that this decline manifested in delays in providing basic care and at least 50% indicated that patients were discharged without "adequate teaching" regarding their health condition and how to manage it.

GRAPH 10 ***AVERAGE 1998 SALARIES OF UNIVERSITY SYSTEM OF GEORGIA GRADUATES***



Source: Board of Regents, University System of Georgia, Office of Research and Policy Analysis

The extent of the problems captured in the ANA survey led more than 42% of respondents to indicate that they would *NOT* feel confident having someone close to them receive care in the facility in which they work. Further, 55% of respondents reported that they would *NOT* recommend the nursing profession as a career to their children or friends.

IMPACTS OF THE SHORTAGE: Based on the weight of this material, there can be no doubt that Georgia's health care workforce is in a state of crisis. This conclusion, however, leads to an important question: does it matter that Georgia has too few nursing, allied health and behavioral health professionals to meet the growing demand for health care services? This question is perhaps the most important matter involved in this issue.

The answer is an emphatic yes. Shortages in critical staff in the health care environment impact the quality of care. Low staffing levels will result in poor care, leading to increased complications, reduced benefits from successful interventions and, most importantly, increased mortality.

In a study that was issued by HRSA in February 2001, entitled *Nurse Staffing and Patient Outcomes in Hospitals,* researchers identified solid evidence that indicates that the quality of care is affected by nurse staffing levels. They identified a "strong and consistent relationship…between nurse staffing variables and…patient outcomes *(in)* pneumonia, length of stay, upper gastrointestinal bleeding, shock….and failure to rescue." Better outcomes were associated with higher levels of nurse staffing. Thus, lower levels of staffing may be linked to poor outcomes. These outcomes can impact individual lives in increased discomfort and complications that result from inadequate care. Because length of stay appears to increase with lower staffing levels, the overall cost of providing care rises. This impacts every Georgian who pays taxes, buys insurance or has to pay for medical care directly.

Health care quality costs have long-term social and economic impact. Nowhere is the need for adequate staffing more evident, however, than in the mortality that is associated with low staffing levels. The report identified failure to rescue as an outcome impacted by staffing levels. This outcome, which represents the death rate among those with one of the severe complications covered in the report, was highly and consistently related to staffing levels. Lower staffing levels were associated with higher failure to rescue rates. This matter is something that will affect all Georgians as they, or their loved ones, seek medical care.

Data were not available to formally document similar concerns among the other health care professions. Surveys of hospitals by GHA reflect vacancy rates ranging from 9% to 18% for masters level social workers, psychiatric nursing assistants, respiratory therapy technicians, occupational therapists, and other professions in hospital settings. There is abundant anecdotal evidence of the service delivery problems caused by shortages. Given that all health care professions share a common workplace, it is likely the problem is common among the health care professions. As such, the importance of this finding cannot be overstated. Patient safety and health care costs are unquestionably negatively impacted by the shortages. We must act swiftly to address this issue, before the problem grows any worse and in time to meet the projected explosion in demand.

Recommended Actions to Understand and Address the Shortage

To address the myriad factors influencing both health care workforce supply and demand the TAC developed a comprehensive range of strategic initiatives. These recommendations fall into six broad categories:

- Planning and Policy Development;
- Technology and Data;
- Education Financing;
- Recruitment;
- Retention; and
- Marketing and Public Information.

For each category the TAC has developed at least one key strategy and various recommendations for action.

Planning and Policy Development

•Key Strategy—Establish a Health Care Workforce Policy Advisory Committee (the committee):

Early in the course of the TAC proceedings, the need to create a standing body, charged with monitoring the state of the nursing, allied and behavioral health care workforce, became evident. In part, this was in response to the seemingly cyclical nature of these shortages and the failure of institutional solutions following previous shortages. Moreover, it was also an acknowledgement of the potential long-term and complex nature of the current crisis. As such, a permanent standing body should be established and given the responsibility of monitoring the efficacy of the health care workforce on a continual basis to eliminate the current problem and prevent new ones from emerging. During the 2001 session the General Assembly enacted legislation allowing the DCH to appoint this advisory committee.

