



EMORY

ROBERT W.  
WOODRUFF  
HEALTH  
SCIENCES  
CENTER

*Woodruff Leadership Academy 2010*

# *Allied Health Professions Programs at Emory*

*Executive Summary  
May 2010*



## *Allied for Health Team Members*

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## STATEMENT OF PROJECT PURPOSE

This report addresses the future organization of the allied health professions programs at Emory that best supports the following objectives:

1. Be the model academic health center, meeting the **needs** of a **changing care delivery paradigm** by offering training programs in an **array of allied health professions** that focus on **cost-effective inter-professional patient care** (“Vision 2020 Health System”).
2. Contribute to Emory Healthcare’s vision to be a leading academic health system differentiated by discovery; innovation; and compassionate, patient and family-centered care by **training and retaining the next generation of allied health professionals** necessary to operate the Vision 2020 Health System.
3. Provide the highest quality education by offering allied health professions training programs that will **attract top faculty and outstanding students necessary to be a national leader in healthcare**.

## SUMMARY

### *Key Assumptions*

- An aging population and increased prevalence of chronic medical conditions will increase demand for healthcare
- Healthcare resources will become increasingly constrained
- The healthcare delivery paradigm will change from one focused on episodic acute care to a family and patient centered model coordinated by an inter-professional team
- The role of allied health professionals with expanded scopes of practice in delivery of healthcare services will sharply increase
- Home-centered care will be emphasized in place of institutional-based care

### *Findings*

Each of the allied health professions programs at Emory operates in accordance with the objectives of its respective parent school or department. The current structure results in limited interaction and collaboration among the programs and does not foster interdisciplinary thought and strategic planning. Despite projections for a growing number of allied health professionals in a wide range of specialties, Emory has not significantly expanded its allied health professions programs in quite some time.

The current structure limits the innovation necessary to meet the needs of a changing healthcare delivery paradigm, the Vision 2020 Health System. The new paradigm will be characterized by a team-based approach that optimizes the use of allied health professionals, preserves patient independence by focusing on care in the outpatient and home settings, and results in more cost-effective delivery of care.

## Recommendations

Emory has an opportunity to lead disruptive innovation in healthcare delivery but must develop a unified strategy for its allied health professions. This strategic approach will allow Emory to attract top faculty to provide the highest quality education to graduates who will lead and implement the Vision 2020 Health System. Team *Allied for Health* therefore recommends the following staged actions along a continuum:



### Phase 1 – Immediate

Establish an Office of Allied Health Professions (OAHP) within the Woodruff Health Sciences Center (WHSC) which reports to the Executive Vice President of Health Affairs (EVPHA). The objectives of the OAHP would include:

1. Bridge the existing allied health professions programs in WHSC
2. Establish the overall strategic direction of allied health professions at Emory and develop unified goals
3. Identify the allied health professions needed in the Vision 2020 Health System
  - Right-size existing programs
  - Develop new programs as well as internal and external partnerships
4. Ensure that the curricula educates and prepares graduates for the future work force
5. Coordinate philanthropic efforts related to allied health professions programs
6. Implement initiatives to strengthen student recruitment and retention of graduates within WHSC
  - Work with Emory’s Career Center to promote allied health professions as a career path for Emory undergraduates
  - Provide desirable career paths within WHSC

### Phase 2 - Long-term

1. Identify programs best suited to be organized within an Emory School of Allied Health Professions
2. Develop an Emory School of Allied Health Professions contingent upon:
  - A critical mass of programs, faculty, and students
  - Adequate tuition, philanthropic support, and research funding to financially support the programs and infrastructure

## SUPPORTING INFORMATION

### *Changing Healthcare Delivery Paradigm – Vision 2020 Health System*

A change in the healthcare delivery paradigm is needed as clinicians grapple with providing increasingly complex care to an aging population with chronic medical conditions, in a cost-constrained environment. Decreased mobility and capacity for independent care in this population require a greater utilization of healthcare resources.

The Vision 2020 Health System will adopt a care delivery model that is **patient and family-centered**, less focused on episodic acute care, and coordinated by an inter-professional team. **Quality** of care will be improved and healthcare delivery will be more **efficient** by way of **integrated information** from multiple complementary data sources **and improved interdisciplinary communication**. Families and patients will be supported by a host of professionals and resources that will facilitate self-management, health monitoring, and frequent follow-up.

As home-based and outpatient care replaces institutional care in the Vision 2020 Health System, non-physician providers will be relied upon to provide increasingly complex services. In response, allied health professions programs will be challenged to adopt curricular innovations that change or expand scopes of practice. This will include improved education and training for the paraprofessional workforce essential for delivery of quality home-based care. Vision 2020 Health System will employ a new healthcare workforce that is a product of a team-based, collaborative education model.

