
Improving Direct Care Work: Integrating Theory, Research and Practice

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Introduction

In its 2008 report, *Re-tooling for an Aging America*, the Institute of Medicine calls for broad reforms in the recruitment, training and utilization of the long-term care (LTC) workforce. Although the report addresses serious concerns related to physicians, nurses and other professionals, it gives equal focus to the seven out of ten long-term care workers classified as “paraprofessionals,” i.e. the direct care workers who provide non-medical services to the elderly. Known by many titles including home care aide, home health aide, certified nursing assistant (CNA), orderly, and personal support worker, this workforce currently totals roughly three million workers in the U.S. and does not include the hundreds of thousands of additional home health or home care workers privately hired by individuals.

Stone and Dawson (2008) argue that improving the jobs for the long-term care workforce is a quality issue, an economic issue, and a moral imperative. Almost all of the hands-on in-home care and interactive care in nursing homes, assisted living facilities, adult day care centers and other long-term care settings is provided by this sector of the healthcare workforce. Direct care work is poorly paid and characterized by heavy physical and emotional demands; turnover is high and overall retention is poor. However, given the aging of the population, the growth in demand for these workers is expected to be inexorable and dramatic: the need for paraprofessionals in healthcare will grow three times faster than all other occupations—a growth rate that will result in roughly a million new positions by 2014 (Dawson 2007). Although this may sound like good news in a time of record unemployment, many experts are concerned that there are not enough potential workers to fill these challenging, low-paid jobs.

Research on direct care workers is interdisciplinary and rapidly growing. Once largely the province of nursing, medicine, and health administration, today researchers from a variety of disciplinary perspectives examine issues that affect different populations of care recipients (the old, the very young, the medically frail), and include a variety of settings for providing care (hospitals, day care centers, skilled nursing facilities and home-based care.)

This paper seeks to bring an interdisciplinary perspective to issues of recruitment and retention of direct care workers in long-term care. Key sources include the large and growing body

of applied work published in the medical gerontology literature, as well as research grounded in broader theories of work organization, work design and workforce policy. In particular, research in organization theory and applied psychology offer evidence-based frameworks that build on the commitment and expertise of the workforce to improve the quality of care.

Although falling well short of a comprehensive review of research relevant to the direct care workforce, in this paper we begin the process of synthesizing the seminal work being done from a variety of normative, theoretical and applied perspectives. Our hope is that casting a wide net across a range of disciplines and perspectives will promote a more thoughtful debate about the agenda for future research and policy.

Organization of the Paper. Section I (Direct Care Workers: Policies and Potential Reforms) offers additional facts, figures and contextual information about direct care workers in long-term care, and provides an overview of current policy issues and possibilities for improving the lives of workers and care recipients. Section II reviews the work of prominent scholars who have explored women's experiences as caregivers and offered normative frameworks for understanding the nature and meaning of care work.

Section III provides an overview of some of the more influential studies of direct care turnover and job satisfaction. These studies do not provide consistent answers, but they do raise a series of questions about management and organizational practices, as well as about how direct care staff perceive and experience their work. Because nursing homes have received more attention than home and community-based care for the elderly, the majority of studies discussed in Section II focus on the nursing home workforce.

Section IV explores the literature on work organization and management, and its implications for understanding direct care workers and settings; Section IV also summarizes studies that attempt to test the applicability of management and organizational "best practices" in long-term care settings. Complementing and extending insights from the work organization literature are studies that focus on worker agency and variables that shape role performance and job design. This literature is the focus of Section V. Much of the more theoretical work (particularly in Sections IV and V) is not based on insights drawn from or tested in direct care settings. However, this work provides promising theoretical models that have not yet been applied in direct care settings where, as noted in Section III, the research studies tend to be more descriptive and the findings inconclusive. Finally

Section VI attempts to draw these strands together, with a discussion of implications for future research and policy.

I. Direct Care Workers: Policies and Potential Reforms

Until relatively recently, the frail elderly -- along with the chronically ill and the very young -- were likely to be cared for by female family members within the home. Since the 1950's, the proportion of married women in the U.S. labor force has doubled (Jacoby, 2009), reducing the availability of women to provide unpaid care in the home. The burden of care still falls heavily on families and friends, but now primarily on women with jobs outside the home. Women's labor market participation, geographic mobility and the re-structuring of families are all factors likely to continue to reduce the availability of family caregivers in the future (Eaton, 2005). Encouraged by federal entitlements and tax subsidies for families purchasing care, recipients and their families are increasingly willing to pay privately for care. As a consequence, both home-based and residential care has grown enormously. Governmental expenditures for long-term care (LTC) totaled \$177.6 billion in 2006, with nursing home care absorbing roughly \$125 billion and home-based care nearly \$53 billion (Harrington et. al., 2009).

Approximately 1.2 million elderly and 300,000 younger chronically ill or disabled individuals live in the nation's 17,000 nursing homes, and another 900,000 elders reside in assisted living facilities. The majority of nursing home residents are frail, elderly women who have exhausted or outlived other options for care. They will spend the final years of their lives -- on average more than two years -- in skilled nursing care. Currently, the long-term care (LTC) system has far more beds than the nation's hospital system and, despite serious concerns about quality and cost, the demand for both home-based and institutionally-based care will increase dramatically over the next few decades. Experts anticipate that the number of older Americans needing paid home care will more than double between 2000 and 2040 to 5.3 million, while nursing home residents will increase from 1.2 to 2.7 million (Johnson, et. al. 2007).

Increasingly people prefer their own homes to life in a residential setting, and in 2005 nearly 2.8 million people received some form of home health or personal care service through the Medicaid Home and Community Based Services program (Harrington et. al. 2009). The Bureau of Labor Statistics (BLS) estimates that the demand for personal and home care aides will increase by 51% and that the demand for home health aides will increase by 49% between 2006 and 2016, making these jobs the second and third fastest growing occupations in America

(USBLS 2007). However, the population of workers who have traditionally filled these jobs (women between the ages of 25 –54) will increase by less than 2% in this period (Dawson 2007).

Currently the paraprofessional workforce is overwhelmingly female, racially diverse, and to an increasing extent, made up of immigrants.¹ Most direct care workers have limited or no education beyond high school. While the minimal training requirements pose only a slight barrier to entering LTC work, neither the 75 to 120 hours of entry-level training required by state regulations, nor the continuing education provided by employers, offers career pathways to other work. In 2005, the median hourly wage for direct care workers was \$9.56 as compared to a median hourly wage of \$14.15 for all U.S. workers. The annual salary for a nursing home aide was approximately \$22,000 a year; home health aides averaged \$19,500, and personal and home care aides received an average annual salary of \$17,700. Nearly one in five home care aides and 16 percent of nursing home aides live below the poverty level, and among workers who are single parents, one third receive food stamps (National Clearinghouse on the Direct Care Workforce, 2006).

Direct care jobs report one of the highest injury and illness rates of any occupation (IOM, 2008). Despite the hazards of this work, more than 55% of direct care workers in nursing homes and 77% of home health aides do not receive employer-based health insurance and even fewer are eligible for pension benefits (NCDCW, 2006). Since many LTC workers are hired on a per diem basis, many workers also lack basic benefits like sick leave and paid vacation days (Lipson & Regan, 2004).