The TAC has set forth a suggested charter for the department's consideration. According to the committee's charter, the committee should be a future-oriented research and development organization established to develop and disseminate objective information about the non-physician health care professions licensed or regulated by the state. The committee would serve to promote the best health delivery models for the citizens of Georgia, optimizing the unique assets of these health care professionals. The committee would:

- collect, analyze and report comprehensive information on current and future supply of and demand for non-physician health care personnel and disseminate this information to appropriate entities and individuals.
- convene task forces of experienced and knowledgeable persons to plan and implement changes suggested by the data.
- provide consultation, technical assistance and information related to health care personnel within and outside Georgia and serve as a clearinghouse for data related to health care personnel.
- foster collaboration among members of the health care community to achieve policy consensus, promote diversity and enhance the knowledge in health policy and health services research.

Although the charge of the committee will be broad and include the authority to issue policy recommendations, its powers are advisory. The recommendations of the committee are to be submitted to the Department of Community Health and relevant member organizations for further action. Recommendations are confined to nursing, allied health and behavioral health educational programming; education financing; regulatory issues; work environment; and public information/consumer awareness.

To ensure an effective balance between supply and demand components, interests, skill sets and perspectives, the committee should be composed of a broad spectrum of professions, sectors, and private and public organizations. Special consideration should be given to ensure a sufficient employer focus. Representation will include the following:

- *Providers*–general health care systems, facility-based services, community-based services, physical and mental health providers, the long-term care industry, clinical practice/patient services administration, and public provider systems.
- *Professions*–registered nurse, allied health, behavioral health, dentistry, and pharmacy.
- *Educators*–the private, post-secondary, health care education system, and area health education centers.
- *General*–consumer/public member/business sector and private foundation concerns focusing on health care.

Ex-officio members from agencies that affect the health care workforce would also be placed on the committee. These include:

- the Department of Community Health,
- the University System of Georgia,
- the Georgia Student Finance Commission,
- the Department of Labor,
- the Secretary of State,
- the Department of Technical and Adult Education, and
- the Department of Human Resources.

In an effort to ensure balance and direction for the committee's proceedings, leadership should be provided by a chairperson possessing sufficient stature and having knowledge and experience beyond health care.

Other recommended actions for Planning and Policy Development:

- Determine whether additional educational programs are needed to meet growing demand and ensure that educational service providers work together to maximize geographic coverage and minimize costly duplication.
- Foster regular dialogue between providers, educators and health care professionals to promote understanding of work challenges and potential solutions.
- Review the current content of health science education at all levels and make recommendations to ensure that it adequately addresses the demands of the workplace.
- Coordinate and expand health education opportunities through the use of distance and digital learning technologies to ensure that an adequate number and breadth of courses needed by the health care workforce are available and accessible throughout the state.
- Identify existing programs that have the best practices in successful education of their students, determine which distance learning technologies will be utilized and how they will be utilized and coordinate efforts among agencies, institutions and locations to ensure the best programs reach the right audiences in the right locations.

TECHNOLOGY AND DATA

•Key Strategy—Build A Data Consortium

Georgia has no ongoing, coordinated and systematic data collection body to provide information on the whole spectrum of health care professions. This fact is readily apparent in the analysis of the current condition of the workforce. This is not a problem unique to Georgia, as most states have only recently begun any meaningful analysis of the health care workforce beyond physicians. Like Georgia, most have struggled in recent years to grasp an understanding of the nature of the current shortage. Data from national or profession-specific sources have been utilized and extrapolated to provide some information about various professions at the state level. Although the TAC has largely relied on this method throughout its deliberations, it is less effective than an organized, premeditated process of data collection, review and forecasting.