### *Overview of Workforce*

**Finding** – *The allied health professions workforce is large, has a wide variety of skills, and is growing.*

Allied health professionals work in more than 60 different occupations and represent a large portion of the healthcare workforce. The number of allied health professionals grew almost 30% between 1999 and 2008.<sup>1</sup>

There is an increasing array of allied health professions—the Bureau of Labor Statistics added at least six new categories between 1997 and 2008—and it is likely that other allied health professions that are not yet offering degree-based training (e.g., health coaches) will emerge over the next ten years.

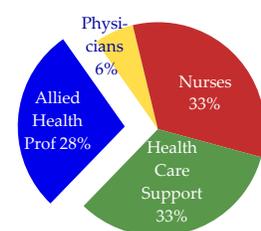
**Implication** – *The role and types of allied health professionals will expand in the Vision 2020 Health System.*

**Finding** – *There is a current shortage of allied health professionals.*

In a recent survey, 79% of hospital CEOs believed there is a shortage of allied health professionals, with 19% seeing that shortage as serious.<sup>2</sup> One-third of the 30 fastest growing occupations are in the allied health professions or healthcare support occupations.<sup>3</sup>

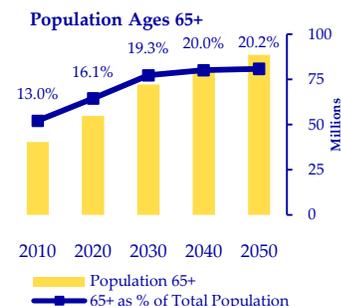
**Implication** – *Unless the educational pipeline for these occupations expands, the shortage will worsen.*

Health Care Employment by Occupation Type  
2008



**Finding** – The population aged 65+ will double between 2010 and 2040.

Between 2010 and 2040, the number of people aged 65 and over will double<sup>4</sup>. Currently, this 13% of the population comprised of older adults uses 26% of office visits, 35% of hospital stays, 34% of prescriptions, and 38% of EMS responses.<sup>5</sup>



Healthcare faces the dual challenge of attracting/retaining replacements for retiring workers and simultaneously expanding the workforce to care for an aging population. Between 2008 and 2018, approximately 461,000 new technical healthcare jobs will be created; however, total job openings due to growth and replacement needs will be approximately 899,000—a 41% increase from current levels.

Category	2008 Jobs	2008 – 2018 New Jobs Created	2008 – 2018 Openings due to Growth and Replacement – “Need”	% Change from 2008
	(in thousands)			
Healthcare practitioners & technical	2,175	461	899	41%
Healthcare support occupations	3,137	949	1,278	41%
Physicians	661	144	261	39%
Nurses	<u>3,372</u>	<u>737</u>	<u>1,430</u>	<u>42%</u>
	<b>9,345</b>	<b>2,291</b>	<b>3,868</b>	<b>41%</b>

**Implication** – The need for all health professionals will increase significantly over the next ten years.

### Current State of Allied Health Professions Programs at Emory\*

Allied health professionals have traditionally been defined as healthcare practitioners, excluding physicians and nurses, with formal education and clinical training who are credentialed through certification, registration, and/or licensure.\*\*

**Finding** – Emory programs are distributed across many departments with little coordination among programs and are dissimilar in the degrees offered upon completion.

Emory University currently offers a variety of allied health professions programs housed within departments in the School of Medicine and Emory Healthcare, which include:

- School of Medicine
  - Anesthesiologist Assistant – PA (Department of Anesthesiology) – Masters Degree
  - Medical Imaging Technologist (Department of Radiology) – Bachelor’s Degree
  - Ophthalmic Technologist (Department of Ophthalmology) – Certificate Program
  - Physician Assistant – PA (Department of Family Medicine) – Masters Degree
  - Physical Therapist – DPT (Department of Rehabilitation Medicine) – Doctoral Degree
- Emory Healthcare
  - Clinical Lab Medical Technologist (Laboratory) – Certificate Program

\* The source for much of the information described in this section is based on interviews of the individuals listed in the Appendix.

\*\* This section describes the current state using this traditional definition and therefore excludes nursing programs. In addition, a process is currently underway to consider establishing an Emory School of Pharmacy and has been excluded from the scope of this project.

**Challenge/Opportunity** – There is limited interaction among the allied health professions programs, which results in minimal opportunity for collaboration. While there are some economies of scale to be gained from bridging the programs, these may be limited by the different levels and foci of training provided by the programs.

