DRAFT: Healthcare Industry Cluster Report for Northwest Indiana

I. Introduction

The Center of Workforce Innovations, Inc. (CWI), is a nonprofit corporation dedicated to addressing workforce development issues throughout Northwest Indiana. A key endeavor for our organization has been to help diversify our regional economy in the wake of continued employment declines in the steel industry. CWI has been engaged in a regional strategic planning process with leaders in business, labor, education, community and faith-based organizations, economic development professionals and locally elected officials. We have identified four objectives that are crucial to the success of the region:

1) Diversify our region's economy
2) Increase the skills of our current workforce
3) Prepare our youth for success
4) Improve intermediary systems between workers and employers

As a result, CWI developed an Industry Cluster Project to identify targeted industries for business expansion and attraction throughout Northwest Indiana. Clusters were chosen as targeted industries based on a combination of three criteria; greatest potential for employment, fastest growing industries in the region, and highest wage levels. These include advanced manufacturing, 21st Century logistics, healthcare, professional services, information technology and life sciences, which also encompasses all of the clusters targeted by the State of Indiana's *Energize Indiana* program. Our mission as a Workforce Investment Board (WIB) is to be a catalyst to proactively enhance and promote workforce development opportunities for growth.

The purpose of this project is to assemble the following for each industry cluster:

- Profile of infrastructure and support services that already exist in the region
- Track changes in employment levels and wages, costs of workers compensation and other costs of doing business.
- Baseline assessment of the skills, knowledge and experience levels needed for select occupations that are in high demand, difficult to hire or retain, or have higher turnover rates
- Create a "best practices" approach for reducing turnover, increasing productivity and providing training to workers
- Directory of regional training and educational providers and programs
- Cost-of-doing business analysis to identify the potential for a competitive advantage of doing business in Northwest Indiana, or identify uncompetitive costs or barriers to doing business in the region
- Prepare a toolkit of this information to be utilized by regional economic developers and workforce development to develop marketing plans, implement strategic planning initiatives and develop incentives for new business attraction, retention and expansion.

Our survey of the healthcare industry in Northwest Indiana includes a wide variety of programs and practitioners, including hospitals, medical clinics, mental health facilities, visiting nurse associations, home health care, rehabilitation services and nursing homes. Northwest Indiana is defined in this report as the seven counties that make up Region 1 as grouped by the Indiana Department of Workforce Development. Region 1A includes Lake County. Region 1B includes the following six counties: Jasper, LaPorte, Newton, Porter, Pulaski and Starke. Region 1B is served by The Center of Workforce Innovations (CWI) and Region 1A is served by the Lake County Integrated Services Delivery Board (LCISDB).

The information gathered will be presented to all stakeholders who have participated in this strategic planning process, hereafter referred to as members of the Community Workforce Compact. Implementation of this project will assist Northwest Indiana in diversifying its industries and encourage economic growth among businesses related to these industries.

II. Background Information

In 2001, the Indiana Department of Workforce Development made the conversion from using the Standard Industry Classification (SIC) system to the North American Industry Classification System (NAICS) for tracking employment, number of employers, payroll and average wages. For healthcare, SIC 80 was converted to the following in NAICS: 621, 622 and 623. As previously noted, the healthcare industry is one of the fastest growing industry clusters in Northwest Indiana. From 2001 to 2002, the Indiana Department of Workforce Development recorded the following:

TABLE A:

YEAR	NAICS - INDUSTRY	PAYROLL	EMPLOYERS	EMPLOYMT	AVG ANN WG
2001	621 - Ambulatory healthcare services	$497,802,587	1,219	11,698	$42,555
2002		$514,683,218	1,238	11,925	$43,159
	% Change	3.3%	3.3%	1.9%	1.4%
2001	622 - Hospitals	$525,719,708	16	15,913	$33,038
2002		$576,479,719	16	16,514	$34,908
	% Change	8.8%	NC	3.8%	5.7%
2001	623 - Nursing/residential care facilities	$137,704,463	109	7,055	$19,518
2002		$154,499,021	107	7,594	$20,344
	% Change	10.9%	(1.8%)	7.6%	4.2%

For the last decade, Northwest Indiana has experienced a severe contraction in the amount of steel-related jobs in addition to an overall decline in manufacturing jobs as well as occupations requiring little or no skills. Traditionally, the region has also suffered from an ambivalent attitude towards education beyond the high school level. Due to the higher levels of unemployment in the area's manufacturing arena and the growing number of low-paying service jobs to replace them, workers in the region are becoming more receptive to pursuing an occupation in healthcare since it is one of the higher paying service occupations. However, the existing healthcare education

programs in the region are at capacity—which constrains the amount of new workers who can successfully make this career transition, even if they have the ability to pay for the training or are eligible for training funds due to a layoff or being below the threshold for household income.

Employers in the region's healthcare industry report an ongoing shortage of qualified workers in key positions, such as nursing at all levels, diagnostic imaging, health technicians, pharmacists and therapists. The pressure to fill RN positions, for example, has led to a number of industry practices, such as large sign-on bonuses and perks to maintain staffing levels along with mandatory overtime to ensure adequate staff coverage.

Some innovative employers have resorted to more creative compensation and flex time options, and allow nurses to earn the right to choose their hours, shifts and floor or work area. Home healthcare organizations and visiting nurse associations have grown tremendously as nurses increasingly opt out of their hospital jobs in order to have more control of their time and working environment—even though the pay is significantly less than the hospital rate.

According to the latest wage survey from the Indiana Department of Workforce Development, the following healthcare occupations in the Gary PMSA (Lake and Porter Counties) had the following rates of pay for 2001:

TABLE B:

Occupation	Median Hourly Wage	Mean Hourly Wage	Mean Annual Wage
Home Health Aide	8.81	8.75	18,200
Medical Assistant	10.70	11.46	23,840
Medical & Clinical Lab Technologist	18.90	18.60	38,700
Medical & Clinical Lab Technician	15.70	15.49	32,210
Nursing Aid, Orderly, Attendant	8.71	8.86	18,430
LPN/Licensed Vocational Nurse	14.18	14.40	29,950
RN	19.04	18.65	38,790
Cardiovascular Technologist/Technician	12.54	13.85	28,800
Diagnostic Medical Sonographer	21.82	21.67	45,060
Radiologic Technologist/Technician	17.65	18.04	37,530
Surgical Technologist	15.17	14.88	30,960
Medical Equipment Preparer	10.77	10.68	22,210
Medical Transcriptionist	11.53	11.75	24,450
Medical Records & Health Info. Technician	10.17	10.70	22,260
Psychiatric Technician	10.41	11.87	24,680
Psychiatric Aide	9.78	9.76	20,290

Community Needs

The Indiana State Department of Health reported that there were only seven state funded community health center programs in Northwest Indiana for 2000-2001. The Indiana State

Department has been able to use the State Funded Community Health Center Program to build a network of primary and preventive health care providers throughout the state. The following organizations have participated in the network:

State Funded Community Health Centers in Northwest Indiana

Catherine McAuley Clinic, Hammond

East Chicago Community Health Center, Inc., East Chicago

Gary Community Health Center, Inc., Gary

Hilltop Neighborhood House, Inc., Valparaiso

Laporte Regional Health Systems, Inc. – CHC, LaPorte

Portage Township Community Health Care Clinic, Portage

St. Anthony Medical Center, Crown Point

These community health centers are on the front lines of providing free health screenings and subsidized care for various populations that are typically without insurance coverage and below the poverty level. Some of them have close relationships with a local hospital, even having key administrative staff on their board of directors. According to the Indiana State Department of Health, there are a number of communities or even entire counties in Northwest Indiana that are either "Medically Underserved Areas" (MUAs) or "Medically Underserved Populations" (MUPs) (in TABLE C).