Direct care workers who provide care in the home are caught between legal definitions of work and the domestic sphere. In a series of articles, Smith provides both a detailed regulatory history of these “legal outcasts,” and describes political strategies for addressing the needs of this workforce (Smith, 2008, 2007a, 2007b, 2007c, 2006, 1999). Amendments to the Fair Labor Standards Act (FLSA) in 1974 added coverage for nurses, CNAs and workers who provide health services in the home, but did not address the exclusion for domestic workers who are deemed to provide “companionship” services (Smith, 2007b). This interpretation was recently challenged in the courts by a home care worker whose agency employer refused to pay minimum

¹ The increasing reliance on recruiting immigrants to fill direct care jobs raises a series of questions for practices and public policy, has implications for both receiver nations and source nations, and has received only limited attention from researchers (Brown & Braun, 2008; Leutz, 2007; de Castro et. al. 2006; Priester & Reinardy, 2003).

wage and overtime. However, the Supreme Court's 2007 decision on *Long Island Care at Home vs. Evelyn Coke* reaffirmed the domestic service exclusion from the Fair Labor Standards Act (FLSA) (Direct Care Alliance 2009).

Many consumers prefer hiring caregivers directly rather than contracting through home health agencies, since this allows them to select someone with whom they feel comfortable and to customize schedules and tasks to their own needs. Home care recipients include people with varying ability to pay privately for care. The largest funding source is the federal Medicare program which is not needs based; consumers, including the middle class elderly who "spend down" their assets, qualify for Medicaid. State governments are increasingly directing public funding (Medicaid) toward consumer-directed care (CDC). As home care workers move from agency-based care to CDC, they may lose critical legal protections that other U.S. workers take for granted (Smith 2007b; "The rights of domestic workers," 2009). Home care workers hired by individual employers may be excluded from coverage under the National Labor Relations Act, Dept. of Labor regulations interpreting the Occupational Safety and Health Act (OSHA), and, in roughly half the states, workers compensation laws.

Limited public funding for home care, whether agency or consumer directed, results in tensions among key stakeholders (Delp & Quan, 2002). Consumers fear that increasing public expenditures for overtime would result in fewer hours of care. Having adopted CDC in the hope of reducing expenditures for agency-based home care and nursing home costs, state governments are reluctant to become the employer of record and pay for overtime (Smith 2008). Home health care agencies argue that requiring FLSA protections has the potential to place their industry at financial risk. Home care workers are not only caught between definitions of work and domestic service but are also implicated in the debate over whether society has a responsibility to provide vulnerable citizens with adequate and affordable health care. Smith (2007a) argues that the responsibility for meeting these needs should not "rest on the weary shoulders" of this low-income workforce. Moreover, home based care workers face an even higher risk than their nursing home counterparts for injuries (e.g. manually lifting and transferring clients without the assistance of equipment, and agitated and confused clients who become combative) as well as for infections, including hepatitis and HIV. As a contrast, Smith (2007a) describes Sweden, where the disabled elderly are given grants for housing adaptations that enhance autonomy and create a safer environment for both the elderly persons and their caregivers.

The working conditions for direct care staff are an indication of more global problems with the quality of long-term care. Resources for home and community-based and residential care settings are widely seen as inadequate. The supply of home care services does not meet even current levels of demand, and there is little uniformity in training requirements across states or even across facilities in the same geographic region (Harrington, et. Al, 2009). Although data indicate that clinical care has improved in nursing homes over the past two decades, serious concerns about quality persist (e.g. IOM, 2001; Levinson, 2008). The situation is complicated by the fact that long-term care is often a profit-seeking endeavor. More than 10,000 (65%) of the nation’s nursing homes are proprietary, and the majority are owned by large corporate chains. There is widespread concern, and some evidence, that for-profit facilities may sacrifice patient quality and safety in the interests of efficiency (Pear, 2008).

The majority of nursing homes still fall short of the 1987 Nursing Home Reform Act’s promise to help residents attain physical, mental and psychosocial well-being (IOM 2001a). Shorter hospital stays and the increasing availability of assisted living alternatives for people with fewer medical needs have resulted in a frailer, more dependent nursing home population. The workloads of frontline nurses and aides in the vast majority of nursing facilities necessitate a constant triage among the most immediate and pressing needs of residents, constraining the ability of even the most dedicated staff to meet residents’ needs for social contact (Baker 2007).² Appropriate nursing home staff levels have been debated in the research literature for decades, and the literature focusing on understanding and making recommendations for staffing levels in nursing homes is large and complex (IOM 1986, 2001, 2003, Cohen and Spector, 1996; Harrington et. al, 2000; Wells, 2004, Castle, 2008). Levels of reimbursement from the major payers do not support increased staffing (IOM 2008), and across the country both providers and advocates for the elderly argue that the gap between the cost of care and current reimbursement levels threatens to compromise the ability of virtually any nursing home to deliver quality care (Ash & Basu, 2009; Johnson, et. al. 2009).

Average nursing home staffing levels have remained “flat” at 3.6 to 3.7 hours per resident day since the early 1990s (Harrington. 2007). In 2002, a study commissioned by the Center for

² Parallel issues affect home care workers who are pulled between their clients—many of whom have profound physical, social and emotional needs—and their employers who limit the care they can provide based on the limitations of public and private funding (Stone, 1999, 2000a).

Medicare and Medicaid Services concluded that 4.1 nursing hours per resident day would be necessary to prevent harm to long-stay residents (Center for Medicare and Medicaid Services, 2002). The study noted that 97% of the nursing homes in the U.S. did not meet at least one of the staffing thresholds needed to avoid adverse consequences to residents, and more than half failed to meet all of them. The proposed standards were endorsed by an IOM committee in the 2003 report, *Keeping Patients Safe*, and by a broad coalition of stakeholder groups (NCNHR 2001). The Bush administration questioned the feasibility of costs for increasing staffing--\$7.6 billion—and expressed “hope that the problem would be resolved through market forces and the more efficient use of existing nurses and aides” (Pear, 2002).

Conclusions about the impact of staffing on quality are limited by the dependence of many studies on cross-sectional data and other methodological issues (Zhang & Grabowski, 2004, Castle 2008). However, there appears to be a consensus that higher nurse staffing levels are associated with a range of important outcomes including lower hospitalization rates and better overall quality indicators for residents; and lower rates of turnover and injury for workers (Harrington, 2007). Although fewer studies have focused on assisted living environments, research indicates that the average ratio of one staff person to every 14 residents is inadequate to meet resident needs. A national survey of assisted living residents reports that residents’ greatest concerns related to inadequate staffing levels and high staff turnover (Hawes & Phillips, 2000).

“Medicalization” and Quality of Life. As health care facilities, nursing homes are responsible for the care of medically fragile individuals; but unlike the hospitals on which they are modeled, nursing homes are in fact the final home for many of their residents. Isolation and boredom typify the nursing home experience for many residents (Thomas, 1992). A regulatory system “riveted” on indicators of poor health in combination with inadequate staffing contributes to sterile environments in which residents’ needs ranging from touch and comfort, conversation and relationship to autonomy, dignity and privacy are easily overlooked (Kane, 2001, 2003). In listing some of the factors that influence the low priority given to quality of life (QOL), Kane (2003) notes that individuals who already believe that nursing homes range from “bad to unspeakably bad” and whose goal is trying to avoid nursing care – including disability activists – will not spend time on improving it. Kane also points out that QOL concerns may appear frivolous to nursing home advocates and reformers focused on the failure of many nursing homes

to meet basic standards for care. Thus, with a few prominent exceptions,³ reformers have not been oriented toward data collection and measurement.