**Finding** – *Several of the allied health professions programs are nationally ranked.*

The programs for which rankings are available are in the top 5% nationally—the Physician Assistant (PA) and Physical Therapy (PT) programs are ranked #3 and #11, respectively<sup>6</sup>.

**Challenge/Opportunity** – Emory must ensure that structural changes enhance, not diminish, national rankings.

**Finding** – *A minority of allied health profession graduates are placed jobs within Emory Healthcare.*

The current programs' placement rates within Emory Healthcare are all under 10%, with the exception of Medical Imaging Technologists, which is 55%.

**Challenge/Opportunity** – It is important to fully understand and address the underlying reasons for low placement rates. One factor may be that current Emory policies dictate Emory PT graduates can either practice clinically or teach, but not both.

The Emory Clinic Section of Orthopedics contracts with a third-party to provide physical therapy services to their patients. While this arrangement made good business sense when it was established, an assessment should be conducted to determine if the Department of Rehabilitation Medicine faculty and its graduates can meet the needs of patients seen by Orthopedics while creating a win-win for both sections and Emory Healthcare.

**Finding** – *The current programs may not be “right-sized”.*

Medical Imaging Technologist and PT programs have more qualified applicants than can be accommodated, while PA Anesthesiologist Assistant and Ophthalmic Technologist programs have excess student capacity.

**Challenge/Opportunity** – While the program directors are aware of opportunities (e.g., enrollment growth, research), they do not have the time or the resources to address these issues.

**Finding** – *There is limited collaboration with other Emory University schools or with other regional/area institutions.*

**Challenge/Opportunity** – Emory has a significant opportunity to leverage its existing resources as it strengthens current and develops new allied health professions programs. Opportunities for collaboration exist with the Rollins School of Public Health, the Nell Hodgson Woodruff School of Nursing, and the Candler School of Theology. In addition, there are opportunities to work with the undergraduate Career Center to attract students and to offer more inter-professional training among allied health profession, medical, and nursing students.

There are potential opportunities to partner with other area educational institutions (e.g., Georgia Tech prosthetist/orthotist program, respiratory therapist program at Georgia State, healthcare support occupation programs at technical colleges).

**Finding** – Most of the existing programs have little or no grant funding and therefore operate primarily on tuition revenues.

**Challenge/Opportunity** – The allied health professions programs have a significant opportunity to support the research component of Emory’s tripartite mission. Increasing research activities and leveraging existing research at other Emory schools will enhance internal/external visibility, strengthen faculty/student recruiting, create new revenues to support growth, and expand opportunities for students.

**Overview of Programs at Benchmark and Regional Institutions**

**Finding** – Among Emory’s benchmark schools<sup>7</sup> and medical schools associated with the top 25 hospitals ranked by U.S. News & World Report, fewer than one-third have a separate School of Allied Health Professions (“SAHP”)

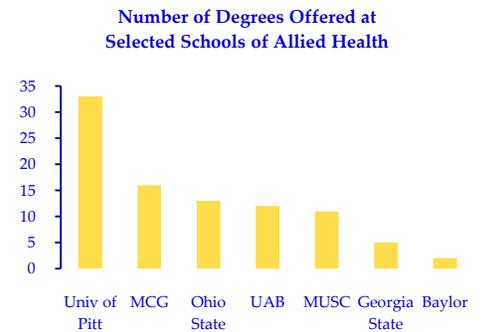
The University of Pittsburg and Baylor are the only “benchmark schools” with SAHPs. Seven of the top 25 U.S. News & World Report hospitals have an SAHP (see Appendix for list).

Four large public universities in the region (UAB, MUSC, Georgia State, MCG) have SAHPs.

**Implication** – A School of Allied Health Professions is not an essential component of a highly ranked health system or medical school.

**Finding** – A wide array of degrees are offered at the SAHPs studied, with most offering at least 10 different programs.

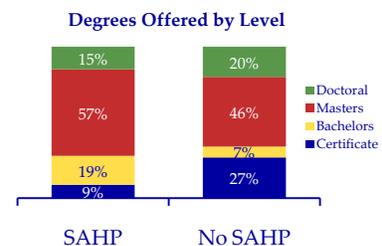
Most SAHPs include ten or more programs, and very few SAHPs have five or fewer programs. However, the range is wide—Baylor offers only two degrees, while the University of Pittsburgh offers over 30 degrees.