TABLE C:

MEDICALLY UNDERSERVED AREAS /POPULATIONS (MUA/Ps)
CURRENTLY DESIGNATED IN NORTHWEST INDIANA AS OF MARCH, 2003

PLEASE NOTE: Score ranges from 1 – 62. The lower the score, the higher the need.

County	Service Area Name	ID#	Types	Currently Designated Area	Code
Lake	City of Gary SA	956	MUA	CTs 101, 102.98, 102.99, 103-134, 411, 412, 413.01	46.4
Lake	Central Hammond SA	958	MUA	CTs 203-208	51
Lake	City of East Chicago SA	957	MUA	CTs 301-303, 303.98, 304, 304.98, 305-310	51.4
Lake	Lake Station SA	943	MUA	CTs 416-418	61.6
Porter	Low-Inc Porter	7230	GOV-MUP	Whole County	none
Starke		949	MUA	Whole County	53.4

A "Primary Care Health Professional Shortage Area" (HPSA) is based primarily upon the number of residents with either low-income barriers to services or geographic boundaries due to distance from services or other transportation barriers (in TABLE D).

TABLE D:

PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS (HPSAs)
CURRENTLY DESIGNATED IN INDIANA AS OF MARCH, 2003

TABLE C: *PLEASE NOTE: Score ranges 1 – 25. The higher the score, the higher the need.*

County	Service Area Name	HPSA ID#	Designation Type	Currently Designated Area	Score
Jasper		1180731829	Low-Income Population	Whole County	13
Lake	Gary	1180891804	Geographic	CTs 101, 102.98, 103-134, 411,412, 413.01	12
Lake	East Chicago	1180891828	Geographic	CTs 301-303, 303.98, 304, 304.98, 305-310	13
LaPorte		1180911830	Low-Income Population	Whole County	11
Starke		118149	Geographic	Whole County	6

Rising Number of Uninsured

On September 30, 2003, the U.S. Census released a report that for the State of Indiana, the number of residents without insurance is 13.1% (with a standard error of 0.8%). The U.S. Census report also reported that young adults (18-to-24 years old) are the least likely group to have health insurance coverage with a national average of 70.4% insured, compared to 82.3% for those who are 25-64 years old and 99.2% for those 65 and older.

Young adults are more likely to be working part time or in an entry-level position without insurance benefits. For Northwest Indiana, the percentage of the working population is flat in some counties and projected to dip over the next two decades. Clearly, the success of the healthcare industry depends upon a healthy mix of employers to help bear the costs of services, getting employers to educate and encourage healthy behaviors for their employees, and increased collaboration among healthcare providers to maximize the utilization of facilities and services—especially in preventive healthcare screenings, community education about wellness and identifying diseases at earlier and more treatable stages.

Challenges for Hospitals

As previously indicated, hospitals make up the majority of healthcare employment throughout the region, accounting for 16,514 jobs, $576.5 million in payroll and having average annual wages of $34,908. Hospitals continue to experience increased competition, sometimes from their own affiliated physicians who build their own facilities and specialty clinics that specialize in "higher margin" services without the overhead, liability and regulations that hospitals face. They also face competition from visiting nurse associations and home health care agencies that tend to

have lower costs for patients and additional services like housekeeping, landscaping and even home repairs.

According to the Indiana State Department of Health's Annual Fiscal Report of Nonprofit Acute Care Hospitals (2000), salary expenses account for a major percentage of operating costs. With some facilities reporting as much as 40% turnover among their nursing staff, it is imperative for human resource departments to look at ways to reduce turnover through better screening of applicants' knowledge and abilities to perform their jobs, creative compensation and management style, flexible staffing, training and career development programs and other incentives. This is probably one of the greatest areas for increasing productivity and reducing operating costs.

Vacancies in nursing jobs are also very expensive, since the hourly rate for an agency nurse is much higher than a staff nurse. Using agency nurses to fill positions can make it difficult to achieve cohesiveness and teamwork within a unit, attributes which usually result in better patient care and shorter lengths of stays.

As the population of Northwest Indiana continues to gentrify, there will be an increase in the percentage of revenues coming from Medicaid and Medicare patients in addition to an increase in the amount of unreimbursed expenses, further eroding net margins for healthcare employers. The combined percentage of residents receiving either Medicaid or Medicare is already approaching between one fourth and one third of the population in most counties in Northwest Indiana, and account for between 40-50% of most healthcare providers' revenues.

TABLE E:

County	Poverty Rate	Medicaid % of Population	Medicare % of Population	Combined edicaid & Medicare
Jasper	6.9%	9.0%	14.1%	23.1%
Lake	11.1%	16.3%	14.3%	30.6%
LaPorte	9.1%	11.8%	14.3%	26.1%
Newton	7.4%	11.3%	12.5%	23.8%
Porter	5.7%	7.2%	11.4%	18.6%
Pulaski	8.7%	12.2%	16.5%	28.7%
Starke	11.7%	19.3%	14.9%	34.2%

Sources: FSSA Medicaid Report, 2002; U.S. Census 2000, Indiana State Department of Health, Center for Medicare and Medicaid Services

Healthcare employers surveyed by CWI indicated that the Medicaid and Medicare reimbursement cycles make it increasingly difficult to manage cash flow, keep up with current technology and expand programs. These reimbursements also have not kept up with rising costs of wages and expenses associated with serving low-income patients. Net margins for most hospitals in Northwest Indiana are less than 5%, and some are running deficits.

