Improving the Upward Mobility of Low-Skill Workers: The Case of the Health Industry

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I. INTRODUCTION

The nation is currently undergoing major changes in the structure of the economy and the nature of work. Companies are becoming more efficient and competitive in the global economy. Productivity growth is returning, but much of the workforce is not able to take advantage of the new economic trends. At the same time that low-skill workers are at risk of being left behind, current welfare reform discussions assume that more public assistance recipients can enter the workforce, remain permanently employed, and receive wages high enough to maintain a standard of living above the federally determined poverty threshold. The standard approach to addressing employment issues focuses on educating and training individuals, or the supply side. Traditionally, firms invest most of their training on mid-level and upper-level workers and not on the low-skill, entry level workers who are the targets of welfare reform efforts. But, the impacts of economic and legislative reforms may suggest additional strategies for helping lower-level workers.

The underlying premise of this study is that, where there is change, there is opportunity. To place the workforce changes in the health industry in context, we begin by tracing broad historical trends in the U.S. economy, by describing recent patterns regarding the relationship between economic structure and workforce opportunity, and by presenting the empirical evidence concerning job stability and occupational mobility in the U.S.

Then, we examine what can be done from an industry, or demand perspective, using a major and rapidly growing industry, health care, as an example. We spell out: (1) how the industry is restructuring itself, (2) the implications of this restructuring for the workforce, and (3) strategies for shaping the structure of jobs and training in this industry to expand upward occupational mobility for low-skill workers.

The process of conducting this study and conceptualizing the issues identified a number of opportunities for new policy initiatives and research that can be broadly applied beyond the health care industry. These are addressed in the last part of the report.

II. ECONOMIC CHANGE AND WORKFORCE IMPACTS

Introduction

It is common wisdom that the U.S. economy is entering a new phase involving increasing globalization and a "third" industrial revolution dominated by service-sector employment. Workers are seeking to understand the "new economy" and how they fit in. The popular press has picked up on the public's general economic insecurity and pessimism about the future. Public perception is that lifetime jobs, predictable occupational mobility, and steady career ladders are a thing of the past (Newman 1993). The objective of this chapter is to examine the degree to which these perceptions are valid from historical, theoretical, and empirical perspectives.

This chapter begins with a review of previous periods of great economic change, specifically the three American industrial revolutions. In the transitions from an agricultural to a manufacturing and then to a service economy, jobs disappeared and emergent technologies displaced workers. It was during these historical periods that the concept of the "American dream" developed. The literature suggests that the concept was somewhat mythical in that only a portion of Americans actually lived the dream. Nonetheless, the dream lives on in the midst of significant changes in the economy and in the structure of work.

This chapter then reviews the economic literature on job mobility and career ladders in the United States with a focus on the theoretical models developed by social scientists to describe the mobility process. The period reviewed ranges from the 1960s to the early 1990s and emphasizes models of low-wage workers' experiences. This section is followed by key empirical evidence on the degree to which mobility has occurred over the last two decades.

The findings indicate that from the turn of the century to the early 1970s, the majority of individuals who followed the "rules" associated with the American dream (e.g., hard work, prudence, ambition, industry, and optimism), were rewarded with social and economic mobility into the middle class and rising standards of living. During the last quarter of the century, however, the dream was realized by fewer Americans and access to higher standards of living varied along ethnic, gender, educational, and industrial lines. The labor market of the 1990s is characterized by dual income households, record high labor force participation rates and employment-to-population rates for women, rising hours of work, falling wages, and growing earnings inequality. Some groups, including older workers, persons of color, and workers in the non-goods producing sectors of the economy, lost their jobs at higher rates in the 1990s than in the 1980s. However, despite the conventional view of rising uncertainty and turbulence in the labor market, overall job loss rates and job tenure remained constant over the last decade.

The existing literature on mobility examines either a person's mobility in and out of jobs over the life cycle or the job ladders within organizations. Lacking are analyses about whether more frequent job changes signal occupational mobility or a loss of occupational standing for an individual worker. In addition, further research is needed to examine *within* occupational mobility from which to develop a broader understanding of the mechanisms that allow for social and economic mobility.

Historical Perspective: The American Dream

The 19th century witnessed the agricultural or "first" industrial revolution in the United States. During this period, the abundance of land and the fertility of nature helped many farmers generate productive farms and considerable wealth and expand the demand for agricultural labor. By the middle of the 19th century, about three-fourths of the labor force worked in agriculture.

The gradual advent of machine technology in the late 1800s and early 1900s along with the collapse of farm prices in 1921 caused some 20 million Americans to leave their farms and move into the central cities. This movement represented the largest internal population transfer in American history. As the "second" industrial revolution accelerated in the manufacturing sector, the majority of displaced, unemployed, rural farm workers found employment in factories where labor was in growing demand. According to the Bureau of the Census, by 1930, only 21 percent of workers were farmers and some 38 percent were classified as industrial workers (Millis and Montgomery 1938).

The agricultural and manufacturing societies of the 19th and 20th centuries laid the foundation for the "American dream," a somewhat mythical characterization of a lifestyle experienced by only a segment of native-born and ethnic Americans but sought by many, if not all. The dream offered earned wealth as an alternative to inherited privilege. Wealth was to be acquired through hard work, prudence, ambition, industry, and optimism. The rights to property were dear to Americans who avidly defended their hard won land. Americans dreamt of enjoying the fruits of their labor and living the "good life," described by historian Loren Baritz as the aspiration to become "a true American, independent, proud, able to care for his family and to provide his children a more advantageous start in their own lives"(1982, pp. 6-7).

A key element of the American dream was the hope that if a person could not attain higher economic status in one generation, upward mobility and improved living standards were envisioned for the next generation. This was the dream of the skilled and unskilled worker, the educated and uneducated, immigrants from different shores, African slaves, the poor and the rich--all of whom aspired to similar prosperity.

The formula for achieving the dream during the second industrial revolution was an exchange of hard physical work in a factory for payment of a wage above a subsistence level. Fully aware of this exchange, Henry Ford, founder of the Ford Motor Company in 1903, offered to pay his workers $5 a day to enable them to rise from low-income to middle-income status, symbolized in a person's ability to afford the low price of the standardized Model T, the Tin Lizzie. Ford's dream was to "build a motor car for the great multitude ... constructed of the best materials, by the best men to be hired, after the simplest designs that modern engineering can devise. But it will be so low in price that no man making a good salary will be unable to buy one and enjoy with his family the blessing of hours of pleasure in God's great open spaces" (Baritz 1982, p. 62). Indeed, Ford's calculations proved right, with the result being higher pay, socio-economic mobility, and increased consumption of cars and other consumer durables to the benefit of the greater society.

Employment in the manufacturing sector surged during the early part of the 20th century. Ample inexpensive labor was available as a result of the displacement of farm workers, the influx of 30 million immigrants into the United States between 1870 and 1930, and the northward migration of over one million Southern rural blacks between 1915 and 1928. The good life associated with a middle class standard of living was born. Between 1914 and 1926, real wages rose by almost 30 percent (prices of cars and other products were falling), industrial productivity rose by 40 percent, and the average work week declined to 50 hours (Millis and Montgomery, p. 162). Tens of thousands of middle-class Americans participated in the stock market and began purchasing houses, cars, and radios on credit. Security, pride, home-ownership, and mass acquisition of products that made life easier and more pleasant represented the fulfillment of the American dream. By the end of the 1920s, the new ethic was the pursuit of pleasure and the belief that the present was less desirable than the future, which stood in stark contrast to the 19th Century Protestant ethic of hard work, thrift, and contentment.

The consequence of success was perceived independence through ownership of property including clothing, a car, a house, home furnishings, and disposable income. The belief that we made it on our own entitled us to due rewards. However, if we failed it was also of our own doing. Progress meant moving forward, accumulating wealth, and economic growth.

The onset of the depression in October 1929, challenged the notions of social and economic mobility for most Americans. Between 1929 and 1933, the national unemployment rate jumped from about 3 percent to a terrifying 25 percent. The government responded with broad-reaching initiatives to provide temporary relief in the form of food and shelter, employment in the form of public works, and efforts to assure minimum standard of living for the working and non-working classes. The Fair Labor Standards Act created 40 hour work week and the minimum wage and the Social Security Act created the old age insurance and Federal-State welfare programs. The New Deal marked the beginning of the transformation from a private economy with limited government to a mixed economy with an active public sector.

Despite the devastating economic effects of the depression, hope persisted. "There was no revolution during the Great Depression because even suffering workers took pride in the fact that they were good and patriotic Americans who would not support an alternative political future. With time, the industrial workers of the depression and their children, some of whom were to ascend into the middle class, became the nation's most enthusiastic advocates of free enterprise" (Baritz 1982, p. 124). The public believed that capitalists, not capitalism, had failed.

The U.S. reestablished economic growth during World War II. The government resorted to deficit financing to insure the production of war materials. About 16.3 million young Americans entered the military. Stateside

industrial production increased, half of which went to producing weapons for the war and the other half to durable goods for the domestic consumption. Almost 20 million women were employed during the war, 9 million more than in 1940. The war did not represent a relative increase in women's economic standing, however. Women's earnings dropped from 62 percent of men's earnings in 1939 to 55 percent during the war. Moreover, when the veterans of war returned in 1945, many female workers were either forced out of the labor force altogether or moved into acceptable "women's work" as secretaries or clerks.

Despite their displacement from war time jobs, women soon began to fuel the growing economy. By the mid-1950s, 70 percent of middle class families included a second earner, usually the wife. The economic standard of living of American families rose appreciably. The percentage of families earning less than $3,000 a year fell from 46 percent in 1947 to 20 percent in 1959, and the percentage earning between $7,000 and $10,000 (the upper middle class) rose from 5 percent in 1947 to 20 percent in 1959 (Baritz 1982).

Strong economic growth and expansion of the manufacturing industry peaked in the late 1960s. Unemployment fell below 4 percent, output grew by over 4 percent per year, and wages and productivity rose at 3 percent annual rates. Manufacturing industries employed over 30 percent of all employees as of 1966. Over the next two and one-half decades, growth in output, productivity, and wages all slowed significantly. The proportion of workers in manufacturing declined by 50 percent to about 15 percent of the work force. Productivity growth, demand shifts toward services, and competition from international producers of automobiles, auto parts, metalworking, steel, and consumer electronics displaced millions of assembly line workers. (McKinsey 1993).

Through the 1970s and 1980s, the U.S. made the transition into the "third" industrial revolution characterized by global competition and the introduction of computers into the workplace. Many workers displaced from the manufacturing sector were hired into the service sector. Today over 79 percent of employment in the United States is in the service sector, broadly defined, and less than 16 percent of employment is in the manufacturing sector (Council of Economic Advisors 1995).

The Imperative in the 1990s

The state of the current "American dream" in terms of occupational levels and incomes reveal optimistic and pessimistic strands. On the positive side, opportunities in professional, managerial, and technical occupations have expanded. The proportion of jobs in professional and managerial positions rose from about 22 percent in 1960 to nearly 30 percent in 1995. Productivity growth has begun to increase slightly to about 1.5-2 percent and unemployment rates have declined below 6 percent. At the same time, personal incomes are stagnant and the number of people living in poverty is rising. Median annual income in the average American family fell by nearly two percent between 1992 and 1993 to $36,959 (in inflation adjusted dollars), while per capita income rose by less than 1 percent to $16,366. In 1993, about 39.3 million people or 15 percent of the population lived below the official poverty threshold of $7,400 for an individual and $14,700 for a family of four. The incidence of poverty was higher in 1993 than in 1979.

In addition, the Census Bureau reports a long-term national trend toward increasing income inequality. Between 1968 and 1993, the commonly used Gini index of inequality rose by 15 percent. In 1993, the lowest 20 percent of families in the income distribution (those with no more than $12,920 in income during the year) received 3.6 percent of personal income, down from 4.2 percent in 1968. In contrast, those in the top 20 percent (with incomes over $60,544) received 48.2 percent of total income.

Structural change, stagnant incomes, and high poverty rates have all helped create uncertainty in American households about their economic standing and the future well-being of their children. While the economic recovery from the 1990-91 recession is well under way, the Secretary of Labor refers to this recovery as the "Goldilocks recovery" and sees the working class splitting into three groups: "an underclass largely trapped in center cities, increasingly isolated from the core economy; an overclass of those who are positioned to profitably ride the waves of change; and in between, the largest group, an anxious class, most of whom hold jobs but who are justifiably uneasy about their own standing and fearful for their children's future."[1] Those in the top of the income distribution have seen their incomes rise while entry-level workers, those without college degrees, and blue collar workers have experienced wage decreases and job losses.

Theories on Mobility

Social scientists have developed several theories that describe the processes of mobility and immobility in the U.S. This section provides a brief overview of the key theories on mobility since the 1960s. The literature differentiates primarily between the experiences of two groups, those who are poor and those who are full-time, male workers. Female workers, who comprise half of the labor force today, and contingent workers, who comprise 30 percent of the labor force, have only recently been considered in the literature.

Mobility of the Poor

Mobility of the lower and working classes has been central to public policy research over the past three decades. The literature in the 1960s focused on the intergenerational transfer of poverty as part of a "culture of poverty". But, studies in the 1970s found that intergenerational socio-economic mobility was considerable, thus rejecting the "vicious cycle of poverty" concept (Blau and Duncan 1967).

With the maturing of longitudinal datasets in the 1980s, researchers were able to follow individuals for more than a decade and examine changes in their living standards. The findings lent some support to the theory of intergenerational and intra generational persistent poverty but also revealed much mobility. Recent information drawn these data sets reveals that, while over 40 percent of new entrants on to welfare stay for

two years or less, over three-fourths of current recipients on welfare will spend over five years on public assistance (Pavetti, 1995).

Three major schools of thought emerged to explain inter- and intra generational persistent poverty.[2] The "resource model" hypothesizes that parental economic resources are the strongest predictor of children's adult socio-economic attainment. Low incomes limit access to quality schools and other human capital investments, job networks, and housing in good neighborhoods for a certain segment of the population. Hence, public policy prescriptions should provide greater economic resources to the poor to enable them to buy into better neighborhoods or gain access to educational and other networks. Proponents of the resource model argue for the Earned Income Tax Credit, refundable child care tax credits, housing vouchers, other in-kind benefits, and training programs.

A second school of thought is the "welfare culture model." The model emphasizes such cultural forces as deviant values, attitudes, and behaviors and participation in the welfare system. The government welfare system fuels the welfare culture that traps individuals into poverty and economic dependence by creating work and marriage disincentives, by concentrating the poor, and by avoiding serious work requirements. To break the dependence, proponents prescribe time-limited welfare, the elimination of welfare, and the withdrawal of benefits that reward those who do not follow "the rules" (Murray 1984, Mead 1986, 1992, Personal Responsibility Act 1995). The rules are benchmarked to the middle class American dream notion of individuals working their way out of poverty and up the career ladder to economic independence.

The third major model of intergenerational poverty is the "underclass model" which attributes poverty and lack of occupational mobility to both structural *and* cultural forces (Wilson 1987). The main argument is that the loss of manufacturing jobs in cities and the out migration of middle class blacks has a detrimental impact on the probability of inner city citizens escaping poverty and its attendant social isolation, especially for minorities. Since joblessness is central to becoming part of the underclass, macroeconomic policies to create jobs and appropriate social services are advocated to enhance opportunities for residents in underclass neighborhoods. Another response is "community building" and/or "empowerment." The idea is that, since external stimulus to assist the poor will continue to have a limited impact on alleviating poverty, the best approach is to assist residents in poor neighborhoods build their own capacity to develop economically. This strategy involves mobilizing local churches, community organizations, settlement houses, and other neighborhood structures to meet the needs of the poor.