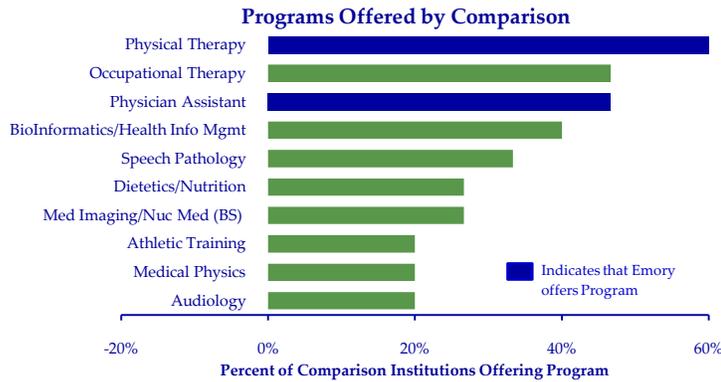
**Implication** – Each institution determines the critical mass necessary to establish a stand-alone SAHP.

**Finding** – There is significant variability in the types of degrees and programs offered at the institutions studied.

The majority of degrees offered are at a masters or doctoral level at most comparison institutions with little variation based on the presence of an SAHP. However, institutions with no SAHP offer a higher percentage of certificate programs.



There are over 50 types of programs offered at comparison institutions with a few being the most common. As indicated in the chart below, Emory offers two out of the ten most common programs.



**Implication** – There is no “standard” as to scope of programs or degrees offered and each institution develops programs that leverage its strength and meet its needs.

### New Program Opportunities

It will be imperative that decisions about new program development align with the overall strategic direction of WHSC. Outlined below are some of the programs that might support high priority WHSC strategies.

Program	Emory Comprehensive Centers and Other High Priority Areas						
	Neuro-science	Heart & Vascular	Cancer	Health in Aging	Critical Care	Informatics	Research
Occupational Therapy	X		X	X			
Speech/Language Therapy	X		X	X			
Respiratory Therapy	X	X			X		
Audiology	X			X			
Radiation Therapy			X				
Cardiovascular Tech		X					
Perfusionist		X					
Dietetics/Nutrition	X	X	X	X	X		
Research Administration							X
Health Info Mgmt/Informatics	X	X	X	X	X	X	X
Translational Medicine							X

It is in Emory’s interest to determine if it is best to directly train, partner with another institution (e.g., Georgia Tech Prosthetist/Orthotist program or Grady radiation therapy program), or look to other educational institutions (e.g., Georgia State respiratory therapy program) to produce graduates.

Team *Allied for Health* believes the following programs are best aligned with Emory initiatives and priorities and should therefore be among the first programs assessed by the Office of Allied Health Professions:

1. **Occupational Therapy** – Given the aging population and the impending healthcare reform, this profession will become increasingly important. Occupational therapy promotes health by enabling participation in meaningful activity and self care by individuals and families.

2. ***Dietetics/Nutrition\**** – Common health problems can be prevented and/or alleviated with a healthy diet. Dieticians provide evidence-based dietary advice and management to individuals and institutions.
3. ***Speech Therapy*** – Speech therapists have scopes of work that intersect with several other Emory priority areas (dementia, aging, Parkinson’s disease, cancer, otolaryngology), and they are focused on areas of treatment likely to be important (functional status, memory impairment, communication, language disorders, swallowing, traumatic brain injury).
4. ***Health Information Management*** – It will be increasingly important to use technology to make complementary types of information sources (including a universal electronic health record) and large volumes of data more accessible to direct care of the individual patient.

To be successful in the Vision 2020 Health System, the definition of allied health professions will need to expand to encompass other healthcare workers, such as home health aides, pharmacy technologists, and social workers. Emory needs to determine what role, if any, it will have in training individuals in these traditional healthcare support occupations.

## CONCLUSION

The Vision 2020 Health System is the new paradigm for healthcare characterized by a team-based approach that optimizes the use of allied health professionals, preserves patient independence by focusing on care in the outpatient and home settings, and results in more cost-effective delivery of care. In moving Emory toward this model, team *Allied for Health* recommends:

- The immediate establishment of an Office of Health Professions to:
  - Coordinate existing allied health professions programs in WHSC;
  - Establish the overall strategic direction of allied health professions at Emory;
  - Identify the allied health professions needed in the Vision 2020 Health System;
  - Ensure that the curricula educates and prepares graduates for the future work force;
  - Coordinate philanthropic efforts related to allied health professions programs; and
  - Implement initiatives to strengthen student recruitment and retention of graduates within WHSC.
- Longer-term direction to:
  - Identify programs best suited to be organized within an Emory School of Allied Health Professions; and
  - Develop an Emory School of Allied Health Professions once a critical mass is reached.

