CSSI Health Care Industry
Career Progression Analysis

The Workforce Boards of Metropolitan Chicago

FINAL DRAFT: MAY 17, 2004

Submitted by Corporation for a Skilled Workforce (CSW), Ann Arbor, Michigan
Purpose of This Report

The Workforce Boards of Metropolitan Chicago contracted with Corporation for a Skilled Workforce (CSW) to analyze career progression opportunities in metro Chicago and to identify actions that the Workforce Boards can take to address skill shortage occupations in three targeted industries: health care, manufacturing, and transportation/warehousing/logistics (TWL).

The purpose of this report is to provide the Workforce Boards of Metropolitan Chicago with a framework to consider strategies that will support career progression in critical health care occupations identified for the metropolitan Chicago region. As part of the critical skills shortage initiative (CSSI), it is the first of three reports focusing on career progression. Subsequent reports will target the manufacturing industry and the TWL industry. Within the CSSI context, the career progression information and strategies outlined in this and subsequent reports should be viewed as components of a more comprehensive Regional Solutions report currently under development.

More importantly, given the size, complexity and dynamism of metro Chicago’s labor market, the information and strategies outlined herein should serve as starting points for ongoing analysis, discussion and decision-making. This report is a snapshot in time; the health care industry, like other industries, is constantly shifting. The social, political and financial factors that impact health care providers; the balance of workforce supply and demand; and the types of jobs, skills and training needed by health care employers will certainly change over time. What is deemed “critical” in just a few years may be very different from what is considered critical in 2004.

Methodology

Research & Analysis

The health care industry is one of the most commonly cited critical industries in workforce areas around the country. As such, it is an industry that has been highly studied and scrutinized, both nationally and in the Metropolitan Chicago area. There are an enormous number of models, approaches and strategies for career progression that exist. CSW had a two-week time frame in which to conduct general research into the career progression landscape for health care and develop an analytical framework that would be useful to the Workforce Boards of Metropolitan Chicago.

CSW’s research methodology consisted of the following activities during the two week time frame:

Week One

- Project team members (which included staff from CSW and from sub-contractor CAEL) collected print and web-based reports, studies and other documentation about career progression and employee recruitment, retention and development efforts around the country and in the Metropolitan Chicago region, as outlined in the contracted work plan.
Team members also conducted a limited number of phone interviews with subject matter experts (SMEs) at area health care providers to obtain first-hand information about career progression practices and issues related to employee recruitment, retention and development. Interviews were conducted with SMEs from Northwestern Memorial Hospital.

Toward the end of week one, CSW was notified of the Workforce Boards’ decisions regarding the three tiers of critical health care occupations.

Team members met for a day-long working session to examine the research findings and identify promising models or practices that might have applicability for the Chicago region within the context of the CSSI. Team members then began developing an analytical framework for the Workforce Boards’ critical health care occupations.

**Week Two**

Project team members continued developing and refining the analytical tools used to depict career progression opportunities in health care, including:

- An occupational matrix showing the targeted critical occupations within the context of all SOC health care industry occupations, average salary ranges, minimum education or work experience requirements, and employment figures for the metro Chicago region.

- A related matrix showing the critical occupations within the context of the six health care job families identified by MCHC in “Results of Employer Survey Conducted for the Workforce Boards of Metropolitan Chicago.” This matrix also shows average wages and education requirements according to the U.S. Bureau of Labor Statistics O*NET classification.

- Career progression ladders showing the targeted critical occupations within the six health care job families identified by MCHC.

Project team members completed the analytical framework and wrote a working draft of the report. Throughout the week, team members were in continual communication with each other, and obtained guidance on the development of the report from both the client and members of the Hudson Institute team.

**Briefings, Presentations and Final Report Preparation**

On May 18, CSW attended a meeting of the Health Care sector council to obtain feedback on the information and suggested strategies contained in the working draft. CSW also received feedback from the directors of the Workforce Boards between May 10 and 18. The report was revised and a final draft submitted to the client for integration into the Hudson Institute’s Regional Solutions report on May ___, 2004.
Health Care Career Progression Options for the Metropolitan Chicago Region

Framework

The health care industry is one of the most commonly cited critical industries in workforce areas around the country. As such, it is an industry that has been highly studied and scrutinized. There are an enormous number of models, approaches and strategies for career progression that exist.

CSW recommends that CSSI career progression strategies be considered and developed in tandem with the work of the Chicago-based, Illinois Career Pathways Initiative (ICPI). The Illinois Career Pathways Initiative is a state-wide coalition of organizations and practitioners who are committed to strengthening career pathways to help address the state’s workforce issues. The ICPI describes a career pathway as “a set of connected courses and programs, with extensive supports for students and information to track their progress, that enables students to advance over time to better jobs and higher levels of education and training.”

The ICPI further emphasizes that a framework for career pathways must include both regional and local economies. CSW strongly agrees – employers, workers and students make business, job and career-related decisions that transcend traditional boundaries of jurisdiction. The fluidity of commerce across geographic regions means that workforce development responses must be able to be effective under fast-paced, ever-shifting circumstances. Likewise, workforce development responses in large, complex labor markets such as metro Chicago must not be too rigidly defined; they rather need to be flexible and adaptive while simultaneously fostering continuous quality improvement.

The ICPI has outlined what it views as the components of a career pathway. These components include:

- A “road map” describing jobs in industries of importance to the regional economy, illustrating the connections between education and training programs at a range of levels, and detailing the requirements to enter programs at each level.
- A modular curriculum approach that breaks certificate and degree programs into smaller sets of courses to allow students to work while pursuing their education, and to enter and exit education as their circumstances permit.
- Basic skills training that combines needed basic skills, such as literacy, math, and English as a Second Language, with career-specific skills training (i.e., bridge programs).
- Assistance with securing internships, cooperative work experiences, and employment opportunities through close relationships with employers in a given sector.
- Access to supportive services, such as tutoring, child care, financial aid, and job placement.
During our research for the CSSI, CSW found many of these components to be present in information about various models and programs across the country. However, CSW’s scope of work for the CSSI career progression focused mainly on the first component – the “road maps.” As shown in Figure 1, developing road maps for career progression is where workforce boards can yield the most leverage and be most effective in a regional career progression strategy. By doing so, such maps can guide the programmatic implementation of the other career pathways components that occur, appropriately, at the partner or practitioner level, e.g., curriculum development, training, employment and work experiences, and supportive services.

The Workforce Boards of Metropolitan Chicago are already playing this role well. They have conducted regional labor market research (via the State of the Workforce Reports) which resulted in the identification of the three key industries. And, through the CSSI, they have set in motion several activities that will result in improved information about the occupational and skill trends facing metro Chicago employers in the key industries, including identifying the critical occupations for in those key industries. The career progression reports will enable the Workforce Boards to translate that industry research into useful guidelines for policy and practice across the metro region.

As such, CSW’s analysis resulted in the creation of several tools for the critical health care occupations identified by the Workforce Boards that can contribute to an overall road map for career progression in the region. These include:

- CSSI Health Care Framework (Figure 1)
- Job Family Progression Maps showing career progression options for the targeted occupations within five job family clusters derived from the three occupational tiers.
- Health Care Occupational Matrices (Tables 2 and 3) that place the targeted occupations within the context of the entire spectrum of health care industry occupations in metro Chicago.
- Table of Roles and Promising Practices of Regional Partners (Table 5)

CSW utilized these tools as well as information obtained through our research to develop the recommended strategies that are outlined on pages 28-30.
THE PROBLEM: A LOOMING CRISIS IN CARE

- Two shortages: immediate and more serious long-term problems
- Shortages include both caregivers and support personnel
- Contributing causes:
  - Workforce is aging
  - Fewer potential workers following retiring Baby Boom generation
  - Fewer choosing health careers
  - Employee dissatisfaction is high
- The bottom line: not enough current or new workers to meet rapidly rising demand for health care services

CHARGE OF THE WORKFORCE BOARDS OF METROPOLITAN CHICAGO

- Increase recognition that people are a key, strategic resource for metro Chicago health care employers.
- Expand interest in health care careers and educational programs.
- Encourage health care providers to be “employers of choice.”
- Assist regional partners with better serving health care employers and job seekers.

