



Facilitating Healthcare Workforce Development



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Cover Story

What's Really Propping Up The Economy?

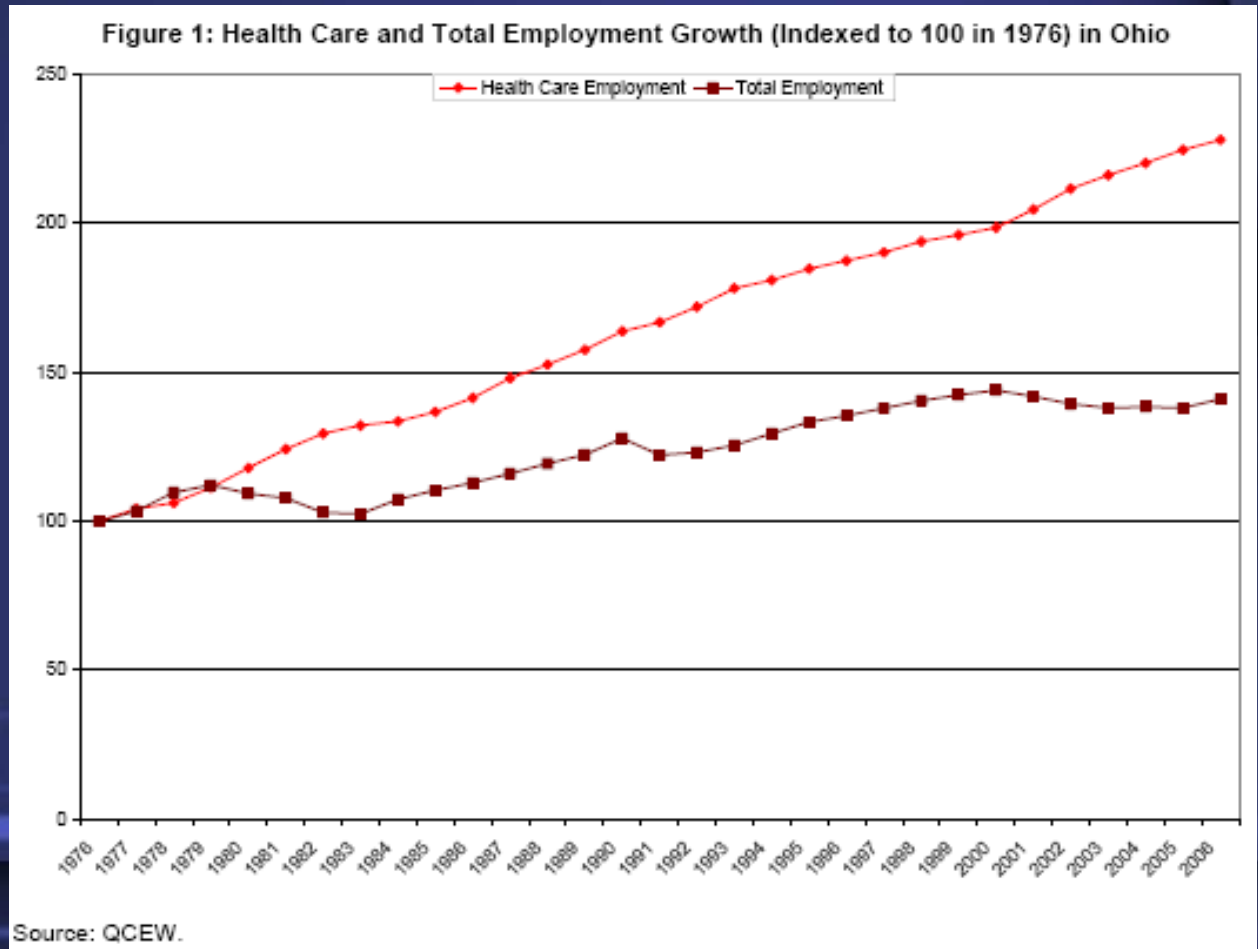
“Since 2001, the health-care industry has added 1.7 million jobs. The rest of the private sector? None”

**Ohio Governor Ted Strickland
(June 4, 2007)**

“The future of jobs growth in Ohio is in investing in our regional strengths and in making sure we have the most-educated, highly skilled workforce possible.”

Ohio Healthcare – An Economic Engine

- Healthcare - one of few industries in Ohio that is experiencing both a high rate of growth and a large demand for qualified workers.
- In Northeast Ohio, healthcare is largest employment sector.