The TAC concluded that a data consortium needs to be built to collect and share data on Georgia's health care workforce, enabling Georgia to more effectively identify workforce trends and take calculated actions swiftly. This would facilitate course correction at an early stage, when the costs of correction are minimal and when the impacts of a shortage have yet to be felt. In developing this concept, TAC members reviewed organizations in other states and in Georgia that provide data pooling and analysis for state level health care workforce planning. Sites in North Carolina, South Carolina, California, and New York were identified as potential models for a non-physician workforce data center in Georgia. Within Georgia, the work of the Georgia Board for Physician Workforce could be emulated for the other health professions.

Many agencies and organizations already collect the kinds of data necessary to do meaningful analysis and forecasting. Regrettably, individual agency data has rarely been shared and no standard protocols for doing so exist. The consortium concept would allow for data exchange and common definitions without duplicating existing agency processes and efforts. Critical concepts include:

- increasing the amount of data flowing in from licensure renewal surveys;
- developing effective means to share data among relevant state agencies;
- developing a means to match data on individuals between agency data bases to enable substantive, aggregate level research on issues impacting the workforce; and,
- securing the privacy of individual data while promoting robust analysis.

The data maintained by the consortium would be accessible only by appropriate parties. In addition to global analysis, parties would be able to utilize this data to conduct their own analysis of workforce issues of particular importance to their agency. The committee, in its role as the body responsible for setting the research agenda for the Georgia workforce, would have access to this consortium to facilitate the analysis called for in its research agenda.

Other recommended actions for Technology and Data:

- Institutionalize an ongoing process to collect consistent information from all licensed health care professionals at least once every two years during the license renewal process.
- Link licensure, education and health care system data and projections to regularly and effectively forecast future supply and demand of professionals and to allow enactment of proactive corrective measures.
- Educate health care providers on technology and resources available to support the ongoing professional advancement of their workforce.
- Minimize, where appropriate, demand for certain types of health professions by expanding utilization of successful telehealth practices, particularly to improve access to health services in underserved areas.
- Maximize the use of computer technology to improve the accessibility and speed of exam licensing and continuing education processes.
- Develop a certificate program to be offered through technical colleges and schools to help health care professionals gain familiarity and comfort with current and emerging workplace technologies.

EDUCATION FINANCING

•Key Strategy—Expand Service Cancelable Loan Programs

As reported earlier, certain health care professions are experiencing sharp declines in the number of graduates, making current graduation rates inadequate to meet future demand for many professions. Methods are needed to encourage more students to pursue education and careers in health care. Economic factors were identified as an effective method to attract students into health care. In particular, the TAC looked to financial benefits that could be provided to students interested in health care by reducing the cost of their education, thereby providing them immediate financial rewards.

The Georgia Student Finance Commission *(GSFC)* was identified as the best partner to assist in efforts to plug students into health care programs through the use of such incentives. Working with GSFC, TAC members identified existing vehicles that target financial resources to students who chose to pursue education in health care. Service cancelable loans were selected over simple scholarships in light of research done by the Cecil B. Sheps Center of the University of North Carolina at Chapel Hill. This research demonstrated higher retention levels for advanced practice nurses, dentists and physicians in under served areas among practitioners who received service cancelable loans instead of scholarships.

Three specific service cancelable loan programs are recommended. These include a program specifically targeting nurses, a loan program targeting teacher education, and a pilot program operating in south Georgia that combined local dollars and state dollars to support the education of high shortage professions. These programs have already demonstrated some efficacy. The TAC proposes the following modest changes to the programs to increase the depth and extent of the impact they provide to the health care workforce:

- *Service cancelable loans for nurses*—to increase the amount of support to $4,000 per year, and require two years of service to repay each year's loan. The program will cover students in private or public schools seeking a degree that prepares them to become a registered nurse.
- *Nursing Faculty*—This program is loosely based on the current program to finance the education of primary and secondary school teachers. It would provide $9,000 per year to students pursuing post graduate education in nursing in return for service as nursing faculty in Georgia post secondary education programs. The loans would be forgiven at a rate of one year's loan for two years of service *($4,500 per year)*.
- *Cooperative Health Scholarship and Service Cancelable Loan Program*—This program is based in part on a successful pilot that was organized in the Albany area at Darton College. The TAC recommends establishing a cooperative local student financing system, which will require a 1:1:1 match of state, provider and community dollars to support the education of health professionals in severe shortage in the community. Up to $50,000 of state funds would be available to communities, with each community determining the particular structure, target professions and content of the loans provided in its program.