CAREER PROGRESSION ROAD MAPS

- Driven by current and forecasted needs of industries
- Flexible and adaptive to future shifts in industry needs
- Foster increased cooperation and improved quality

REGIONAL PARTNERS

- Health care employers and associations
- K-12 schools
- 2- and 4-yr. colleges and universities
- Community based organizations
- One-Stop Career Centers
- Labor unions
- Foundations
- Local elected officials

Curriculum Development | Training | Employment Assistance | Supportive Services

CSSI: Health Care Career Progression Final Report May 17, 2004
Health Care Occupational Matrix

As of the writing of this report, the Workforce Boards of Metropolitan Chicago had identified 34 critical health care occupations and had organized these occupations into three tiers indicating level of criticalness, i.e. First Tier = highly critical, Second Tier = moderately critical; Third Tier = less critical, as follows:

Table 1: Metro Chicago CSSI Critical Occupations

<table>
<thead>
<tr>
<th>FIRST TIER (7)</th>
<th>SECOND TIER (8)</th>
<th>THIRD TIER (19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Technologist</td>
<td>Billing/Insurance Clerk</td>
<td>Activity Aide/Assistant</td>
</tr>
<tr>
<td>Nuclear Medicine Technologist</td>
<td>CAN/PCT/LPN II</td>
<td>Audiologist</td>
</tr>
<tr>
<td>Occupational Therapist (AOTA)</td>
<td>Licensed Practical and Vocational Nurse</td>
<td>Computer Tomography (CT) Technician</td>
</tr>
<tr>
<td>Pharmacist (Staff/R.Ph.)</td>
<td>Medical Laboratory Technician</td>
<td>Diagnostic Medical Sonographer</td>
</tr>
<tr>
<td>Physical Therapist (ARPT)</td>
<td>Medical Records and Health Information Technician (Coder)</td>
<td>Emergency Room Technician</td>
</tr>
<tr>
<td>Radiologic Technologist (ARRT)</td>
<td>Physical Therapy Assistant (2 yr./PTA)</td>
<td>Food Service Worker/Dietary Assistant</td>
</tr>
<tr>
<td>Registered Nurse (RN)</td>
<td>Respiratory Therapist (RRT)</td>
<td>Home Health Aide</td>
</tr>
<tr>
<td></td>
<td>Social Worker</td>
<td>Medical Assistant</td>
</tr>
<tr>
<td></td>
<td>Surgical/O.R. Technician (Certified)</td>
<td>Medical Secretary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Technologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Transcriptionist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental Health Counselor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MRI Technician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupational Therapist Assistant (COTA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pharmacy Technician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical Therapy Aides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physician Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech Therapist/Pathologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substance Abuse Counselor</td>
</tr>
</tbody>
</table>

CSW examined how the critical occupations in all three tiers are positioned with regard to average annual salary and minimum education or work experience requirements within the broader metro Chicago health care industry occupations as defined by the Standard Occupational Classifications (SOC). This is shown in Table 2 on page 11.

The three occupational categories in Table 2 – Practitioners; Support; and Management, Administrative and Facilities – were created by grouping occupations from Table 1 under specific standard occupational classifications (SOC). “Health care practitioner” occupations represent all occupations under SOC code 29-0000; “health care support” occupations represent all occupations under SOC codes 19-1000, 21-1000, 25-1000, 31-0000 as well as selected technicians and technologists related to life sciences. The third cluster of occupations represents all other SOC categories not represented in the previous two clusters, such as management, administrative, and facilities occupations. The occupations in each category were weighted by employment (the number listed in parenthesis) and wages to get the top occupations for each category. The weighted occupations were then sorted by wage ranges and by employment to arrive at the placement in the matrix.²

The data in Table 2 make it clear that the vast majority of the CSSI critical occupations are in the $25,000 - $40,000 average annual wage category. In fact, 12 of the 17
occupations in the First and Second Tiers are in this range, with minimum requirements ranging from short-term on-the-job training (Billing Clerk) to a Master’s degree (Social Worker). Seven of the Third Tier occupations are found here as well. Tellingly, only one of the targeted CSSI occupations from either Tier 1 or 2 is found in the $25,000 and less annual average salary range – Medical Records and Health Information Technician – while five Third Tier occupations appear here. The next biggest cluster of CSSI occupations is in the $40,000 - $55,000 annual salary range, with three from First Tier and four from Third Tier.

This analysis can have implications for career progression strategies in metro Chicago. A common focus of career pathways policies and programs is on increasing access to entry-level and advancement opportunities for low-income, low-skilled, often disadvantaged job seekers. Yet, only one occupation that the Workforce Boards have decided to make a priority - Medical Records and Health Information Technician – is in the lowest salary range. As was suggested in the Hudson Institute’s initial CSSI report, greater focus on the Third Tier occupations in this salary range may need to be reconsidered in order to ensure that there are adequate opportunities for the lowest paid and lowest skilled members of the labor force to enter the health care field. The Third Tier occupations in the $25,000 or less range are, by-and-large, occupations that require only short- or medium-term on-the-job training and are well suited to job seekers who need immediate employment. The bulk of the Tier 1 and 2 occupations, however, require at least a postsecondary vocational award or Associate’s degree. Therefore, if the Third Tier occupations are not given adequate attention, very low-skilled individuals who are in need of immediate employment may not be able to find entry-level opportunities in the health care industry. In light of this, CSW recommends that the Third Tier occupations should be viewed as potential entry-level or “bridging” jobs to First and Second Tier occupations. Suggested pathways for the CSSI critical occupations are illustrated in the Job Family Progression Maps on pages 15-19.

Table 3, on page 13, shows average hourly wage and minimum education or work requirements for the CSSI critical occupations distributed according to the health care job families outlined by MCHC in its Employer Survey Results report to the Workforce Boards. Here, the relationship between educational attainment and wages in each of the job families is more apparent. However, it is important to note that this is not a hard and fast rule. For example, three imaging positions represented – Diagnostic Medical Sonographer, Nuclear Medicine Technologist, and Radiologic Technologist/Technician – all require Associate’s degrees. Yet, the differences in average hourly wages for the three occupations are substantial: Nuclear Medicine Technologists earn an average of $3 more per hour than Diagnostic Medical Sonographers who, in turn, earn an average of nearly $8 more per hour than Radiologic Technologists (in contrast, Table 2 indicates that Diagnostic Medical Sonographers earn higher wages than Nuclear Medicine Technologists, yet both still show higher wages than Radiologic Technologists)\(^3\). Similarly, the differences in Other Professional/ Clinical occupations requiring a Master’s degree range from an average hourly wage of $27.82 for Physical Therapists to $13.65 for Substance Abuse Counselors.
The overriding lesson is that wage advancement does not always correlate to the obtainment of higher skill levels or educational credentials, even in occupations that have been identified by industry as critical.
## Table 2: All Metro Chicago Health Care Occupations by SOC

### Practitioner Occupations

**Average Salary Range: $70,000 or Higher Annually**
- Family and General Practitioners (2,083)
- General Internists* (1,911)
- Pharmacists (1,593)
- Psychiatrists (1,055)
- Surgeons* (975)
- Optometrists (811)
- General Pediatricians (354)
- Anesthesiologists (277)
- Obstetricians and Gynecologists* (180)

**Average Salary Range: $55,000 to $70,000 Annually**
- Dental Hygienists (4,802)
- Physical Therapists (2,849)
- Diagnostic Medical Sonographers (713)

**Average Salary Range: $40,000 to $55,000 Annually**
- Registered Nurses (58,519)
- Medical & Clinical Laboratory Technologists (3,538)
- Dentists (2,443)
- Occupational Therapists (1,987)
- Speech-Language Pathologists (1,206)
- Nuclear Medicine Technologists (430)
- Physician Assistants (329)
- Audiologists (268)
- Radiation Therapists (227)

### Support Occupations

**Management, Administrative and Facilities Occupations**
- Chief Executives (839)
- Computer & Information Systems Managers (424)
- Marketing Managers (265)

**Support Occupations**

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ First professional degree</td>
<td>Postsecondary vocational award</td>
</tr>
<tr>
<td>□ Doctor's degree</td>
<td>Work experience in a related occupation</td>
</tr>
<tr>
<td>▲ Master's degree</td>
<td>Long-term on-the-job training</td>
</tr>
<tr>
<td>▼ Degree plus work experience</td>
<td>Moderate-term on-the-job training</td>
</tr>
<tr>
<td>◊ Bachelor's degree</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>♦ Associate's degree</td>
<td>Weighted employment (BLS, 2001)</td>
</tr>
</tbody>
</table>

* Occupation’s wages are state specific and are not specific to Chicago PMSA
## Average Salary Range: $25,000 to $40,000 Annually