The empirical research on these issues documents high upward mobility among some groups of poor alongside among some groups, especially families headed by poor, never-married mothers. Overall, children raised in poor households receive less formal schooling and earnings and are more likely to be poor in early adulthood than their nonpoor counterparts. The general consensus is that labor market conditions, economic resources, family and community structures, individual investments in schooling, and government transfer payments all play important roles in determining socio-economic outcomes including mobility (Nightingale and Haveman 1994).

Economic Theories of Mobility

The major models within the economic literature to describe occupational mobility are grouped into two types, vacancy-driven models and other models, including human capital, labor market segmentation, and life-cycle theories.

Vacancy-Driven Model

Much of the research on job mobility draws from the vacancy-driven model.[3] According to this model, the size and structure of job vacancies determine mobility and opportunities. A vacancy is generated when either a new job is created or a worker leaves an existing job.

The basic unit of analysis in this research is a job or pair of jobs adjacent in a work history. Over time, a person may remain in a given job, move to a different job with the same or different employer, or leave employment to become either unemployed or not in the labor force. A career is defined as a sequence of jobs associated with some type of progress or coherence over the work life. Job rewards are assumed to occur by changing jobs. Mobility depends on the opportunity structure, individual's resources and characteristics, time, and the information available on new jobs.

In most organizations, jobs are shaped as a pyramid, with fewer jobs at higher ranks or pay. Opportunity for mobility is dependent upon the shape of the pyramid and the rate at which higher jobs become vacant. Employers determine intrafirm mobility (promotion) based on the organization's structure and the schooling, ability, and job experience of workers. The basic vacancy model assumes all workers have the same opportunity at each level of the pyramid. Later models include some variation in the opportunity structure based on position, resources, and experience. The vacancy model does not provide for changes in resources over time, an assumption relaxed in the human capital model which allows for both the acquisition and depreciation of human capital.

Other Models of Career Mobility

Not all mobility is contingent upon vacancies. Opportunities for mobility may arise as a result of growth in employment growth, investments in human capital, a redistribution of jobs, and/or seniority arrangements over the life cycle.

Overall employment growth and job creation can lead to mobility. Employers may create a special position for an individual with unique skills and responsibilities, individuals may create jobs from a wage and salary job

into self-employment, and the government creates job openings through public works programs.

The human capital theory provides a well-known alternative to the vacancy-contingent model. The theory posits that individuals create earnings opportunities through the acquisition of skills and knowledge needed in the market place. Formal education and job training programs markedly enhance a person's human capital and increase the supply of higher skilled labor.

The human capital theory argues that productivity increases commensurately with increases in skill levels. Because workers are paid their marginal product, a worker with more human capital is paid more than a person with lower levels of human capital. The optimal investment in human capital and the optimal decision regarding when to quit a job maximize the individual's expected lifetime earnings. Human capital raises future earnings both directly through potential future earnings in certain occupations and indirectly through improvements in career paths.

The theory is used to explain the increasing wage premiums going to skilled workers in the US labor market. From 1969 to 1990, the wages of men from the lowest quintile of the overall distribution of wages fell by 25 percent while wages of men in the top quintile rose by 6 percent. This increase in wage differentials by educational level reflects a long-term decline in the demand for workers with less human capital (Topel 1994). The decline may be due in part to a shift in the type of work required by employers in evolving workplaces and to increased international competition in markets for goods and services produced by workers with less human capital. In this literature, an individual's job opportunity is a function of his or her human capital; moreover, the skill structure of jobs is not fixed but evolves in part based on the skill structure of the labor force.

In contrast to human capital theory's focus on labor supply, the labor market segmentation theory concentrates on the demand side of the market. The segmentation literature examines labor mobility and workers' careers in the context of a job structure largely fixed and independent of the structure of skills. The theory posits that the labor market is segmented and that not all workers have access to all job openings. The market s broken down into primary and secondary sectors and jobs. Primary jobs offer higher pay, more job security, and greater career opportunities. Secondary jobs are less stable, dead-end, and pay lower wages. Each worker's career opportunities are limited to the jobs within the respective labor market segment. There is little mobility from the secondary to the primary segments, especially for older workers. According to the labor market segmentation theory, the opportunity for upward mobility is limited because primary sector jobs are rationed.

A third theory relevant to mobility is what economists call life cycle effects, or how time affects career processes. At early stages of the life cycle, workers move most frequently from job to job and even from occupation to occupation. As they age, workers engage in fewer voluntary job shifts and gain job seniority, tenure and experience within organizations or occupations. Departures for career reasons decline with seniority. These factors go together with age barriers to career mobility, so that some workers are considered too old or too young for certain promotions.

In sum, many factors contribute to our understanding the processes of mobility and career ladders not only within and across firms but also over the life cycle.

Empirical Evidence on Mobility

Impressions and reality sharply diverge over the issues of job loss and job stability. While the media portrays and many workers worry about turbulence in the labor market, the academic literature finds that overall, jobs are not more scarce nor more unstable today than they were two decades ago. The following sections review the recent empirical evidence on labor market opportunities, job loss, and occupational mobility and attempt to reconcile these differing perspectives.

Ideally, to understand the degree to which individuals achieve the American dream of occupational mobility, we would want to track the careers of individuals within and between occupations and to examine earnings histories and quality of jobs. Such information is not readily available. Among the pieces of the mobility process that have been examined closely by social scientist are job loss (i.e., the incidence of job loss by gender, education, and race) and job stability (e.g., length of time in a job or with an employer by education, race, industry, and occupation).

Job Loss

Advancements in longitudinal data collection allow for analyses of experiences of similar cohorts of workers over the last two decades. A comprehensive study conducted by Farber (1993) examined the incidence of job loss among American workers during three time intervals, the 1982-83 recession (during which 7.5 million jobs were lost), the 1986-87 expansion, and the 1990-91 recession period (during which 8.6 million jobs were lost). He gathered experiences of displaced workers from several supplements to the Current Population Survey (CPS).[4] He then compared job loss by worker and job characteristics, including gender, age, education, industry, and tenure in an effort to test the hypothesis that higher-educated workers have become more vulnerable to job loss over the period.

The job loss rate was computed for the two-year intervals 1982-83, 1986-87, and 1990-91. The loss rate is defined as the number of workers who reported losing a job during the interval divided by the number of employed individuals in 1984, 1986, and 1988, respectively. Farber concludes that overall job loss did not rise over the 1980s.

This finding for all workers does not capture the variety of patterns experienced by different subgroups of

workers. For example, older men and more educated women and men were more likely to experience job loss in the early 1990s than the early 1980s. The rate of job loss of older men (ages 45 to 60) was 8 percent in 1990-91 compared to 6.2 percent in 1982-83. In contrast, the rate of job loss of women of all ages and young men was the same during the two recessions. Moreover, women experienced significantly lower overall job loss during the decade than to men (6.2 percent for women vs. 7.8 percent for men).

When Farber tabulates job loss by educational levels, he finds that college educated, middle age women (ages 35 to 50) had significantly higher rates of job loss in 1990-91 than they did in 1982-83 or 1986-87. Older men (ages 40 to 60) with 16 or more years of schooling who experienced an average job loss rate of 5 percent in 1990-91, significantly higher than the 3.9 percent rate in 1982-83.

Job loss rates do not capture why a worker lost a job and whether the loss was voluntary or involuntary. Sicherman and Galor (1990) argue that job loss may reflect an optimal decision by a worker seeking to enhance career mobility. Using data from the 1976-81 Panel Study of Income Dynamics for male heads of households, aged 16-60, they test to see if men with more human capital (i.e., more formal schooling) are more likely to change jobs voluntarily. They find that given the occupation of origin, more educated male workers were more likely to move to a higher-level occupation both within and across firms. But without controlling for occupation of origin, higher schooling was associated with lower occupational mobility.

Nonwhite workers in the 1920s and 1930s experienced significantly higher job losses from the early 1980s to the early 1990s than similar white workers. The overall job loss rate for white women under age 40 was 6.7 percent compared to 9.1 percent for same aged nonwhite women. For men the respective rates were 8.9 percent and 11.7 percent (Farber 1993). Racial differences in job loss rates did not extend to workers over age 40.

Farber also found that job loss became relatively more common in the growing non-goods producing sectors of the economy in the early 1990s relative to the 1980s. The probability of job loss in the trade sector was more than two percentage points higher in 1990-91 than in 1982-83; job loss in finance, insurance, and real estate was four percentage points higher over the same period. In contrast, most of the job loss in the manufacturing sector occurred in the early 1980s.[5]

Finally, Farber notes that the longer tenure a worker has, the lower the probability of job loss. Workers with over 15 years of tenure with a firm have a probability of job loss that is less than 25 percent the rate of job loss for workers in their first year on the job. The result applies to workers of all ages.

Sicherman and Galor (1990) also found that for men, firm tenure has a positive effect on career mobility, and for those with more experience, career mobility is more likely to occur within the firm (i.e., promotion) than across firms. DiPrete (1993) found that in the 1980s, organizations tended to protect experienced workers more than inexperienced workers during organizational contractions. The Farber, Sicherman and Galor, and DiPrete findings are important particularly for those workers who are experiencing shorter spells of employment with the same employer (voluntarily or otherwise) or in an occupation, and hence are not establishing tenure and experience that may cushion them from job loss in the future.

Job Stability

While the likelihood of job loss has changed over the past decade, what happened to stability as measured by the length of time in a job or with an employer? Diebold, Neumark, and Polsky (1994) examined data from the tenure supplements to the CPS for 1973, 1978, 1981, 1983, 1987, and 1991 from which they calculated the probability that workers with a particular level of job tenure today will have an additional t years of tenure t years in the future (i.e., the t-year retention rate, R(t)). The results indicate that for women and men with less than six years of tenure, retention rates fell slightly between the periods 1983-87 and 1987-91. The opposite occurred for men with more than six years of tenure whose jobs became more stable over the period.

The stability of jobs during the 1980s varied considerably by education, race, industry, and occupation. Job stability was longer among college graduates than among high school graduates and dropouts. Black workers experienced more job instability than white workers with retention rates falling from .57 to .53 over the period. Retention rates rose from .49 to .51 in the goods-producing sector but fell from .58 to .52 in the service-producing sector. Finally, occupational stability rose only for managerial and professional workers, whereas blue collar, sales and clerical, and service workers all experienced a drop in retention rates between 1983-87 and 1987-91. Diebold, Neumark, and Polsky conclude that the decline in retention rates for high school graduates and dropouts, blacks, and blue-collar workers corresponds loosely to changes in the wage structure over the 1980s and early 1990s.

DiPrete's analysis of the Current Employment Statistics from 1982-83 and 1986-87, the Mergers and Acquisition data from 1981, 1982, 1985, and 1986, and the CPS confirms some of the findings of Diebold, Neumark, and Polsky. DiPrete (1993) found that blue collar workers and lower paid service workers (i.e., service, precision production, operators, handlers, transporters, and laborers) did not benefit during the industrial restructuring of the 1980s. In industries that expanded, blue collar/service workers experienced a drop in internal mobility (within an industry or organization), a rise in exits (to the same or different industry), and higher unemployment. DiPrete concludes that blue collar/service workers bore the brunt of industry contractions in the 1980s while upper white collar workers were the biggest beneficiaries of industry expansion. He estimates that 681 blue collar/service workers lost their jobs for each net loss of 1000 jobs in an industry. DiPrete also observes that jobs tend to be more stable in firms that are large enough to withstand the forces of mergers and acquisitions and downsizing, firms that can capitalize on economies of scale in production, and those that produce products and services that are in high demand.

Finally, the most recent work by Farber (1995) using data from the mobility supplements to the January 1973, 1978, 1981, 1983, 1987, and 1991 CPS, found that the distribution of job duration during the last two decades did not change in the aggregate. However, as with job loss and job stability, the distribution of long-term jobs across population groups has changed. First, men with less than 12 years of education are less likely to be in long jobs today than they were 20 years ago. Second, women with at least a high-school education are substantially more likely to be in long jobs today than they were 20 years ago.

Implications for Work

The empirical evidence suggests that since the 1970s, the probability that the average worker will lose a job and change jobs more quickly changed little in the aggregate. This result stands in striking contrast to the media image of constant layoffs, downsizing and job turnover. Certainly, instability did increase for some groups; older men, college educated workers, persons of color, and those in the non-goods producing sectors of the economy all encountered higher job loss rates in the early 1990s than in the 1970s or 1980s. Job insecurity (measured by job tenure, experience, and duration) has risen for blue collar workers, low paid service workers, non-college educated workers, and persons of color. Jobs for higher paid white collar workers were the most stable over the two decades.

Our understanding of occupational mobility is limited. DiPrete (1993) posits that the literature is bound by the old thinking about the industrial organization of work, whereby job instability was associated with a person. He argues that new models are called for that associate job instability with the structure of jobs. Little evidence is available on whether upward mobility is more prevalent in certain industries or occupations and whether the prevalence of job ladders is increasing, constant, or decreasing.

Conclusions

This chapter has reviewed the concept of social and economic mobility from historical, theoretical, and empirical perspectives. The historical perspective spans three major industrial revolutions in agriculture, manufacturing, and service. During these transitional periods, a major segment of the work force was displaced by technologies and re-employed in emerging industries. Workers associated rising standards of living and the attainment of the American dream with mobility. The upward economic and social ladder meant moving from common laborer to skilled laborer, blue collar worker to white collar worker, white collar worker to executive.

The review of the theoretical and empirical evidence suggests that the American dream of rising standards of living and career mobility are attainable for only certain segments of the population. If current trends continue, incomes will remain stagnant for the majority of American workers (Krymkowki and Krauze 1992, Newman 1993).

As we near the close of the 20th century, the US economy is generating large numbers of jobs, but not enough wage growth. The result is increasing proportions of individuals working to maintain their desired living standard. Out of a total civilian, noninstitutionalized adult population of 196.8 million in 1994, over 131 million were in the labor force (Council of Economic Advisors 1995). The current labor force participation rate of 66.6 percent is well-above that of 55.7 percent in 1940. Since the 1940s, the labor force participation of women has risen steadily from 32 percent to almost 59 percent, while the rate for men has fallen from 87 percent to 75 percent. Most dramatic and steady has been the rise of married women's labor force participation from 20 percent in the 1940s to 60 percent by the 1990s. It took the majority of wives to work for married couple families to reach the median income of $43,000 in 1993.

The outlook for workers over the next decade is hopeful for workers with high skills but mixed for other types of workers. According to Bureau of Labor Statistics projections, the demand for workers is rising more rapidly than the growth in the labor force. The BLS projects that annual employment growth will average 1.5 percent through 2005, whereas labor force growth will average only 1.3 percent per year. The return of modest productivity growth and the continuing demand for higher skills raise the prospects for higher wage growth and new opportunities, but these forces can also be disruptive for some workers, especially those with limited or obsolete skills. Taking advantage of the future will require improvements in the educational and systems as well as hard work by students and workers. However, employers can also play an important and constructive role, especially if organizations increase responsibility and widen the scope of line workers, develop job ladders and provide extensive and continuing training. We now turn to one major industry undergoing significant transformations that embody increased emphasis on productivity growth and on the restructuring of the work place.

III. HEALTH CARE INDUSTRY OPPORTUNITIES

For decades, the health industry has been a major employer of low-skilled workers. Between 1980 and 1989, employment growth in the health industry was twice as rapid as growth in total non-agricultural employment. The latest labor force projections suggest that the health sector will continue to grow, and provide more jobs in both skilled and less-skilled occupations.