These program adjustments have been recommended to the GSFC board. The TAC has requested that the GSFC board consider the changes to the nursing service cancelable loan program for implementation in early FY2002.

The TAC made one additional recommendation regarding education financing. A substantial portion of health care takes place in public agency settings: prisons, public mental health hospitals, youth detention centers, public health clinics, etc. Evidence provided to the TAC indicates that these areas are severely affected by the current shortage. Because of the number of agencies potentially involved in an initiative to support the education of public sector health care professionals, special efforts need to be taken to develop a coordinated and thoughtful proposal for transmittal to GSFC. The TAC encourages the State Agency Coordinating Council to design a suggested strategy reflecting the needs of state agencies regarding education financing for consideration by the GSFC board.

Other recommended actions for Education Financing:

- Maximize the use of federal workforce shortage designation programs, national loan repayment programs, visa support and scholarship dollars.
- Develop more effective marketing and communications strategies to help students, parents, health providers, and educational institutions learn about loans, scholarships, and grants.
- Work with the Department of Labor to more effectively use the Workforce Investment Act and other federal training initiatives to meet the training needs of Georgia's health care system.
- Develop targeted health workforce certificate programs through the technical and adult education system, thereby building on the education system's expertise and allowing access to student financing options offered by the Georgia Student Finance Commission.
- Support the Board of Regents' request to expand the size of the School of Pharmacy and support other University system efforts to expand the capacity of health professional programs in cases where shortages or maldistribution may result from a limited number of programs throughout the state.
- Support increased compensation for public and private higher education health care faculty wherever disparities exist.

RECRUITMENT

•Key Strategy–Expand the Pool of Available Health Care Professionals:

More than any other work done by the TAC, the work undertaken in this area has been guided by the need to identify quick solutions. These recommendations targeted populations where capable professionals may reside already. Unlike recommendations covering other areas, these will enable skilled professionals to move swiftly into the Georgia workforce. However, these recommendations will not single handedly solve the crisis. The numbers of professionals that can be secured through these recommended initiatives will be too small to address all the needs for services. Still, they do represent an important and accessible component to mitigate the current shortage and will buy Georgia additional time.

In particular, three populations were identified; existing nurses in neighboring states; the displaced labor force that may hold future professionals and/or current professionals to import into the workforce; and, resident immigrants who possess the necessary education and skills to secure health care employment. The programmatic means to bring these populations into the Georgia health care workforce are explained below:

- *The multi-state nursing compact*—This contract between states enables a nurse licensed in a compact state to practice in any other compact state. The compact was written by the National Council of State Boards of Nursing and has been adopted by 13 states with five other states *(including Georgia)* considering adoption. Georgia must enact the compact through legislative action in order to enter into it. As designed, the compact would enable LPNs and RNs from other participating states to practice in Georgia. Because of the structure of Georgia's nursing boards, separate language would have to be established for both LPNs and RNs. Legislation has been introduced in the General Assembly to enable RNs to practice under the compact. The TAC urges action on this measure during the 2002 session.
- *The Department of Labor*—The DOL operates programs that assist a variety of displaced workers in entering or re-entering the workforce. Working with the DOL the TAC identified five programs that can bring an untapped workforce into health care professions. These programs target TANF recipients, youth, persons with disabilities, professional workers, and veterans. The TAC is working with the DOL to identify partners who may be able to lead and assist in ongoing efforts to utilize these programs.
- *Resident Immigrant Professionals*—Efforts to tap into the potential held in Georgia's immigrant communities will require a broad range of partners. Utilizing qualified immigrants presents Georgia with an unusual array of issues, such as immigration, English as a second language, cultural barriers, severe distrust in government, and differing educational requirements to those used in the U.S. and Georgia. Efforts are underway to identify partners who possess the collective expertise to surmount these barriers. The TAC has identified potential partners in the DOL, the State Office of Rural Health Services, and Catholic Charities.