<table>
<thead>
<tr>
<th>Licensed Practical and Licensed Vocational Nurses (12,495)</th>
<th>Medical Assistants (5,346) ●</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric Technicians (4,256)</td>
<td>Medical Secretaries (5,323) ●</td>
</tr>
<tr>
<td>Radiologic Technologists and Technicians (3,723)</td>
<td>Medical Transcriptionists (2,571) ●</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians (3,719)</td>
<td>Medical &amp; Public Health Social Workers (2,017)  ◆</td>
</tr>
<tr>
<td>Respiratory Therapists (2,280) ◆</td>
<td>Physical Therapist Assistants (1,663) ◆</td>
</tr>
<tr>
<td>Surgical Technologists (1,591) ◆</td>
<td>Social Workers (1,090) ▲</td>
</tr>
<tr>
<td>Cardiovascular Technologists and Technicians (1,389) ◆</td>
<td>Dental Laboratory Technicians (868) □</td>
</tr>
<tr>
<td>Emergency Medical Technicians and Paramedics (1,282) ●</td>
<td>Mental Health Counselors (557) ▲</td>
</tr>
<tr>
<td>Dietitians and Nutritionists (1,063) ◊</td>
<td>Child, Family, and School Social Workers (524) ◆</td>
</tr>
<tr>
<td>Recreational Therapists (970) ◊</td>
<td>Rehabilitation Counselors (485) ▲</td>
</tr>
<tr>
<td>Respiratory Therapy Technicians (806) ●</td>
<td>Massage Therapists (456) ●</td>
</tr>
<tr>
<td></td>
<td>Substance Abuse Counselors (386) ▲</td>
</tr>
<tr>
<td></td>
<td>Occupational Therapy Assistants (341) ◆</td>
</tr>
<tr>
<td></td>
<td>Health Educators (244) ▲</td>
</tr>
<tr>
<td></td>
<td>Secretaries, Except Legal, Medical, and Executive (4,328) ◆</td>
</tr>
<tr>
<td></td>
<td>Billing and Posting Clerks and Machine Operators (3,916) ◆</td>
</tr>
<tr>
<td></td>
<td>Bookkeeping, Accounting, &amp; Auditing Clerks (2,384) ◆</td>
</tr>
<tr>
<td></td>
<td>Customer Service Representatives (1,854) ◆</td>
</tr>
<tr>
<td></td>
<td>Bill and Account Collectors (1,799) ◊</td>
</tr>
<tr>
<td></td>
<td>Executive Secretaries &amp; Administrative Assistants (1,757) ◆</td>
</tr>
<tr>
<td></td>
<td>Maintenance and Repair Workers (1,552) ◆</td>
</tr>
<tr>
<td></td>
<td>Mangers of Housekeeping &amp; Janitorial Workers (1,062) ◊</td>
</tr>
<tr>
<td></td>
<td>Light or Delivery Service Truck Drivers (558) ◊</td>
</tr>
</tbody>
</table>

## Average Salary Range: $25,000 or Less Annually

<table>
<thead>
<tr>
<th>Medical Records and Health Information Technicians (3,499) ◆</th>
<th>Nursing Aides, Orderlies, and Attendants (27,563) ◆</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Technicians (1,577) ◆</td>
<td>Dental Assistants (7,286) ◆</td>
</tr>
<tr>
<td>Dietetic Technicians (663) ◆</td>
<td>Home Health Aides (5,218) ◆</td>
</tr>
<tr>
<td></td>
<td>Personal and Home Care Aides (1,260) ◆</td>
</tr>
<tr>
<td></td>
<td>Physical Therapist Aides (799) ◆</td>
</tr>
<tr>
<td></td>
<td>Medical Equipment Preparers (717) ◆</td>
</tr>
<tr>
<td></td>
<td>Psychiatric Aides (495) ◆</td>
</tr>
<tr>
<td></td>
<td>Pharmacy Aides (342) ◆</td>
</tr>
<tr>
<td></td>
<td>Occupational Therapist Aides (209) ◆</td>
</tr>
<tr>
<td></td>
<td>Receptionists &amp; Information Clerks (9,981) ◆</td>
</tr>
<tr>
<td></td>
<td>Maids and Housekeeping Cleaners (7,697) ◆</td>
</tr>
<tr>
<td></td>
<td>Office Clerks, General (6,064) ◆</td>
</tr>
<tr>
<td></td>
<td>Medical &amp; Health Service Manager (4,094) ▼</td>
</tr>
<tr>
<td></td>
<td>Food Preparation Workers (3,686) ◆</td>
</tr>
<tr>
<td></td>
<td>Cooks, Institution and Cafeteria (2,981) ◆</td>
</tr>
<tr>
<td></td>
<td>File Clerks (2,537) ◆</td>
</tr>
<tr>
<td></td>
<td>Janitors &amp; Cleaners (2,192) ◆</td>
</tr>
<tr>
<td></td>
<td>Laundry and Dry-Cleaning Workers (2,027) ◆</td>
</tr>
<tr>
<td></td>
<td>Security Guards (1,273) ◆</td>
</tr>
<tr>
<td></td>
<td>Food Servers, Nonrestaurant (1,162) ◆</td>
</tr>
</tbody>
</table>

| ■ First professional degree |
| □ Doctor's degree |
| ▲ Master's degree |
| ▼ Degree plus work experience |
| ◇ Bachelor's degree |
| ♦ Associate's degree |

- Postsecondary vocational award
- Work experience in a related occupation
- Long-term on-the-job training
- Moderate-term on-the-job training
- Short-term on-the-job training
- Weighted employment (BLS, 2001)

*Occupation’s wages are state specific and are not specific to Chicago PMSA
Table 3: CSSI Critical Health Care Occupations in Job Families

<table>
<thead>
<tr>
<th>Nursing</th>
<th>Educ./Work</th>
<th>Ave. Wage</th>
<th>Other Professional/Clinical/Technical</th>
<th>Educ./Work</th>
<th>Ave. Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses</td>
<td>♦</td>
<td>$27.17</td>
<td>Pharmacists</td>
<td>■</td>
<td>$40.18</td>
</tr>
<tr>
<td>Emergency Medical Technicians and Paramedics</td>
<td>●</td>
<td>$12.96</td>
<td>Substance Abuse and Behavioral Disorder Counselors*</td>
<td>▲</td>
<td>$13.65</td>
</tr>
<tr>
<td>Surgical Technologists</td>
<td>●</td>
<td>$17.39</td>
<td>Mental Health Counselors</td>
<td>▲</td>
<td>$16.51</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational</td>
<td>●</td>
<td>$18.69</td>
<td>Audiologists</td>
<td>▲</td>
<td>$26.09</td>
</tr>
<tr>
<td>Nurses</td>
<td>●</td>
<td>$18.69</td>
<td>Physical Therapists</td>
<td>▲</td>
<td>$27.82</td>
</tr>
<tr>
<td>Nursing Aides, Orderlies, and Attendants</td>
<td>◮</td>
<td>$11.51</td>
<td>Speech-Language Pathologists</td>
<td>▲</td>
<td>$26.12</td>
</tr>
<tr>
<td>Imaging</td>
<td></td>
<td></td>
<td>Occupational Therapists</td>
<td>◩</td>
<td>$25.05</td>
</tr>
<tr>
<td>Diagnostic Medical Sonographers*</td>
<td>♦</td>
<td>$26.99</td>
<td>Physician Assistants*</td>
<td>◦</td>
<td>$23.29</td>
</tr>
<tr>
<td>Nuclear Medicine Technologists</td>
<td>♦</td>
<td>$29.46</td>
<td>Respiratory Therapists</td>
<td>♦</td>
<td>$21.84</td>
</tr>
<tr>
<td>Radiologic Technologists and Technicians*</td>
<td>♦</td>
<td>$19.03</td>
<td>Cardiovascular Technologists</td>
<td>◦</td>
<td>$25.62</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td>Occupational Therapist Assistants</td>
<td>◦</td>
<td>$18.49</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technologists</td>
<td>◩</td>
<td>$22.25</td>
<td>Physical Therapist Assistants</td>
<td>◦</td>
<td>$19.04</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>♦</td>
<td>$17.71</td>
<td>Pharmacy Technicians</td>
<td>●</td>
<td>$13.07</td>
</tr>
<tr>
<td>Finance/Health Information/Administrative</td>
<td></td>
<td></td>
<td>Physical Therapist Aides</td>
<td>◻</td>
<td>$12.11</td>
</tr>
<tr>
<td>Medical Transcriptionists</td>
<td>●</td>
<td>$15.71</td>
<td>Healthcare Support Workers, All Other</td>
<td>◻</td>
<td>$9.43</td>
</tr>
<tr>
<td>Medical Secretaries</td>
<td>●</td>
<td>$14.66</td>
<td>Medical Assistants*</td>
<td>●</td>
<td>$13.76</td>
</tr>
<tr>
<td>Bill and Account Collectors</td>
<td>◻</td>
<td>$15.56</td>
<td>Home Health Aides*</td>
<td>◻</td>
<td>$8.43</td>
</tr>
<tr>
<td>Other/Entry Level</td>
<td></td>
<td></td>
<td>Food Preparation Workers</td>
<td>◻</td>
<td>$9.61</td>
</tr>
</tbody>
</table>

* Average wage data not available from the MCHC CSSI report; MSA wages substituted.

CSSI Tier 1 Occupations

CSSI Tier 2 Occupations

CSSI Tier 3 Occupations
CSSI Health Care Job Family Progression Maps

Job Family Progression Maps for the metro Chicago health care industry follow on pages 15-19. CSW used the MCHC job families in Table 2 as a starting point, and made some modifications, as depicted in Table 4, below.