The required paperwork and online reporting required for regulatory oversight tends to be viewed by the industry as an administrative burden that absorbs scarce resources and reduces time for resident care and innovation (Weiner, 2003). Despite the fact that nursing homes are often described as one of the most regulated industries in the country, poor and even dangerous conditions in nursing homes persist (Levinson, 2008; U.S. GAO, 2004, 2005). Concerns about the existing Medicaid and Medicare quality assurance system range from problems with nursing home reporting and agency monitoring to the consistency and adequacy of the state inspection processes and sanctions for homes found in violation of CMS standards (Weiner, 2003).

Reform: Agendas and Accomplishments

Nursing Homes. Current interest in the long-term care workforce goes beyond the need for a larger and more stable pool of direct care workers. There is an increasing recognition that the fate of direct care workers and the recipients of their care are intertwined, and that care cannot be improved without improving the jobs of this workforce (IOM, 2008). For advocates of care recipients and direct care workers, it is a time of both challenge and promise. LTC in the U.S. currently encompasses both the familiar, dismal institutional “homes of last resort,” and organizations seeking to transform the way care is organized and provided. Building on the nursing home reform movement of the past five decades, and rooted in concerns for both the civil rights and human needs of the institutionalized elderly, consumers, family members and long-term care professionals have created a growing movement around the idea of “culture change” (Pioneer Network; Baker, 2007). To improve the autonomy and well-being of nursing homes residents, these stakeholders have advocated for a model of care directed by and/or centered on the needs of the person receiving care rather than dictated by existing institutional cultures. Advocates are also demanding care in more “home like,” less medical, environments, including group home settings with fewer residents and person-centered community-based care.

Thousands of nursing homes across the U.S. are trying to implement more person-centered models of care (Baker, 2007). According to a national survey conducted by the Commonwealth Foundation in 2007, only 5% of nursing homes report comprehensively

³ Discussed in Section IV. of this paper.

instituting “culture change” practices, but nearly one-third describe themselves as “culture change adopters” and another 25% characterize themselves as “culture change strivers” (Doty, et. al., 2008). Residents in these facilities are more likely than residents in traditional nursing homes to control their own schedules (e.g. bedtimes and meals), receive personal care that responds to their preferences, and have a voice in shaping administrative decisions.

The growing interest in person-centered care has significant implications for the frontline workforce. Traditional long-term care settings limit the discretion of frontline healthcare workers: standard mealtimes, showers and other care routines are implemented by managers to enhance efficient performance of defined tasks. The norms of person-centered care, however, do not comport with the “assembly line” model of care, and instead require aides to function with greater autonomy in meeting individual care recipients’ preferences, needs and schedules. The Commonwealth Foundation study cites “some evidence that management is accommodating collaborative and decentralized decision-making to empower direct-care workers” (Doty, et. al. 2008). Although much more research has focused on institutional settings than home and community based long-term care, home health agencies and home health/home care aides have been included in some of the interventions funded through the Robert Wood Johnson Foundation/Atlantic Philanthropies Better Jobs/Better Care program. Consumer-directed home care is another rapidly emerging trend with important implications for the frontline workforce (Benjamin, 2001).

Studies of practices that support culture change values have only begun to emerge in the past decade. Knowledge about effective organizational practices and how to implement these practices in long-term care settings is far from complete (Kemper. et. al. 2008). There is also a growing understanding that the workforce problems confronting long-term care settings also pose significant challenges to services and residential settings for other vulnerable populations including young children, the developmentally and physically disabled, and the mentally ill (Hewitt, et. al. 2008).

Union Involvement. The nursing home “culture change” movement is based on dissemination and voluntary adoption of new models of care. To a large extent, workforce needs are viewed in the context of how to train and supervise a workforce that can offer “person-centered” care. In contrast, home care workers have been squarely in the sights of a very different reform movement led by the Service Employees International Union (SEIU). Building

on its successful “Justice for Janitors” campaign, SEIU’s home care organizing efforts have resulted in more than 300,000 new members, the largest union gain in the U.S. since the 1930s, and inspired similar campaigns among child care workers (Cobble & Merrill, 2008). Home care workers are among the influx of largely female service workers that are reversing declines in the union membership base and changing the demographics of the labor movement.

Understanding the implications and impact of these campaigns is the focus of recent work by a number of labor scholars and social scientists (e.g. Appelbaum et. al. 2003; Boris & Klein, 2007; Bronfenbrenner & Juravich 1995; Chang 2000; Cobble 1991a, 1991b, 1994, 1996, 1999; 2001; 2005; Cobble & Merrill 2004, 2008; Howes 2002, 2004, 2005; MacDonald & Siriani 1996; Milkman 2006; Needleman 1998; Rhee & Zabin 2008; Smith 2006, 2007c, 2008).⁴ Delp and Quan’s (2002) case study of SEIU’s home care campaigns in California identified three interdependent strategies crucial to the union’s successes in Los Angeles, Alameda County and San Francisco: grassroots organizing of the ethnically diverse and geographically scattered home care workforce; the use of policy changes as a means of involving workers; and the creation of strong coalitions between labor, consumer, and community groups. The coalition between home care workers and consumers managed to overcome mutual distrust based in viewing resources in “zero sum” terms, e.g. suspicions that wage increases would result in fewer hours of care.

A crucial result of the organizing campaigns has been the creation of California’s In-Home Supportive Services (IHSS) system which includes a network of county-level public authorities with quasi-public sector employees on whose behalf local unions can engage in collective bargaining (Delp & Quan, 2002; Smith. 2008). The labor union movement has followed the California home care organizing campaigns with successful campaigns to extend basic labor protections to workers in at least eight additional states, and has broadened this strategy to campaigns for family day care providers in ten states.

Smith (2008) provides an overview of legal developments in each of these states and compares strategies and outcomes. Since the National Labor Relations Act (NLRA) only covers private sector employment and generally excludes independent contractors, the extension of these rights has depended on state legislation or executive orders issued by state governors or

⁴ See Cobble and Merrill (2008) for a comprehensive overview of seminal research and the key themes emerging from this literature.

municipal authorities.⁵ Collective bargaining rights based on defining an employer of record do not restore the full range of labor protections to this workforce, but they open the door to improving working conditions.

Research by Howes (2002, 2004, 2005) documents the impact of the new bargaining agreement on home care workers and their clients in San Francisco. Her project matched 18,000 San Francisco home care workers with 15,500 service recipients from 1997 – 2002. Changes over the 52 months of the study include:

- Nearly a doubling of wages for IHSS homecare workers and an increase in the number of hours worked by some providers;
- An increase in the number of IHSS workers (54%) and the number of consumers served by the program (47%); and
- A decline in various measures of workforce turnover.

In addition, Howes argues that the wage increase may have reduced the number of San Francisco county residents living below the poverty line by up to 15%. Annual income from the IHSS program was up to \$114 million by 2001 as opposed to \$37 million in 1997, meaning that every county dollar invested in IHSS services was matched by as much as \$13 in income from federal and state sources (Howes, 2002).

At the same time, labor historians Cobble and Merrill (2008) argue that “contract unionism” is not sufficient to improve opportunities for workers in the most poorly paid service occupations, many of whom are women and minorities. Existing legal structures such as the NLRA are ill-suited to meeting the needs of workers who move from job site to job site, and unions themselves must change to meet the needs of a post-industrial workforce. Recalling the expansive history of the labor movement in shaping fair labor standards, using the courts and creating public pressure on employers, they call for a broad-based social justice movement to address fundamental economic and social inequalities. By building a coalition that addressed the needs of both home care workers and their clients, Cobble and Merrill note that SEIU’s home care campaigns provide a potential model for a unionism that can involve the larger community.