Table F: Fiscal Report Summary for Acute Care Hospitals in Northwest Indiana

Hospital	Salary Expenses / Total Expenses	% of Medicare and Medicaid	Total Unreim-bursed Costs	Charity Care Allocation	Bad Debt / % of Expenses	Net Margin
Community Hospital, Munster	45.4%	50.2%	(6,926,445)	(864,682)	(5,180,807) 3.0%	2.6%
Methodist Hospital, Gary	45.7%	42.0%	(104,261,913)	(23,348,067)	(11,471,274) 5.2%	4.9%
St. Anthony Medical Center, Crown Point	36.2%	49.9%	(17,308,054)	(2,316,367)	(3,474,550) 3.7%	(2.2%)
St. Catherine Hospital, East Chicago	36.8%	46.0%	(5,442,143)	(6,396,342)	(5,886,653) 7.1%	(0.1%)
Porter Memorial Hospital, Valparaiso	36.7%	42.4%	(25,684,375)	(767,805)	(10,656,753) 7.6%	3.2%
LaPorte Hospital and Health Services, LaPorte	40.0%	40.8%	(20,746,197)	(1,546,436)	(6,549,142) 7.7%	8.3%
St. Anthony Memorial Health Centers, Mich. City	34.5%	43.3%	(8,622,667)	(1,435,530)	(5,563,625) 7.3%	4.8%
Jasper County Hospital, Rensselaer	43.2%	43.9%	(125,934)	(125,934)	(2,542,354) 11.3%	(5.9%)
Starke Memorial Hospital, Knox	41.8%	51.6%	(1,858,446)	(77,415)	(1,302,835) 9.3%	14.5%
Pulaski Memorial Hospital, Winamac	44.4%	45.3%	(2,393,786)	(70,943)	(451,661) 3.7%	(9.5%)

Source: Indiana State Department of Health (ISDH) 2000 Annual Fiscal Reports
Total unreimbursed costs of providing care to patients unable to pay, to patients covered under government-funded programs, and for medical education and training.
Charity Care Allocation is a charity benefit policy to serve the medically indigent. On an annual basis, the hospital will confirm the eligibility and set aside dollars to ensure low-income persons can be offered needed inpatient and outpatient hospital services.
Net margin is the excess of revenue over expenses divided by the total operating revenue.

Occupancy and Length of Stay

Hospitals and long-term healthcare providers face a challenge if their occupancy rate is too low or too high. According to the Federal Department of Health and Humans Services, the national average for occupancy rates at urban hospitals is 58% and 38.6% for rural hospitals. Another concern is the Average Length of Stay (ALOS), especially if patients' length of stay exceeds reimbursement caps from Medicaid, Medicare or insurance providers. ALOS can also be prolonged by a lack of long-term care beds, which pushes those patients into acute hospital beds. Another factor could be the severity of illnesses that require longer hospitalization than peer averages for other facilities.

TABLE G:

Hospital	Average Daily Census	Average Length of Stay	Bed Capacity	Calculated Occupancy Rate
Community Hospital of Munster	240.6	5.03	364	66%
Methodist Hospital, Gary	331.1	5.53	357	93%
St. Anthony Medical Center, Crown Point	95.9	4.94	250	38%
St. Catherine Hospital, East Chicago	93.9	4.92	290	32%
Porter Memorial Hospital, Valparaiso	149.9	4.69	275	55%
LaPorte Hospital and Health Services, LaPorte	69.0	3.85	227	30%
St. Anthony Memorial Health Centers, Michigan City	126.2	4.98	310	41%
Jasper County Hospital, Rensselaer	33.6	8.17	69	49%
Starke Memorial Hospital, Knox	15.4	3.61	53	29%
Pulaski Memorial Hospital, Winamac	7.8	3.65	25	31%

Average Daily Census (ADC) is the average number of residents in the facility or unit, calculated by dividing the number of resident days during a given period by the potential number of days in the same period. In this report, the formula for calculating the average daily census is resident days for all facilities in the county/365 days in 2000.
Average Length of Stay (ALOS) is the average number of days patients remain in the facility per hospital stay. ALOS is computed by dividing the total patient days by the number of admissions.

III. Methodology

In order to gain a better understanding of the issues, challenges and opportunities facing Northwest Indiana's healthcare industry, CWI surveyed 25 employers in the region. Our goal was to identify areas of concern and develop strategies to meet the needs of employers in this industry cluster. The majority of surveys were conducted during a face-to-face interview with either the top administrator, director of human resources, department manager or a combination of these decision-makers.

These industry leaders were asked to answer a number of questions relating to their industry as well as their own facility, including quality of life issues, the impact of the economy, jobs in demand, hiring and retention, expansion plans, how well do local universities and schools prepare their students for work, and opportunities to attract suppliers to the region. Many of the questions asked for a ranking from 1 to 5, with 1 being of little or no significance and 5 being significant. A comparison of median and average response scores indicate that a number of

healthcare providers who were surveyed are encountering similar challenges and have a similar mindset towards key areas affecting their success. All of the individual survey responses have been kept confidential and are being released in aggregate.

IV. Participants

Respondents included 11 hospitals, 4 nursing homes, 3 mental health facilities, 3 home health care/hospice providers, 2 medical clinics, and 2 rehabilitation providers. A list of all participants is provided on the last page of the Industry Report on Healthcare in Appendix A.

V. Survey Results

A total of 25 healthcare employers were surveyed, representing organizations with total employment of 11,292 full time workers and 5,829 part time workers. The entire survey report with aggregated responses is in Appendix A. A summary of highlights is provided here for discussion.

Technology Issues

Employers were asked, "What is the impact of changes in new technology on your industry?" (On a scale of 1 to 5, with 5 being high impact, 1 being of little or no impact.) The median score was 5.0, with an average score of 4.3. Employers were then asked, "How would you rate your company's ability to keep up with new technology?" The median score was 4.0, with an average score of 3.5

Employers were asked, "How do technology changes affect the skills you will be seeking in new hires?" Responses were the following:

0% reported "No change – don't require tech skills."
4% reported, "No change – have always required tech skills to hire."
48% reported, "Increased expectations – expect basic tech skills, but we provide specific skill training."
48% reported, "Increased expectations – expect higher level tech skills with experience in specific tech skills."

When asked about specific technology skills required for employment, the most critical skills being sought by employers were computer skills (15 employers), clinical skills (13), rad techs (3) and pharmacy (2).

Productivity and Compliance

Process improvements are driven by compliance with several mandates from accrediting organizations, federal regulations and various recognized quality programs. Those most cited were:

Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
Commission on Accreditation of Rehabilitation Facilities (CARF)
Community Health Accreditation Program (CHAP)
National Committee for Quality Assurance (NCQA)
Accreditation Association for Ambulatory Health Care (AAAHC)
Medicare and Medicaid regulations

Most providers used a number of productivity improvement strategies. 80% of providers mentioned industry-specific accreditations, 76% have increased their investment in worker training, 64% have increased their investment in management and supervisory skills training, and 68% use a "balanced scorecard" of performance indicators. Other quality initiatives mentioned by individual facilities included Six Sigma, Quint Studer and Baldrige.