TABLE 4: DIFFERENCES IN JOB FAMILY CLUSTERS

<table>
<thead>
<tr>
<th>MCHC Job Families</th>
<th>Modified Job Families for Progression Maps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>Nursing</td>
</tr>
<tr>
<td></td>
<td>(Generally similar, slight modification)</td>
</tr>
<tr>
<td>Imaging</td>
<td>Technologists &amp; Technicians</td>
</tr>
<tr>
<td></td>
<td>(Combines occupations from Imaging, Laboratory, and Other Professional/Clinical/Technical)</td>
</tr>
<tr>
<td>Laboratory</td>
<td>Health Information/Administrative</td>
</tr>
<tr>
<td></td>
<td>(Drops Financial occupations since they are not targeted in the three CSSI occupational tiers)</td>
</tr>
<tr>
<td>Financial/Health Information/Administrative</td>
<td>Professional and Clinical</td>
</tr>
<tr>
<td></td>
<td>(Technical occupations moved to Technologists &amp; Technicians)</td>
</tr>
<tr>
<td>Other Professional/Clinical/Technical</td>
<td>Therapy</td>
</tr>
<tr>
<td></td>
<td>(Includes therapy-related occupations from Other Professional/Clinical)</td>
</tr>
<tr>
<td>Other Entry Level</td>
<td>(Not it's own category; these and other CSSI Third Tier occupations appear as common entry-level points in all of the job families above)</td>
</tr>
</tbody>
</table>

Modifications to the job family clusters were made in an attempt to better capture common skill, task, and education/ training requirements among the various health care occupations. Each Job Family Progression Map shows a potential career advancement progression, from one or more possible Entry-Level jobs to Mid-Level and Upper Level positions. All CSSI Tier 1 and 2 occupations, and nearly all Tier 3 occupations, are included in the maps. Advancement centers around increased educational attainment which leads to jobs with higher wages. While this is generally true, educational attainment does not always lead to a job with wages equivalent to other occupations requiring equivalent levels of education or training.

Each of the Job Family Progression Maps also includes side-bar, summary information about common Critical Task Areas, Skill Sets and Skill Deficiencies (if available) for the occupations with the job family. This information was drawn from the Hudson Institute's JOWE database analysis of the top skill and knowledge areas for each critical occupation, and from MCHC’s report on the results of the health care Employer Survey.
**Critical Tasks**

**Pharmacists**
- Using and updating job-relevant knowledge
- Evaluating information against the standard
  
  *Current Skills Deficiency*: Experience, employability skills, bilingual

**Medical Laboratory Technologist**
- Monitor process, material, and surroundings
- Evaluating information against the standard
  
  *Current Skills Deficiency*: Experience, employability skills

**Medical Transcriptionist**
- Recording information
- Processing information
  
  *Current Skills Deficiency*: Experience, bilingual

**Medical Secretaries**
- Documenting information
- Interacting with computers
  
  *Current Skills Deficiency*: Experience, employability skills

**Medical Records Coder**
- Processing information
- Documenting and Recording Information
- Interacting with Computers

**Billing/Insurance Clerk**
- Gathering information
- Working with public
  
  *Current Skills Deficiency*: Experience

**Medical Assistants**
- Evaluation information against standards
- Assisting and caring for others
- Processing information

**Pharmacy Technicians**
- Communicating with others
- Handling and moving equipment
  
  *Current Skills Deficiency*: Experience, employability skills, bilingual

**Home Health Aides**
- Evaluation information against standards
- Assisting and caring for others
- Processing information

---

**Health Information/Administrative Job Family Map**

**Upper Level**

**Education and Training**: Md/Phd, to Bachelor’s degree plus work experience

- Pharmacists
  - $40.18/hr

- Medical Laboratory Technologists
  - $22.25/hr

**Mid Level**

**Education and Training**: Associate’s Degree or postsecondary vocational award

- Medical Transcriptionists
  - $15.71

- Medical Secretaries
  - $14.66/hr

- Medical Records & Health Information Technician (Coder)
  - $11.49*

**Entry Level**

**Education and Training**: Short-term to Moderate-term on-the-job training

- Bill/Insurance Clerk
  - $15.56/hr

- Medical Assistants
  - $13.76/hr

- Pharmacy Technicians
  - $13.07/hr

- Home Health Aides
  - $8.43/hr

---

*No wage data available from MCHC on Medical Coder, IDES MSA wages used as replacement.*

---

**Metropolitan Chicago Region – Health Information/Administrative Job Family**

---

CSSI: Health Care Career Progression Final Report: May 17, 2004
Critical Tasks

Medical Technicians
- Identifying object and events
- Monitoring processes
  *Current Skills Deficiency: Experience, bilingual

Registered Nurse
- Monitoring processes
- Documenting and recording information
  *Current Skills Deficiency: Experience, bilingual

Licensed Practical Nurse
- Assisting and caring for others
- Performing general physical activities
  *Current Skills Deficiency: Experience, bilingual

Surgical Technician
- Assisting and caring for others
- Getting information needed to perform the job
  *Current Skills Deficiency: Experience, bilingual, employability skills

Medical Assistants
- Evaluation information against standards
- Assisting and caring for others
- Processing information

Nursing Aides
- Performing general physical activities
- Assisting and caring for others
  *Current Skills Deficiency: Experience, bilingual

Home Health Aides
- Evaluation information against standards
- Assisting and caring for others
- Processing information

Common Skill Sets
- Medicine
- Customer and Personal Service
- Biology
- English Language
- Mathematics

Nursing
Job Family Map

### Upper Level

**Education and Training:** Bachelor's Degree plus work experience

- **Medical Technologist**
  - $16.51/hr
- **Registered Nurse***
  - $27.17/hr

### Mid Level

**Education and Training** Associate's Degree or postsecondary vocational award

- **Licensed Practical Nurse**
  - $18.69/hr
- **Surgical Technicians**
  - $17.39/hr

### Entry Level

**Education and Training** Short-term to Moderate-term on-the-job training

- **Medical Assistants**
  - $13.76/hr
- **Nursing Aides**
  - $11.51/hr
- **Home Health Aides**
  - $8.43/hr

*Referring to RN with a BA or above

Education and Training Requirements from Bureau of Labor Statistics, Average Hourly Wage from MCHC Employer Survey

Metropolitan Chicago Region – Nursing Job Family Map
Upper Level

**Education and Training:** Master’s Degree, to Bachelor’s degree plus work experience

- **Substance Abuse Counselor**
  - Current Skills Deficiency: Bilingual
  - Average Hourly Wage: $13.65/ hr

- **Mental Health Counselor**
  - Average Hourly Wage: $16.51/ hr

- **Social Worker**
  - Average Hourly Wage: $23.63/ hr

Mid Level

**Education and Training**: Postsecondary vocational award

- **Medical Secretaries**
  - Average Hourly Wage: $14.66/hr

Entry Level

**Education and Training**: Short-term to Moderate-term on-the-job training

- **Activity Aides/Assistants**
  - Average Hourly Wage: $9.43/hr

- **Home Health Aides**
  - Average Hourly Wage: $8.43/hr

- **Medical Assistants**
  - Average Hourly Wage: $13.76/hr

- **Food Service Workers**
  - Average Hourly Wage: $9.61/hr

Education and Training Requirements from Bureau of Labor Statistics, Average Hourly Wage from MCHC Employer Survey
Critical Tasks

Medical & Clinical Technologist
✓ Identifying object and events
✓ Monitoring processes
✓ Skills Deficiency: experience, bilingual

Nuclear Medicine Technologist
✓ Getting information needed to do the job
✓ Processing information
✓ Skills Deficiency: bilingual

Diagnostic Medical Sonographer
✓ Monitoring processes
✓ Controlling machines & processes
✓ Evaluating information against the standard

Cardiovascular Technicians
✓ Monitoring processes
✓ Documenting information
✓ Skills Deficiency: experience

MRI Technicians
✓ Monitoring processes
✓ Controlling machines & processes
✓ Skills Deficiency: experience

CT Technician
✓ Monitoring processes
✓ Controlling machines & processes
✓ Skills Deficiency: experience, bilingual

Radiologic Technologist & Technicians
✓ Monitoring processes
✓ Controlling machines & processes
✓ Skills Deficiency: experience, bilingual

Medical & Clinical Technicians
✓ Controlling machines & processes
✓ Identifying objects and events
✓ Skills Deficiency: experience, bilingual, knowledge of equipment

EMT & Paramedics
✓ Assisting and caring for others
✓ Monitoring process
✓ Skills Deficiency: experience, knowledge of current practices

Medical Transcriptionist
✓ Processing information
✓ Documenting information
✓ Skills Deficiency: experience

Pharmacy Technicians
✓ Communicating with others
✓ Handling and moving equipment
✓ Skills Deficiency: experience, employability skills, bilingual

Common Skill Sets
✓ Science
✓ Information gathering
✓ Reading comprehension
✓ Problem identification
✓ Critical thinking

Technologists and Technicians
Job Family Map

Upper Level

Education and Training: Degree plus work experience

Medical and Clinical Technologist
$16.51/hr

Mid Level

Education and Training: Associate’s Degree or postsecondary vocational award

Nuclear Medicine Technologists
$29.46

Magnetic Resonance Imaging (MRI) Technician*
$28.10

Diagnostic Medical Sonographers
$26.99

Computer Tomography (CT) Technician*
$26.95

Cardiovascular Technologists and Technicians
$25.62

Medical and Clinical Laboratory Technicians
$19.03

MRI Technicians

CT Technician

Radiologic Technologists and Technicians
$17.71

Medical and Clinical Technologists
$16.51/hr

Emergency Medical Technicians and Paramedics
$12.96

Entry Level

Education and Training: Short-term to Moderate-term on-the-job training

Pharmacy Technicians
$13.07/hr

Education and Training Requirements from Bureau of Labor Statistics, Average Hourly Wage from MCHC Employer Survey