⁵ As of June 2009, the New York State legislature was considering a law which would establish a domestic workers bill of rights for caregivers, nannies, and housekeepers that would provide overtime, vacation and sick days, severance pay and health coverage as well as a means of enforcing these rights. If passed, it would be the first law of its kind in the country (“The rights of domestic workers,” 2009).

Stone (2000b) and Folbre (2006) also advocate a broad-based care movement; both stress the potential for building on the emotional connections between care workers and care recipients and their common interests in adequately funded, high quality care. England and Folbre (1999) argue strongly for a framework that includes both “love and money.” They argue that if we cannot rely on the “invisible hand” of the market to ensure adequate care for our society’s most vulnerable citizens, government must play a stronger role (Folbre 2001; Nelson & England 2002). Stone (1999; 2000a, 2008) emphasizes the need to re-balance the individualistic, anti-government policies endorsed by conservative economists and politicians since the Reagan years and to re-establish the importance of “kindness” in the public as well as private sphere.

II. Normative Frameworks: Valuing Care

In the introduction to their edited volume of seminal essays on care work, Abel and Nelson (1990) wrote, “As a society that enshrines the virtue of independence, defines instrumental work as superior to emotional work, seeks to distance itself from basic life events, and devalues the activities of women, we have tended to ignore the experiences of caregivers.” Although this paper reflects a growing interest in such experiences, discussions of care work are still profoundly shaped by conservative/liberal debates about the appropriate roles of government and markets; discomfort with aging, disability and death; and the social and economic value of work that is disproportionately performed by women and minorities, often in the home.

In exploring the social values that surround care work and seeking to understand women’s experiences as caregivers, feminist scholars and other social scientists have sought to understand what accounts for the specific challenges facing paid and unpaid caregivers, the meaning and nature of care giving from both an individual and societal perspective, and what is reasonable to ask of caregivers.⁶ This work provides historical, normative and empirical perspectives that clarify connections between paid and unpaid caregivers and a range of care recipients. In this brief overview it is not possible to do justice to the scope or complexity of the arguments raised in this literature; however, research and analysis relevant to several key themes are briefly explored.

“Women’s Work”: The Influence of Gender and Race. Smith (1999, 2007a) documents the extent to which the politics of race and gender shaped the marginalized legal

⁶ For collections of some of the more seminal essays, see: Finch & Groves 1983, Abel & Nelson 1990; MacDonald & Sirianni 1996; Harrington Meyer 2000; Korczynski & MacDonald 2008).

status of work in the domestic sphere. She notes that from 1870 to 1940, more women were employed in domestic service than in any other occupation, many as live-in servants working 17 hour days, seven days a week. During the Progressive era, political justifications for omitting domestic workers from wage, hour and health and safety protections included arguments that the home is outside the sphere of production and that domestic work is stress free and “good marital training.” Just as assumptions about gender roles shaped policy during the Progressive era, racism and the perceived economic interests of the southern U.S. shaped the legal framework surrounding domestic service during the New Deal (Smith 1999, 2007a). White women moved from domestic service into industrial jobs in the 1930s and 1940s. Black women had fewer options and more than 50% remained in domestic service. Unwilling to expand the political or economic power of African Americans and seeking to maintain an inexpensive supply of labor, Southern politicians worked to exclude domestic service and farm labor from New Deal labor reforms.

Studies of Comparable Worth. Much of women’s labor—whether in their own home, a client’s home, or in schools, hospitals, or other setting—is minimally rewarded in the formal economy. A large body of research on comparable worth demonstrates that workers in “caring jobs” such as teaching, childcare or nursing experience a wage gap: jobs involving care giving tend to pay less than other jobs even after controlling for worker, occupational and industry characteristics. (See, for example, Filer, 1989, Kilbourne, et al. 1994, Sorensen, 1994, Steinberg, 2001, Steinberg, et al. 1986; England, et. al., 2001, England, Budig & Folbre, 2002, England & Folbre, 1999; England, 1992). Although men working in caring professions also experience this wage penalty, far more women occupy these jobs and thus bear the brunt of the systematic under-valuing of them (England, Budig & Folbre, 2002).

In a series of articles, England, Folbre and their collaborators (England & Folbre, 1999; England & Nelson, 2002; England, 2005) explore theoretical frameworks that may explain the low pay of care work relative to jobs of comparable education and skill. In addition to the historic undervaluing of the feminine sphere, they describe the economic argument that workers are attracted to care giving despite the low wages because of the intrinsic rewards of this work. Moreover, care workers may be reluctant to leave despite inadequate wages and poor working conditions, because they become attached to those in their care—in a sense “prisoners of love.” Folbre (1995) also examines a cultural paradox—caregivers receive few economic rewards

because people are uncomfortable putting a price on something as intimate and fundamental as care. An additional factor is that many care workers are employed through public or non-profit employers who serve those too poor to pay for their own care: wages are constrained by what society in general, and policymakers in particular, are willing to allocate to programs that serve the needs of the poor (England & Folbre, 1999). Care work is also among a larger classes of occupations that are not fully commodified (Himmelweit, 1999).

In addition, market failures typical of the health care sector also apply to the direct care workforce. Inelastic needs for care, problems with measuring and monitoring quality of care and imperfect information, have led to poorly-regulated markets characterized by low pay and low quality outcomes (Folbre 2001, 2006). The market fails to reflect the benefits of public goods that may be diffuse, accrue to those who do not pay for services and may materialize many years in the future. For example, the skills imparted to children enrolled in quality preschool may benefit future employers of such children, as well as the current employers of their parents by allowing parents to be more productively employed. However, there is no market mechanism to incorporate these benefits into the pay for the direct care workforce.

The Personal and Social Context of Care Giving. As both paid and unpaid caregivers soon discover, care giving requires making judgments about how to balance one's own needs with those of others. Abel and Nelson (1990) stress that good care-giving involves "a union of reflection, judgment and emotion," and an understanding of good practice and the needs of particular individuals. Feminist scholarship offers varying perspectives on whether care giving oppresses and exploits women or offers meaning and fulfillment (e.g. Gilligan, 1982; Hochschild, 1983). According to Abel and Nelson (1990), there is general agreement among feminist scholars that by requiring both instrumental tasks and affective relationships, care-giving bridges the dualisms that have defined much of Western thought—autonomy vs. nurturance, reason vs. emotion, public vs. private returns.

Folbre (2008b) adds another layer to this mix in her observation that care work involves "the kind of exchange that changes the caregiver." In economic terms, labor is an imperfect commodity because the quality of labor depends on human motivations, and caring labor is even less standardized than other kinds of work because of the complications created by interactions between care givers and consumers of care. According to Folbre, care services have an "emotionally sticky" aspect, and preferences and feelings (on both sides) can be modified by the

exchange. Noting that further exploration of these ideas may have important implications for improving institutional design, Folbre (2008b, p. 1770) observes:

Sustained personal interaction with care recipients can strengthen intrinsic motivation to help them, which enhances performance in complex jobs characterized by task ambiguity, where it is difficult to specify in advance which specific goals should take priority. Further, emotional connection often yields valuable person-specific information allowing better care.... unlike the idealized consumers of standard economic theory, care recipients may not know themselves what they need, and they don't enjoy a menu of many alternative choices. Their very lack of consumer sovereignty makes them vulnerable—and caregivers who know them well can advocate for them despite pressures for efficiency and cost cutting.