Other recommended actions for Recruitment:

- Encourage educational programming structured to allow young people and other interested individuals to obtain some or all of their health care curriculum in their home communities to minimize personal cost, relocation and potential out-migration.
- Publicize the range of opportunities available, the variety of practice settings, and the multitude of skills and interests encountered through health care work.
- Determine, through focus groups, the most effective means to interest young people in becoming health care professionals and design career guidance, education and programming to promote understanding and interest in health careers.

RETENTION

•Key Strategy—Maximize the benefit of the Healthcare Workforce Resource Manual to providers.

The work of the TAC regarding retention issues capitalizes on important work that the Georgia Hospital Association *(GHA)* has undertaken. The TAC appreciated GHA's cooperation and willingness to share those materials it had designed to assist provider agencies in addressing issues that negatively impact retention. One item in particular, GHA's Healthcare Workforce Resource Manual, holds considerable merit. The resource manual contains an extensive battery of recruitment and retention management tools to assist providers in working effectively with health care professionals to improve staff retention and to recruit new, qualified staff.

To ensure the greatest benefit from the Resource Manual, the TAC has requested that GHA aggressively support the distribution and implementation of the manual. Specifically, the TAC requested that GHA dedicate staff to hold regional training sessions to help interested parties use the manual effectively.

To guarantee the manual's long-term viability, the TAC also requested that the GHA Task Force take steps to ensure adequate buy-in and content of the manual on an ongoing basis. Specific actions that were recommended included discussions with non-nursing professionals to receive their input and ensure that the manual adequately addresses allied health and behavioral health care professional concerns.

The TAC made a key recommendation regarding collaboration between professions to improve retention efforts, encouraging provider associations *(GHA, the Georgia Nurses Association, etc.)* to engage their members in a series of focus groups with groups of nursing, allied health and behavioral health professionals to better understand the concerns of each group. These focus groups would utilize a standard process/format and use a similar series of questions.

The questions would be designed to discover those factors that lead professionals to leave health care, changes that would be required to entice inactive professionals back into active practice and measures that would keep professionals in the workforce.

Other recommended actions for Retention:

- Recommend to the Board of Community Health that they assist providers in health care employee retention by allowing reimbursement for staff health benefits and educational programs through Medicaid cost reports and other state financing mechanisms.
- Publicize the range of opportunities available, the variety of practice settings, and the multitude of skills and interests encountered through health care work.
- Work with the Board of Nursing, other state licensing boards and provider groups to encourage licensed but non-practicing nurses and other health professionals to return to the health care workforce.
- Develop training and educational strategies to support "bridge" programs and professional career paths that allow entry-level workers to gain skills and move into higher level licensed professions over time through local and on-the-job learning experiences. This should include working with providers to develop effective practical, mentoring and continuing education practices.
- Develop strategies to improve inter-profession working dynamics in the workplace (*physician to non-physician and other, inter-profession dynamics).*

MARKETING AND PUBLIC INFORMATION

•Key Strategy—Develop an integrated health care web site.

•Key Strategy—Create a brochure on state education financing options.

The need to establish effective communication with the general public was identified as a concern early in the TAC proceedings. Lack of public awareness of and interest in the issue could stifle progress. Georgia will struggle in attracting new individuals to work in health care if the public is unaware of the benefits of employment in the health care professions, the unprecedented availability of jobs in health care, and the resources available to help individuals secure the needed training. The TAC proposed the creation of an integrated web site and the dissemination of media to inform students of the financial aid available for an education in health care.