Metropolitan Chicago Region – Technologist and Technicians Job Family
**Upper Level**

*Education and Training:* Master’s Degree to Bachelor’s Degree plus work experience

- **Physical Therapist**
  - $27.82/hr

- **Speech Language Pathologist**
  - $26.12/hr

- **Audiologist**
  - $26.09/hr

- **Occupational Therapist**
  - $23.29/hr

**Mid Level**

*Education and Training*  
Associate’s Degree or postsecondary vocational award

- **Respiratory Therapists**
  - $21.84

- **Physical Therapy Assistants**
  - $19.04/hr

- **Occupational Therapy Assistants**
  - $18.49/hr

**Entry Level**

*Education and Training*  
Short-term to Moderate-term on-the-job training

- **Medical Assistants**
  - $13.76/hr

- **Physical Therapy Aides**
  - $12.11/hr

- **Home Health Aides**
  - $8.43/hr

---

Education and Training Requirements from Bureau of Labor Statistics, Average Hourly Wage from MCHC Employer Survey

---

*Metropolitan Chicago Region – Therapy Job Family*
It is important to emphasize here (and throughout this report) that these job families and career progression maps are intended as guidelines for ongoing, improved cooperation and coordination among the various regional partners in supporting labor market attachment and advancement for metro Chicago’s workforce. In reality, the career paths that people take are rarely so straight-forward and are not always easily rationalized. CSW encourages the Workforce Boards to foster the development of these broad job family clusters and Job Family Progression Maps (as well as previous analyses conducted by MCHC, Hudson Institute, and others), as a menu of possible, pathways clusters that can guide the development of more specific regional workforce development solutions at the partner and practitioner levels.

**Common Employment Settings**

“Within the health sector, 45% of all workers are employed in hospitals. Although hospital employment has been relatively stable in absolute numbers, the percent of the health care workforce employed in hospitals has dropped during the past two decades and risen in other settings like offices, clinics and home health agencies.”


Small businesses have always been the backbone of the American economy, both in terms of share of GDP and employment growth. The health care industry is no exception. Although large hospitals and health systems will continue to play a vital role in provision of care and in employment around the metro Chicago area, in fact, it is the small- and medium-sized employers that offer the greatest employment growth potential in health care. The range of possible employer settings for career progression in the health care industry are vast and varied, and include:

- Hospitals
- Personal care facilities
- Outpatient rehabilitation centers
- Offices and clinics of physicians
- Home health agencies
- Community clinics
- Secondary/ postsecondary educational settings
- Corporations - Medical Safety Departments
- Emergency medical services (e.g., Fire Departments, Police Departments)
- Health care trade organizations (e.g., Metropolitan Health Care Council)
- Public health departments
- Airports
- Various military units
- Poison control centers
- Biohazard organizations
- Sports organizations

![Health Sector Employment by Setting](Bureau of Labor Statistics, 2000)

- Hospitals: 45%
- Offices and clinics: 28%
- Nursing and personal care facilities: 16%
- Home health care services: 6%
- Medical and dental laboratories: 2%
- Other: 3%
Some General Considerations

Getting serious about career progression on a regional basis, in a complex and dynamic labor market such as metro Chicago, raises some general issues to consider. Chief among them are the need to: a) Sort out partner roles; b) Foster meaningful, high performance health care workplaces; and c) Support flexible, lateral movement between occupations. These are discussed below, followed by CSW’s key recommendations to the Workforce Boards for supporting career progression initiatives in the region.

A. Sorting Out Partner Roles

CSW’s primer, Starting and Managing Healthcare Workforce Initiatives, stresses the importance of clarifying the roles of workforce development partners, especially in a large region such as metro Chicago. Equally important is the notion of letting the goals and objectives of workforce projects drive the definition of partner roles by matching organizational core competencies to specific objectives or tasks. This requires ongoing communication, evaluation and adjustment. Table 5, on page 23, depicts several examples of the general roles and promising practices of regional workforce partners in support of career progression initiatives.

One of the main partnership roles in career progression initiatives is the role of education or training provider that delivers industry-driven programs and curriculum. In the Job Family Progression Maps, education and training are core elements that define progression options. As of the writing of this report, the CSSI Inventory of Producers, which will identify metro Chicago education and training providers and their capabilities, had not been completed. Additionally, due to the short time frame for researching and compiling this report, CSW’s work plan did not include an analysis of which metro Chicago schools, colleges, universities, community based organizations, private training vendors or other providers can fulfill specific education, training or skill-building roles within each Job Family Progression Map. Nonetheless, several of the following implications for the roles of metro Chicago regional partners can be culled from the Job Family Progression Maps.

- **Bilingual skills and work experience are common skills deficiencies for all levels of employment.** Metro Chicago health care employers have indicated these are issues for all employment levels, not just at the entry-level. This means that all regional partners need to strengthen their efforts in these areas. It is not, for example, a narrow issue confined only to the community-based organizations and One-Stop Career Centers serving inner city job seekers. High schools across the region may need to bolster foreign language requirements or school-to-work opportunities in allied health careers. Colleges may need to restructure student services to better support career exploration, work-based learning experiences and internships for students whose native language is not English. Health care industry employers may need to reassess the structure and culture of their workplaces to ensure that they offer attractive workplace settings and benefits for individuals with the desired work experience and bilingual skills.
- Reading, writing and math (the basics!), the sciences, and critical thinking and problem solving are common critical skill sets for all levels of employment. The increasing demand for higher-level skills even at lower-levels of employment implies the need for linked, progressive programs and curricula. For example, colleges could establish satellite “branch campuses” at a community based organization to teach basic skills and entry-level instruction, and to provide on-site assistance with enrollment in advanced training courses. One-Stop Centers could designate Employer Services staff to specialize in recruiting employees for mid-level health care occupations that are difficult to fill.

- All entry-level occupations require only short-term or moderate-term on-the-job training, and all mid-level occupations require at least a postsecondary vocational award or Associate's degree. Yet, upper level occupations require a wide range of postsecondary education and experience, from additional work experience (on top of a vocational award or Associate’s degree) to a Bachelor’s degree, Master’s degree or, in some cases, M.D. or Ph.D. This points, again, to the increased need for linked career progression programs and curricula through greater use of articulation agreements, memorandum of understanding, compacts and other formally developed working relationships among regional partners. This is often easier said than done. State higher education policies and federal regulations (such as WIA) often make funding career progression difficult; competition for limited dollars and segregated programs funded through multiple sources often prevent partners from committing to reinvention of their programs or delivery systems; and health care employers may not always recognize the potential return-on-investment (ROI) from supporting linked career progression efforts (or may see the ROI potential but be unable or unwilling to implement the necessary internal employee development policy changes).

PROMISING PRACTICE EXAMPLE: Lancaster, PA Media Campaign

By studying the recruitment strategies of Lancaster health care employers, the Lancaster Workforce Investment Board concluded that the numerous approaches used by employers overlapped and were often not effective. The WIB determined that the most effective recruitment strategy would need to be larger in scope than just their labor market. The Lancaster WIB collaborated with two other workforce investment boards to increase coverage and created a media campaign that had a larger geographic scope and a straightforward message. The WIB hired experienced commercial producers and produced 20 commercials aired on a television station that catered to young adults. The first year of the media campaign was funded by both a state grant and contributions from 40 health care employers. Interest in health care careers increased dramatically and the weekly healthcare career orientations at the Careerlink sites were filled to capacity.

-- Starting and Managing Healthcare Workforce Initiatives, November 2003

PROMISING PRACTICE EXAMPLE: North Lawndale Employment Network, Health Careers Awareness Campaign, Chicago

In 2000, the North Lawndale Employment Network (NLEN) wanted to find out why there were so few residents employed in the health care industry even though the North Lawndale neighborhood is located next to the Illinois Medical District. By conducting focus groups, community surveys, and interviews NLEN learned that many residents were unaware of the extensive range of jobs in the medical field, which included many for which employers were having difficulty hiring. NLEN began a campaign to raise the awareness of neighborhood residents with the intention of introducing them to entry-level healthcare jobs. NLEN convened a group of health care employers, service organizations, and training providers to develop strategies to address the challenges found through their previous research. The group defined 11 health care occupations on which to focus and developed easy-to-read brochures with information about salaries and certification requirements for each of the occupations. The brochures served as the centerpiece for a grass roots campaign during which NLEN staff canvassed the neighborhood passing out the information and talking with residents. Within the first year interest was so great that a Healthcareer Hotline had to be created to handle the volume of inquiries into health care jobs.