This chapter examines the opportunities for low-skill workers and restructuring in the health care sector. As noted above, existing trends in the overall U.S. economy, dating back at least two decades, have led to stagnant or falling wages for low-skilled workers and rising earnings inequality. Labor market changes are moving low-skilled workers into lower-wage positions with fewer chances for advancement. In this context, it is useful to focus on a single industry. A close examination of the health care industry allows us to ask: Can

structural changes in an expanding industry slow or reverse these negative patterns for low-skilled workers? Restructuring in the health care industry is leading to higher skill requirements and more responsibility for paraprofessional workers, along with slow growth in the demand for unskilled workers in health care. Changes in the industry present problems and challenges, but opportunities as well. Several promising projects give hope that the change can improve the prospects for low-skill workers. The focus of this part of the report is on the following questions:

- What types of restructuring are taking place in the health care industry?
- How does health care restructuring affect the allocation of labor?
- What are the impacts on the industry's workforce needs and what training can best meet those needs?
- What opportunities do these changes portend for occupational mobility?
- What programs have utilized these opportunities?

The Restructuring of the Health Care Industry

Consolidation, corporate medicine, market competition -- these terms appear daily in descriptions of our evolving health care system. The U.S. health care industry has been undergoing a remarkable restructuring for at least the past 20 years in response to economic, demographic, and technological factors (Falkson and Rubin 1993). The continued rise in health care costs, changing social attitudes, and an aging and increasingly diverse population have stimulated growth and change in the health care industry. Technological advances interact with the changing demographics of the population and affect the ways in which services are delivered.

The restructuring taking place in the health care industry includes both government and private sector initiatives, reflects local economic conditions, and has implications for other industries. This section describes restructuring in terms of organizational, financing, workforce, and service delivery changes.

The Rising Demand for Long-Term Care

Demographic factors are a driving force behind the growth of the health sector, particularly the rise in the population most at risk for long-term care. People with disabilities and chronic illnesses who require long-term care are a diverse and growing population including persons with acquired immunodeficiency syndrome (AIDS), children who are dependent on medical technology (e.g., ventilators) or otherwise disabled, persons with mental retardation and related conditions, and those experiencing serious mental illness or problems of substance abuse, in addition to the elderly disabled. Approximately 12.6 million individuals, or about 5 percent of the U.S. population, require long-term care (Vladeck, Miller, and Clauser 1993). While patients of all ages may require long-term care, the prevalence of disability increases with age, and the need for assistance with activities of daily living increases dramatically for individuals 85 years of age or over. By the year 2030, the very old population, those over 85, is projected to quadruple to 8.6 million, and will comprise 13 percent of the elderly (Rice 1989). Another factor expected to increase the demand for caregiving services is that an increasing number of older persons live alone rather than in family settings.

In addition to the aging of our population, there are other trends that are affecting the size and make-up of the population in need of long-term care. The rate of growth in disabling conditions among the non-elderly is increasing rapidly. This growth has been attributed in part to a decline in mortality rates for certain conditions, such as heart disease and hypertension, which increases the prevalence of these disabling conditions. Improvements in trauma care and emergency medicine have decreased mortality rates for individuals with major physical impairments such as spinal cord injury (DeJong, Batavia, Griss 1989). Recent developments in the epidemiology and treatment of persons infected with human immunodeficiency virus (HIV) are also changing the composition of those in need of long-term care. Survival time has increased and the prevalence of the disease is increasing among the poor, minorities, women, and children. Medical and technological advances have not only increased survival rates for many diseases and injuries, but these advances have made it possible for the physically and developmentally disabled to lead long lives without being institutionalized. An estimated 2.3 million people ages 21-64 live at home and need assistance with basic activities of daily living (National Medical Expenditure Survey 1987 in Bayer et al. 1993) . Thus, the long-term-care industry will see increased demands for services from persons of all ages, with a wide range of care needs.

Reorganizing for Efficiency

Fennel and Alexander (1993) note that there are at least three major trends characterizing health care organizational change during the past decade: (i) an increase in the diversification of organizational types and products; (ii) change in traditional ownership and management configurations; and (iii) the development of new interorganizational arrangements and multi-tiered governance structures.

Diversification includes the emergence of new forms of providers, such as free-standing urgent care centers and ambulatory surgery centers, as well as diversification within hospitals. Examples of hospital diversification include hospital-sponsored home health programs, health promotion programs, geriatric programs, and outpatient surgery units. Diversification allows the hospital to reduce its vulnerability to uncertainty within the inpatient, acute care sector, by broadening its base of activity (Fennell and Alexander 1993).

Organizations are also responding to cost containment pressures by using vertical integration. Under this approach, one health care organization (such as a hospital or hospital system) provides all levels and intensities of service to all patients. For example, for-profit hospital chains are expanding by purchasing outpatient surgery centers and home health care networks, enabling them to offer "one-stop shopping" to managed care companies. In theory, as the number of stages of production controlled by the hospital

increases, production and transaction costs during an episode of illness can be expected to decline (Clement 1988). However, experience to date in the health sector has not borne this out, perhaps because market pressures were not severe enough to require strategic, integrated behavior between operating units (Shortell, Gillies, and Devers 1995).

The nursing home and home care industries are also responding to increased competition by diversifying their services. For example, nursing homes are developing more skilled subacute care units as well as branching out into assisted living and home care services. Home care services are linking up with hospitals, nursing homes, and each other and are also branching out to offer adult day care and assisted living. As a result of diversification, the nursing home and home care industries are coming to resemble each other more than they did before (Feldman 1994). Training programs are already being developed to respond to this change. [6]

Changes in ownership and management patterns are reflected in the increased concentration of the hospital industry through closure and merger, a rise in the prevalence of hospital corporate restructuring, and a blurring in the distinction between profit and not-for-profit ownership, including a change in management "climate" from emphasizing nonprofit service to competitive business strategies (Fennell and Alexander 1993). Examples of the latter include the proliferation of total quality management programs, marketing divisions, and emphasis on health care "products" or "product lines" in all types of hospitals.

Increasingly complex interorganizational patterns have evolved, including multi-hospital systems, provider networks, and formal linkages between hospitals, physician groups, and third party payers. Powerful buyers--big employers, insurance companies, and managed care companies--are putting pressure on hospitals, demanding contracts that sharply cut their medical bill. The hospital industry is responding to this competitive environment by increasing the size and breadth of its organizations. Through gains in volume, bigger companies stand to lose less as the pressure for lower prices erodes profits. However, the multihospital systems of the 1980s that emphasized administrative economies of scale did not seem to improve performance. A refinement of the low-price/high volume strategy is emerging, which centers on integrated systems of care that focus on defined populations and communities (Shortell, Gillies, and Devers 1995).

Cost Containment Pressures: Changes in Regulatory and Reimbursement Approaches

Public policy changes in the 1980s have affected hospitals, nursing homes, and home care providers in several ways. The Omnibus Budget Reconciliation Act (OBRA) of 1981 introduced the Medicare Prospective Payment System (PPS), based on Diagnosis Related Groups or DRGs. The Medicare PPS, designed to contain hospital costs by shortening average acute care inpatient stays, literally pushed older persons (and others) out of acute care institutions into institutional and community-based long-term care settings. At the same time, private insurers' utilization review programs led to reductions in the number of hospital admissions and in the average length of stay per admission. Earlier discharge from acute care hospitals generated ripple effects among all types of care providers who supply health and social services to the institutionalized and homebound elderly by increasing the workload and intensity of services required (Close, Estes, Linkins and Binney 1994).

The impact of reduced hospital lengths of stay has been felt most strongly in the home health and nursing home industries.[7] Home health agencies include those that are government-owned, hospital-based, proprietary for-profit, proprietary not-for-profit, and visiting nurse associations (U.S. Department of Labor 1993). Since Medicare is the most significant source of financing for home care, changes in Medicare certification and reimbursement policies have had a pervasive effect on the delivery of health services in the Medicare-certified home care sector. Because long term care providers were not subject to DRG-based prospective reimbursement and reimbursement per skilled nursing home bed actually increased during the 1980s, the number of for-profit agencies in the long-term care business increased.

While Medicaid is not a driving force for uniformity in the home care industry, it is a major funding source for nursing home care. Medicare covers only short-stay skilled nursing care. Low Medicaid reimbursement rates require nursing homes to carefully manage the mix of skilled nursing, Medicaid, and private pay patients (whose rates subsidize the cost of Medicaid patients). These pricing pressures led to a consolidation in the nursing home sector, beginning in the late 1970s, and the growth of regional and national chains (Falkson and Rubin 1994). Demand for nursing home care is rising as a result of demographic trends and the trend to provide less costly alternatives to hospital car. In addition, nursing homes are strategically adding services which enhance revenues either because of favorable reimbursement policies (e.g., rehabilitation services) or limited regulation (e.g., assisted living, adult day care).

The move toward managed care, including capitated payment, is increasing pressures for cost containment and accelerating consolidation in the health care industry. Managed care organizations strive to keep costs down by using their buying power to obtain steep discounts for members on outpatient and inpatient services. Providers of home and community-based services, which have traditionally been reimbursed on a fee-for-service basis, with fees based on their costs, are beginning a gradual shift away from cost-based reimbursement to capitated arrangements. An increasing number of such providers are negotiating with managed care companies for capitated payment contracts under which the provider receives a set amount per client and commits to provide all necessary care for that fee. While currently both Medicare and Medicaid make third-party payments for home and community-based care on the basis of cost, the federal government is pursuing other alternatives, such as the use of per-visit and per-episode prospective payments systems for post-acute care in the Medicare program (Raphael and Santamaria 1994).

The Health Care Financing Administration is sponsoring research and demonstration programs to test approaches to integrating the acute and long-term care delivery systems into one service delivery and

financing system. The Program of All-inclusive Care for the Elderly (PACE) demonstration incorporates all acute and long-term care services available through Medicare and Medicaid under full provider financial risk. The PACE model includes as core services adult day care and multidisciplinary team case management, through which access to and allocation of all health and long-term care services are arranged. Several PACE sites are also receiving funds from the Robert Wood Johnson Foundation to determine whether the PACE model can be adapted to meet the needs of various non-elderly disabled groups. A second demonstration program, the Social Health Maintenance Organization (SHMO) supplements the existing Medicare HMO benefit package with expanded benefits such as drug coverage and chronic care benefits such as homemaker, transportation, and home health services. Financing of SHMOs is accomplished through prepaid capitation, pooling funds from Medicare, member premiums for the chronic care benefit, and Medicaid (for eligible enrollees). The four sites implementing this demonstration have been in operation since 1985, and additional sites are being developed which test refinements of the model, integrating other services and reimbursement methodologies. (Vladeck, Miller, and Clauser 1993). Formal evaluations of the SHMO suggest generally high levels of consumer satisfaction with covered benefits and amount of out-of-pocket costs. Initial evidence from the PACE demonstration suggests that the managed care system is successful in reducing acute care expenditures, but it is less clear that integrating acute and long-term care services generates overall savings.

Restructuring the Workforce to Reduce Costs and Provide Patient-Focussed Care

With medical markets growing more competitive, hospitals are looking harder at costs. In a labor-intensive industry like health care, staffing comes under close scrutiny. Many hospitals are analyzing the work done by the 985,000 registered nurses at hospitals and reassigning simple tasks to lower paid help (Wall Street Journal, February 10, 1995). The revamping is meant to produce a new way of staffing hospitals, in which a few nurses oversee care and focus on tasks calling for the most skill, such as administering intravenous drugs. Surrounding them are teams of aides who feed patients, check blood pressures, and do other routine chores in health care delivery.

A work-restructuring model that has generated considerable interest and support in the hospital industry is patient-focused care. Patient-focused care combines staffing changes, structural changes, and technology by assigning multiskill care teams (which include nurse's aides, LPNs/ LVNs and technicians) to provide ancillary services such as EKG tests, routine respiratory therapy, phlebotomy (drawing blood), pharmacy and, in some cases, radiology, x-ray, and physical therapy, on the nursing unit, thus reducing time spent transporting patients and coordinating services (Greiner 1994). Technological advances such as lighter and more portable equipment, nursing node computers, automated narcotic dispensing machines, and electronic pagers have facilitated such restructuring.

While cost savings are certainly a factor in hospital staff changes and job redesign initiatives, cost containment has already cut out a lot of "fat" in the system. With fewer opportunities for cost-cutting, there is more non-price competition in the hospital industry. The patient is now viewed as a "customer" whose satisfaction is important to the hospital's bottom line. The focus on customer service has changed staffing in a number of ways, including expanding the decisionmaking authority of front-line workers so that they can better meet the needs of the customer and increasing patient contact for traditionally isolated jobs in dietary and housekeeping. Some health care employers now include customer satisfaction in employee appraisal, and others provide training sessions on customer service, interpersonal skills, and the importance of teamwork.

Changing Social Attitudes: Responding to Consumer Demands

Just as health care providers have begun to consider customer satisfaction, consumers have also moved away from their traditionally passive role in health care. Changes in health insurance coverage, in the organization of health care providers, and greater out-of pocket costs, are increasing the involvement of consumers in health care decisionmaking. Technological advances have also contributed to the empowerment of health care consumers, particularly those with disabilities. The new technologies have added to the number of disabled individuals by saving lives, and have greatly increased the independence of many with long-term or permanent disabilities. This is particularly evident in the long-term care community, where young disabled patients want control over the course of their lives. For example, advocates for "consumer-directed care" would modify the role of home care agencies and allow patients to hire, fire, schedule, supervise, and pay long-term care workers. A growing proportion of the population seems to be willing to talk about accepting greater responsibility for their own health (Reynolds 1989). Yet, patient empowerment is at odds with both Medicare and Medicaid policies, which emphasize traditional medical services because they require services to be prescribed by a physician. Employers in long-term care, such as home health agencies, assisted living facilities, and nursing homes are exploring ways to provide consumers a greater voice within regulatory constraints; this is likely to result in changes in staff training, evaluation, and compensation.

Service Delivery Changes Increase Frontline Worker Responsibility

Service delivery changes are the "front line" manifestation of the many factors described above. Most notable are the move from inpatient to outpatient care, the dwindling of the patient-physician interface and its replacement by the organization or "gatekeeper" interface, and the rise of community-based care, with increased emphasis on patient independence and empowerment and a recognition of the limitations of medicine. Frontline paraprofessional workers effectively have assumed increased responsibility to deliver post-acute and subacute care to a more physically ill population of elders (Close, et al. 1994). Yet, wages and benefits in the nursing home and home care industries are markedly lower than those for workers providing comparable services in acute care hospital settings. Within hospitals, paraprofessional workers are also assuming increased responsibility, and they must adapt to an environment that is increasingly complex and demanding, both technologically and interpersonally.

Implications of Health Industry Changes for Workers

How are the myriad changes in the health industry affecting employment and advancement opportunities for low-wage workers? This section addresses labor market implications, skill requirements and training implications, and career mobility implications.

Job Growth in the Health Care Industry

According to the Bureau of Labor Statistics (BLS), health care is one of the few sectors of the economy with projected job growth. The BLS reports that "health services, which accounted for 7 percent of total wage and salary worker employment in 1975 and 8 percent in 1990, will approach 9 percent of total employment by 2005. Expenditures for health care, one of the fastest growing components of GNP, will increase significantly as several factors increase the demand for health services" (BLS 1991).

The BLS estimates that among the twenty occupations that will see the greatest percentage growth in employment by the year 2005, ten are related to health care:

- home health aides (projected to increase by over 90 percent)
- personal and home care aides (77 percent increase)
- physical therapists (76 percent increase)
- medical assistants (74 percent increase)
- radiological technologists and technicians (70 percent increase)
- medical secretaries (68 percent increase)
- physical and corrective therapy assistants and aides (64 percent increase)
- occupational therapists (55 percent increase)
- surgical technologists (55 percent increase)
- medical records technicians (54 percent increase).