Ohio Healthcare - An Economic Engine

- Hospitals alone contributed about \$62.8 billion into the Ohio economy and supported more than half a million jobs for Ohioans in 2006

Where are the Jobs in NEO and the State?

- From 1976 to 2006, employment in healthcare industries in Ohio has risen from one employee per 39 residents to one employee per 18 residents.
- (Source: Ohio Job & Family Services, May 2008)

Where are the Jobs in NEO and the State?

- Employment in 77 different healthcare occupations is projected to grow 19.5 percent from 2004 to 2014, compared with 7.3 percent across all occupations in Ohio.
- There will be 22,176 projected annual openings in healthcare occupations from 2004 to 2014, 48.1 percent of which will be for replacement needs.

Facing Reality

The demand for registered nurses and other health care workers will continue to rise as the 78 million “baby boomers” continue to age and require additional health care. Two fifths of Ohio’s oldest baby boomers (55-64 age group) will be retiring by 2010. At this point, health occupations are projected to account for approximately one in seven new jobs for Ohioans, due largely to the need to care for this large aging population and longer life expectancy.



Available Jobs . . . But will There be Workers?

- 23 percent of the current public healthcare workforce or almost 110,000 workers are eligible to retire by 2012.

Source: Association of Schools of Public Health, February 2008

- The Ohio Hospital Association (OHA) predicts a 29 percent shortfall of almost 32,000 registered nurses by the year 2020.

FACING REALITY

“Hospitals in the U.S. have more than 100,000 vacant nursing positions, and that number is expected to reach 340,000 by 2020. Fully qualified candidates were rejected simply because there weren’t enough openings for training, faculty to teach them, or in some cases, classrooms.”