-- Starting and Managing Healthcare Workforce Initiatives, November 2003
Table 5: General Roles and Promising Practices of Regional Partners in Support of Career Progression Efforts

<table>
<thead>
<tr>
<th>PARTNERS</th>
<th>ROLES &amp; PROMISING PRACTICES</th>
</tr>
</thead>
</table>
| Workforce Investment Boards                   | • Strengthen and coordinate regional workforce planning efforts.  
• Sponsor or conduct labor market research, and disseminate information to stakeholders.  
• Identify and obtain funding to support regional efforts.  
• Advocate for state policies that support career progression, especially for low-income/unemployed individuals.  
• Provide incentives or “seed” money to initiate new service delivery mechanisms.  
• Convene intermediaries, employers, policy-makers, and educators to develop relationships and work toward mutual goals.  
• Online multi-WIB portal for regional career ladder information in critical industries and occupations.  
• Marketing/media campaign (print, TV, web, and hitting-the-streets) to encourage individuals to consider careers in critical occupations.  
• Ongoing outreach to employers to encourage use of incumbent worker training to move people along career ladders.  
• Match employer wages for entry-level employment for participants in high growth career initiatives, using WIA customized job training funds.  
• Build capacity of one-stop career centers to assess employer needs and better serve employers.  
• Develop sector-focused, regional skills alliances.  |
| Postsecondary Education Institutions          | • Strengthen supply of workers with specific in-demand skills.  
• Develop training programs (credit and non-credit) for specific industry/sector skill and training needs.  
• Advocate for state policies that support career ladder approaches, especially for low-income and disadvantaged individuals.  
• Create partnerships with employers, unions, human service agencies and community organizations to support individuals while they are enrolled in college.  
• Work directly with employers to ensure curriculum is aligned with skill and job needs; conduct skills and job analyses as basis for curriculum.  
• Use adjunct faculty from industry.  
• Create “bridge programs” that link non-credit courses, such as ESL and GED classes, to credit-bearing courses, programs and certificates.  
• Offer more evening and weekend scheduling, credit for prior knowledge and learning, and more intensive, short-term courses that lead to certificates.  
• Offer courses at work sites.  
• Utilize “retention specialists” or “educational coordinator” positions to help students develop and implement career plans; for low-income students, commit retention specialists for one year or until student/family is out of poverty.  
• Expand dual high school-college credit programs.  
• Articulation agreements between education institutions to allow for easier transfer.  
• Prior learning assessment to allow adults to gain credit for work-based experience.  |
| K-12 Schools                                  | • Strong focus on basic skills and applied academics.  
• Career exploration integrated into all components of curriculum.  
• Ongoing relationships with industry and employers through field trips, industry studies, business simulations, internships, job shadowing, etc.  
• Partner with postsecondary education institutions to expand dual high school-college enrollment programs  
• School counselors understand and actively promote range of career options, not just 4 yr. college preparatory.  |
| Industry or Employer Associations            | • Clarify and communicate the needs of employers.  
• Help to identify career paths across firms.  
• Convene and support employers.  
• Improve delivery of education and training, and support services.  
• Conduct research and development of workforce development strategies and products.  
• Broker and provide services to employers and workers.  
• Develop sector-focused, regional skills alliances.  
• Broker low-cost training options for common skill needs across multiple firms.  
• Sponsor internships, job shadow experiences, and other career exploration activities.  |
<table>
<thead>
<tr>
<th>PARTNERS</th>
<th>ROLES &amp; PROMISING PRACTICES</th>
</tr>
</thead>
</table>
| Employers | • Articulate hiring, recruitment, retention, skill and training needs to education providers, industry/employer associations, one-stop career centers, and other workforce intermediaries.  
  • Articulate and make employees aware of career ladders; explain levels and requirements for advancing within the firm.  
  • Structure work to support career progression.  
  • Participate in industry consortia  
  • Partner with educational institutions, private vendors, community based organizations, one-stops to recruit, retain and support employees.  
  • Demand results and provide ongoing feedback to regional partners.  
  • Leadership training for managers and supervisors on the 'hidden' rules of the workplace and how to support employee development and work/life transitions or challenges.  
  • Assign and train incumbent workers as job coaches or mentors for new employees.  
  • Tuition assistance for GED, ESL, certificate, and degree programs.  
  • Release time/personal days policies for employees to attend training, family/school events, and take care of personal business.  
  • Employee assistance program to link employees with work or personal life challenges to appropriate, professional and community support services.  
  • Form alliances with educational institutions to collaboratively develop customized degree, certificate, and non-credit programs that meet business and employee needs.  
  • Form alliances with intermediaries to provide retention and advancement that are not a part of the firm's core competencies.  
  • Reinvest money saved on recruitment in employee development and enhanced workplace environment. |
| Labor Unions | • Strengthen supply of workers with specific in-demand skills.  
  • Help employers to structure work in alignment with career progression.  
  • Assist with targeted HR functions (e.g., orientation, performance appraisal, training, etc.).  
  • Provide connections to local workforce.  
  • Improve employer-employee relations and working conditions in support of above. |
| Local Economic Development Organizations | • Clarify and communicate the needs of employers.  
  • Act as relationship broker to private-sector employers with hiring or training needs. |
| One-Stop Career Centers, Human Services Agencies and Community Based Organizations | • Provide training, hiring and recruitment services via access to a pool of candidates for entry- and mid-level jobs.  
  • Provide pre- and post-employment support services related to work/life balance issues.  
  • Create partnerships with employers, unions and community colleges to support individuals while employed or enrolled in education and training.  
  • Act as a referral source for job seekers to other supportive services. |
| Temporary Staffing & Recruitment Firms | • Provide hiring and recruitment services via access to a pool of candidates for all occupational levels.  
  • Provide pre- and post-employment support services.  
  • Act as a referral source for job seekers to human and other supportive services.  
  • Assist with designing and carrying out targeted HR functions (e.g., payroll, benefits, insurance, etc.) |
| Professional Employer Organizations (EAP consultants, employee leasing, HR outsourcing) | • Consult with employers and employer associations on HR or work/life program design and implementation.  
  • Act as a referral source for employees to human and other supportive services.  
  • Provide supervisory training and employee workshops on work transition, retention and advancement.  
  • Assist with designing and carrying out targeted HR functions (e.g., payroll, benefits, insurance, etc.) |
B. Fostering Meaningful, High Performance Health Care Workplaces

Whether it is called career “development”, “advancement”, “pathways”, or “progression,” regionally coordinated analyses and solutions are unlikely to reach the scale and impact desired if the chief roles for health care employers are solely to provide information about skill needs or partner with training providers on curriculum development. Real support for employee development must also be integrated into the workplace environment – both in practice and philosophy; if it is not, incumbent and future health care workers alike will recognize the disconnect between rhetoric and reality, and they will choose other employers, either in health care or other industries.

The Workforce Strategy Map of the American Hospital Association’s Commission on Workforce for Hospitals and Health Systems offers guidelines for fostering meaningful work and improving the workplace “partnership” with employees.5 In the AHA Commission’s Workforce Strategy Map, fostering meaningful work includes:

- Make work design an organizational priority and competence
- Develop new work designs
- Assure enough qualified staff for safe, timely care
- Increase caregiver time in patient care
- Create the capacity to keep all staff up-to-date
- Partner with business on new work models

Improving the workplace “partnership” includes:

- Create a culture in which all workers feel valued
- Measure, improve, and reward the capabilities of front-line managers
- Learn what makes workers become long-term employees
- Develop a comprehensive rewards strategy that includes competitive edge compensation, flexible benefits, employee recognition, and career development
- Increase personal control over assigned hours
- Give human resources the same governance and senior leadership attention as finance.

The independent, international Institute for Employment Studies further highlights the critical role that employers must play in support of career development within the workplace. In “Strategies for Career Development: Promise, Practice and Pretence,” a report summarizing case studies of major employers across the manufacturing, financial services and public services sectors, IES researchers conclude that there are three common gaps between the rhetoric and reality of career development within organizations. These are:

1. Muddled, poorly or dishonestly communicated career development policies.
2. Lack of alignment between official career development positions and the practices of human resources staff.
3. Insufficient commitment and assignment of resources in support of official career development policies and/or related human resource practices.6
The Workforce Boards of Metropolitan Chicago have spent considerable time and effort building relationships with metro Chicago health care employers and engaging them in identifying regional workforce issues and solutions, including the formation of a health care sector council as part of the CSSI. The Workforce Boards have a unique opportunity to deepen their relationships with area health care industry employers, thereby deepening the potential impact of CSSI and other workforce development initiatives, by becoming a strong advocate for meaningful, high performance health care workplaces as essential elements in regional career progression solutions.

**PROMISING PRACTICE EXAMPLE:**
Improving the Effectiveness of Basic Education

INTEGRIS Health of Oklahoma City, working with local leaders, transformed a school with low test scores and high truancy into the first charter elementary school in the state. They established an After School Academy, Saturday School, and Summer Academy where students learn life skills and study in safe supervised environments. The school also created a mentoring program where volunteers from the community work one-on-one with students to establish caring adult relationships and improve reading, math, and language skills.

-American Hospital Association, In Our Hands, How Hospital Leaders Can Build a Thriving Workforce

**PROMISING PRACTICE EXAMPLE:**
Working with teachers, counselors and parents to help students understand the variety of health care related occupations.