The BLS also estimates that there will be about 1.8 million new jobs by 2005 in four health-specific occupations:

- registered nurses (projected increase of 767,000 workers)
- nursing aides, orderlies, and attendants (552,000 new workers)
- licensed practical nurses (269,000 new workers)
- home health aides (263,000 new workers).

While several of the growth occupations require at least a four-year college degree (e.g., physical and occupational therapists), some require minimal educational levels (e.g., home health aides, nursing aides, orderlies and attendants), and many require skills that can be obtained with post-secondary training or on-the-job training but not necessarily a four-year degree (e.g., radiological technicians, medical assistants, physical therapy assistants, medical records technicians, licensed practical nurses).

The picture is not uniformly optimistic, however. Many of the occupations with projected growth will experience changes in job roles and work settings. The changing heath care delivery environment will exert varying effects on local growth. For example, a study of the projected supply and demand for health workers in New York City concluded that substantial decreases in hospital-based employment would not be offset completely by projected growth in nursing homes, office-based practices, clinics, and home health care. This difference from the national outlook stems in part from New York City's traditional reliance on large medical centers for the provision of health care and the relatively late initiation of hospital downsizing in New York City (Berliner et al. 1994). As several of the case examples presented later in this paper demonstrate, organizations involved in training health care workers must constantly reassess the market and adapt or design programs which meet the needs of workers and employers. A number of programs that were initiated to respond to a crisis, such as an acute shortage of nurses, are now becoming more institutionalized, providing new employment opportunities with new skill requirements.

While the rapid organizational and occupational restructuring in the health care sector is likely to change the occupational and training mix of workers and the mix of employers, high demand for front line workers nationally is unlikely to abate (Feldman 1994). In short, there will be job growth in the health care industry, but identifying and maximizing opportunities, especially those with long-term career potential, is a complex and dynamic process.

Manton and Suzman (1992) have projected relatively high demand for long-term care workers through 2040, even if elders' disability and service utilization rates should decline. Opportunities for paraprofessionals in the long-term care field include both institutionally-based and home- or community-based positions. Despite the growth in available jobs, home health aides have the highest vacancy rate of all positions employed by home health care providers, in part, because of very high job turnover. Factors contributing to the high turnover and vacancy rates include: low wages and poor benefits, irregular and/or inadequate hours, little advancement potential, and inadequate training. Many home care agencies operate like temporary employment agencies, where the majority of workers are employed on an hourly or part-time basis and there are no guaranteed work hours. A national survey of proprietary home health agencies indicates that they employed almost three times as many "home health aides" on a part time basis as they did on a full-time basis, and almost twice as many "homemakers" (a less skilled category) on a part-time basis as on a full-time basis. Low reimbursement levels by third party insurance payers and heavy public regulation keep wages low in this occupation. The average national wage of home care workers in 1988-90 was between $4.50 and $5.00 per hour (U.S. Department of Labor 1993). However, those with certification who are employed by

Medicare-approved home health agencies may earn wages substantially above the average.

In comparison to home care workers, nursing home aides comprise a much larger group than home health aides (843,175 compared to 197,049 according to the 1989 Current Population Survey), and tend to have more education and higher incomes (Crown et al. 1992). An analysis of Current Population Survey (CPS) data by Crown (1994) comparing aides employed in hospitals, nursing homes, and in home care finds that the three types of aides fall into a clear economic continuum, with hospital aides tending to be the best compensated, followed by nursing home aides, and finally by home care workers. This is true whether one measures economic status by family income, individual earnings, or hourly wages. As hospital job redesign programs increase the range of tasks performed by aides under the direction of nurses, pay and training disparities become an issue. National averages are $15,000 per year for aides and $36,618 for RNs, and hospitals that have redefined staff roles have not narrowed this gap (Wall Street Journal, February 10, 1995).

In the past, the nursing home and home care labor markets were somewhat segmented. To the extent that the two sectors converge in their service delivery offerings, they may increasingly compete for similar workers with similar compensation packages. Some of the pressure on the long- term care labor market may be alleviated if long-term care employers can attract increased numbers of former hospital workers who lose their jobs as a result of hospital downsizing. However, an attempt to upgrade long-term care jobs from temporary part-time to salaried work, or to significantly bid up their wages and benefits, will require adequate third party funding and will inevitably collide with the general economic trend toward contingent work (Feldman 1994).

Government reimbursement rates have been identified as one of the major barriers to improving the stability of the home health workforce (MacAdam 1993). Some states, such as Massachusetts and New York, have increased Medicaid reimbursement levels for home care, thus allowing firms to raise wages. Some employers have increased wages or provided fringe benefits in response to labor shortages. More agencies are increasing travel reimbursement or using company vans to facilitate transportation. Unions are also becoming more active in organizing and in providing training for this occupational group, and they are encouraging the industry to define levels of care and areas of specialization and to develop a common occupational terminology. These efforts are aimed at enhancing the status of this occupation as well as creating opportunities for advancement.

Changes in the Health Care Industry Require New Skills and Training

This section discusses how quality concerns, hospital restructuring and downsizing, the increasing complexity and diversity of cases, and the empowerment and increased autonomy of paraprofessionals impact on skill requirements and training needs for health care paraprofessionals. Particularly at the paraprofessional level, employers worry that the supply of workers may not meet the demand and the workers available may not be adequately trained to serve an increasingly older population with increasingly complex care needs. As a study of the supply and demand for health workers in New York City concluded, "Efforts to upgrade existing personnel or retrain displaced staff must be premised on an understanding that there is a profound, widespread need for remedial education and training. Simply put, much of the current workforce, especially many mid-and lower-level clinical and administrative support staff who are most at risk of displacement, is not prepared for a dynamic health care system that is becoming acutely sensitive to questions of price, effectiveness, customer satisfaction, and quality." (Berliner et al. 1994).

Quality concerns have led to certification requirements for nurse aides and an increased awareness of the need to invest in training for low-wage workers as well as for managers and professionals. Specific requirements include training in basic skills; computer literacy; more specialized health care training; increased supervision and involvement in patient care plans; and training in interpersonal skills, including an emphasis on multicultural issues.

In nursing homes and other long-term care facilities, training and certification of nurse aides has increased in response to the Omnibus Budget Reconciliation Act (OBRA) of 1987, which required certification of nurse aides in Medicaid-approved skilled nursing facilities and instituted competency exams and/or training for home health aides employed by Medicare-certified home health agencies, beginning in 1990. A home health aide is a paraprofessional who provides assistance with personal care and home management services that permit elderly, ill, and disabled persons to live at home rather than in an institution. There are a range of skill levels in home health, from the certified home health aide whose services are reimbursable by Medicare and Medicaid, to the personal attendant and homemaker, who provide a more limited range of services.

Medicare-certified home health aides must complete a minimum of 75 hours, with at least 16 hours of classroom training, followed by at least 16 hours of supervised practical skills, and must pass a competency exam. At least three hours per calendar quarter of inservice continuing education and training must be provided. Currently, there are no regulations or training requirements for non-Medicare home care, but industry standards are comparable to Federal requirements. Most home care agencies, especially non-Medicare agencies, generally do not pay for training and pay no wages while the individual is in training. Some agencies provide pre-employment training, wherein the workers usually do not receive a salary and are hired for home care jobs at the end of the training/probation period. Federal programs such as the Job Training Partnership Act (JTPA) and other state and federally sponsored demonstrations also provide free or low-cost training to workers.

Hospital restructuring and downsizing have also increased health worker demand for training programs. A training center sponsored by a jointly administered union-employer educational trust fund finds that more workers are seeking training to upgrade their skills or learn new skills in response to the uncertainty of their

current jobs. A common problem faced is the impact on workers who obtained employment at a time when education and skill requirements were vastly different, and who have not participated in the job market or the education system for many years. Many of these individuals lack basic math and language skills, are unfamiliar with computers and other technology, and have a real fear of classroom situations (in fact, a union sponsored training center now offers seminars on different learning styles and on learning disabilities). On the one hand, hospitals faced with cost-cutting pressures may use downsizing and restructuring as a way to "unload" workers whose skills are lacking or out-of-date. On the other hand, unions and workers are saying to employers "let us know what your needs are and we will get the appropriate training."

Because of the increased complexity and diversity of cases and the increased responsibility likely to devolve to paraprofessionals, health workers require more training about disease characteristics and patient management. Some will need specialized training, such as rehabilitation aides, high-tech care aides, and aides who specialize in the care of patients with dementia or cognitive impairment. Paraprofessionals will need to have a better understanding of why certain procedures are followed, what other illnesses and interventions a patient is subject to, and when to seek the advice of a professional, because the supervising nurse may not be close at hand. Paraprofessionals must also become more involved in patient care planning and coordination of care, because frontline workers have valuable information by virtue of their extensive one-on-one interaction with patients (Raphael and Santamaria, 1994).

Increased autonomy and responsibility of paraprofessionals will require more sophisticated training, but it will also require more support and supervision than is currently available, particularly for home care workers. The Visiting Nurse Service of New York has found that mentor programs and frequent case conferencing are effective in helping paraprofessionals cope (Raphael and Santamaria, 1994). Feldman (1993) reported on an evaluation of several home-health aide work life improvement demonstrations, including a program sponsored by New York City's Human Resources Administration, to create a new role for a selected group of home health workers to become "Field Support Liaisons" (FSLs). The FSLs received intensive training in communications and problem solving skills, were given new job responsibilities, and received increased pay and benefits. They conducted regular home visits to aides at their work sites, aimed at identifying and resolving (often with the help of senior agency staff) a variety of worker problems, including interpersonal conflicts with clients or clients' families, environmental problems impeding client care or worker safety, and personal problems affecting the aides' job performance. In addition to reducing worker isolation, the FSLs, who became full-fledged agency staff members with commensurate pay and benefits, were conceived as role models for home attendants who might wish to move upward on a home care career ladder. The program reduced turnover and improved continuity of care.

The tendency to move towards specialization as training requirements become more sophisticated must also be balanced against the value of cross-training (providing one type of training that can be applied in several work settings), especially in a dynamic environment where interdisciplinary teams are the wave of the future. As noted by Shortell, Gillies and Devers (1995), "... many of the major diseases of the 1990s--AIDS, Alzheimers, cancer, trauma, and behavioral problems are not *diseases that single departments* can handle but rather illnesses that require an entire *system of care*." This is consistent with the move towards managed care and capitated payment systems. All members of the health care team will need to share a common understanding of the patient's care plan and goals.

The team care approach, increased attention to customer satisfaction and consumer empowerment, and the growing diversity of our population in terms of race and ethnicity, all highlight the critical importance of interpersonal skills for success in health care service delivery. Workers require training in communication, negotiation, and cultural sensitivity, but many of these lessons are best learned through experience. Thus, training must include workers of diverse skill levels and cultural backgrounds, and the workplace itself must begin to resemble the multicultural population it serves. The recognition of Community Health Workers (CHWs) as "culture brokers" between their community and the public health system is one example (Love and Gardner 1993). Community Health Workers are paraprofessionals who work in public health education and primary care. Outreach community health workers are those whose primary tasks are performed largely outside the clinic or agency, such as case finding, community organization, and community education. Clinic-based community health workers perform tasks largely within a clinic or agency, such as translation, health histories, or medical assisting. Both types of community health workers provide information and referrals, health education, and patient advocacy services, and are integral members of the public health care team.

There is little standardized, systematic training for CHWs. However, most facilities require or provide training based on their own standards and needs, and some award certification to those completing training. Beginning in Fall 1993, a community health worker pilot training program began at the Community College of San Francisco. The nine month training provides class time, an opportunity to practice new skills at the work site, ten college credits, and a certificate of completion. CHW training is also provided by community colleges and through the U.S. Department of Agriculture's Cooperative Extension System, especially in rural areas. The Centers for Disease Control and Prevention and the Health Resources and Services Administration fund projects to train lay health advisors, or *consejeros* (counselors), to provide education and referrals to farmworkers in their communities. The CHW and similar programs are an effective way for health programs to reach community members who may not be as responsive to outsiders. Several studies of CHWs indicate that those training programs which combine classroom instruction and internships produce CHWs who are well-prepared to work in a variety of health and social service settings (Love and Gardner 1993).

Opportunities for Advancement: Specialization, Team Care, Cross-Training, and Job Restructuring

Career ladders and an organizational climate of opportunity are needed to ensure upward mobility for those in lower level jobs. Team care and specialization are two health care delivery trends that provide more paraprofessional opportunities. Paraprofessional occupations in many industries provide opportunities for low-skilled and semi-skilled workers to enter career tracks. Within the health care industry, occupations are more likely to require a license or certification as a condition of employment, and to have standardized skill criteria (Yudd and Nightingale 1990). This may make it more likely that career ladders can be developed in the health industry than in other sectors of the labor market. Currently, individuals with a high school education or General Equivalency Degree (GED) who are able to pursue additional training (usually a two-year program) as Licensed Practical Nurses can obtain higher paying jobs and advancement opportunities in long term care facilities. New opportunities for paraprofessionals offer the possibility that the gap between entry level and LPN can be filled with advancement steps. Alternative paths to full-time jobs with benefits can also be developed.

OBRA 1987 established, for the first time, a set of standards for providing hands-on care in a nursing facility, recognized through a certification process. Having a recognized level of expertise changes the status of nurse's aide in two ways: (1) It weakens their reliance on any one employer, as they now have expertise that is directly transferable to other organizations, and (2) it increases their commitment to the occupation, by virtue of their initial investment of time and effort. (Brannon and Smyer 1994). While credentialling and increased training requirements may appear to hinder the ability of some individuals to become home care workers, there are strategies to encourage both government and employer sponsored training.[8]

Other strategies for improving career mobility include increased specialization, additional supervisory or "advanced practice" job levels, job restructuring, and cross-training. Increased specialization responds to the diverse needs of long-term care patients and can serve as a means to procure a better (e.g., more guaranteed hours, higher hourly pay, or benefits) position or advance within an organization. Especially in hospitals, the job market is a competitive arena for entry level paraprofessionals and training beyond the minimum certification requirements can improve one's chances of employment. Areas of specialization include care of patients with dementia, care of AIDS patients, rehabilitation aide, and hospice care. Specialization can provide an avenue for advancement for those who prefer to remain in direct patient care rather than assume supervisory or clerical responsibilities.

Supervisory training and responsibility are traditional avenues for advancement, but in health care the ability to move from entry level to a supervisory level has required a significant educational increment (e.g. from nurse aide training to LPN training). Some organizations are adding increments between the nurse aide and the LPN, such as the Field Service Liaison noted earlier. This approach begins to provide a career ladder for entry level workers, recognizing and requiring experience, interpersonal, and supervisory skills. As a cost-cutting measure, this approach has appeal because it is still cheaper for employers to add an increment than to hire more nurses. The addition of a supervisory level or senior aide position in home care responds to the need for worker support and quality assurance as more serious and complex cases are treated at home.

A number of job restructuring initiatives have potential for improving the employment conditions and advancement opportunities of low-wage workers in health care. In the home care industry, several demonstrations in New York City are exploring ways to structure stability into the job and expand opportunities for full-time work. In 1989 the New York City Human Resources Administration Medicaid Personal Care Program adopted, on an experimental basis, a *cluster care* model of paraprofessional service delivery. In this model, clients living in close geographic proximity (e.g., in the same apartment complex) are served by several home care workers responsible for the cluster, with each client receiving a task-oriented package of services. They have over 80 patients clustered in three buildings. This has reduced the number of workers needed to care for these patients by 50 percent and the number of hours by 25 percent (Raphael and Santamaria 1994). Thus, providing full-time work opportunities in this manner may actually reduce costs.