In short, emotional connection may limit the ability of bureaucrats or administrators to increase efficiency but may also be fundamental to good care.⁷

At the same time, research makes it clear that we should not romanticize care work or assume there will be compassionate care in the less-than-ideal settings in which the majority of direct caregivers work. Writing about occupational health hazards in Canadian facilities for the developmentally disabled, Baines (2006) criticizes work organizations that depend on “the endlessly stretchable capacity of women to provide care in any context, including a context of violence.” In her study, gendered expectations led to different assignments for men and women: Men were more likely to engage with clients in recreational activities while women spent more time communicating with emotional distressed clients. As a result, women caregivers were subjected to a disproportionate share of the violence. Meagher (2006), takes exception to the widely-accepted standard for judging paid care, i.e. that it should be based on “love” and the same sense of duty that ideally undergirds the care which family members offer each other. Describing a range of other “moral bonds” including contracts between caregivers and recipients and professional ideals, she acknowledges that organizational factors are the biggest barrier to successful paid care giving relationships. Ungerson (1983) and Graham (1983) also seek to limit reliance on care givers’ motivations, emphasizing that caring involves both love and labor.⁸

⁷ The fact that a “culture change” movement has developed to encourage nursing homes to adopt more “person-centered” care practices indicates that historically speaking the controlling stakeholders (government funders, for profit and non-profit corporations) have oriented more strongly to task and efficiency than attachment. Cancian (2000) discusses the ways in which bureaucracy and capitalism undermine emotional care.

⁸ See Fisher and Tronto (1990) for an overview of work by Ungerson, Graham and other feminist theorists.

Importance of Context. If there is one overriding conclusion from the work reviewed in this section, it is that the “meaning” of care giving cannot be separated from the social and organizational context in which it is performed.⁹ This discussion reveals the challenge of creating better jobs and better working conditions, and clarifies arguments for a “care movement.” The following sections provide a closer examination of the organizational context of direct care, and how this context shapes the experiences and motivations of the direct care workforce.

III. Turnover: A Window into the Problems and Challenges Facing LTC

A critical and unresolved factor contributing to staff shortages, poor quality care and unnecessary costs is the persistent high rate of turnover among all levels of long-term care staff. This is particularly a problem with the direct care workforce. A 2002 national survey of nursing homes found annual turnover rates among CNAs to be greater than 70% and average vacancy rates to be almost 12% (Decker et. al, 2003). Although national data on turnover in home health care is not available, studies report annual turnover rates ranging from 12% to 76% (HRSA, 2004). Reported rates for assisted living facilities are estimated at 35 to 40%. (AAHSA, 2002). High rates of turnover have been linked to lower quality of care, e.g. greater use of physical and chemical restraints, catheterization, and development of pressure ulcers and contractures (Castle & Engborg, 2005). Facilities with high rates of turnover are more likely to be cited for deficiencies during state inspections (Dawson, 2007). Recruiting and training replacement staff also represents a significant cost to employers, estimated at \$2,500 – \$4,000 per worker. Seavey (2004) estimates that the total cost to employers amounts to \$4.1 billion annually in the U.S. Finally, turnover disrupts the lives of both residents and staff in less immediately measurable ways: Residents lose caregivers who understand their needs and preferences and the loss of experienced staff creates challenges for the staff that remain (Cohen-Mansfield, 1997; Bishop, et. al. 2008).

Turnover, Retention and Job Satisfaction: Findings from Large-scale Surveys

Instability among direct care staff is not a new phenomenon, and efforts to understand high rates of turnover within long-term care facilities go back to the early 1970’s and include hundreds of articles. Study design and findings from eight large-scale, widely-cited studies on

⁹ See Fisher and Tronto (1990) and Abel and Nelson (1990) for particularly eloquent discussions of this observation.

direct care turnover in the literature are described in Table 1 to illustrate the diverse methodologies and variability in findings reflected in this literature. There is a great deal of diversity in the research designs and findings of the studies summarized in Table 1 and the larger research base they represent. Some studies rely on facility and local economic data while others are based on CNAs' perceptions as reported on job satisfaction surveys. A few include multiple types/levels of data (e.g., Brannon, et. al.2002; Castle, 2005; Castle, et. al. 2007). For the most part, this literature is not grounded in current work organization or management theory, but builds on previous descriptive work focused on nursing home staff satisfaction and turnover.

The value of this body of research is that it allows us to search for patterns across hundreds of facilities and thousands of direct care workers. But while these offer some level of confirmation that multiple variables contribute to dissatisfaction and turnover, taken as a whole, neither the studies described in Table 1 nor the broader literature of which they are representative provide consistent direction regarding the major factors responsible for direct care staff turnover in LTC. As summarized by Brannon et. al. (2002), "The accumulated findings of research on staff turnover in nursing homes have produced little by way of empirically reliable guidance on remedying the problem."

Given the wide variety of research instruments and study designs, it is perhaps not surprising that these studies do not offer a consistent picture of the factors that may be responsible for workers' decisions to leave. Interpreting the findings from much of the work on turnover in long-term care is complicated by a range of issues:

- Constructions of independent and dependent variables vary from study to study. For example, facility-level data may come from interviews with administrators or the CMS Online Survey Certification and Reporting (OSCAR) system. Dependent variables include actual turnover, or more commonly, "intent to quit." The method for measuring turnover is also an issue since there is little standardization among facilities in calculating turnover rates (Seavey, 2004) and some studies include both voluntary and involuntary terminations, while others do not.
- Most of the extant research assumes that worker turnover is solely a function of work conditions and compensation (e.g., factors like pay and supervision). This belief persists despite the very low correlation between turnover behavior and these factors. Recent

research by Mittal, Rosen and Leana (2009) shows that factors such as work-home flexibility, and spirituality and dignity at work, are key determinants of retention of direct care workers. Moreover, in longitudinal research, Castle, Degenholtz and Rosen (2006) found that neither satisfaction with pay nor satisfaction with work were significant predictors of actual turnover behavior. Instead, the only strong predictor of actual worker resignations over this 3-year study was the presence of dependent children at home. Their conclusion is that retention is a far more complicated matter than previous cross-sectional research has assumed, involving both on-the-job and off-the-job factors. Yet such off-the-job issues are seldom considered in intervention programs or subsequent policy debates.

- Castle, et al. (2006) also found that direct care respondents' self-reports of intent to quit were not significantly correlated with actually leaving. Yet most of the studies of workers (versus facilities) use such self-reports as their measures of worker turnover. At the same time, studies that rely on interviews with administrators or Directors of Nursing (DONs) to assess work practices may not fully or accurately reflect aides' experiences.
- As previously stated, most prior research only includes factors like pay and work conditions as predictors of turnover, to the exclusion of home life, spiritual and emotional well-being, and the physical and mental health of workers. In doing so, the research has systematically over-estimated the impact of factors included in the model (i.e., on-the-job factors), while assuming that the factors excluded in the models are inconsequential. Only a multivariate model that includes all the factors can provide true estimates of their relative impact on turnover. Existing studies are deficient in this regard.
- Existing research is cross-sectional and/or conducted within particular care facilities. The problem with such research designs is that they can tell us who leaves these jobs, but they cannot tell us *why* these workers leave and *where* they go. For instance, the prevailing assumption in current research is that workers who leave their current jobs migrate to better-paying jobs. But if this were the case, we would see an overall improvement in their standard of living as well as reduced turnover. Only longitudinal research that follows workers over time (rather than cross-sectional surveys of workplaces) can answer questions regarding not just how many workers leave their jobs, but why they leave, where they go, and how their circumstances improve or decline in the process.