College bound high school seniors gain clinical experience in a wide range of hospital departments during a year long program at Oswego Hospital in New York. The program encourages participation by allowing students to gain credits in health occupations while satisfying English and social studies requirements. [www.oswegoboces.org](http://www.oswegoboces.org)

-American Hospital Association, In Our Hands, How Hospital Leaders Can Build a Thriving Workforce

### C. Supporting Flexible, Lateral Movement Between Occupations

One of the recurring themes in this report is for the Workforce Boards to adopt solutions that result in flexible responses to an ever-shifting economy and labor market. While the Job Family Progression Maps offer suggested career pathways within those job families, the regional solutions developed by the Workforce Boards must take into account that individual career progression decisions and actions are often “messy” and not linear. This implies the humbling recognition that, no matter what career pathways schema are developed by academics, policy analysts or workforce development practitioners, in the real labor market, individuals will find alternative ways to advance both within the same industry or across to different industries or sectors. The Workforce Boards can take the “messy” factor into consideration for regional solutions by, at a minimum, creating a framework that can support lateral movement between health care occupations when it occurs. An example of a comprehensive career path format that attempts to address lateral movement, developed by Kaiser-Permanente, one of the largest integrated health delivery systems in the U.S. (based in California), can be found in Figure 2 on the following page.
FIGURE 2: Kaiser Permanente Lateral Movement Career Path Format

Pharmacist
  - Pharmacist Intern
    - Pharmacy Tech (inpatient)
    - Pharmacy Tech (outpatient)
      - Pharmacy Clerk/Aides
  - Nuclear Med Tech, MRI Tech, Radiation Therapy Tech
    - Diagnostic Ultrasoundgrapher
      - Radiologic Tech
        - Respiratory Therapy Tech
          - Respiratory Therapist/Respiratory Care Practitioner

Registered Nurse
  - Bachelor of Science, Nursing
    - Physical/Occupational Therapist
      - Surgical Tech
        - Registered Nurse
          - Licensed Vocational Nurse
            - Physical/Occupational Therapy Asst.
              - Lab Tech
                - Physical/Occupational Therapist
                  - Surgical Tech

Pharmacist Intern
  - Certified Nurse Midwifery
  - Nurse Practitioner
    - Certified Registered Nurse Anesthetist
      - Physician’s Assistant Certified

Acute Care Nurse Asst., Medical Asst., Unit Asst., Home Health Aide, Respiratory Therapy Asst.
  - Ortho Tech, EKG Tech, ED Tech, OB Monitor Tech, Echo Tech, Optical Tech
    - Medical Transcription/Medical Secretary Trainee
      - Medical Secretary
      - Medical Transcription/Medical Secretary

Health Care Contract Specialist (Call Center), Receptionist

Report: May 17, 2004
Strategy Recommendations

Recommendations outlined in this section are intended to support the strategic action by the Workforce Boards of Metropolitan Chicago within the context of the Meta-Framework, i.e., to provide the “big picture” policy road map that fosters increased cooperation and improved quality throughout the metropolitan workforce development landscape. A thoughtful and carefully developed career progression framework has many uses. For example it can be used:

- As a communication tool between employers and employees, and between prospective students and educational vendors.
- To build awareness among stakeholders on the ample number of opportunities in health care fields - rather than focusing on only a few occupations.
- To inform development of recruitment and retention tools for employers.
- To foster collaboration among parties seeking to establish skill standards and certifications.

Rather than present a laundry list of all possible known strategies, CSW has focused on recommendations that:

- Are aligned with the missions of the Workforce Boards;
- Can provide effective leveraging of resources;
- Can add significant value to the many career progression efforts already underway across the region; and
- Help to simplify and “de-mystify” career progression concepts so that they are more easily understood and communicated among multiple stakeholder groups.

Recommendation #1: Create a Common Vocabulary

Success of the CSSI (or any other initiative) ultimately depends on the ability of partners to understand the vocabularies and underlying assumptions that drive programs, policies and practices within different sectors. “Career paths”, “career lattices”, “career development”, “career advancement”, “lifelong learning”, “skills shortage” – these phrases will have differing meanings depending on who is using them.

CSW recommends that the Workforce Boards develop a common health care career vocabulary as a first step toward a coherent, regional response to the needs of the health care industry. Developing consensus around definitions and usage of common industry-related terms is a pre-condition for communicating effectively the opportunities and challenges of the health care industry to students, parents, workers, job-seekers, employers, educators, researchers, elected officials, and others. It is also a springboard for the development of industry skill standards. The process of building consensus around vocabulary and definitions would help to strengthen relationships among regional partners and set the stage for deeper, longer-term partnerships.

Creating a common health care career vocabulary should involve members of the CSSI Health Care Sector Council, the Illinois Career Pathways Initiative, education and
training providers, and public- and private-sector workforce intermediaries. Suggested steps include:

- Electronic survey of regional partners to get feedback on the Job Family Maps included in this report, and to compile career related program names, and phrases and definitions currently in use around the region.
- Analysis of the survey results.
- Facilitated discussion sessions with partner representatives to respond to the survey results, develop common names and definitions, and plan for creating information tools and materials.

**Recommendation #2: Develop a Regional On-Line Health Care Careers Portal**

CSW found several excellent models of on-line career portals, some targeting health care occupations and some targeting several key industry occupations. www.careerladder.org is one of the best we found. It is operated by the NOVA workforce board and the workforce boards of Monterey, San Mateo, Santa Clara, and Santa Cruz counties in California. The primary feature of the website is that it presents easy-to-read, highly rich career progression information for critical occupations in key industries (health care, logistics, manufacturing and other). The occupations are searchable by county, as are training providers, which can also be searched by occupation and include direct links to the providers' web sites. The site has general information about careers, skills, interviewing tips, and links to other regional labor market studies that NOVA has produced. Most importantly, it serves as a resource for job seeker, student, and practitioner alike.

The metro Chicago region could benefit enormously from such an online tool. It can serve as a vital resource for organizing the various career progression efforts that exist in the region; as an easy-to-use tool to cost-effectively support counselors and case management staff at One-Stop Career Centers, schools, colleges, and community organizations across the region; and as a centerpiece for an awareness campaign aimed at increasing the number of individuals interested in health care careers.

CSW suggests the formation of a committee to more closely study the feasibility of developing a portal similar to the NOVA site, as well as others (such as www.tcc.compTia.org), using the Job Family Maps included in this report as a starting point. CSW further suggests that such a portal include additional information and services to facilitate the flow of information and connection between health care industry employers, educators, employment assistance providers, job seekers and students. For example:

- Tools for employers and educators to assess skills gaps and develop career progression programs.
- Calendar and links to health care industry related events around the region.
- Resume posting and job matching service for metro Chicago health care industry employers and those seeking employment in the industry.
Live web-casts of health care industry seminars and workshops for students, job seekers, educators, curriculum developers, human resources personnel, and others.

**Recommendation #3: Seek Alignment of Federal, State and Private Funding to Support Career Progression Efforts in the Region**

The use of state CSSI funds to expand career progression efforts across the region is a great example of how the Workforce Boards are attempting to leverage other resources. The Boards have an opportunity now, through the CSSI, to leverage the relationships they are building with industry groups, employers, educational institutions, and workforce intermediaries to build toward a more sustainable regional career progression initiative. A candid discussion with stakeholders about new funding partnerships will make it more likely that career progression, and other regional efforts, endure over the long term. Alignment of federal, state, foundation, and industry resources should be an integral part of the Workforce Boards’ regional solutions plan.

**Recommendation #4: Launch a Major Awareness Campaign About Health Care Employment Opportunities**

Changing peoples’ minds and impressions about career opportunities in the health care field will take a concerted, coordinated ongoing effort. It is an effort that is critical, yet often under-estimated and, especially, under-funded. This type of “social marketing” over the long-term is costly, yet can have a dramatic impact on the workforce supply/demand equation (as in the Lancaster, Pennsylvania example). Because of the scale of effort required, CSW recommends that a major awareness campaign involve broad-based support from traditional workforce development stakeholders, as well as non-traditional stakeholders that have an impact on the recruitment or retention of workers such as convention and tourism bureaus; real estate professionals; state and local media; and the public relations, alumni relations and fund development staff of the region’s public and private postsecondary institutions.

**Recommendation #5: Transition the Health Care Sector Council into a Standing Advisory Group**

In order to ensure the sustainability of career progression efforts beyond the life of the current “version” of the CSSI, the Workforce Boards must build the organizational infrastructure, now, so that future workforce challenges, such as skill shortages, are able to be addressed in a timely, efficient manner. Specific to the health care industry, CSW recommends that the CSSI Health Care Sector Council be transitioned into a permanent standing advisory group to the Workforce Boards of Metropolitan Chicago. The advisory group can serve as an ongoing advisory body for the other recommendations included in this report, and provide guidance to the Workforce Boards on future healthcare workforce related opportunities and challenges.
Sources/ Resources Consulted and Endnotes

Sources/ Resources

National Career Maps, Visuals, Portals, Programs, etc.

1) www.CareerLadders.org. Comprehensive and excellent on-line portal for regional and county-level career pathways and occupational information, with strong health care industry focus. Operated by consortium of five California Workforce Boards including NOVA and four other boards within Monterey, San Mateo, Santa Clara, and Santa Cruz counties.


3) San Mateo Regional Biotech Career Pathways System (Genentech Inc. Model). Bio-technology research company’s visual depiction of career track from Lab Tech to Quality Control Analyst. Includes educational requirements.