Another approach to restructuring home care employment is the *swing aide* project, jointly supported by the United Hospital Fund of New York and The New York Community Trust. In this model an aide, within the same day, will work both at a regular home care case assignment and then at a senior center--just as an elderly client might split his or her day between home and a nearby congregate program (Surpin, Haslanger, and Dawson 1994).

Cross-training responds to the recognition that different care settings require similar skills. For example, distinctions between Medicare home care for the elderly and home care for the disabled funded by social services are largely a function of reimbursement policies and administrative barriers rather than clinical issues. Longitudinal integration of health care providers, where many levels of care are available under one corporate organization, as well as the proliferation of new types of care settings (i.e., assisted living, adult day care), are continuing trends in the health care industry. Workers trained with a core set of skills that can be applied to any number of settings will be at an advantage in the future health care labor market.

Seizing the Opportunity: Strategies and Examples from the Health Sector

Strategies for improving training and advancement opportunities can vary according to the source of sponsorship, the type of training; the goal of the training; and the target group of the training. This section describes some illustrative examples of training opportunities and incentives for employer-sponsored training and advancement identified in the health care sector. Detailed descriptions of six programs are attached. An important point to note is that there are many training programs and initiatives under way--there is an encouraging amount of activity in this field. For every example cited here, there are many other innovative and/or exemplary programs. The selected programs represent a range of strategies, incentives, and occupations, categorized as follows:

- Promotion of employer and private sector initiatives for training and advancement.
- Publicly-funded collaborative efforts for training and credentialling.
- Job restructuring and service delivery innovations.
- Meeting the demand for new workers.

Promotion of Employer and Private Sector Initiatives for Training and Advancement

The attached case descriptions provide detailed examples of three programs (New York State Rate Adjustment Program, Project L.I.N.C., and Philadelphia 1199C Training and Upgrading Fund) that promote employer and private sector initiatives for training and advancement. One theme of these examples is that specific incentives are needed to obtain employer support of training, and sometimes those incentives can change or disappear as the labor market shifts. Both the New York State Rate Adjustment Program and Project L.I.N.C. were originally established in response to a critical shortage of nurses, although they addressed other health care occupations as well. In the case of the Rate Adjustment Program, the state responded by providing financial incentives for employers to engage in activities aimed at increasing the supply of health workers in shortage occupations. Project L.I.N.C. is a collaborative response of hospitals, nursing homes, and educational institutions, spearheaded by the Greater New York Hospital Association, with financial support from foundations, union training and upgrading funds, and state government. While the nursing shortage has currently abated in New York, these programs still have much to offer. They were effective in increasing the supply of nurses, and lessons can be learned from their successes with respect to employer incentives, collaboration, and barriers faced by employees seeking education and/or advancement. For example, New York State has also used the rate adjustment strategy to support retraining for those who have lost jobs due to hospital downsizing, and to support time off with pay for approved training for hospital clerical workers.

Union training and upgrading funds, supported by employer contributions as negotiated in labor agreements, are an important source of skill enhancement and educational advancement opportunity for workers already employed in the health care industry and eligible for union benefits. The degree of employer involvement in such training varies, but unions find that they must respond to changing conditions in the health care industry in order to better meet the needs of workers. Improved communication with employers helps in designing appropriate training. For example, some unions have negotiated no-layoff clauses in contracts so that workers are protected in the event of hospital restructuring or downsizing. In response, cross-training of staff has increased, and hospitals have worked with union training and upgrading programs to identify and support training initiatives.

High turnover has also provided an incentive for some employers to encourage training and advancement. Genesis Health Ventures, Inc., a nursing home chain based in Kennett Square, Pennsylvania, offers a career ladder for its nursing assistants. The Geriatric Nursing Assistant Specialist Program (GNAS) is a 6-month, 108-hour employer-paid training program offered in collaboration with local community colleges. Of the 1,000 nursing assistants who have completed the program since it was established n 1988, more than 83 percent are still employed in upgraded positions at the nursing centers which sponsored them. Additional leadership training is available for Geriatric Nurse Assistant Specialists to become senior aide coordinators, and tuition assistance is available for those pursuing nursing careers.

Publicly-Funded Collaborative Efforts for Training and Credentialling

Collaborative efforts and credentialling initiatives are most often publicly-funded. Two case examples (Delaware Tech Workforce Training and Unified Curriculum/Training for Home and Health Aides) are attached. The Workforce Training Program at Delaware Tech is an example of the JTPA-funded job training programs found across the country, which target economically disadvantaged and welfare populations. These programs typically involve collaboration between a community college and a local Private Industry Council. They generally respond to government or industry changes in training and credentialling requirements rather than initiating such changes or experimenting with new curricula. For example, the nursing assistant training offered by Delaware Tech is a direct response to the CNA certification requirements of OBRA 1987. Graduates of this program work for both nursing homes and home care agencies. In order to successfully place graduates and promote the financial self-sufficiency of graduates, programs such as Delaware Tech's Workforce Training collaborate closely with employers to assure that trained workers meet staffing requirements of local organizations. This collaboration can also include "hands-on" experiences for students and commitments from employers to hire program graduates.

Public funding in the form of demonstration grants can provide the opportunity to develop and evaluate new curricula for training long term care workers. The Unified Training Curriculum, funded by the U.S. Administration on Aging, will train am individual to qualify as a Medicaid Certified Personal Care Aide, and, with additional training, as a Certified Home Health Aide and a Certified Nurse Aide. This approach is intended to enhance job mobility for graduates. This program incorporates many of the components of other publicly-funded job training programs, such as targeting low-income adults and collaboration between community colleges, long-term care employers, and community groups. But, the demonstration program has the added benefit of producing and testing training materials and models that can be used by others. Other demonstration programs include three programs funded by the Department of Labor in 1992 to develop models for training geriatric aides and promote career ladder opportunities in eldercare (Long and Pindus 1995).

The homemaker home health aide demonstrations sponsored by the Health Care Financing Administration in 1983 tested the feasibility and cost-effectiveness of training AFDC recipients to provide home health services (Bell and Orr, 1994). The demonstration, which operated in seven sites throughout the US, utilized an

experimental model which randomly assigned some recipients to receive training and subsidized employment as homemaker health aides and assigned others to control status. The goals of the projects were to provide employment for AFDC recipients, to raise their long-term earnings, and to produce home care services for needy elderly individuals. According to the evaluation, the projects worked effectively and yielded net economic benefits in several sites. The demonstrations not only raised employment levels of recipients during the program period, but recipients in the treatment group achieved gains in post-program earnings by statistically significant amounts (increases of from $1,200-$2,600 per month in 1984 dollars). In addition, the AFDC homeworker health produced home care services valued at from $4,800 to over $13,000 per participant. The costs per participant ranged from $4,300 to $8,700 per participant. After taking account of the costs, the earnings gains, and the serviced produced, the evaluators estimated that the demonstrations in six of the seven sites generated net social benefits of $2,226 to $12,961 per participant (again, in 1984 dollars). These results suggest considerable potential for dealing with two problems at once: the need for AFDC recipients and the shortage of home health aides.

State funding has supported curriculum development and training for other health workers as well. Both California and New York have addressed training requirements for community heath worker (CHWs). San Francisco State University has developed a certificate training program for community health workers in California which is being offered at the Community College of San Francisco. The goal of this training is to improve primary health care to disadvantaged and bilingual communities by increasing the number of CHWs equipped to provide culturally and linguistically sensitive services, and to serve as a step-to-college/career pathway, particularly for minorities. Piloted in Fall 1993, the nine month training program is meant to be replicated in community colleges across the state. The New York State Department of Health provides its contracted agencies, such as the Bronx Perinatal Consortium, with an outline of general topics to be covered in their training programs for Community Health Workers, and makes individual training modules available upon request. The training outline consists of 5 modules with pre-service and in-service components, requiring approximately 120 hours. In addition, the Department of Health provides requested technical and training assistance as well as support and direction (Walker 1994).

Job Restructuring and Service Delivery Innovations

Job restructuring and service delivery innovations were identified in home care and community health. A case example describing Cooperative Home Care Associates is attached. One goal of Cooperative Home Care Associates(CHCA), a worker-owned and controlled home health care company, is to serve as an "innovation laboratory" in the home health industry. Innovations implemented or underway at CHCA include improved wage and benefit structures, guaranteed hours, in-home supervision models, and participative on-the job training programs. Providing stable, full-time work has been a major thrust of these efforts. CHCA negotiated with institutional contractors (hospitals and home health agencies that subcontract with firms like CHCA for home care services) to provide a higher percentage of full-time assignments. In addition to obtaining the support of top management at these organizations, CHCA developed close working relationships with scheduling coordinators to encourage the scheduling of cases and the design of client care plans in a way that increased full time work opportunities. Examples include: scheduling some patients for afternoon care rather than morning care, considering the location of patients when assigning an aide more than one case, and avoiding gaps between short-term cases assigned to aides. CHCA has demonstrated that the provision of paraprofessional home care services can be a full-time job. More than 70 percent of its workforce is employed full-time, compared to an industry average of 40 percent (Dawson and Kreiner 1993). CHCA also initiated the Guaranteed Hours Pilot Project to provide a guaranteed 30-hour work week to aides having three years' seniority The purpose of the program is to increase job stability for those who have shown a long-term commitment to the company by decreasing anxiety stemming from an unpredictable work schedule. CHCA is also involved in ground breaking work developing measures of quality of service.

A subsidiary of the Visiting Nurse Service of New York has begun to provide health insurance to paraprofessional workers who have been with the company over one year, and now offers a pension plan. The subsidiary also offers a number of programs in which "staff" home health aides care for a team of patients and receive the same 40-hour pay per week, regardless of the number of hours they actually provide service. Since the introduction of these initiatives, worker turnover has declined to 27 percent, much lower than the industry average of 60 percent, and workers are reporting higher levels of satisfaction with their jobs (Raphael and Santamaria 1994)[9]

Any discussion of innovations in service delivery would be incomplete without mentioning the many roles of lay health workers and outreach workers in health care. The more formal application of this role is the community health worker, discussed previously. There are many examples of less structured lay health worker positions which are part-time, volunteer or minimally paid positions that serve as an entry point for new workers and provide opportunities for community organizations to experiment with varying service delivery approaches and design new jobs.

A combination of state and foundation funding supports training for community health advocates sponsored by the Center for Healthy Communities in Dayton, Ohio. Upon completion of the training program, Advocates are employed 20 to 30 hours per week at community health centers, senior citizen centers, and other agencies to provide health education and serve as a link between individuals and the health care system. The Sandtown-Winchester high blood pressure program in Baltimore, Maryland employs eight local community residents to provide blood pressure screening at individuals' homes. Through a cooperative arrangement with The Johns Hopkins University, these individuals are trained in measurement, health factors and health risks associated with hypertension, high blood pressure screening procedures, and interviewing and note-taking. The program is viewed as an economic development as well as a health promotion initiative because it

provides training and jobs for neighborhood residents and may open the door to further education and employment opportunities for these individuals.

The use of lay health workers may also improve program effectiveness. Through a grant from the U.S. Centers for Disease Control and Prevention, the Maryland Department of Health employed lay health workers in a breast and cervical cancer screening project. Workers selected for the 20-hour per week paid jobs were members of the program's target group with good interpersonal skills. Outreach methods included individual home visits, follow-up visits, presentations to groups, and media announcements. An evaluation of this project found that personal contact with lay health workers was the most effective approach to bringing women in for screening.

One particularly innovative approach to health advocacy and health promotion is the Congregational Health Promoters Program funded by the Pew Charitable Trust and sponsored by Emory University and the Carter Center in Atlanta, GA.. This program provided 20 hours of training to "natural leaders" in religious congregations. Each group attending training selects the topics they consider to be most important to their community. These individuals provide outreach and serve as collaborators between their congregation and health providers in the community. The Expanded Nutrition Program serving McAllen, TX, part of the Texas Agricultural Extension Service, provides training and education programs that serve the poor, rural subdivisions known as *colonias*. Headed by a home economist, the program has 20 paraprofessional teachers who provide formal training programs for classes of 10-20. The programs are six to eight months long and include training in basic skills, food preparation, menu planning, budgeting, and self esteem. The training programs have been very successful in improving self esteem and opportunities for women in the *colonias.* Although not intended as employment training, they have enabled women to obtain employment as cafeteria workers, and have encouraged home-based employment such as home day care, catering, and flower arranging. These examples have broad application in light of the increasing demand for community-based services, and may provide those with limited skills and education a chance to step onto the ladder.

Meeting the Demand for New Workers

While most of the examples discussed focus on training those already in the workforce, initiatives are also under way for training new workers to meet the demand for jobs in health care. Two of the examples discussed previously, the New York State Rate Adjustment Program and Project L.I.N.C., have components which address the need for attracting and training new workers for careers in health care. The Linkages With Youth initiative provided reimbursement incentives to programs focused on introducing high-school and middle school students to health careers. Programs supported included health education tracks within career-oriented high schools, mentoring programs that focused on a student having a one-on-one relationship with a health worker, work/study programs with paid or volunteer work positions, and group activities such as a health career days. An evaluation of the rate adjustment program found that, in the Linkages with Youth programs, participating in mentorships was most predictive of participant success, as measured by interest or actions toward pursuing a career in health care (Kovner et al. 1993). The Greater New York Hospital Association, which initiated Project L.I.N.C., also established an affiliate agency, the New York Health Careers Center in 1989. This organization serves as a clearinghouse for information on health careers in the New York City area. "One-on-One," a program of the Careers Center funded by The Robert Wood Johnson Foundation and New York State, is open to the public and provides testing, assessment, and referral services for health careers education and training.

Programs for high school students are responding to the need for a more skilled workforce in general, and in the health industry in particular The Oakland, CA Health and Bioscience Academy, one of six career-oriented academies in the Oakland public high school system, focuses on placing students in jobs as part-time apprentices or summer interns. This focus on the school-to-work transition uses work experience to motivate students' academic achievement, by demonstrating the relevance of academic subjects and the workplace rewards of a good education and skills. The success of programs such as Oakland's require high academic and teaching standards as well as close relationships with area employers. For example, the Oakland academy has ties with Kaiser Permanente, a large health maintenance organization, and with local hospitals.

Conclusions

The combination of change and growth suggests that cautious optimism should guide our thinking about employment and advancement opportunities in the health care field for low-wage workers. Job level factors include:

- increased acuity of patients;
- increased responsibility for frontline workers;
- increased emphasis on customer satisfaction; and
- increased use of technology.

Organizational level factors include:

- different employers in the health industry;
- different ways of bundling services and paying for services;
- emphasis on providing a continuum of care;
- increased competition based on customer satisfaction and quality.

These factors will require a restructuring and rethinking of employment and jobs. A "job" may still refer to 32 to 40 hours per week, but it may not be carried out in a single setting or even for a single employer. Traditional titles and training programs may be obsolete, and other skills may be more readily transferable

across jobs. Lines of supervision and authority will change and workers may find that they are evaluated and held accountable in new ways. For workers who have not fared well under the systems of the past, there is the promise that things may be different, and the growth in demand for workers in health care offers a chance to try new approaches.

IV. POLICY ISSUES AND RECOMMENDATIONS

The two previous chapters suggest a number of challenges to policy makers and foundations interested in expanding opportunities for upward occupational mobility in health care and other industries, including (a) how to expand opportunities for low-skilled workers to enter jobs with career opportunities, and (b) how to stimulate employers to develop such jobs as part of their restructuring activities.