Most Critical Jobs

Employers overwhelmingly reported that nurses at all levels are the most critical jobs in their organization (18 employers), followed by diagnostic imaging/radiology (10), pharmacists (9), therapists – occupational, speech, physical (7), and home health aides/health techs (7). For licensed positions, nursing was also cited as having the highest turnover, being in highest demand for recruitment, and being the hardest position to fill. For unlicensed positions, the need was for home health aides and health techs. Very few employers saw a need to downsize or eliminate positions, though consolidations are imminent for some employers regarding clerical, middle management and housekeeping positions. Employers for most positions also required state licenses and appropriate certifications.

Recruiting Employees

Most employers utilized newspaper want ads, yet found them to be mediocre at best as a recruiting tool. By far, the best source for getting qualified applicants was through referrals from current workers and colleagues, followed by unsolicited walk-ins. Several employers reported having success with school placement through local colleges and universities as well as internships. Nursing students are required to perform a practicum at a healthcare facility without compensation. Those practicums are monitored by employers to screen potential future employees. Almost all employers reported that the WorkOne system was not being utilized for recruiting. Most mentioned having difficulty utilizing the CS3 system, or being sent unqualified applicants in the past as being major obstacles to implementation. The CS3 database utilizes applicants' self-assessment for matching their abilities with available jobs.

When asked how often they have to recruit qualified workers from outside of Northwest Indiana, 28% of employers surveyed said that they never or rarely have to recruit outside of the region. 60% said that they sometimes have to recruit from outside of the region, but primarily for physicians (10), executive management (6), RNs (6), therapists (5) and specialties (4). Employers rated their overall satisfaction level of their current recruitment and selection methods with a median of 3.0, and an average of 3.2.

Turnover rates were reported at the following levels:

Companies	Turnover rate
4%	0-3%
4%	4-6%
32%	7-10%
28%	11-15%
12%	16-20%
20%	21% or higher

One hospital reported a turnover rate of at least 40%, down from a previous year's high of over 60%. Nursing was reported as the number one occupation experiencing a high rate of turnover. The most common response by employers (especially hospitals and nursing homes) in order to deal with the high turnover and staff shortages was mandatory overtime, requiring nurses to often work double shifts. Aside from nursing jobs, most facilities reported that the rest of their staff turnover rates were less than 5%. Some recurring explanations for the high rate of turnover among nurses was due to the competitive compensation and benefits being offered to them by employers, including sign-on bonuses of $10,000 or more by some employers. Some employers reported very low levels of turnover due to providing nurses with a "pool" system that gives them the ability to make their own choices regarding shifts, floors, units, hours and duties.

The visiting nurse associations reported that a number of their nurses had come to them from the local hospitals in order to have a more flexible schedule and more control over their work, even though it meant a significant cut in pay and benefits.

Quality of Applicants

Employers mentioned that there were few problems with English, reading and math among applicants. Drug and criminal history was not a problem due to applicants being aware that they would be tested for drugs and a background check would be conducted. By far, the largest problem among applicants was a poor work ethic—which included not having a good attitude towards patients, not being able to work as part of a team, or not being prepared to handle the stress and hard work of being in a healthcare setting.

The second largest problem was poor interpersonal skills, followed closely by insufficient work experience. Employers noticed that some healthcare educators do a better job than others by preparing students for the realities of the workplace—by having exceptional clinical skills, being able to deal with difficult or needy patients, working long shifts and being able to multi-task. Some of the softer skills most mentioned by employers and most sought after were confidence and "stick-to-it-iveness" to complete assignments. This is especially valuable to employers since 52% of them reported that it takes 5 months or longer to bring a new hire up to the proficiency level of an experienced worker.

School Preparation

Employers were asked to rate how well local high schools, two-year vocational colleges and 4-year universities prepared students for employment. Not surprisingly, the more education a

student received beyond high school, the more likely an employer in the healthcare industry would hire them. Someone with only a high school diploma is not qualified for the majority of jobs that are available in healthcare—most jobs require a state license and knowledge acquired through a program with an accredited training provider.

88% of employers reported that local 4-year universities had at least a satisfactory ability (52% satisfactory ability, 36% good ability) to prepare workers for their needs. 84% of employers reported that local 2-year postsecondary and technical skills had at least a satisfactory ability (60% satisfactory ability, 24% good ability) to prepare workers for their needs. Only 24% of employers reported that local high schools had at least a satisfactory ability (20% satisfactory ability, 4% good ability) to prepare workers for their needs. Most jobs cited for these workers included environmental (housekeeping), food preparation and aides.

Few healthcare providers have any ongoing relationship with a local high school. There is a tremendous need in the region for educational programs to expose students to pre-professional preparation for a health career. Mentors and role models from the healthcare community are needed to help schools do a better job of attracting students to the healthcare field. Internships would provide an invaluable resource to employers for screening new talent, and give students opportunities to gain the work-related experience they need for success.

Training

Almost all employers provide hands-on training for all of their employees. Most also provide on-site classroom training by their own company trainers. Most employers also offer tuition reimbursement, though very few employees utilize that benefit. No facilities reported utilizing individual training accounts as described by WIA 134 (d) 4.

When asked, "What percent of your payroll is spent on training?" Employers reported the following:

Companies	% of payroll spent on training
16%	Less than 1%
40%	1-2%
12%	3-4%
16%	5-6%
12%	More than 6%

Vertical and Horizontal Industry Integration

Typically, an industry cluster strategy would include opportunities for vertical and horizontal integration of the industry by attracting suppliers or major customers to the region. For employers in the region, 68% of their major suppliers are located outside of Northwest Indiana. Most of their contact with equipment providers is through national sales offices with little regional presence. Most sales reps work out of a home office. More local suppliers include Gordon Food Service and various pharmacy and medical consumable supplies. There is an opportunity for local economic development professionals to work together with healthcare

employers in the region to attract suppliers—or at least explore the possibility of bundling purchases for greater leverage and better pricing.

There are a growing number of entrepreneurial firms that provide services like placement, billing and medical transcription as services for the healthcare industry. Further study may indicate more niche opportunities for services to the industry, and should be considered as a prime opportunity for business development and attraction to the region.

Customers and Quality of Life

When asked "What keeps you in Northwest Indiana," employers said the number one reason for being here is due to its proximity to their customer base. The second highest response was because it is a "good place for me and my workers to live" followed closely by the availability of a qualified workforce. The tax environment and proximity to suppliers was ranked as inconsequential.

Expansion Plans

88% of employers foresee a need to expand at their current location within the next 5 years. 36% plan to expand elsewhere in the region and 8% have plans to expand outside of the region into either the Chicago market or into the State of Michigan. (Responses are higher than 100% since 4 employers have plans to expand at their current location *and* elsewhere in the region.) No employer had plans to relocate out of the region or to another community within Northwest Indiana.