Parade, January 6, 2008

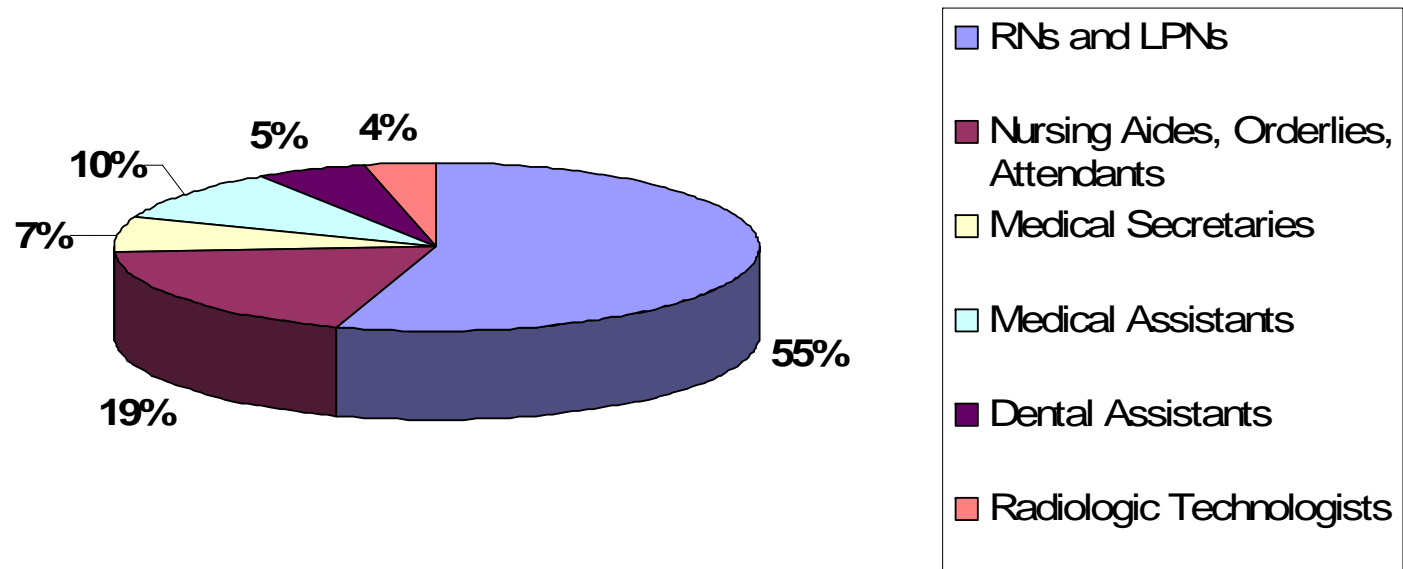
FACING REALITY

National Shortages and Projections

Job Title	2002 Employment	2002 Vacancy Rate	2012 Projected Employment	Percent Employment Change 2002 to 2012
Physical Therapists	135,050	4.4%	183,440	36%
Occupational Therapists	81,450	4.7%	110,200	35%
Physician Assistants	62,700	6.1%	93,510	49%
Respiratory Therapists	85,770	6.3%	115,600	35%
Medical Lab Tech	146,070	4.5%	174,780	20%
Medical Lab Technologists	148,570	4.4%	177,540	20%
Surgical Technologists	72,250	3.9%	92,420	28%
Radiologic Techs	174,110	4.0%	214,070	23%
Cardiovascular Techs	43,390	5.0%	57,940	34%
Pharmacy	229,430	4.7%	298,640	30%
Totals	1,178,790	4.72%	1,518,140	31%

Where are the Jobs in Northeast Ohio and the State?

Total Annual Openings



Source: ODJFS, 2006b, 2007c

NOHSIC

Snapshot of Vacancies-May 2007

Hospital	Openings	Top Openings
Cleveland Clinic Health System	1,651	RN, Medical Secretary, Nursing Asst, medical tech
Louis Stokes Cleveland VA Medical Center	15	RN, support staff
MetroHealth Health System	265	RN, LPN, nursing assistant
Southwest General Hospital	143	LPN, RN
Summa Health System	328	RN, nursing assistant, pharmacist
University Hospitals Organization	1516	RN, nursing assistant, med tech, pharmacist

Total Open Positions = 3,918

FACING REALITY

Occupations with High Employment Prospects

Combined Cleveland-Elyria-Mentor, Akron MSA

(Occupations paying at least \$12.00 an hour and having at least 50 annual openings)

Healthcare Occupation	Annual Openings	Average Annual Salary
Emergency Medical Technician	94	\$30,472
Licensed Practical & Licensed Vocation Nurses	252	\$37,357
Registered Nurses	1,026	\$54,060
Respiratory Therapists	62	\$44,678
Medical and Clinical Laboratory Technicians	52	\$29,036
Radiologic Technologists & Technicians	94	\$42,515
Physical Therapist Assistants	55	\$41,829
Medical and Clinic Laboratory Technologists	64	\$44,346
Mental Health & Substance Abuse Social Work	66	\$35,651
Physical Therapists	55	\$63,898
Speech-Language Pathologists	63	\$53,706
Pharmacists	110	\$91,957

Education and Training Needs

There are healthcare occupations and openings at every level of education or training. Over 25% of the annual job openings in healthcare occupations require less than one year of training.

Education and Training Needs

Training/Education Level	Employment		2004-14 Change		Total Annual Openings
	2004	2014 Projected	Net	Percent	
All Healthcare Occupations	591,340	706,390	115,050	19.5%	22,176
Short-Term On-the-Job Training	81,540	105,780	24,240	29.7%	3,758
Moderate-Term On-the-Job Training	41,780	54,280	12,500	29.9%	2,048
Long-Term On-the-Job Training	5,960	6,290	330	5.5%	147
Postsecondary Vocational Award	167,530	188,280	20,750	12.4%	4,821
Associate Degree*	154,460	189,270	34,810	22.5%	6,616
Bachelor's Degree	39,050	44,910	5,860	15.0%	1,372
Work Experience plus a Bachelor's or Higher Degree	10,620	12,260	1,640	15.4%	371
Master's Degree	31,800	37,480	5,680	17.9%	1,150
Doctoral Degree	5,460	6,200	740	13.6%	193
First Professional Degree	52,370	60,860	8,490	16.2%	1,687

*Registered Nurses are included in this category. Training requirements may be met through a two-year associate's degree, a three-year diploma, or a four-year bachelor's degree.

Source: ODJFS, 2006b.

NOHSIC: A Healthcare Workforce Development Partnership

The Northeast Ohio Health, Science & Innovation Coalition (NOHSIC) is an unprecedented regional consortium created in 2007 to implement solutions to planning for and developing a healthcare workforce to meet the demands of the region.



“Crossing boundaries to solve Northeast Ohio’s regional challenges”



NOHSIC: Our Mission

To build a sustainable system that effectively aligns employer, public, and private sector resources for the development, recruitment, and retention of a skilled healthcare workforce.