The "one-stop shopping" web site would serve as a link to the full array of resources for individuals employed, or interested in becoming employed in a health care profession. The web site, tentatively labeled *healthcareers.org,* would target health professions students, potential students, current health care professionals, job seekers, and health educators. The web site will be operated by the Statewide AHEC.

To inform the public and health care students of the full range of financial resources available from GSFC, the TAC also developed an outline for a comprehensive brochure to cover all the student financing options managed by the state to assist students in pursuing an education in health care. GSFC has agreed to assume responsibility for publishing and disseminating the brochure. The TAC recommends that the Policy Advisory Committee assist GSFC in keeping the brochure up to date and ensuring that publications adequately reflect changes in health care professions and education financing.

Other recommended actions for Marketing and Public Information include:

- Develop a professional, long-term media campaign, aimed at youth, to focus on improving the image of health care professions and increasing the number of health care professionals. Identify private sector and foundation funding to support this strategy. Publicize other strategies, such as education financing and employment opportunities, using a common theme and message in concert with the media campaign.
- Support and expand the AHEC collaborative with the Department of Education, local school systems, and health occupation programs to ensure that students have access to the best and most current materials, training and programming.
- Develop a health workforce clearinghouse to showcase and disseminate health care workforce promotional materials from a wide range of programs.
- Increase the number of health career fairs, promotions and health care camps held throughout the state and expand the number and ages of youth served.
- Increase the academic opportunities and competitiveness of students from rural and underserved communities through support of math/science academies, summer enrichment programs and other advanced learning opportunities.
- Develop educational tracks and specialized opportunities for students to explore various health fields through honors work, internships, mentoring and partnerships with child-serving agencies and professional organizations.
- Explore adding a health/biomedical track to the Governor's Honors Program.
- Develop, distribute and replicate wherever possible core curriculum to youth organizations for use in teaching about health careers.
- Encourage AHECs to work with Family Connection sites across the state to engage young people in dialogues about health care education and careers.
- Work with One Georgia and the Rural Economic Development Council to learn more about the forces and factors that would encourage young people in rural areas to pursue health careers in their home communities and develop strategies and resources to support these approaches.

Summary of Accomplishments and Mutual Learning

The TAC has made considerable headway despite substantial challenges. The lack of comprehensive and readily available data on the state of the workforce has limited indepth understanding and effective communication regarding the condition and the needs of the health care workforce. Previous health care workforce shortages in the 1980s and early 1990s that appeared to cycle out after a short period created a credibility or "boy who cried wolf" factor for the group. The group began its work late in the calendar year, making it impossible for legislative or budget initiatives to be incorporated into any agency's requests or proposals.

Even with those challenges, the TAC moved forward aggressively to develop a preliminary set of recommendations in November 2000. These recommendations, issued in report form, were approved by the Health Strategies Council and adopted by the Board of Community Health. With leadership from the Georgia Hospital Association, several key legislative proposals were introduced and considered during the 2001 Session of the General Assembly. These measures helped focus legislative attention on the workforce shortages; the bills relating to data collection and the multi-state nursing compact should be favorably reviewed during the next Session. The Department of Community Health incorporated the recommendation for a workforce policy advisory committee into the agency's main legislative initiative. That bill passed both bodies and has been signed into law by Governor Barnes.

Journalists and the media have given meaningful attention to the workforce shortages—special thanks to Andy Miller, James Salzer, Martha Ezzard, and Tom Crawford for the coverage they have provided. The articles have helped educate the public and policy makers about the serious crisis and bring to light the tremendous demand for workers and the available career opportunities.

The success that the TAC enjoyed in FY 2001 came, in large measure, as a result of effective alliances established during the course of the committee's work. These alliances took many forms and involved numerous entities. With much of the TAC's work just beginning, these alliances should prove invaluable in the future.

A particularly productive relationship exists between the TAC and the Georgia Hospital Association. Early on in the TAC's proceedings, GHA demonstrated keen interest in solving the crisis and working collaboratively. GHA was instrumental in moving important legislative and budget recommendations through the General Assembly. GHA Task Force members and staff actively contributed to the TAC efforts throughout the process. While the strategies of the groups have differed at times, the goals of improving the health care workforce and workplace have always been common.