Table 1: Summary of 8 Widely-Cited Studies from the Literature on Direct Care Turnover

Authors Theoretical models or key lit. cited	Turnover Rate	Study Design	Focus	Factors associated with higher levels of turnover	Other conclusions
Waxman, et. al. 1984 Previous turnover studies	5.7 to 62%	Interviews with 234 NA's in 7 proprietary NH's; facility level data on turnover	Wages and benefits, job satisfaction, ward atmosphere and perceived quality of care as related to turnover and job satisfaction	Counter intuitive: - high satisfaction and low complaints - Highly organized work with explicit procedures - Higher quality resident care - Non-union	-Greater NA involvement in decision-making may decrease turnover
Brennan and Moos, 1990 Social climate including interpersonal conflict and cohesion	All staff – 46%	Cross-sectional analysis of facility level data obtained from survey data from 117 community nursing homes (Veterans homes are not included in this table)	Physical environment, policies and services, resident and staff characteristics, and social climate as related to turnover	- Facilities with younger staff and a larger proportion of NA's - Resident characteristics - Negative social climate (more conflict, less cohesion, less organization, less resident influence)	-Reducing staff conflict & improving social climate may reduce turnover
Banaszak-Holl and Hines, 1996 Descriptive literature on LTC environment, job design	NA's 32%	Cross-sectional analysis of data from structured interviews with Administrators and DONs in 250 nursing homes in 10 states	Facility characteristics, job design, workload and organizational structure, local economic conditions, and turnover	- Local economic conditions (strongest effect) - For-profit facilities - Facilities that do not involve aides in resident care plans	- Workload and intensity, facility size, payer source mix were not related to turnover -Explained 21% of total variance in turnover rates
Brannon et. al., 2002 Role of organizational factors	NAs 51%	Cross-sectional analysis of data from a stratified sample of 308 facilities in 8 states using OSCAR ¹⁰ facility level data, county economic (ARF) data and interviews with DONs	Facility characteristics, management structure, participation structure and nursing care processes. Facilities assigned to high, medium and low turnover groups.	- High RN turnover - For profit ownership, particularly chain facilities - Clinical training sites	Focus on very high and very low turnover as poor outcomes. Workload, NA participation, and local economic factors unrelated to turnover. Different actors operate at the high & low end of the continuum.

¹⁰ Centers for Medicaid and Medicare Services maintain a nursing home data base: The Online Survey and Certification and Reporting (OSCAR); ARF = Area Resource File

Parsons et. al., 2003	30% intend to quit	Statewide survey of 550 NAs – response rate of 33%	Personal and facility characteristics/ correlation with intent to quit and job satisfaction	- Little professional growth - poor supervision - Lack of information from management. - Personal factors: younger, shorter tenure, interested in job growth and education, looking for additional job	- Low wages the major source of dissatisfaction but do not predict turnover - Social rewards of working with residents, closeness to residents independent of intent to quit
Organization behavior and job satisfaction					
Castle, 2005	NAs 58%	Cross-sectional analysis of facility level data (OSCAR and ARF) and interviews with administrators from stratified, random sample of 419 facilities in 5 states (resp. rate 85%)	Job design, facility, resident, and market variables and management, nurse and NA turnover	- Management turnover -Nurse turnover - Bed size and chain membership associated with high turnover facilities but not low turnover facilities.	-Highlights importance of top management in influencing NA turnover. -Suggests that high and low turnover rates are influenced by different factors.
Impact of top management turnover; theoretical models of turnover in general					
Brannon et. al. 2007	43% thinking about quitting in the next year	Cross sectional analysis of mail survey of 3,039 direct care workers from multiple types of LTC settings in 5 states	86 item survey of job and work system characteristics correlated with various levels of “intent to leave.”	-Strongest associations with intent to leave were work overload (nursing homes), lack of opportunity for advancement (home care), and poor supervision (across settings).	(Altruism) desire to help others lowers intent to quit (no data on actual turnover). -Data on problems and rewards suggests trying to improve “person-job fit” as an approach to enhancing the workforce.
Job rewards job concerns model and critical role of relationships with supervisors					
Castle et. al., 2007	48%	1,779 surveys from NAs from 72 randomly selected NHs in 5 states—(resp. rate of 30%) NA’s re-surveyed and turnover data collected NA’s after 1 year. Included facility characteristics through OSCAR & environmental factors through ARF.	Longitudinal (T1, T2) design that uses previously validated instruments on NH job satisfaction with specific aspects of their jobs, facility characteristics and practices, and quality of care. Dependent variables were intent to leave and actual turnover after 1 year.	Low job satisfaction is associated with turnover intentions & actual turnover; relationship strongest on subscales on training, rewards, and work schedule (workload and time pressure). -Dissatisfaction with an increasing number of subscales predicted job search and turnover.	Limited by cross-sectional data on job satisfaction, intent to quit and turnover. -Suggests possible evolution in NA’s decision process: negative quality perceptions may become a factor as NAs move toward actual turnover.
Modified general model of turnover developed by Price and included facility variables that have shown strong relationship with turnover					

- Most existing studies also leave out the growing number of at-home care workers. This is an important omission because direct care workers seem to move easily across institutional and at-home settings without much improvement in pay or work quality. A recent survey of 2,260 California home care workers found that flexible hours, affordable health insurance (for part-time workers) and higher wages improve recruitment and retention (Howes, 2008). Whether the focus is on workers or workplaces, many of the major studies show low survey response rates, significantly restricting the representativeness of the sample and the generalizability of the findings to other workers and work sites.

Issues Raised by these Studies.

The predictors of turnover in most studies can be grouped into three categories:

- *Environmental factors.* A strong local economy provides job alternatives (Banaczyk-Holl & Hines, 1996). Because of the importance of local economic variables, most studies use sampling and/or analysis to control for local job markets.
- *Facility characteristics.* This includes ownership and structure (e.g. for profit vs. non-profit; chain vs. stand-alone), administrative resources, organization, job design, social climate and quality of patient care.
- *Workforce characteristics* including demographics. For example, Parsons (2003) found that younger, better-educated, white aides who are interested in job growth express stronger intent to quit.

In addition to revealing the wide array of variables associated with higher rates of turnover, these studies raise a series of broader questions about LTC organizations and about the motivations of direct care workers and how they perceive their role within these organizations. For example, a number of studies find that rates of turnover are higher in proprietary chains (Banaszak-Holl & Hines, 1996; Brannon et. al. 2002; Castle 2005; Castle & Engberg, 2005). The link with for-profit chain ownership is hardly a negligible concern since two-thirds of all nursing homes operate as for-profit facilities or corporations, and 52% are part of an organization that owns more than one facility. Higher levels of turnover in for-profit chains may represent a clustering of factors associated with turnover, including lower staff/patient ratios and accompanying higher workloads, as well as leadership instability as key leaders and upper-level

nurses move among various corporate postings. Castle (2005) found that the turnover rate of top managers is highly correlated with the turnover rate of direct care aides. Brannon et. al (2002) found that turnover among RNs is associated with CNA turnover, and posited that chain facilities may be characterized by more permeable borders than stand-alone facilities and are thus inherently less stable in regard to staffing.

The literature also identifies organizational practices associated with turnover that are not necessarily tied to ownership status or organizational structure. For example, many “charge nurses” receive little formal training in management, and several studies indicate that dissatisfaction with supervisors is a significant factor predicting turnover (Parsons, et. al. 2003). In a sample that included more than 3,000 direct care workers from multiple settings (nursing homes, assisted living, day care and home care), Brannon et al. (2007) found that poor supervision was correlated with worker reports of intent to leave across all of these settings.