Maintaining a Thriving and Growing Healthcare Industry

Employers were asked what they need most in order to thrive and grow here. The number one critical factor is an overall improvement in the economy, followed closely by better qualified workers. Better access to capital and new equipment/better technology tied for third place, followed by better local schools.

VI. WorkKeys Occupational Profile

On September 17, 2003, The Center of Workforce Innovations hosted a WorkKeys occupational profile session for healthcare employers. WorkKeys was developed by American College Testing (ACT) as an assessment tool to help employers find the right people to staff various positions, determine skill levels of their current workforce, and develop training programs to help employees reach the required levels of skills and knowledge required for a particular job.

The Center of Workforce Innovations invited several healthcare employers to provide subject matter experts (SMEs) for the occupational profile for healthcare. Five employers sent 8 employees, representing LPNs, CNAs, medical transcriptionists, case managers and home health aides. All of these positions were identified by healthcare employers in the region as either having the highest turnover, being in the highest demand or being the most difficult to fill. 59

tasks were chosen by the SMEs as being critical to their jobs. The top skills and respective levels of criticality were:

SME Skill	Entry Level	Effective Performance	% of Tasks Requiring this Skill
Observation	5	5	84%
Team Work	4	4	69%
Reading for Information	4	5	66%
Locating Information	4	5	37%
Applied Mathematics	3	4	45%
Writing	3	3	79%

The complete WorkKeys summary report and comments are included in Appendix B. For a general description of these skills and levels, also visit:
http://www.act.org/workkeys/assess/index.html

The Center of Workforce Innovations will work with healthcare educators and training providers to set instructional standards and develop curricula to help students meet the requirements and skill standards for occupations in the healthcare field to meet the needs of employers.

Occupational profiling does not meet the content validation standards set by the Equal Employment Opportunity Commission for screening job applicants, hiring, promoting, evaluating employees in terms of training performance or selecting employees for training if it leads to future selection decisions. An employer is encouraged to conduct a WorkKeys job profile for a specific position at their organization in order to meet EEOC guidelines for those activities.

VII. Opportunities and Challenges

The Indiana Physician Survey Databook that was compiled in 2001 tells a story of growth and diversified practice areas. For active physicians with an Indiana license and an Indiana Principal Practice location, the number of MDs and DOs increased from a total of 8,065 in 1997 to 9,984 in 2001—an increase of over 19%. However, there were a number of major specialties that experienced multiples of that rate of growth since the last survey was conducted in 1997.

One area that should be explored is the growing panic among Illinois physicians regarding the skyrocketing cost of malpractice insurance. Practically all health insurance providers require physicians to carry malpractice insurance, which for high-risk specialties can now run upwards of $100-300K or more annually. The State of Indiana has a cap of $250,000 for malpractice liability. Perhaps Northwest Indiana can utilize its proximity to the Chicago area to draw more high-risk specialty practices into the region, and become a cluster for such services.

TABLE H: Physicians by Major Specialty, 2001 and 1997

Specialty	2001	1997	% Increase
Critical Care Medicine	30	17	76.5%
Endocrinology	80	51	56.9%
Geriatrics	38	25	52.0%
Hematology*	43	16	168.8%
Internal Medicine, General	922	575	60.3%
Internal Medicine, Pediatrics	70	31	125.8%
Neurology	164	116	41.4%
Pathology, Subspecialty	49	29	69.0%
Pediatrics, General	508	387	31.3%
Pediatrics, Subspecialty	181	114	58.8%
Radiology, Subspecialty*	139	33	321.2%

* Some portion of increase may be due to differences between 1997 and 2001 specialty classifications.

TABLE I: Physicians by Aggregated Specialty Group, 2001 and 1997

Aggregated Specialty Group	2001	1997	% Increase
Primary Care**	3,394	2,603	30.4%
Geriatrics	38	25	52.0%
Internal medicine/Pediatrics	70	31	125.8%
Pediatrics, Subspecialty	181	114	58.8%
Radiology (Gen. and Subspec.)	493	364	35.4%
Surgery (Gen. and Subspec.)	1,075	796	35.1%

**Primary care: family practice, general practice, general internal medicine and general pediatrics.

Another consideration for new employers relocating to Indiana is the lower costs of doing business. For instance, worker's comp rates are considerably lower for firms in Indiana than in Illinois. For comparison purposes, these rates are based upon what a company would pay that is new to Indiana with no claim history.

The advisory loss rates are:

Worker's Compensation Rates Comparison

Employer type	(Rates: per $100 of payroll) Indiana	Illinois
8833 Hospital – professional employees	$0.67	$1.60
8835 Nursing-home – health, public and traveling	$2.55	$3.82
8832 Physician and clerical	$0.18	$0.53
9040 Hospital – all other employees	$2.17	$6.45

Source: Northwest Indiana Forum, October 2003

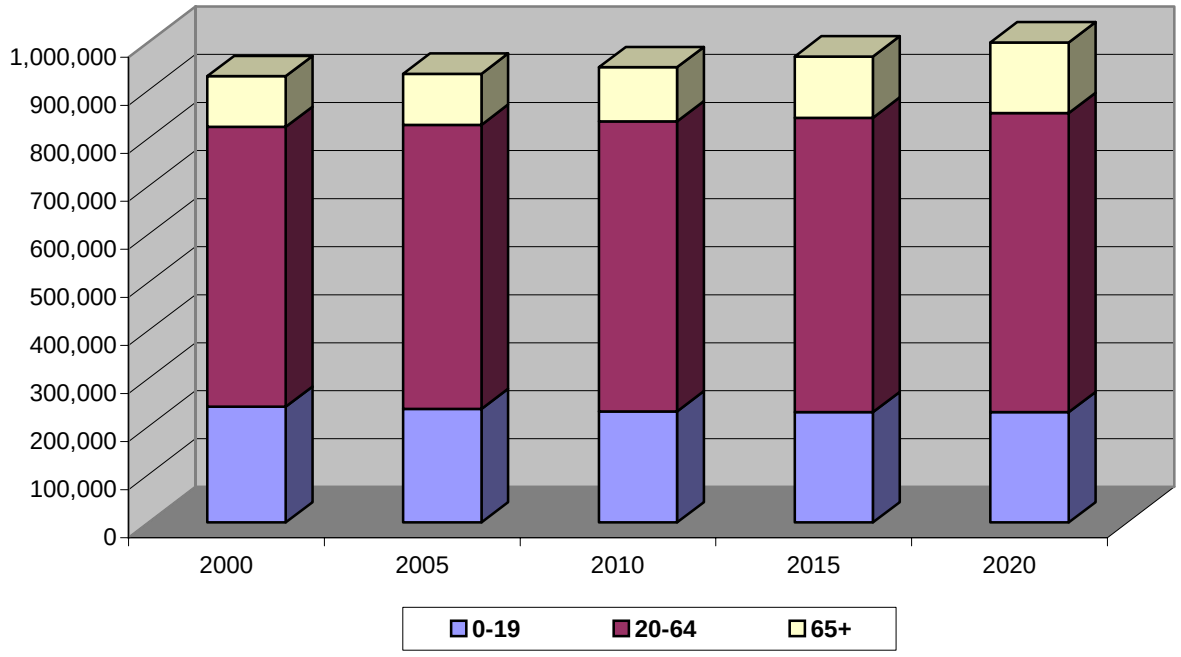
The main determinant of the rate is claim history. Most large hospitals are self-insured. Those who are not probably pay quite a bit less, depending upon their claim history. The rates quoted

above are for those companies who cannot get insurance elsewhere. The State of Indiana provides insurance until a history and/or private insurance can be established.