Public, non-profit, and philanthropic organizations already fund many job training and career development initiatives to help currently low-skilled workers take positive advantage of opportunities in the labor market. For example, as discussed in Chapter III, programs are training workers for jobs that are in high demand (e.g., health technology occupations, computer operators); creating new jobs and businesses in high demand areas (e.g., providing seed money for entrepreneurs to start up enterprises with growth occupations such as home health aides); and retraining workers displaced from declining industries for jobs in expanding sectors. One policy challenge is to identify ways to assure that such programs emphasize jobs that have the potential for upward mobility.

Private businesses are also an important part of the career development picture. Many firms in the health industry (a few of which are described in Chapter III), encourage, initiate, or fund education and training for their employees. These training efforts should raise earnings either by upgrading the existing occupation or enhancing mobility to other occupations. Private businesses make such investments primarily because they expect that efficiency and productivity will improve. Evidence indicates, though, that most employer-provided training goes to mid-level, not low-level, workers. Even private employers who do not directly sponsor education and training, often have formal or informal career ladders, specifying paths or tracks that lead to better jobs. Employer career paths may provide more chances for lower-level workers to move up than do employee education and training programs. Unfortunately, as discussed below, there is little empirical research about the routes by which workers move up.

Therefore, another main policy challenge is to determine how to encourage more employers to establish career ladders for low-skilled workers. As indicated in Chapter III, many firm-based career development efforts in the health care sector were initiated in conjunction with overall firm and work restructuring. Public policy makers may have an opportunity to encourage employers to consider ways to enhance career mobility at the same time they are considering ways to improve organizational performance and competitiveness.

What conceptual issues can help guide policy development?

The analyses presented in Chapters II and III raise several important issues that public policy makers, businesses, and foundations should understand as they develop career ladders and career development programs:

- Overall economic trends and changing market conditions.
- The changing nature of work and its implications for training.
- The characteristics and circumstances of the target population.
- Both industry and cross-industry worker mobility experiences, trends, and opportunities.

Understanding and Adapting to Changing Market Conditions

Individuals go through several changes over the course of their work lives. Their incomes change, they may obtain new jobs, their hours or locations may change, their employers may change, and they may switch industries. Much of the movement is upward, but lateral changes, and even downward changes, also occur. We are concerned with upward mobility, primarily moving "up" in terms of income and job status, through, for example, promotions based on performance, experience, or attainment of additional skills or education.

One important trend in the overall job market is that wages for low-skilled workers have been stagnant or declining for the past twenty years. At the same time, employers are paying premium wages for persons with skills, especially technical skills. While there are jobs for persons with low skills, few offer the opportunity for moving up. Persons without education beyond high school have more limited opportunities than in the past for upward wage and occupational mobility.

Public policy makers responsible for employment and welfare policy are aware of these trends and the implications for income assistance, job training, and other programs. But program operators often do not have adequate knowledge about the specific labor market trends in their geographic areas. Many have only anecdotal information about the types of jobs that seem to be available or the types of businesses that are hiring. Rarely do public education, training, and employment programs such as JTPA, School-to-Work, or JOBS have a broader perspective about jobs with upward mobility potential.

There are several general paths by which workers may move up occupationally:

- Workers may climb formal or informal career ladders. They can move up to higher levels within the same occupation (e.g., from accountant to senior accountant) or to higher occupations in a cluster of related occupations (e.g., from licensed practical nurse to registered nurse).
- Individuals may obtain better jobs in different occupations, firms or industries, which recognize or value the

earlier skills or experience.
- Individuals may make career changes, moving to totally different occupations, firms or industries.

To assure that low-skilled workers are able to become economically self-sufficient (a public policy objective), a more refined understanding of the dynamics of upward occupational mobility for that population is needed. This will require more empirical research, on a national level and for specific labor market areas and industrial sectors, about the actual job mobility paths low-skilled workers take, including identifying which occupations seem to link together to form informal and formal career ladders.

Similarly, employers could benefit from learning about career development efforts, both in their own industries and in other industries. Like the health care sector, other industries, such as child care and finance, are also developing career ladder efforts on their own, in response to obvious market changes. A public information clearinghouse about career ladders, for example, might prove useful to employers considering organizational or work restructuring. In principle, employers should be able to lower labor costs by training the less skilled to perform more sophisticated tasks, since the wage premium required to hire the more educated is higher. However, firms too often lack the knowledge about how best to restructure their operations to take advantage of these trends.

Understanding the Changing Nature of Work and its Implications for Training

As noted in Chapter II, a review of economics and business literature indicates that the traditional expectation of lifelong employment with one employer or one industry is no longer as clear-cut as in the past. At an overall level, workers are not being displaced any more today than in the past; many workers still have very long tenure with one employer or in one industry. But subgroups of workers are experiencing permanent job displacement as the occupational structure of the nation's labor market continues to change--the total number of jobs are declining in industries such as manufacturing, and many occupations are requiring more technological skills and experience even at the entry levels. Thus, while many workers are remaining with one employer or industry, some segments of the workforce are moving extensively between occupations, employers, and industries. There are various explanations for the high rate of mobility where is does exist. Some of the (positive) movement may be occurring because of the increasing transferability of skills, which allows workers to move to new jobs more easily than in the past. Technical and computer skills are clearly in demand, but so also are certain "soft skills," such as interpersonal communication, and effective teamwork. In fact, there is increasing recognition that upward occupational mobility in general requires workers to be flexible enough to perform many jobs and to navigate transitions--between jobs and between technologies--successfully. This skill has been described as the ability to "plan and manage one's own career," whether in one firm or in several firms, and it may represent an important informal route up the career ladder.

However, although there is only limited research on this topic, lower-skilled workers appear to be experiencing more negative job changes than are higher-skilled workers. Some job losses and involuntary job changes are the result of industry downsizing; other changes occur because low skill jobs may have higher turnover than in other jobs.

In any case, workers can no longer assume or complacently accept the traditional phasing of education followed by entry into the workforce. Instead, training, education, and work must be redefined in cyclical terms: education and training should not end when one enters the workforce. Those workers who do not continuously upgrade their skills are less likely to move up in a labor market that is experiencing rapid technological and other structural changes.

The responsibility for responding to these changes in the nature of work rests with the individual worker, employers, unions, schools, and job training programs. The federal government's lifelong learning initiative is promoting such a recognition, by encouraging continuous education and training throughout a worker's lifetime. Operators of job training programs and the proliferating school-to-work programs should assure that occupational and apprenticeship training, work experience, and other activities incorporate an understanding of the need for workers to continuously upgrade skills since the workplace is continuously changing.

With and without job restructuring, many workplaces are involved in broader organizational restructuring. The restructuring is generally expected to improve efficiency, productivity, and profits by creating a high-performance workplace (e.g., through total quality management), or by reducing costs of production (e.g., through de-layering or downsizing). Some organizational research suggests that positive returns can be obtained if the restructuring is well-planned and implemented, including appropriately involving and retraining employees at all levels.

But the evidence on the role and effectiveness of career ladders within firms, either with work reorganization or independent from restructuring, is not yet clear. The case studies of the health sector presented in this report suggest that several promising efforts are underway. However, there has been little formal evaluation of the effectiveness of career development and career ladder efforts, both from the perspective of the individual worker and from the perspective of the firm. This is an important area that foundations and the government should address.

The potential for positive results is promising, even beyond achieving financial returns for individuals and for firms. There are also societal objectives that can result from care er upgrading programs. For example, the New York State Rate Adjustment Program was started in response to a severe shortage of nurses and other health care workers in the state, but the program had other goals as well, including increasing the representation of minorities in health careers and providing advancement opportunities for current health care workers. These secondary goals also reflected an understanding of the trends in the health services market

(e.g., the need to serve an increasingly diverse population) and an understanding of the potential efficiencies gained by upgrading existing personnel rather than hiring exclusively from the outside labor market.

Helping firms learn what works best through well-documented and well-evaluated restructuring and training efforts might encourage more organizations to undertake similar initiatives.

Considering the Characteristics and Circumstances of the Target Population

Public policies have focused for several decades on the employment problems of economically disadvantaged persons. The primary objective has been to place individuals into existing jobs, either immediately (i.e., direct job placement) or after some publicly-funded occupational training. While some traditional training programs are apparently effective in terms of increasing employment and earnings, most have fallen short in terms of helping individuals move into jobs that can provide stable employment and self-sustaining wages. The ineffectiveness cannot be blamed on any one factor, but rather reflects a combination of factors, including the low skills of the economically-disadvantaged workforce, the low wages and instability of jobs for which these workers can qualify, and an inadequate link between the job training provided and occupational demand in the local labor market.

Public and private training programs could improve the labor market outcomes by helping workers with limited skills to take the first step onto a career ladder, rather than emphasizing simply getting them into any job. If a better trained, more stable workforce improves economic productivity, in terms of, for instance, output and service quality or increased profits, then intensive human capital investments in low-skilled workers can be justified. To date, little research has been conducted to distinguish jobs by their potential for upward mobility. Further, efforts to stimulate broad changes in labor demand and utilization of less skilled workers are only in their early stages.

Using Both Industry and Cross-Industry Analysis

The health care sector analysis in this paper offers an example of how a combination of industry-specific analysis plus cross-industry management and organizational analysis can be used to design and assess career development efforts. Firms or industries with relatively better systems of accountability and management may be better able to define career ladders that are consistent with overall organizational objectives, and may be better able to monitor the performance and progress of all workers, including those in formal career development programs.

In each industry, there may be unique market and regulatory features that affect not only the potential for developing new career ladders, but the types of actions that can be taken to improve management, performance, and accountability in general, and thus further produce the best organizational environment for successful career development policies.

In the health industry, for example, the trend is toward capitation for services provided by paraprofessionals, rather than using the more traditional fee-for-service system. How might this affect low-wage workers? One effect may be that employers have greater flexibility in paying their workers. Under a fee-for-service system, health care providers receive a set hourly or visit rate for paraprofessional service based in part on their historical cost for wages. Providers are thus unable to pay workers an hourly rate higher than the rate they themselves are receiving and still keep costs in line. A system in which a provider receives a lump sum per patient gives the provider the ability to decide how best to structure its pay system and rates and increase incentives for raising productivity. Capitated payment also provides greater flexibility in terms of monitoring and reporting on the specifics of the care process. With this flexibility, providers might experiment with new ways of paying staff, including paraprofessionals, and paying providers of goods and services, and holding all parties accountable. For example, a provider might choose to pay the paraprofessional a set fee per case to achieve certain outcomes. It would then be up to that paraprofessional--in concert with the client--to determine the timing of visits and the frequency of tasks that need to be performed to achieve the specified outcomes.

Such an analysis tells us about structuring opportunities in the health care industry, but it may be possible to extend the application of new payment and accountability mechanisms more broadly in the service sector. Might restructuring be able to improve worker pay and advancement opportunities in child care, for example?

Industry and cross-industry analysis could also be applied to job content. To what extent are particular work skills and characteristics common to a range of jobs? Opportunity for upward worker mobility is possibly higher across firms and industries which have relative more occupational commonality. There may even be some opportunity for cross-firm training. This is already beginning in the health care industry, where distinctions are blurring among home care, institutional care, and other long-term care services. Similar examples probably exist within other industries. More management, organizational, job training and labor analysis could be conducted across sectors to identify potentially promising areas of skill transferability.

What Further Information and Analysis is Needed?

This report represents a conceptual and exploratory review of upward occupational mobility and applications to the health care industry. The literature reviews, discussions with experts, and visits to programs suggest that there is much potential to do more to systematically encourage career development for upward occupational mobility. We offer several recommendations below based on this study.

Philanthropic foundations and public agencies should continue to fund and support training programs designed to encourage upward occupational mobility, but should place more emphasis on sharing experiences across programs.

Foundation grants have played a major role in the development and implementation of training programs, especially for special need populations, such as welfare recipients, economically disadvantaged persons, high-risk youth, and low-skilled workers. Foundation grants for start-up "seed" programs, demonstrations and pilots, and operating programs have been important. The experience gained through these programs has expanded the knowledge base. Federal programs, such as those funded under the Job Training Partnership Act, similarly provide important support for training programs operated by public agencies, non-profit organizations and private businesses.

It is important to disseminate information about programs' experiences in developing training curricula, linking to employers, restructuring jobs and occupations, instructional methods, occupational requirements, and other details. Foundations and federal agencies are the logical places to establish information clearinghouses where organizations and institutions can share materials, knowledge and experiences. Conferences, workshops, and other forums could provide a needed opportunity for state and local administrators and staff to share experiences and materials and gain new insights into program development options.

Existing career development and career ladder programs should be carefully evaluated.

Many of the career development and career ladder programs discussed in this report show promise in terms of their ability to increase the wages, income, and employment options for individuals and in terms of returns to firms or industries (e.g., productivity, profits, job performance, efficiency, quality of outputs/production). To date, though, evaluations of the programs have been minimal. Some specific career development programs have had evaluation components, but they have been mainly descriptive. Little effort has been devoted to formally evaluating the programs, and little analysis has been conducted on aggregate outcomes or impacts across programs.

Foundations and federal agencies should initiate formal evaluations of potentially effective efforts. In theory, career ladder programs should result in positive net impacts for both individuals and firms and should, in industries like health care which are service-oriented, result in higher quality services. But, if we want the private sector to take more of an interest in career ladders for low-skilled workers, the evidence of success--especially the return on the investment--must be more clearly documented.

Additional case studies of specific career ladder and career development efforts should be conducted, both for specific industries and across industries.

The insights gained from this review of career development and career ladder activities in the health care sector have been very informative. In the course of the study, we learned of the many efforts that exist in other sectors as well, such as building trades, hotels and hospitality, finance, and child care. More detailed case studies of efforts in other specific sectors would provide a better understanding of the issues, opportunities and constraints. At the same time, though, it would also be useful for an interdisciplinary research team to examine efforts across industries and occupations. The intent should be to identify themes, patterns and issues that are similar and different across sectors.

More research is needed about occupational mobility, labor markets and work productivity.

Despite the large amount of scholarly research devoted to studying labor market behavior, some major information gaps remain and should be filled. Perhaps most importantly, we need more analysis on how workers move from job to job, within and across occupations, within and across firms/employers, and within and across industries, and how their wage histories change with occupational mobility. There is also a need to further examine the nature and content of specific jobs or clusters of jobs, and the changing nature of work in certain occupations both in specific firms/employers and industries and across firms and industries.

More research is also needed to fully understand which training, education, and skill preparation mechanisms are most likely to increase a worker's chances for upward mobility. For example, do some school-to-work program models seem to do better than others in helping young people obtain employment in occupations or industries with well-structured career ladders? And, in the long run, are youth in school-to-work programs more likely than other young workers to attain upward occupational mobility? Similar analysis is needed to examine the mobility patterns of adults, such as welfare and Unemployment Insurance recipients, who participate in training and employment programs. Finally, we need a better understanding of why firms establish career ladders in the first place. Once that is better understood, we will be better able to identify policies that could influence more firms to create job ladders for low-skilled workers.

Conclusions

Health care has been a leading industry in terms of the current trend toward restructuring organizations, firms, and the nature of work. In many respects, market forces provided the primary motivation for the restructuring, just as they provided the motivation for considering national health reform. But, as discussed in Chapter III, within this context of structural and industrial change, the opportunity arose to also attempt some creative approaches to career development and occupational upgrading. Similar, although probably not as dramatic, changes are occurring in other industries. Management and organizational reinvention is occurring in the private and public sectors. Performance workplaces demand a better trained workforce, and employees at all levels are increasingly expected to perform at higher levels. The reinvention and restructuring movement provides an important rationale for simultaneously investing to upgrade the skills of workers in general.