4) Boston Health Care and Research Training Institute: Overview of Career Pathways. Simple visual depiction, addresses Patient care, medical/ staff administration and technical staff.

5) California State University, Hayward web site. Career ladder/ education portal entitled “Health and Bio Science Careers Collaborative.” Web site lists all health care categories (Patient Care, Medical Imaging, Rehabilitation/ Physical Therapy, Human Services, Lab & Bio Sciences, Environmental careers, Administrative & Health Info, Health Specialties). Site gives various job titles under these categories, education/ qualifications, salary ranges, & position descriptions. Also provides large database on education/ training providers, classes and degree programs in region. Can search by county, job category or job title.
   http://www.sa.csuhayward.edu/~hcareers/CareerLadderDescriptions.shtml

6) Careers Under Construction (Employment Development Department, Labor Market Division, Information Services Group, Occupational Research Unit:
   http://www.calmis.ca.gov/file/occmisc/CareerLaddersConstruction.pdf)

This report gives a number of examples of models and formats for developing career ladders and pathways, but stresses that “up is not the only way,” explaining the career lattice vs. career ladder approach. Models include:

- Lattice Format was used to show Health Care Industry Careers with occupations depicted horizontally by type of work and vertically by salary ranges (2002 wages from Occupational Employment Survey of Employers by EDD and LMID, Health Care Association of Southern California).

- A Tree Format illustrates how Nurse Aides and CNAs serve as the beginnings to other health careers (California Association of Health Facilities, July 2000).

- A Step Format shows growth opportunities in a number of Health Care Careers in the Career Ladders Project of Santa Cruz County (June 2002).

- A Bubble Format was used for a career ladder hierarchy and closely related occupations (Orange County Cluster Project, Orange County Business Council, June 2002).
• Kaiser Permanent—one of the largest integrated health delivery system in the country, based in CA. A detailed Career Path Format shows lateral movement between related occupations (Kaiser Permanente, SEIU Local 250, August 2002). Also has interesting web site detailing many facets of nursing careers, job competencies, salaries, promotion opportunities, etc. www.nursingpathways.kp.org/ncal/careers/index.html

7) The Royal College of Nursing (of the UK)’s Research Society (Joyce Kenkre and David Foxcroft) developed five potential career pathways, including academic, clinical, clinical research nurse, pharmaceutical and management, www.man.ac.uk/rcn/rs/career.htm.

8) Washington Healthcare Career Web site—Resource web site for job seekers and employers. Job seekers can explore area schools for LPN, CAN, RN, etc. Gives job descriptions of positions and typical salary ranges and allows job seekers to post resume. Also gives information on state licensing regulations and how to apply for visas. Employers can post an ad for $100/month and can search resumes of potential job candidates. http://www.washingtonhealthcarecareers.com/Edu~JobDesc/JD-Nurse-Ladder.htm

9) CompTIA: Leading IT trade association based in OakBrook, IL. Has very cool web site that “demystifies the IT field,” gives info on jobs, positions, competencies, salaries, educational requirements, etc. Beneficial to job seekers, educational institutions and businesses alike. CompTIA does policy advocate work and develops vendor-neutral IT certification exams. www.tcc.comptia.org

10) Connecticut Career Ladder Advisory Committee’s Three Year Strategic Plan by the Office for Workforce Competitiveness (http://www.cga.state.ct.us/PWSC/Publications/Career_Ladder_Report.pdf, February 2004) addressed the nursing shortage and focused on the (mostly academic) career path to becoming a nurse, including diploma, degree, accelerated and advancement programs. It also listed a number of challenges to moving workers along a nursing career ladder and possible strategies.

11) The Standards-based Teacher Education Project (STEP) is a multi-state initiative involving the American Association of Colleges for Teacher Education and the Council for Basic Education to help universities assess and redesign their teacher prep programs to make sure that candidates have the necessary knowledge and skills to support the standards. (http://www.c-b-e.org/teachered/step.htm)

12) Climbing the Ladder describes clinical career development approaches allowing nurses to advance without leaving patient care, listing Boston’s Faulkner Hospital, Lahey Clinic in Burlington and Children’s Hospital in Boston as examples of successful implementation and bases for expansion. Article also reinforces mentoring and coaching as key to success of career ladders. http://bostonworks.boston.com/healthcare/hgb2003/articles/climbing_ladder.shtml

13) A performance-driven clinical ladder, the Nursing Clinical Career Progression Model (NCCPM), “integrates and balances the key cultural cornerstones of organizational values, evidence-based practice, relationship-centered care, pay for performance, the American Nurses Credentialing Center Magnet Criteria and a commitment to differentiated practice.” The model’s design was based on horizontal versus vertical growth or promotion, career lifetime and Novice to Expert advancement, stretch and dynamism (Excellence in Nursing Administration, http://www.nursingsociety.org/publications/EXCEL_NA3Q03/pdf/http://www.nursingsociety.org/publications/EXCEL_NA4_3Q.html).

An example of the career ladder approach is shown for Chaffey College in Rancho Cucamonga, CA, for health sciences occupations focuses on personal objectives of students and does not require them to go up the ladder in a certain period of time. (http://www.chaffey.edu/hscareerladder/index.shtml)
Chicagoland Health Care Progression Programs, etc

14) Advocate Health Care, STEP (Success Through Excellence in Practice program). Professional development career ladder for nurses. Building internal pipeline for more nurses (retention). Advocate is 2nd largest private employer in Chicago (25,000). Also plans to tap into 10,000 non-exempt workers to “proactively approach individuals who could be good nurse candidates.”

15) Davis Jenkins’ report to Workforce Boards of Metropolitan Chicago, Sept 8, 2003
“Templates for Mapping Career Pathways in Healthcare”. Good start on templates for titles and wages/salaries & attempt at pathway, not finished.

16) CAEL Health Care Career Ladder Project: Under its $1,998,200 grant from ETA, CAEL is addressing both current and projected health care workforce shortage through a holistic approach. In this model, CAEL builds the pool of new health care workers through Certified Nursing Assistant (CNA) and Licensed Practical Nurse (LPN) registered apprenticeship programs and then provides incumbent LPN’s with expedited pathways to careers as Registered Nurses through a hybrid distance learning/ community college training model. CAEL will partner with hospitals, national health care systems, the community college system, and local One-Stop Career Centers, to build this model so it can be maintained after the federal investment has been fully expended.


18) Strive: national non-profit, in partnership with Advocate Lutheran General Hospital & Wright College. Lutheran Hospital hires entry-level workers form Strive program; Strive follows up and monitors them. City Colleges is in process of developing a career bridge program to upgrade these individuals-- entry level workers to higher level positions.

19) Education-to-Careers Program, Chicago Public Schools: a few schools (Julian & Sullivan) specialize in health care careers. Offers practical Nursing Program, state’s only licensed high school program and College Excel, a partnership in which students may dually enroll in City College programs and earn both high school and college credit in EMT, Pharmacy Technology, Medical Asst and CNA.

20) Alivio Medical Center (Pilsen- Chicago Latino neighborhood) has partnerships with local middle schools and high schools where student receive credit while working at the medical center and being exposed to health care jobs for their future.

21) Northwestern Memorial Hospitals. External programs most frequently used to acquire new entry-level recruits include: Medical Explorers Inroads, a national organization that recruits the “best and the brightest” minority students from 8-12 grades who are interested in Health Careers; MOWD Summer Jobs program; new partnership with Chicago Public Schools- Education to Careers program (Sullivan and Julian HS; ). One of their preferred providers is CARA program. It places low income individuals in entry level jobs (environmental services, etc.). CARA also works closely with the hospital to customize training to match its processes and equipment. (Stats: since 1997, NW hired 100 folks from CARA; as of January 68% are still there- good retention). Jackie’s criteria for successful partnerships: 1) Making sure the agency knows the employer and their expectation for new recruits, 2) The agency’s training matches employer’s needs (the right basic skills, life skills, and job skills), 3) rigorous front end screening.

Ways Northwestern Memorial Hospitals nurture career progression of incumbent workers include: a School at work program which helps current employees polish up on critical basic skills to prepare them for internal advancement opportunities (writing, resumes, exposure to health care jobs,
interviewing skills). The program is coordinated thru the NW Memorial Academy. The Academy is developing more of their own internal schools (sinography, medical imaging, nuclear medicine, etc). They train interested employees in these areas via onsite classes and open up classes for workers from other hospitals, etc. Training leads to certifications.

22) Chicago State University Nursing Career Ladder Project- strengthening existing articulation agreement with Dawson Technical Institute and CPS LPN program.

23) Seniors Action Service, Evanston, runs pre-CNA program; primarily for elderly; linked to Council on Jewish Elderly, Applied Gerontology Center.

**Endnotes**

---


2 2000 employment and 2001 annual wage data (the most recent data available) were collected from the Illinois Department of Employment Security and combined with the education and training codes from the U.S. Bureau of Labor Statistics.

3 Wages in Tables 2 and 3 differ because Table 2 includes all MSA level data in order to separate occupations with data from the same source and level; average wages in Table 3 are derived from data in the MCHC’s report on employer survey results.

4 Compiled from varied sources.