The Aging Population of Northwest Indiana

Healthcare providers in Northwest Indiana face the same pressure as the rest of the state and the nation regarding reimbursement rates and the cycle of those reimbursements. Going forward, there will continue to be pressure on the healthcare system of Northwest Indiana due to increased participation in Medicare and Medicaid, increased costs of providing healthcare services, increased scrutiny and disallowance of costs by insurance companies, and an increase in the amount of services rendered to people without insurance due to layoffs, being underemployed in a job without healthcare benefits, or other factors.

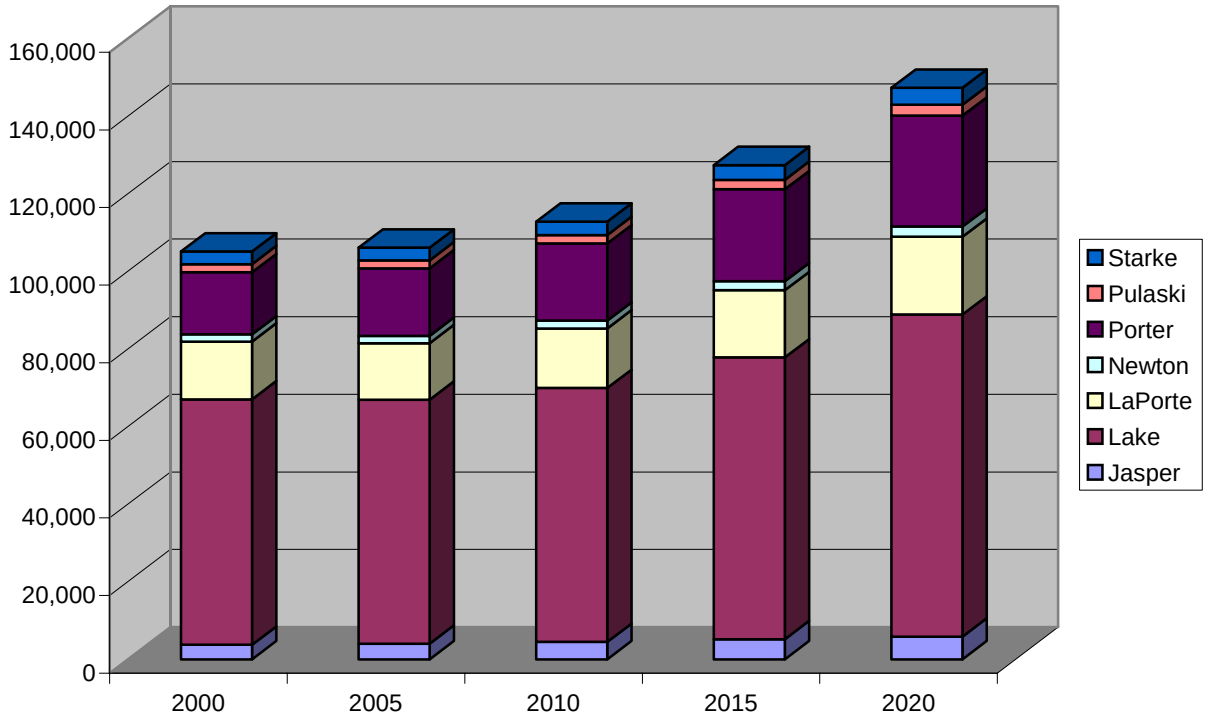
CHART A: Population Projections for Northwest Indiana, 2000 – 2020



Data source: Indiana Business Research Center
Provided by: Indiana Business Research Center, IU Kelley School of Business

Population estimates for Northwest Indiana indicate that the number of people who are 65 years of age or older will continue to grow, while the number of working adults between the ages of 20 to 64 will remain stagnant or even contract, putting even more pressure on the region's economy *and* healthcare providers' ability to provide services at a sustainable margin. According to the Indiana State Department of Health, a number of high risk factors continue to plague Indiana residents, especially those who are less likely to have insurance coverage. These include diabetes, cancer, asthma, smoking ailments, heavy alcohol consumption, heart disease, stroke and obesity.

CHART B: Projected Growth in Number of Seniors (65+) in Northwest Indiana, by County



Data source: Indiana Business Research Center

For those without adequate insurance coverage, these ailments are usually detected and treated by health care providers at later stages that require hospitalization. Any of these chronic conditions could be looked at as an opportunity to expand screening and treatment and/or develop specialties.

One example of innovation is the LaPorte Hospital, which is now in the construction phase of a new cardiovascular unit. Previously, patients had to be transported to South Bend, Chicago, or hospitals in Michigan for cardiovascular surgery. This initiative requires hiring heart surgeons, at least 13 RNs with Advanced Cardiac Life Support Certifications (ACLS), Registered Nurse Team Leaders for all shifts, 2 certified cardiac surgery technologists, a Cardiac Clinical Nurse Specialist/Case Manager, an Assistant Vice President of Cardiovascular Services and other critical support staff. LaPorte Hospital was also recognized in 2002 Newsweek magazine as being one of the top 50 hospitals in the country for geriatrics.

Physicians who are in various specialties in Northwest Indiana are classified by county in TABLE J. TABLE K identifies those physicians who reported that a significant amount of their patients were 65 years of age or older. In fact, every county in Northwest Indiana had a higher percentage of physicians serving the elderly than the state average, especially in more rural areas. The number of physicians with a specialty in geriatrics seems to be extremely low, given the fact that there was only one in all seven counties of Northwest Indiana out of a statewide total of 38. Attracting specialties to the region, especially in rural areas, would help hospitals and other healthcare facilities to increase their capacity and revenues.