In many respects, the time is also opportune for raising the nation's public policy consciousness about occupational mobility. Two broad national policy areas currently have strong public and political support, and

while neither specifically frames its agenda in terms of increasing upward occupational mobility, both provide the foundation for doing so.

First, the current workforce development initiatives being led by the U.S. Departments of Labor and Education are attempting to improve the overall skills and productivity of the nation's workers. Republicans and Democrats alike are committed to workforce improvement objectives, including increasing the earnings potential of non-college workers, improving the basic skills of young people entering the workforce, speeding up the rate at which dislocated workers become reemployed, encouraging lifelong education and training, and improving the transition from school to work. Once more is learned about why firms use career ladders, policies could be suggested to increase their prevalence. For example, might public job training programs, school-to-work programs, or Career Academies be structured in ways that both respond to existing career mobility potentials and also encourage more employers or more industries to create career ladders? .

The second relevant national policy area is welfare reform. Numerous proposals under consideration in Congress and in state legislatures create the expectation that public assistance recipients will work and become self-sufficient. The emphasis in the current welfare reform debate, though, is on moving recipients into existing jobs as quickly as possible. Many analysts and policy makers are very concerned about the low wages and lack of benefits in jobs for which most welfare clients can qualify. Upgrading the occupational skills of welfare recipients should improve their chances of remaining economically self-sufficient. But, there is little public or political support at this time for providing education or training to individuals while they are on welfare. However, support might be garnered for developing strategies and programs to assure that they have access to career training once they become employed.

This paper does not claim to provide all the answers for how to create better career ladders or how to encourage more public or private sector initiatives in this area. But it does strongly suggest that the time is right to seize opportunities arising from the current labor market restructuring and the emphasis being placed on work and organizational restructuring to expand career ladders for low-skilled workers.

CASE EXAMPLES

New York State Rate Adjustment Program

The New York State Department of Health initiated the Health Personnel Rate Adjustment Program in 1989 in response to a shortage of nurses and other health workers in the state. At the time, average nurse vacancy rates in health facilities in New York State were about 10 percent, and vacancy rates for many other health professionals were as high or higher. The Department of Health solicited applications from licensed health care facilities to request adjustments in their reimbursement rates to pay for activities to increase the supply of health workers in shortage occupations. The program supported efforts to increase the supply of new workers as well efforts to retain or recruit those workers either working in the field or academically prepared to work in the field. One goal noted was a career philosophy--that those already in the health care field should advance, and that employers should encourage upgrading of entry level workers and others.

Funding. The funding mechanism for this program was unique. New York State has an all-payer system for reimbursing hospitals, some nursing homes, and ambulatory care facilities, and the State sets the reimbursement rate. Facilities with approved programs received funds through a relatively small increase in reimbursements for each non-Medicare patient day in a hospital and for each Medicaid patient day or visit in other facilities. In contrast to grant-funded programs, funds were provided in a predictable, steady stream rather than in lump sum. Facilities were obligated to spend 100 percent of approved costs in order to secure the portion of the costs paid by the state and other insurers. As a result of the division of costs across payers and between federal, state, and local governments, this mechanism was extremely successful in leveraging funds. For example in 1990, total approved costs of the program were $38 million, but the State's costs were only $3.9 million of the total (Kovner et al.).

Description. Projects approved under the initiative covered a wide range of strategies, including: (1) linkages with youth; (2) training and upgrading; (3) expansion of capacity; (4) scholarship programs; and (5) child care. The linkages with youth programs focused on high school and middle school students, and included comprehensive programs at health-career oriented high schools, mentoring programs, work study programs, and group activities such as career days. Training and upgrading programs focussed on existing workers, and included comprehensive programs (i.e., programs that generally included support services, counseling, paid release time, etc.), training only, and tuition assistance only. Training programs provided training for paraprofessional and technical positions in shortage occupations, as well as review classes organized for state licensing examinations for Registered Nurse and Licensed Practical Nurse. Expansion of capacity programs provided funds to existing programs that prepared health workers in order to expand their enrollment. Scholarship programs were directed at students in training or education programs and required participants to sign a service payback agreement to the facility that provided the scholarship. Child care programs included on-site services and vouchers for licensed day care in the community to recruit and/or retain workers. Almost 34% of participants were in Training and Upgrading programs, about 10% were in classes for state licensing exams; about 18% were in scholarship programs, about 26% were in Linkages with Youth programs, and an additional 12% of participants received subsidies for child care. Most participants were female. Most participants were white; however forty-nine percent of the youth participants were black or Hispanic, as were thirty-one percent of the Training and Upgrading participants.

Outcomes/Impact. An evaluation of the Personnel Rate Adjustment Program was conducted by New York University's Health Research Program, under contract to the New York State Department of Health. The

evaluation found that, as a strategy for increasing the supply and retention of health workers, the program produced a large impact. In the first two years of the program about 18,000 New Yorkers were introduced to health careers, offered the opportunity to study for a new career, or used program-subsidized child care. Almost 5,700 participants who were working indicated that it is unlikely that they would have been working in their current occupation without the program. Of these 5,700, about 1,850 were health workers who pursued additional education and thereby met the State's career ladder goal. (Kovner et al 1994). Key questions addressed in the evaluation were: "Would the outcomes achieved have occurred without the programs?" and "What factors differentiated successful participants from unsuccessful ones?" Individual success measures used in the evaluation were: completing the program; passing a licensure exam; and working in the occupation. The study found that full-time paid release was not associated with greater success. The least expensive way to increase the supply of workers is to provide tuition, but to increase the participation of minorities, other services (i.e., as provided in the more comprehensive programs) are important. Another interesting finding related to individual motivational factors. The importance of having a lot of responsibility was positively related to completion of the programs, while the extent that the respondent saw high pay as related to employment in the occupation trained for was negatively related to completion. The importance of helping others was positively related to completion of or likely completion of the educational program.

Lessons. This program offers important lessons about timing and market interventions. The strategy of leveraging funds from federal and third party insurers through rate adjustment is probably no longer possible in today's budget cutting environment. Yet the lesson of seizing opportunities for creatively financing new programs still holds. The nursing shortage that served as the impetus for this program no longer exists. In fact, some who have studied this program question whether the state government intervened too quickly and too hard, in essence overcompensating. Yet, it is clear that a need must be identified for an intervention to occur--in this case it was the nursing shortage. Lessons learned about which interventions were most cost effective, which interventions were most effective in meeting other goals such as career ladders and increased minority participation, and individual motivational factors associated with success, can be applied to other occupations in health care as well as in other industries.

Project L.I.N.C. (Ladders in Nursing Careers)

Project LINC was developed in 1988 by the Greater New York Hospital Association (in collaboration with unions, schools, hospitals, nursing homes, and nursing associations) in response to a severe shortage of nurses in New York City, exacerbated by the health crises of AIDS and tuberculosis, which increased the demand for nurses. The collaborating organizations developed a program to facilitate the application process, increase flexibility of education and work schedules, and provide support to encourage health workers to pursue professional nursing careers. Approximately 60 hospitals and long term care facilities and 40 schools of nursing throughout New York City participate in this program. In 1994, a national replication of this program was implemented in nine states. The national project's goal is to provide career advancement opportunities for entry and mid-level health care workers, with particular emphasis on minority and low-income individuals. The original target to bring in 180 students during the first year of the replication grants was exceeded -- 244 students entered the program.

Funding. Financial support for Project LINC in New York is provided by The Robert Wood Johnson Foundation (RWJ), the New York State Departments of Health and Labor, the Hospital League/Local 1199 Training and Upgrading Fund, the Aaron Diamond Foundation, Starr Foundation, and the Local 144 Health Facilities Training and Upgrading Fund. The national replication is funded by the Robert Wood Johnson Foundation.

Description. Health care employees have the choice to enroll in a practical nurse, associate, or baccalaureate program, depending on career interest and qualifications. Project LINC's loan/service payback program enables a participant to attend school full-time and work part-time while maintaining full salary and benefits (benefits such as vacation and sick leave are earned pro rata based on the participant's work schedule). Special features to help students successfully complete programs include, individualized guidance, efforts to help students receive advancement for past experience and education, remedial help in areas where the student is deficient, study skills courses, and a review course to prepare for the State licensing exam. In return, the student is obligated to work at her/his sponsoring institution after graduation for 18 months for each year of support from Project LINC (to a maximum of four years). If the service payback obligation is fulfilled, the loans do not have to be repaid. Project LINC covers the cost of school admission fees, tuition, and laboratory fees. Funds are also available to cover expenses such as books and supplies. To enroll, the applicant must be must be working in a health care facility and must be eligible for admission into one of the participating schools. An educational counselor works with the individual to complete the application. Admission to Project LINC is selective, as the number of openings is limited. Potential for successful completion and the applicant's work record are considerations for acceptance.

All of the Robert Wood Johnson-funded programs are sponsored by member-driven associations, primarily State or metropolitan hospital associations. Key components of each grantee's program are: testing/assessment; support services; and relationships with colleges. Currently Project LINC programs operate in: greater New York City, Rhode Island, Maryland; South Carolina; Georgia; Texas; Minnesota; Iowa; and North Dakota.. Plans call for all grantees to implement Project LINC statewide, but the progress of implementation varies across the states.

Nationally, 60 percent of the students in the program are in nursing. Half of the sites have allied health programs (e.g., medical lab technician, physical therapy aide, occupational therapy aide). In Rhode Island, there is a special LINC program for surgical technicians. Allied health programs must involve an academic degree and rather than continuing education. The programs and support services offered are different in each

community, but all have applied learning components such as problem-based learning and "train-the-trainer" programs. In New York, the unions are actively collaborating in developing new programs.

Lessons/Outcomes. As of December 1992, the Greater New York Project LINC had enrolled 411 students. Of these, 39.5 percent graduated, 48.9 percent were still in school, and 11.6 percent had dropped out of the program. The graduates had an overall pass rate of 98.6% on the National Licensing Examination. Of the 411 participants, 53.8 percent are black, 12.2 percent are Hispanic, and 29.7 percent are white. Nursing attendants were 30.4 percent of participants. Thus, the program was clearly successful in increasing the number of nurses, and in providing education and advancement opportunities for minorities. However, Project LINC is now rethinking its objectives and its program in the face of a changing environment. The nursing shortage which provided the impetus for this program has abated. In September 1994, Project LINC in Greater New York City graduated 61 students, but the project is not accepting any new students as of January 1995 in order to evaluate the type of person and programs they want to support. This is an unusual approach which has received a mixed response from collaborating organizations, since some hospital association members are nursing homes that are still experiencing a demand for nurses. Since every institution is different, the hospital association is trying to encourage its member institutions to develop strategic plans and human resources plans. The GNYHA also surveyed its members to help determine the future course that the project should take.

A "think tank" session is also planned to assess progress at end of the first year of the national grant program. RWJ is monitoring the impact nationally and future strategies for LINC will be considered. These include expansion of health careers included in the program, as well as incorporation of new technologies such as long distance learning. Other options which are being explored in New York include apprenticeships and on-the-job training, but the Project Director indicates that new approaches are needed because traditional on-the-job training offers no mobility.

Awareness of the importance of planning for future health care workforce needs resulted in the establishment of the New York Health Careers Center as an affiliate of the GNYHA in 1989. This organization serves as a clearinghouse for information on health careers in the New York City area. "One-on-One," a program of the Careers Center funded by RWJ and New York State, is open to the public and provides testing, assessment, and referral services for health careers education and training.

Philadelphia 1199C Training and Upgrading Fund

District 1199C, the Philadelphia Hospital and Health Care Union, operates a Learning Center which offers training programs for eligible union employees as well as other programs for community residents. All programs offered to union members are tuition-free. The Learning Center offers programs not available at other schools or colleges or not offered at times or places convenient for members. For example, courses are offered in the morning and late afternoon to accommodate shift workers. The courses are generally directed toward preparation for advanced training or professional development. Services available at the training center include: career guidance, academic assessment and testing, technical skills training, placement assistance, workshops and seminars. The learning center contains classrooms, a science lab, a nurse aide certification testing site, a computer library, and a cafeteria. Computer equipment and an Internet link are available for the use of individual union members.

Funding. The Training and Upgrading Fund is a non-profit educational trust jointly administered by the union and its contributing hospitals and health care institutions. It is funded by employer contributions as negotiated in collective bargaining agreements (Taft-Hartley Trust). In addition to the Full Time Scholarship Program and the Tuition Reimbursement Program available to union members, the Training and Upgrading Fund conducts a continuing education program at the Learning Center. The full-time scholarship and tuition assistance accounts for about 75 percent of their budget, but directly affects only quarter of the workers. The Training Center, which is about 25 percent of the Training and Upgrading Fund budget, affects 75 percent of the workers.

Funding sources for programs offered to community residents include the Pennsylvania Department of Education (for basic education and GED classes), the Pennsylvania Department of Public Welfare, and the Private Industry Council. Community members must meet the eligibility requirements of the particular program for which they apply (e.g. displaced worker, transitionally needy, etc.).

Description. The courses most often requested by union members and usually available are: technical skills improvement, computer literacy, advanced computer training, adult basic education, GED test preparation, certified nursing assistant (CNA), medical terminology, reading improvement, pre-nursing, pre-allied health, working with learning disabilities, cardiopulmonary resuscitation (CPR), and interpersonal skills. The Learning Center hires their own teachers and develops their own curricula. This allows them to be flexible as training needs change. They receive some grants for curriculum development, such as the pre-allied health curriculum which was designed to prepare workers to take the LPN licensing exam or college level allied health courses.

The Learning Center also develops specialized courses to meet employer needs. For example, Learning Center staff developed a 14-week academic and life skills course for Support Services Department employees of Thomas Jefferson University Hospital. This program is jointly sponsored by the District 1199C Training and Upgrading Fund and the hospital's Department of Human Resources. The curriculum includes listening and speaking skills, reading and writing skills, mathematics, and computer skills. This course is offered on a "shared-time" plan, where two of the five hours per week are paid for by the hospital and three hours are on the employee's own time. The hospital has been very pleased with the results of this program, and it has encouraged the hospital to hire and promote graduates of the Learning Center's certified nurse assistant

program as well.

Pennsylvania CNA certification is a result of OBRA 1987 and requires 100 hours of training. The Learning Center provides training to those hired before the certification requirement who need to get certified, as well as to those working in other hospital departments who want to train for the CNA. There are about 40 students per class, and a new class starts every few months. The licensed practical nurse (LPN) course is offered once per year. Only 35 percent of those enrolled have previous health care background. Students must pass an entry test for the LPN class. Last year, 19 of 24 students finished the LPN course.

The Learning Center tests and evaluates workers in math, reading comprehension, and writing in order to offer each applicant the appropriate levels of instruction. The Learning Center also offers college courses on-site, including medical terminology, psychology, algebra/trigonometry. composition and literature, and ethics and medicine. Other programs for union members include seminars of topical interest and monthly small group "new directions" meetings designed to inform members of the changes in health care employment and career planning.

The courses for community residents are in various fields of allied health, such as licensed practical nurse, mental retardation technician, psychiatric technician, emergency medical technician, medical records, and nurse's aide, depending on the availability of federal and state funds. For example, the Dislocated Worker Program currently funds training for Mental Health/Mental Retardation Technician. This job is similar to the certified nurse aide, but involves work in drug and alcohol treatment units, and community rehabilitation programs. The positions offer lower pay than CNA positions in hospitals, but because there are union employers in this field, the positions offer a career ladder and continued training opportunities.