NOHSIC: Impact on the Region

- Economic impact of Cleveland area hospitals and their related healthcare facilities is \$13.48 billion. This includes a household earnings impact of \$3.28 billion.
- The total impact on employment in Northeast Ohio is 125,000 jobs. In the state – 500,000 jobs

NOHSIC:

Role & Impact on the Region

- Facilitating workforce development through innovative recruitment, training and retention strategies:
 - **Memorandum of Understanding: U.S. Army Reserve Corps:** Potential access to and additional training for 5,500 military personnel, creating a new pipeline of healthcare workers
 - **Workforce development linkages with other sectors** (e.g. Employment Connection) **and within healthcare** (e.g. Allied Health Roundtable, NEO Healthforce)
 - **Cultural Competency Training** within hospitals and health systems

NOHSIC: Role & Impact on the Region

Facilitating workforce development through collaborative partnerships and community education and outreach:

- **REACH Long-term Care Initiative**
 - Northeast Ohio Nursing Initiative
 - Ohio Healthcare Association and Cleveland Plus
 - Allied Health Roundtables

NOHSIC:

Role & Impact on the Region

Facilitating workforce development through collaborative partnerships and community education and outreach:

- Akron Math, Science and Technology Middle School and Partnership for Invention and Creativity
- Collaborative grant seeking – attracting outside resources to Northeast Ohio

NOHSIC: Role & Impact on the Region

- **Impacting policy**
 - Align policy to healthcare sector needs
 - Workforce Investment Boards
 - Connect NOHSIC leadership to select workforce development boards and commissions

STEM and Workforce Development

“The Science, Technology, Engineering, and Mathematics (STEM) fields are collectively considered core technological underpinnings of an advanced society. In many forums, the strength of the STEM workforce is viewed as an indicator of a nation’s ability to sustain itself.”

STEM Fields, Wikipedia,
(http://en.wikipedia.org/wiki/STEM_fields)

Why STEM?

STEM education prepares *all students* for the challenges and opportunities in the 21st century economy:

- Critical thinking skills across all disciplines
- Skills needed by all students
- STEM skills underpin modern life
- Prepare for college, work, citizenship

Why STEM?

STEM education improves the impact and overall effectiveness of the state's K-16 education system:

- Improves student achievement in all subjects
- Teaches problem-solving, critical thinking and collaborative skills
- Enables U.S. to innovate and compete in global economy
- Equips students for future education and work

Why STEM?

A STEM-literate workforce adds value, productivity, and innovation to the state's economy:

- Problem solving
- Innovation
- Invention
- Life-long learning

Why STEM?

There are skill shortages in STEM occupations like healthcare, information technology, biotechnology, aerospace, engineering, as well as technical and trade professions.

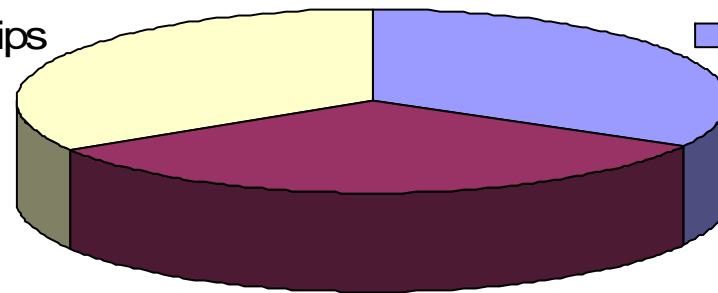


Next Steps

Develop a world-leading workforce of STEM teachers, trainers and academics

Partnerships

Professionals



Programs

Promote student engagement in STEM education and careers

Globally recognized, innovative STEM education and training programs

STEM: What is NOHSIC Doing?

- Clearly explaining the job opportunities in health care (nursing and allied health)
- Supporting accurate media/marketing portrayal of the nursing and allied health professions (e.g. decision-making, job security, intellectual rigor)
- Emphasizing science and mathematics – decrease remediation
- Higher Education Allied Health Advisory Committee
- Primary and Secondary School Allied Health Advisory Committee
- Assessing clinical resources for education and training throughout NOHSIC institutions

STEM: What is NOHSIC Doing?



Future workers:

Career awareness for students, parents, educators, employers

Job shadowing and experiential learning

Mentoring

Promoting need for STEM knowledge and skills



STEM: What is NOHSIC Doing?



Healthcare in Progress (HIP)

Northeast Ohio Nursing
Initiative



Healthcare Workforce
Information Directories, Portals,
Website

ROI in STEM, Career Awareness and Workforce Development:

- More jobs retained and created
- Good wages
- Larger tax base to support essential and quality of life services
- Students better prepared for additional education and workforce
- Larger local pool of workers for existing and future jobs in healthcare and other professions