TABLE J: Physicians by Aggregated Specialty Group and County of Principal Practice Location

Aggregated Specialty Group, 2001/(1997)

	Primary Care	Emerg. Medicine	Geriatrics	Internal Med. Sub.	Internal Med./ Peds	Ob/Gyn	Path-ology (Gen. & Sub.)	Peds. Sub.	Psych-iatry	Radiology (Gen. & Sub.)	Surgery (Gen. & Sub.)	Other	Un-known	Total Physicians	%
Indiana	3,394/ (2,603)	529/(423)	38/NA	1,048/ (843)	70/(31)	510/ (436)	232/ (222)	181/ (114)	468/ (398)	493/(364)	1,075/ (796)	1,858/ (1,680)	88/(155)	9,984/ (8,065)	100.0%
Jasper	17/(11)			1					(1)	1/(1)	(1)	(1)		19/(15)	0.4%
Lake	305/(240)	51/(39)	1	111/(93)	1/(3)	58/(46)	24/(25)	13	38/(33)	47/(43)	108/(87)	166/(148)	10/(16)	933/(782)	9.3%
LaPorte	60/(43)	11/(8)		20/(14)	(1)	10/(7)	8/(7)		10/(9)	9/(12)	16/(14)	31/(20)	3/(1)	178/(136)	1.8%
Newton	1/(2)								(1)	(1)		(2)	(1)	1/(7)	0.0%
Porter	72/(45)	14/(12)		16/(16)	2	11/(6)	3/(3)	3/(2)	9/(8)	12/(11)	22/(14)	37/(29)	3/(4)	204/(150)	2.0%
Pulaski	6/(4)					1/(1)					(1)			7/(6)	0.1%
Starke	9/(5)	1/(1)				1					(1)	2/(1)		13/(8)	0.1%

TABLE K: Physicians Reporting the Elderly (≥ 65) as a Significant Part of their Practice, by Aggregated Specialty Group and County of Principal Practice Location

Aggregated Specialty Group, 2001/(1997)

	Primary Care	Emerg. Medicine	Geriatrics	Internal Med. Sub.	Internal Med./ Peds	Ob/Gyn	Path-ology (Gen. & Sub.)	Peds. Sub.	Psych-iatry	Radiology (Gen. & Sub.)	Surgery (Gen. & Sub.)	Other	Un-known	Total Reporting Elderly as a Sig. Part of Practice	Total Physicians	% Reporting Elderly as a Significant Part of Practice
Indiana	2,351	479	37	914	57	119	108	3	188	322	771	1,349	51	6,749	9,323	72.4%
Jasper	17			1										18	19	94.7%
Lake	203	49	1	97	1	17	14		14	23	84	118	4	625	845	74.0%
LaPorte	44	10		18		2	3		4	5	14	24	1	125	166	75.3%
Newton	1													1	1	100.0%
Porter	51	12		16	1	2			5	9	17	29	2	144	198	72.7%
Pulaski	6													6	6	100.0%
Starke	8	1				1						2		12	13	92.3%

Medicaid and Medicare Reform Efforts

The national healthcare system is becoming heavily taxed by a number of issues that are beyond the control or scope of this report. According to some healthcare experts, approximately 10% of all patients account for about 70% of all healthcare expenditures.[1] These are usually patients with chronic conditions and severe medical problems. There is also a wide variation in the quality of care and implementation of best practices for disease management.[2] In addition to more effective screening, there is an ongoing need to track best practices in disease management, and to provide intensive case management with predictive modeling for high-risk patients most likely to need hospitalization. This effort is already being pushed by many health plans, in addition to various state Medicaid reforms and several Medicare demonstration projects for disease management already underway.[3]

Indiana Initiatives in Medicaid

The federal government recently approved Indiana's Medicaid plan to establish the Indiana Chronic Disease Management Program, which is designed to assist 63,000 Medicaid recipients who have diabetes, asthma or chronic heart failure, in addition to other Medicaid recipients with extensive health care needs. The program is a joint initiative of the state's Family and Social Services Administration, which manages Medicaid, and the Indiana State Department of Health. Program participants work with their physician and a nurse care manager to develop a care plan. Participants receive regular medical assessments, education about their diseases, dietary information to help manage chronic diseases and instructions on how to manage their own care. Another goal of the program is to cut healthcare costs by being more proactive and treating ailments before they become chronic disorders.[4]

According to State Health Commissioner Gregory Wilson, MD, "Chronic disease is the leading cause of death among Hoosiers. This new program is an important step in our fight to improve the health of Hoosiers. By focusing on obesity, diabetes, asthma and cardiovascular disease, we hope we can save lives and reduce long-term disabilities."[5]

[1] Berk, Mark L., and Alan C. Monheit, "The Concentration of Health Expenditures Revisited," *Health Affairs*, Vol. 20, No. 2, (March/April 2001).

[2] Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, National Academy Press, Washington, D.C. (2001).

[3] Capitated Disease Management Demonstration, www.cms.hhs.gov/healthplans/research/CDM.asp

[4] Indiana Chronic Disease Management Program, http://www.in.gov/isdh/whatsnew/news/06-05-2003.htm

[5] Ibid.

TABLE L: Medicare Enrollment by County as of July 1, 2002

HI = Hospital Insurance
SMI = Supplemental Medical Insurance
&/or = Unduplicated count of persons enrolled in either or both parts of the program
HI & SMI = Persons enrolled in both parts of the program

	AGED			DISABLED			TOTAL Aged & Disabled		
COUNTY	HI &/or SMI	HI	SMI	HI &/or SMI	HI	SMI	HI &/or SMI	HI	SMI
JASPER	3,853	3,853	3,750	560	560	497	4,413	4,413	4,247
LAKE	61,395	61,307	59,607	10,620	10,620	9,721	72,015	71,927	69,328
LA PORTE	14,232	14,224	13,856	2,141	2,141	1,914	16,373	16,365	15,770
NEWTON	1,632	1,630	1,602	232	232	217	1,864	1,862	1,819
PORTER	15,185	15,170	14,727	2,261	2,261	2,009	17,446	17,431	16,736
PULASKI	2,030	2,030	1,989	303	303	286	2,333	2,333	2,275
STARKE	2,896	2,896	2,824	745	745	677	3,641	3,641	3,501

Source: Center for Medicare and Medicaid Services, 2001

The Pipeline for Future Healthcare Employment

The Indiana Health Industry Forum (IHIF) released a report on the healthcare industry in Northwest Indiana on July 15, 2003, compiled by Thomas P. Miller and Associates with assistance from the Hudson Institute. The healthcare industry in Northwest Indiana Region 1 has been identified by the IHIF as accounting for 7% of employment and 9% of the total earnings in the region. They also project healthy employment growth in the region due to industry growth and replacements for retirees and career changers.

The IHIF forecast for employment growth from 2003-2008 shows the largest increases in such jobs as Medical Assistants (32.5%), Home Health Aides (35.8%), Respiratory Therapists (22.5%), and Medical Records Technicians (17.6%).

When based upon total openings projected from 2003-2008, the largest number of openings are for RNs (1,404), Nursing Aide and Orderlies (530), Medical Assistants (512) and LPNs (237). Hospitals will continue to be the largest source of these new jobs, representing 1,825 openings compared to 599 openings for Medical Doctors' Offices and 567 openings at Nursing Care Facilities.