These actions will support the strategic direction of WHSC and Emory Healthcare. By providing the highest quality education, attracting top faculty, and training and retaining the next generation of allied health professionals, Emory becomes the national leader in the Vision 2020 Health System. WHSC will be the model academic health center, differentiated by discovery; innovation; and compassionate, patient and family-centered care.

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\* Emory currently offers a Dietician internship

## ENDNOTES

<sup>1</sup> May 2008 Occupational Employment and Wage Estimates, National Sector NAICS Industry-Specific estimates; [http://www.bls.gov/oes/oes\\_dl.htm](http://www.bls.gov/oes/oes_dl.htm). Note: Analysis excludes Veterinary, Dental, Massage, Chiropractors, and Optical occupations

<sup>2</sup> Clinical Workforce Issues: 2009 Survey of Hospital Chief Executive Officers, AMN Healthcare <http://www.merrithawkins.com/pdf/09CEOSurvey.pdf>

<sup>3</sup> Table 1.2 Employment by occupation, 2008 and projected 2018; Employment Projections Program, U.S. Department of Labor, U.S. Bureau of Labor Statistics [http://www.bls.gov/emp/ep\\_table\\_102.pdf](http://www.bls.gov/emp/ep_table_102.pdf)

<sup>4</sup> Table 2 Projections of the Population by Selected Age Groups and Sex for the United States: 2010 to 2050; Population Division, U.S. Census Bureau; August 2008 <http://www.census.gov/population/www/projections/summarytables.html>

<sup>5</sup> Retooling for an Aging America: Building the Health Care Workforce, April 2008, <http://www.iom.edu/Reports/2008/Retooling-for-an-Aging-America-Building-the-Health-Care-Workforce.aspx>

<sup>6</sup> U.S. News & World Report – 2008 Rankings <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-health-schools>

<sup>7</sup> Benchmark schools identified in October 2009 State of the School address by Dean Lawley

## APPENDIX

### *Interviewees*

David Burke	Chair – Rehabilitation Medicine
Bill Eley	Executive Associate Dean – Medical Education & Student Affairs
Lisa Fisher	Administrator – Rehabilitation Medicine
Andy Garrard	Administrator – Ophthalmology
Christina Gray	Administrator – Anesthesiology
Dallis Howard-Crow	Vice President – EHC Human Resources
Zoher Kapasi	Interim Director – Physical Therapy Program
Deborah Larsen	Director – School of Allied Medical Professions – Ohio State
Tom Lawley	Dean – School of Medicine
Linda McCauley	Dean – School of Nursing
Carolyn Meltzer	Chair – Radiology
Tim Olsen	Chair – Ophthalmology
Alan Otsuki	Associate Dean – Medical Education and Student Affairs
Chuck Powell	Administrator – Radiology
Fred Sanfilippo	Executive Vice President of Health Affairs
Dana Sayre-Stanhope	Director – PA Program
Steven Wilson	Immediate Past Director – School of Allied Medical Professions – Ohio State
Jim Zaiden	Chair – Anesthesiology

## Comparison Institutions

<u>Emory Benchmark Institutions</u>	<u>Other Institutions Associated with U.S. News &amp; World Report Top Hospitals</u>	<u>Other Regional Institutions</u>
Baylor	Mayo Clinic	Georgia State <sup>2</sup>
Duke*	Ronald Regan UCLA Medical Center	Medical College of Georgia (MCG)
Johns Hopkins*	Cleveland Clinic	Med Univ of South Carolina (MUSC)
Stanford*	Massachusetts General Hospital <sup>1</sup>	
University of NC	NY-Presbyterian	
Univ of Pennsylvania*	UC San Francisco Medical Center	
Univ of Pittsburgh*	Brigham and Women's Hospital	
Vanderbilt*	University of Washington Med Center	
Washington University*	University of Michigan Hospitals	
Yale*	NYU Medical Center	
	Mount Sinai Medical Center	
	Methodist Hospital, Houston	
	Ohio State University Hospital	
	Memorial Sloan-Kettering	
	M.D. Anderson Cancer Center	
	Northwestern Memorial Hospital	
	Univ of Alabama at Birmingham	

*Note:* Highlighting indicates associated School of Allied Health Professions  
 \* Also in Top 25 of U.S. News & World Report  
<sup>1</sup> Program appears to be associated with hospital, not medical school  
<sup>2</sup> Programs are in College of Health and Human Sciences which includes programs that improve health and well-being and address social justice issues within a multi-cultural society