One of the most rewarding accomplishments for the TAC has been the new partnership developed with the Georgia Student Finance Commission. The support of GSFC and Governor Barnes resulted in an additional $228,000 in funding for nursing service cancelable loans in Fiscal Year 2002. GSFC also reallocated some $350,000 in funding during the current fiscal year to support nursing education. The additional dollars followed several years of budget reductions and unused funds that were the result of the limited knowledge many health care groups had of these programs. There is little doubt that the positive relationship and mutual respect between the education financing system and the provider/educator systems will reap many benefits in coming years.

Numerous other partnerships began to flourish during the TAC's deliberations. In particular, the work with the Department of Labor that has only just begun, the ongoing relationship with the Statewide AHEC, and the relationships that have started with the Department of Technical and Adult Education, the Board of Regents, the Emory School of Nursing, the Georgia Nurses Association, and the Georgia Nursing Home Association stand out. The combined resources and programming of these entities stand to benefit Georgia's workforce in coming years.

By no means a minor feat, TAC members have learned a substantial amount about other sectors of the health care system and have been successful in educating Georgia on the challenges facing that system. TAC members received information from public and private sector service delivery agencies, public and private sector educators and federal and state perspectives on the crisis. The group met in various settings around the state such as Baldwin State Prison, the Georgia Nursing Home Association, Georgia Perimeter College, and Georgia Southern University. All of these efforts fostered a better understanding of the comprehensive and profound nature of the workforce shortage. The TAC, and the policy group which follows, will be able to use this information to better guide leaders throughout the state in making the appropriate choices for Georgia's workforce.

Possibly most challenging for the group has been the diverse, and sometimes conflicting, policy goals of the TAC members and the organizations they represent. Not surprisingly, the outcomes sought by provider groups are frequently in conflict with those sought by professional associations. Educational programs experience tensions—both between and within systems. Public agencies may have competing missions, placing public provider systems at potential

odds with regulators. Discussions have been frank but respectful and conclusions have been reached through compromise and consensus. These processes, though difficult and frustrating for members at times, have undoubtedly created a better set of recommendations—for the recommendations reflect the perspectives of all parties needed to solve the workforce shortages.

As indicated throughout this report, the current and potential future shortages emanate from a multitude of factors. Demand is increasing the burdens placed on the health care system. Simultaneously, the supply of professionals is dwindling as the workforce ages, educational capacity shrinks, existing workers discontinue or limit their involvement in the workforce and as an increasing number of qualified young people seek careers outside of health care. The job is harder, the work setting and compensation are less attractive, and the professional options are greater. Yet, the calling is noble and the need is great. Urgency is required but it is clear that successful public policy requires consensus coupled with celerity.

Next Steps and challenges Ahead

Despite the successes that the TAC experienced in the past nine months, much work remains to be done. Partly, this work involves the completion of actions, both in the legislature and elsewhere, that have been initiated in FY 2001. It will be necessary to break through substantial inertia and limited understanding to effectively implement the TAC recommendations and to establish a climate conducive to creating and maintaining a stable and adequate health care workforce in future years.

The top priorities for action:

- establishing the Health Care Workforce Policy Advisory Committee and allowing the work of the committee to inform the next budget and legislative cycles.
- implementing the data consortium and assisting participating agencies in establishing the necessary contractual agreements to allow for adequate, real and ongoing data sharing.
- clarifying and reaching agreement on the needed actions to ensure regular survey data necessary for workforce planning is collected from current and new licensees in key health care professions.
- supporting the implementation of the expanded and new service cancelable loan programs and securing the public and private resources to make these programs successful.
- developing additional education supports for health care professionals working in the public sector and considering the establishment of a targeted funding stream.
- convening discussions to reach consensus on passage of the Multi-State Nursing Compact.
- working cooperatively with the Department of Labor to facilitate the effective utilization of DOL programs in accessing population groups that represent resources for new professionals and to make health care a career option as other employment sectors downsize.
- solidifying relationships with partner agencies on efforts to move qualified, resident immigrant professionals into the Georgia workforce.
- providing assistance and expertise on general design elements of the focus group processes to achieve improved understanding between health care providers and nursing and allied health professionals.
- ensuring that the Statewide AHEC develops and maintains the linkages and has the authority and sufficient support to manage the *healthcareers.org* web site