Projections for filling these jobs depend upon the region being able to maintain its annual average of new licenses. The IHIF report cites the following:

TABLE M: Licenses Versus Openings for Critical Occupations

Occupation	Hudson Projected Openings 2003-2008	Hospital Projected New Openings 2003-2008	Average Annual New Licenses 1998-2002	Total New Licenses 1998-2002
RNs	1,404	273	313	1,564
LPNs	237	31	153	766
Respiratory Therapists	141	17	28	142
Physical Therapists	130	NA	26	129
Occupational Therapists	41	NA	13	66

Source: Indiana Health Professions Bureau; JOWE (c) Database, Hudson Institute; and Thomas P. Miller and Associates

The IHIF report concedes that the region can meet its demand for workers in all five of these occupational areas *if* workers receive new licenses at the same annual rate as the previous five years (1998-2002). However, the number of licenses issued to registered nurses has fallen each year from 1998-2001 for Region 1, and has declined statewide by 20% from 1998-2002.

Healthcare employers in Northwest Indiana report that there is a nursing shortage already, and healthcare training providers report that their programs are already at capacity. They are not planning to increase their ability to take in more students due to funding restrictions and budget cuts. An additional bottleneck is their difficulty in placing students in practicums at area facilities, which is a requirement for licensure.

The healthcare industry will need to find creative ways to maintain sufficient employment levels and increase productivity to keep up with the projected growth in demand for services, which increasingly require higher-order skills and levels of proficiency. There is a tremendous need to work with educators at the middle- and high-school level to increase awareness of careers in healthcare to students and prepare them for these occupations. Another area that needs to be addressed is the limited capacity of current healthcare educators at the post-secondary level to accommodate increased enrollment in healthcare occupational training and degree programs.

Learners Report

The Center of Workforce Innovations recently updated its Learners Report for Northwest Indiana for 2003, which identifies educators, programs of study and number of graduates by degree. For healthcare industry majors, the total number of enrollments and degrees awarded were the following for the 2001-2002 academic year.

Direct Healthcare Industry Enrollments and Degrees:

Degree	Enrollments	Graduates	Largest concentration (Count of enrolled)
Masters	293	40	Nursing (RN training – 122)
Bachelors	956	128	Nursing (RN training – 517)
Associates	1,050	233	Nursing (RN training – 579)
Certificate	256	68	Practical Nurse (LPN training – 161)

Indirect Healthcare Industry Enrollments and Degrees:

Degree	Enrollments	Graduates	Largest concentration (Count of enrolled)
Masters	147	3	Biology, General (112)
Bachelors	572	86	Biology, General (425)
Associates	9	6	Biology, General (6)
Certificate	0	0	N/A

Vocational Enrollments at High Schools and Career Centers:

Degree	Enrollments	Graduates	Largest concentration (Count of enrolled)
Certificate	99	37	Health professions and Related Sciences (69)

One of the goals of this report is to increase the number of students considering a career in healthcare, and to connect them with employers before graduation through practicums, internships, mentoring and other service learning opportunities. A number of employers have expressed interest in providing continuing education and tuition reimbursement to students who may be hired as a health tech or CNA, and have a desire to pursue additional training to become a LPN, RN, or certified technologist in radiology, surgery and other areas. This could be a useful tool for employee retention, improving teamwork skills and capacity, in addition to a better-skilled workforce.

Several studies have already conclusively shown that when nursing staff levels, training and capabilities are adequate, the result is higher quality care, fewer complications, fewer adverse events, shorter lengths of stay and lower mortality rates.[6, 7] One of the key recommendations from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is to "bolster nursing education to ensure that new graduates are better prepared to care for fragile patients. This means re-invigoration of nursing schools by funding new faculty positions and incenting nurses to seek advanced degrees. It also means the creation of standardized post-graduate nursing residency programs. Increased federal funding for nursing education is also needed to encourage greater interest in the profession."[8]

[6]Aiken, L.H., "Superior outcomes for magnet hospitals: The evidence base," in M.L. Mcclure and A.S. Hinshaw (Eds.), *Magnet hospitals revisited: Attraction and retention of professional nurses* (pp. 61-81). Washington DC, American Nurses Publishing, January 2002.

[7] *Healthcare at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis,* Joint Commission on Accreditation of Healthcare Organizations, 2002.

[8] Ibid.

Wellness Council

The Wellness Council of Indiana is a not-for-profit corporation dedicated to building "Well Workplaces" or organizations committed to the health and well being of their employees. The Wellness Council is part of a supportive network affiliated with the Wellness Councils of America (WELCOA), based in Omaha, NE and has over 60 member companies and community groups in the State of Indiana, with a majority of them in Northwest Indiana. The City of Hobart

was the first community in Indiana to receive a "Well City" designation from Well City USA in 2000. The primary requirement is that at least 20% of a community's working population must be employed by a Well Workplace-designated company as defined by the organization. Its mission is to engage entire business communities in building healthy workforces. This program can certainly help employers and their employees to contain healthcare costs by encouraging healthier lifestyles through exercise, regular checkups and health screenings.

Recommendations and Next Steps

The specific recommendations made by the Community Workforce Compact, a team representing The Center of Workforce Innovations and the Lake County Integrated Services Delivery Board, are the following:

- Explore the creation of a Regional Healthcare Alliance
- Explore collaboration opportunities among healthcare sectors
- Investigate spin-off opportunities
- Study collaboration opportunities among post-secondary research and development divisions
- Examine regional efficiencies and best practices
- Survey healthcare graduates regarding location selection
- Improve marketing of healthcare careers to high school students
- Explore State’s healthcare incentive programs and tuition reimbursement programs
- Explore CEO Healthcare/Life Science roundtable committee
- Examine gaps and blending in the healthcare and mental services
- Review former study and recommendations of the Regional Healthcare Planning Report

The full report is included in Appendix C.

Conclusion

It is our hope that in Northwest Indiana, healthcare industry leaders can collaborate with employers, educators, local government and community-based organizations to promote community wellness programs and to develop a strategy for identifying opportunities to make healthcare delivery more affordable, more cost efficient, and increase the quality of care.

Competition among healthcare providers will continue to increase, but there are numerous opportunities to work together: to identify and meet service gaps, expand their ability to deliver specialty care that is currently going out of the region or out of state, leverage partnerships for advocacy issues, procurement, promote best practices and other efficiencies, support local companies that provide affiliated services and supplies, support economic development efforts to attract employers to the region, and connect with the education community to expand programs that will better prepare existing workers' skills and those entering the workforce. Through collaboration, Northwest Indiana's healthcare industry will be prepared to meet the challenges of providing residents with healthier communities—in addition to a healthier bottom line.