A related issue is whether high turnover and low turnover facilities are molded by different sets of characteristics, i.e. that the factors that determine “high turnover” may be different than those influencing “low turnover” (Brannon et. al. 2002; Castle 2005). A recent study by Mittal, Rosen and Leana (2009) sheds some light on this issue. They found that the factors motivating CNA’s to leave their jobs were quite different from the factors motivating them to stay. On-the-job factors like disrespectful management, poor workplace climate, and the difficulty of the work motivated turnover. However, a quite different set of factors – i.e., a sense of personal and/or spiritual calling to the work; a sense of being patients’ advocates to higher-level staff; and strong relational bonds between caregiver and care recipient – motivated retention. Thus, worker turnover may not simply be the obverse of worker retention as previous studies have implicitly assumed, and facility-level studies focused on turnover (vs. retention) may not be a sound basis from which to design effective retention initiatives.

As these findings indicate, the motivations and perceptions of direct care workers are another piece of the puzzle. Many of the cross-sectional studies fail to validate objective indicators of center quality with worker perceptions of conditions that are assumed to drive turnover and/or job dissatisfaction. We cannot know from these cross-sectional studies whether objective conditions drive aides to quit or whether aides who are unhappy in their jobs perceive objective conditions differently than those who stay. In addition, the Mittal, et al. (2009) findings suggest that the two cornerstones of work motivation – intrinsic rewards and extrinsic

rewards – may drive different outcomes. In exploring these and other questions related to both direct care organizations and the motives and experiences of the direct care workforce, it is useful to consider theoretically-driven research on work organizations that has provided a more in-depth treatment of these questions.

IV. Research on Work Organization and Human Resource Management

A large body of research conducted in a variety of work settings (e.g. manufacturing, high technology firms and service industries including hospitals and clinics) has found that so-called high performance work practices¹¹ are correlated with a broad array of outcomes including quality, efficiency, customer service and financial performance (Appelbaum & Batt, 1995; Appelbaum, et. al. 2000; Appelbaum, Gittell & Leana, 2008). The traditional hierarchical model prevalent in most nursing homes limits CNA involvement and participation in decision-making, and minimizes investment in the skills and knowledge of frontline workers. This stands in stark contrast to the high-performance model that recognizes the potential contribution of frontline employees and seeks to enhance their contribution by developing employee skills through training, mentoring, and creating an organizational climate that supports employee participation and engagement in problem solving (Appelbaum, et. al, 2000). As discussed below, the high performance model may be especially relevant to the enhanced level of coordination needed in facilities seeking to provide person-centered care (Gittell et. al. 2008a).

In two qualitative studies, Eaton (2000, 2002) used the high performance model to understand the patterns of human resource management in nursing homes with a range of structural characteristics: for-profit and voluntary, chain-owned and free standing, union and non-union, and size (15 to 400 beds). Based on hundreds of interviews with nursing home managers, frontline staff, and residents, as well as hundreds of hours of ethnographic observation in 20 nursing facilities, Eaton found that nursing homes could be classified into one of three fairly distinct patterns: (1) traditional low-service, low-quality; (2) high-service, high-quality; and (3) a “regenerative community” model in which the focus is on a communal approach to more individualized care (Eaton, 2000). The characteristics associated with each of these models of care are shown in Table 2 (reproduced as shown in Eaton 2000). Administrators reported

¹¹ Also referred to as high commitment work systems, high involvement work systems or high performance human resource management (HRM).

much higher turnover rates among staff in the low service/low quality homes than in the high quality/high services facilities or the regenerative communities.

Table 2: Typology of Care Organization for Nurse Aides (from Eaton 2000)

	1 <i>Traditional*</i> <i>Low service quality</i> <i>(medical-custodial)</i>	2 <i>Semi-skilled</i> <i>High service quality</i> <i>(medical-rehabilitative)</i>	3 <i>semi-autonomous*</i> <i>'Regenerative</i> <i>community'</i>
<i>Work patterns</i>	Rigid, traditional; individual only	Teams; flexible, adaptive	Neighbourhood units; resident assistance
<i>Worker input into service, delivery and quality</i>	Not welcome; actively discouraged	Welcomed and solicited in systemic way	Built into work structure in 'neighbourhoods'
<i>Information shared</i>	Little to none	Most	Virtually all
<i>Industrial engineering or time and motion studies</i>	No, staff at legal minimum	No, but can complete work	No, but staff responsible for complete patient
<i>Supervision and control</i>	For tasks only; compliance with formal procedure	For outcomes; help to do job	Co-ordination; resident choice
<i>Assumptions re workers</i>	Theory X	Theory Y	Community members
<i>Staffing ratio: day NAs</i>	Ten + residents	Seven to nine	Five to seven
<i>Wages, avg. NA</i>	\$5.50+	\$7.00+	\$6.50+
<i>Turnover, annual</i>	more than 80%	30–80%	20–40%
<i>Career paths for NAs</i>	Little or none	Senior NA; scholarships	Cross-training evolving
<i>Ownership or reimbursement</i>	'Medicaid mills', for profit chain, 'mom & pop'	Non profit; special chain high-end for profit	Non-profit, religious, or high-end private for profit
<i>Labour relations</i>	Mostly non-union	The most unionized	Mixed
<i>Cost structure</i>	Low to average	Average to high	Average to high
<i>Philosophy of care</i>	Medical-custodial	Medical-rehabilitative	'Regenerative'

In a second paper, Eaton (2002) looked specifically at turnover in nine facilities. Analyzing matched pairs of high- and low-turnover facilities within local labor markets, she again explored management practices through semi-structured interviews with managers and frontline staff, and ethnographic observation. Again Eaton found a clear pattern of management

differences between these high- and low-turnover facilities. Although a number of earlier studies -- including several of the large-scale cross-sectional studies summarized in Table 1 -- found a correlation between turnover and facility characteristics (e.g., for-profit chains with high leadership turnover), Eaton focused on the human resource practices and work processes that defined each facility. Similarly, while a large body of work has examined how the relationship between facility characteristics (e.g., staffing levels) may be related to quality measures such as the incidence of pressure ulcers, falls, and the use of restraints (e.g. Collier and Harrington, 2008), Eaton's work suggests that there is an intermediate level of analysis (focused on workforce management and workplace practice) that may better account for the variance that has traditionally been attributed to factors like for-profit status and management turnover. While limited to a relatively small number of facilities, Eaton's ethnographic studies of low quality, high quality and "regenerative" nursing home care suggest a series of hypotheses about the role of organizational norms and values, and the potential contribution of high performance work practices in fostering worker retention.

The Relational Context of HPWPs

Several recent studies elaborate on the high performance work system (HPWS) model as applied to direct care work. These studies have examined specific organizational interventions grounded in the high performance work perspective, including training for leaders and supervisors, employee empowerment, and improving practices related to recruitment and retention (Stone & Dawson, 2008). This work is situated within a broader literature on organizational social capital (Leana & Van Buren, 1999), relational coordination (Gittell et. al. 2000; Gittell 2001), and organizational learning (Argote, 1999; Edmondson, 1999).

Social capital. The concept of "organizational social capital" is central to the emphasis on relationships in organizations. Social capital, broadly defined, represents the value of social connections -- or the resources that can be mobilized through relationships with others at work (Pil & Leana, 2009). Over the past twenty years the dynamics of social capital are increasingly used by researchers seeking to understand a range of organizational outcomes including the effectiveness of teams, efficient work processes, organizational learning, and work attachment (Adler & Kwon, 2002). There is increasing evidence that the fabric of interpersonal relationships has important implications for what is accomplished and how it is accomplished at work (Leana & Pil, 2006). Work relationships based on trust and shared goals can create

conditions that foster efficient coordination, reduce monitoring costs, and enhance organizational performance. However, social capital is inherently contextual and its growth and maintenance depend on the specific features of the organization.