Of course, much work remains regarding informing Georgians of the state of the workforce and the need to take immediate action to bolster it. This has been, arguably, the most difficult challenge that has faced the TAC in its work in FY 2001. The Policy Advisory Committee will take up this task to ensure that the message is heard.

Conclusion

Ages ago, Hippocrates issued a maxim to the healers of the world: "As to diseases, make a habit of two things—to help, or at least, to do no harm." The condition of the Georgia health care workforce is forcing care delivery dangerously close to violating this maxim. The picture that develops when looking at this workforce is of a legion of overworked, stressed, understaffed, and otherwise beleaguered healers. The state of this work force appears to be so compromised as to bring into question its ability to help, if not its capacity, in extreme cases, to do no harm. Such a workforce was not what Hippocrates envisioned when he asserted his tenet and is not what Georgians and health care professionals deserve in their care environment.

That Georgia is facing a workforce crisis is beyond doubt. Likely, this crisis is unprecedented in history, involving every sector, profession, setting, and factor involved in the delivery of care. Demand for health services is rising as the population grows and ages simultaneously. The ability of agencies to maintain the needed workforce numbers appears to be challenged as provider associations report high vacancy rates in key positions. Compounding these existing shortages, an aging workforce is confronted with near impossible working conditions, compelling many to limit or abandon work in direct care. Concurrently, important segments of society have lost interest in health care careers, dimming the hope that youthful reinforcements will be there to bolster the workforce in the future. Thus, unlike previous workforce shortages, the factors that are propelling this crisis are profound and offer no simple fixes.

Georgia must grapple with this issue or pay the consequences. The potential impacts of this shortage will wreak substantial harm on Georgians if left untended. Evidence is mounting that quality of care is tied closely to staffing levels. Reduced staffing increases the cost of care, the extent of adverse outcomes that result from poor care and the likelihood of mortality. Nor can Georgia just wish this problem away in hopes that providers will muster the means to mollify the crisis on their own. The complexities of the shortage and its myriad sources exceed the abilities of any provider system to address it. Georgia's leaders must step in to provide direction and aid in this effort, putting forth a coordinated and comprehensive array of policy initiatives, appropriations, guidance and public stature.

In the past year, the TAC has made important progress in moving Georgia to better support its workforce. Additional funds have been allocated to support critical education financing. A standing committee has been written into statute to promote the strength and the quality of the workforce on a continuous basis. Numerous other important steps have been taken or begun to remove barriers and increase the attractiveness of work in health care. If fully implemented, these actions can provide relief to the workforce and mitigate some of the problems confounding Georgia's ability to provide adequate access to health care. However, additional strategies must be identified and serious discussions must continue at the state level on the adequacy of health care financing systems to support service delivery to all citizens. Only the first steps have been taken and more need to follow.

If Georgia puts its muscle behind the efforts to solve this issue, it can and will overcome the problem. Working together, in support of the TAC's initiatives and future policy recommendations, Georgia providers, educators, professionals, and consumers can move the health care workforce into a place where it can fulfill Hippocrate's vision. Then, not only will Georgia's health care workers be able to "do no harm", they will be able "to help" the ill, injured and infirm in Georgia and effectively meet the high calling of their profession.

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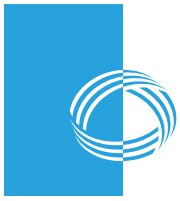
The Health Care Workforce Technical Advisory Committee was appointed by the Health Strategies Council and the Georgia Department of Community Health.



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