Lessons/outcomes. The educational trust and its Learning Center is a tremendous employee benefit. However, many nursing home contracts don't cover the training fund. In these times of uncertainty in the health care industry, training and upgrading staff advise workers to "acquire every skill you can." Although worker interest in training has definitely increased, training and upgrading staff find that the most effective way of recruiting students is to go on-site to the various departments and talk to workers in small groups. The union agreement with employers protects the confidentiality of workers-- individual information on training participation or course performance is not released to employers without the consent of the employee. This is important in encouraging workers to take advantage of training opportunities. Learning Center staff also interview department heads and other managers to learn about their training needs.

One frustration of the training fund staff is that many employers do not see the training fund as a resource that can be used to their advantage, rather it is viewed simply as a negotiated employer benefit. The union would like to increase the dialogue with hospital management and have more lead time in learning what hospitals are planning in order to retrain workers to meet employers' needs. Patient focus and the emphasis on communication skills is a problem because these skills cannot always been taught. Some hospital workers who have been good employees for many years in non-patient-contact jobs will have a hard time adapting.

The Learning Center staff try to keep abreast of job market trends in order to develop and offer relevant training. For example, they recently met with a nursing home employer to adapt a curriculum that would provide a career ladder in the dietary department including dietary aides, clerical positions and nursing dietary manager. They are also encouraging union members to pursue two-year Physical Therapy/Occupational Therapy aide programs. In terms of the current job market, training and upgrading staff indicate that workers in all hospital jobs need a familiarity with computers, even in the linen and dietary departments. Middle managers are getting laid off and lower level workers expected to work more independently.

The implementation of training standards and federal certification requirements is seen as helping employer mobility and transferability. The CNA is no longer a dead-end job, now that nursing homes (at least in the Philadelphia area) are unionized. Hospitals have cut back on hiring nurses, but LPNs are finding jobs in nursing homes and private industry. The Learning Center instructors help CNAs and LPNs with their job search. In general, the health care workforce is comprised of more part-time and lower-income workers than in the past. This less consistent and more stressed workforce poses difficulties for training.

Delaware Technical and Community College's Workforce Training

The Workforce Training Department of Delaware Technical and Community College provides short-term training for entry or reentry into the workforce, career change, and skill upgrading. Programs offered tuition-free, funded by the Department of Labor (DOL) under the Job Training and Partnership Act (JTPA), are designed to move students from the classroom to the job. Similar programs, as well as skills upgrading and career change programs, are offered for tuition-paying students. Programs are offered in health, business, and other fields. The focus of this summary is on health-related training programs, particularly Nurse's Assistant training.

Funding. With the support of the community college and the involvement of the local Private Industry Council, the Workforce Training Department has been offering job training programs funded by the U.S. Department of Labor since 1987. A proposal is submitted to DOL annually. Applicants in the funded programs must be certified by the Department of Labor, which involves a separate intake process including a workplace literacy test and income verification. Applicants must have their GED, be enrolled in a GED class, or be planning to take the GED exam.

Description. Funded programs include training in the following occupations: adult foster care, dental assistant, health insurance claims clerk, medical records, pharmaceutical assistant, and nurse's assistant. In

addition, funded programs are offered in basic skills and in other occupations such as automated accounting, collections, and office technician. The Workforce Training Department also offers tuition programs (for those who do not meet the eligibility requirements of the funding sources) in most of these areas, as well in other areas such as keyboarding. There are some tuition programs offered in specialized areas, such as renal dialysis, which offer upgrades and slightly higher pay for CNAs. The most common source of referrals to the program is word-of-mouth. Students are also referred to the program from the Department of Labor, and by employers.

Delaware Tech. runs five Nurse's Assistant programs per year with about 10 students in each session; they graduate 40-50 Nurse's Assistants each year. The course involves 300 hours of training, 200 in skills directly related to the nurse's assistant program, and 100 hours in basic skills and employability training. Graduates take a standardized test, the Nurse Aide Competency Evaluation Program (NACEP), and must be certified within three months on the job. The state requires that each student have a sponsor for the test, usually the training program or the employer. The Workforce Training Program pays the examination fee for those students it sponsors. Employers are involved in the program's clinical experience component. Also, employers conduct mock interviews to help prepare students for job interviews. The Department of Labor has program accountability requirements, tied to reimbursement, related to student attendance, placement, and follow-up.

The Workforce Training Department needs to keep abreast of job market trends. For example, over the years they have dropped mailroom training programs due to lack of jobs, and the collections training program did not attract enough student interest, in part because employers were hiring college graduates for these positions. Program administrators indicate that anything medical seems marketable right now, especially medical records and coding. The community college has an allied health school, which is good for attracting students and employers. The Workforce Training Department also works closely with employers to learn what their projected needs are. They have a health care advisory committee that meets quarterly and includes representatives from the local medical center, nursing homes, the allied health program and a nursing program. Teachers need to know what business wants, so interaction with employers is encouraged through periodic business breakfasts, field trips for students, workplace experience, and classroom sessions taught by employers.

Many of the training programs offered by Delaware Tech. are regulation-driven. For example, the Nurse's Assistant program is a response to the CNA certification requirement of OBRA 1987. Adult foster care training, which has two levels, basic care and nursing assistant, was developed based on State regulations, but the State never adopted the regulations. As a result, they will have trouble placing graduates of this program and may not offer it after next year. The pharmacy assistant program was a response to OBRA regulations on providing pharmacy consultation to consumers. The health care advisory committee helped in understanding the regulatory requirements and developing an appropriate curriculum.

Outcomes/Impact. Nurse's Assistant program participants take the NACEP six weeks after they graduate; most students pass the first time. It is the responsibility of the applicant to find a job, with help from their advisor. Students have had no problem getting jobs as nurse aides; placement is facilitated because the program has a good reputation among local employers. Graduates work in nursing homes and home health, with more working in nursing homes because they rely on public transportation. A few graduates each year go on for further training to become trained as physical therapy aides or geriatric nurse aide specialists, or other upgrades.

Graduates are followed for six months after placement. They are contacted twice per week after they are placed in a job. This is usually initiated by the advisor, not the student, but the program offers incentives, such as coupons, to encourage students to keep in touch. A form is sent to the employer after 30 days, another at about three months, and a final form at six months.

CNA certification hasn't significantly increased wages. In Delaware, the starting wage with no experience is $5.25 - $6.25 per hour. The hourly pay at home health agencies tends to be better, but there are no benefits and no assurance of a steady 40-hour week. The biggest change that program staff have seen over the past 15 years is in the students enrolling in job training at Delaware Tech. Over time, they are getting more students with some community college or college credits, more high school graduates, and more older students. Every scheduled class is filled. In the Nurse's Assistant program, some already have nursing assistant experience. The length of the Nurse's Assistant program was increased from its original design to provide more time for basic math/English as well as more time to teach life management skills and employment skills.

One of the biggest problems that program staff hear in follow-up contacts is that the standards of quality and recognition of the importance of the nursing assistant's work which are emphasized in the training program, are not always maintained at the facilities where they work. Graduates find that a lot of compromises are made, and that nurse aides are not respected for their work.

Unified Training for Home and Health Aides

This project is developing and testing an inclusive curriculum for training a single individual to qualify as a Medicaid-certified Personal Care Aide, Home Health Aide, and Certified Nurse Aide. The goals of the program are to: develop and test the unified training curriculum and to produce a recruitment/training/job placement model which can be replicated by other consortia of community colleges, area agencies on aging, and older worker employment programs throughout the United States.

Funding. This is a collaborative project of the Alexandria (VA) Agency on Aging, Northern Virginia Community College, and Senior Housing Research Group, funded by a two-year demonstration grant from the

U.S. Administration on Aging. The grant includes a research component to evaluate the effect of the uniform training on job performance and employment success. After the grant, the Unified Training will be a regular course offering of Northern Virginia Community College.

Description. The Unified Training Curriculum provides a total of 140 hours of classroom and clinical skills training. The course is designed to prepare the student to provide direct care and services to elderly and disabled in homes and nursing homes under the supervision of a licensed professional. Upon completion, the student will be prepared to assist clients in meeting physical, social, and psychological needs and in striving for a maximum level of independent function at home or in the nursing home environment. After successful completion of the first part of the curriculum, including a demonstration of personal care skills, trainees receive a certificate as a Personal Care Aide. They then continue on to the combined Homemaker Aide/Certified Nurse Aide training. Successful completion qualifies students for participation in the Virginia Nurse Aide Competency Evaluation Program examination and the Home Health Aide examination of the National Foundation for Hospice and Home Care.

The demonstration is targeted at low-income adults aged 50 and older, adults whose primary language is not English, and older workers who have already lost their jobs due to corporation downsizing, plant shutdowns, or the relocation of facilities. However, the course is open to any qualified student. The course is offered in two community college locations, one urban and multiethnic and one predominantly rural. Approximately 100 adults will be trained during the two-year demonstration period. The program started in 1994, with 30 students enrolled.. The program works through a community consortium of public and private agencies that recruit trainees, provide federal and other training subsidies for low-income, unemployed, and older workers, organize job fairs for graduates, and exchange information on other program issues that support the training. For example, project staff and others from the community college collaborated to present an all-day workshop for practicing nurse aides on "Overcoming Stress and Burnout at Work." The workshop was hosted by a local nursing home, and most attendees were sponsored by their employers as part of in-service training.

Outcomes/Impact. The program has produced a Unified Training Curriculum and Implementation Guide and the English as a Second Language Health Aide Preparation textbook, and is developing a community-based cooperative recruitment/training/job placement model. Since most states have specific licensing or certification requirements for nurse aides and some states have specific requirements for personal care and home health aides, the unified curriculum must be submitted for review and approval for each replication in a new state. In Virginia, the accreditation for Certified Nurse Aide is given by the Board of Nursing, Department of Health Professions. The approval for personal care aide requirements came from the state's Department of Medical Assistance Services. The program meets the requirements of the National Foundation for Hospice and Home Care. This project demonstrates the possibilities for innovative and collaborative approaches to training for a range of related jobs.

Cooperative Home Care Associates

Cooperative Home Care Associates (CHCA) is an employee-owned home health care company, located in the South Bronx area of New York City. The company began in 1985 through the efforts of a team of community development specialists under the auspices of the Community Service Society of New York City, with the goal of shaping home care into a "decent, quality job." A further goal of CHCA is to influence over time the entire home health care system in New York City by demonstrating that an organization emphasizing the home care worker can result in better care for home-bound clients, yet still meet industry standards of profitability. The company works to provide full time employment, at a decent wage, with benefits for its employee-owners.

Funding. Start-up financing included grants and low interest loans from a variety of philanthropic supporters and a short-term loan from a unique venture capital firm interested in employee-ownership ventures. Operating revenue comes from contracts with Medicaid certified home health agencies such as the Visiting Nurse Service and hospital-based agencies. CHCA's first contract was with the Home Health Agency arm of Montefiore Medical Center. After several years, CHCA successfully negotiated higher reimbursement rates from its contractors, enabling the company to increase wage rates and implement differential wage increases of 25 cents per hour for especially difficult cases and for weekend work, an innovation in the industry.

Description. CHCA is structured as a cooperative, a company in which employees own voting stock and elect their board of directors on a one-person, one-vote basis. Workers pay $1,000 for a share in the company, which can be paid through weekly paycheck deductions. CHCA currently employs 300 paraprofessionals and 15 administrative and educational staff. With four workers devoted to scheduling, the company works hard to match people with afternoon as well as morning clients to structure full-time work. CHCA has a guaranteed hours fund which guarantees payment for 30 hours per week for those employed at CHCA for 3 years; this fund has been supported with foundation dollars and will be self-supporting starting this year.

CHCA pays its workers $7 to $8 an hour and offers medical, dental, and vacation sick leave benefits. There is a three-tiered wage system, based on seniority, plus wage differentials for specialized cases and weekend cases. In 1994, most workers earned just over $200 per week. Current annual sales are $5.5 million and the cooperative has been profitable for the last six years. A bonus of between $250 and $500 has been earned by worker owners annually for each of those years.

CHCA created its own entry-level four-week training program, which is now provided on-site at CHCA's offices. CHCA also holds continuing education sessions four times a year, where aides gather to learn new techniques and discuss problems. CHCA recently implemented an on-site adult basic education program to prepare their paraprofessionals for further schooling. There are also plans to establish a tuition

reimbursement program for those interested in continuing on for LPN training or other professional education.

CHCA is also experimenting with other innovations to provide advancement opportunities. The senior home care aide project creates full-time salaried positions which, in addition to home care responsibilities, include one or more of the following: assisting in entry-level training, assisting in coordinating and scheduling assignments, and assisting new aides in problem solving. The team leader training program will expand the number of leadership training positions in the company by electing promising senior home health aides to perform teaching, problem-solving, and liaison responsibilities in CHCA's in-service training program.

In keeping with its philosophy that quality care is worth paying for and that quality of care is inextricably linked to the quality of the home health aide's job, CHCA has begun an ambitious and innovative program of developing quality indicators addressing all dimensions of home care and designing a "scorecard" for monitoring quality. Measures are being developed and refined for: quality of service (including contractor satisfaction, client satisfaction, and reliability), job quality, worker learning and improvement, and financial performance.

Lessons/Impacts. While CHCA is now an extremely successful company, it wasn't until 1987 that a clear turnaround was achieved, with the company earning a profit and a majority of the board composed of worker-owners. Substantial foundation and other outside support sustained this effort during its early years.

CHCA has shown that paraprofessional home care can be a good job, and that an organization like CHCA can provide high quality work. More than 70 percent of its workforce is employed full-time, compared to an industry average of 40 percent. The annual employee turnover rate is less than 20 percent, compared to an industry average of nearly 40 percent. Worker ownership has also been growing, and now represents 70 percent of the total workforce.

CHCA's Work Force is expanding at about 30 workers per year. The entry level program has also expanded, with 125 participants per year, 45 of whom are also enrolled in the company's English as a second language program, thus expanding CHCA's pool of Spanish speaking aides. Over 80 percent of the participants in the entry level program were previously dependent on public assistance, and over 80 percent complete the program.

The CHCA model is now being replicated in Philadelphia, and Boston, with plans to implement the model in two Midwest cities as well. The start up of the companies and training of personnel is being supported by foundations; the new cooperatives should become self-sufficient within two years as they attract clients and a stream of revenue.

CHCA can now speak with a practitioner's authority on regulatory matters and uses its unique position to bring together the various stakeholders in the system (government funders, client representatives, hospitals, unions, and other home care providers) to initiate policy changes in the industry. CHCA led the formation of the New York City Home Care Work Group, a city-wide coalition consisting of elder and disabled consumer organizations, public policy advocates, unions, provider agencies, and academic researchers. This group urged increases from the state in wage and benefits reimbursements--not just for CHCA, but for the entire home care system.

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NOTES

1. Speech delivered to the Center for National Policy on August 31, 1994 in Washington, D.C. (cited in Swoboda 1994).

2. For a more thorough overview see Corcoran (1994).

3. For a more thorough review see Rosenfeld (1992).

4. Farber used the bi-annual Displaced Workers' Survey supplement to the January CPS over the 1984-1992 period, the mobility data from the supplement to the January CPS in 1983, 1987, and 1991, and the merged outgoing rotation group CPS files from 1982 through 1991.

5. Employment in goods-producing industries fell 8.8 percent between 1978-1983 and 3 percent between 1983-1991.

6. A case example of a unified curriculum demonstration is included later in this report.

7. The impact of reduced hospital length of stay has, of course, been felt by individuals as well. Family members have been required to provide more post-discharge care, and the impacts on the patient's health are a concern.

8. See examples in the next section of this paper.

9. Rick Surpin of Cooperative Home Care Associates indicates that average turnover in the industry is almost 40 percent.

* This report, completed in August 1995, has recently been added to our web site in response to numerous requests from researchers and practitioners interested in employment and advancement opportunities for welfare recipients.

Other Publications by the Authors

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