Leana and Van Buren (1999) identify two interrelated facets of organizational life that play a critical role in determining organizational social capital. The first, associability, refers to a willingness and ability to make a commitment to organizational goals and actions, in this way subordinating individual goals to collective purposes. The second is a form of trust that is both generalized among members of an organization and resilient in the face of the inevitable disappointments that might impair trust. Leana and Van Buren (1999) suggest that this generalized, resilient feeling of trust is more likely to be produced in a social context characterized by stable relationships and by norms that emphasize the value of collaboration.

Interest in social capital parallels the growing influence of models of work coordination among professionals that reflect relationships built on trust rather than authority as typically seen in hierarchical organizations. While interactions that typify community values of trust and interdependence co-exist in work organizations with hierarchical and market-based principles, Adler, Kwon and Hechsher (2008) emphasize that “collaborative learning” is critical to effective delivery of services like health care. Drawing on case studies in hospital settings, Adler and his colleagues conclude that bringing together cross-functional, cross-status groups to work on quality improvements has a clear advantage over more hierarchical structures in generating practice-based knowledge and implementing clinical pathways. They admonish managers to go beyond providing opportunities for social interactions such as providing forums for information exchange. Organizational leadership must also provide intrinsic and extrinsic incentives for working together and build individual and group level resources, e.g. collective skills and abilities (Lesser, 2000). Based on accumulated ethnographic evidence, Hodsdon (2005) points to managerial behavior as an essential foundation for social capital in work organizations.

Leana and Pil conducted a series of studies on the effect of social capital in public schools (Leana & Pil, 2006; Pil & Leana, 2009). Essentially, they find that social capital among teachers in a school is at least as important as teacher human capital (e.g., education and certification) in predicting growth in student learning. Like Adler, et al. (2008), they conclude that social capital is an essential but under-utilized resource in service industries such as education and healthcare. In a related study, Leana, Appelbaum and Shevchuk (2009) found that

coordination is also important in childcare classrooms. Like eldercare, providing high quality care to young children is inherently improvisational work. Caregivers must adjust routines and practices to meet the often-unpredictable needs of their charges. Leana, et. al. (2009) find that such improvisation is associated with high quality care but only when it is done as a collaborative effort by two or more workers. Moreover, social capital is a significant predictor of such collective improvisation.

Organizational social capital is a resource that can be directed toward enhanced organizational performance, and high performance work practices may support relationship ties as well as specific functional processes. The challenge for researchers and practitioners who see the value of organizational social capital is in further specifying the conditions, skills and high performance practices that promote this resource.

Relational Coordination. In a related line of research, Gittell and her colleagues explore the impact of relational ties on communication coordination in organizations (Gittell, 2001, 2002, 2003, 2006, 2008, Gittell et. al. 2007, 2008, 2009). Gittell (2001) argues that the efficient coordination of work is a dynamic process in which positive relationships and high quality communication are mutually reinforcing. Relationships characterized by shared goals, shared knowledge and mutual respect (i.e., those strong in social capital) are more likely to support communication that is frequent, timely, accurate and oriented toward problem-solving.

Gittell and her collaborators propose that relational coordination can be seen as a pathway or mediator between high performance work practices and organizational outcomes. Unlike Leana and Van Buren's social capital model, however, they stress that relational coordination is focused on work *roles* rather than the individuals who inhabit those roles. High performance work practices that strengthen relationships between employees overlap with—and may also differ in important respects from—the types of practices used to enhance individual employee skills and commitment. A number of work practices that strengthen relational coordination have been recognized in the HRM literature. Gittell (2008) cites six in particular that foster relational coordination: cross-functional performance measures; shared rewards; selection based on teamwork; cross-functional conflict resolution; specified boundary spanners; and cross-functional meetings.

To test the impact of relational coordination in nursing homes on worker satisfaction and resident quality of life, Gittell, et al. (2008) identified 15 nursing facilities based on their

reputation for providing a good work and care environment, and surveyed approximately 250 nursing aides and 100 residents. The authors argue that relational coordination may provide instrumental benefits to nursing home aides – e.g., helping them to secure the resources they need to accomplish their work – as well as offer aides the intrinsic benefits of working with people who share knowledge, goals and mutual respect. They also suggest that resident quality of life may be enhanced in this environment. The results showed that relational coordination was significantly associated with caregivers’ reports of job satisfaction and with care recipients’ reports of quality of life. The authors describe several implications of their work for nursing home managers including the importance of recruiting and selecting employees that demonstrate relational as well as functional competence, and the importance of frontline supervisors who coordinate the work of nursing home aides. Further analysis of this data set focused on CNAs commitment to stay in their present jobs and found that when CNAs reported having helpful, respectful supervisors who provide good feedback, they also reported a stronger commitment to stay in the job (Bishop. et. al. 2008).

Learning Organizations. Management research has also compared organizations that successfully integrate new information and skills and learn from mistakes, with organizations that do less well in these regards. Learning may be particularly important for organizations in which staff at all levels must cope with complex and unpredictable demands and conditions. Hospitals exemplify organizations in which learning from failure is important. Client-based, as opposed to institutional or rule-based, forms of care in childcare, eldercare etc. should also entail learning from success and failure.

While raising awareness of the need for generating and sharing knowledge within organizations, the initial model of learning organizations (e.g., Senge, 1990) has been seen as difficult to translate into concrete practices (Garvin, et. al. 2008). More recent work is based on observation of actual work processes and worker experience on the job. For example, to understand why hospitals often fail to learn from failure, Tucker and Edmondson (2003) analyzed observational data on 26 nurses in nine hospitals, as well as interviews with a smaller number of nurses. The observations included numerous examples of “failures.” Most of these failures were characterized as problems, e.g. missing information, broken equipment, missing supplies. A much smaller number were categorized as “errors”, e.g. incorrect actions taken by the nurse or other medical staff.

The researchers found that 93% of the time, nurses relied on “first order problem solving”—patching problems in a way that allowed them to complete the care task – to complete the task at hand. Second order problem solving – aimed at addressing the underlying system or process that caused the problem – was a rare event even though most problems were not highly complex or difficult to solve. The authors conclude that failure to learn from—and address—problems in health care organizations may stem from three factors. First, individual vigilance—a strongly held norm that nurses will independently solve problems to meet the immediate needs of patients—results in addressing the immediate situation rather than larger, systemic causes. Second, “efficient staffing” results in workloads that leave nurses little time to address the underlying causes of problems. Downsizing or efficiency norms have resulted in a third problem: Units lack managers who think in systems terms and who are able to assist in resolving the larger issues underlying immediate problems. While line staff members have been empowered to address problems, they have neither the time nor the training to address systemic issues.

Based on two decades of studies of knowledge organizations, particularly hospitals, Edmondson (1999; 2008) provides more specific insights into the relational environment that is the foundation for organizational learning, the role of top leadership and middle management in supporting this environment, and the specific processes and practices that leadership must put in place. Edmondson and her colleagues emphasize “psychological safety” as a condition necessary if employees are to openly question and share their ideas, acknowledge their mistakes, and take risks by trying new approaches. The most important influence on psychological safety is the direct supervisor. Thus, models of learning organizations, like Gittell’s theory of relational coordination, place emphasis on frontline supervision.

Although psychological safety is important in a learning environment, so are expectations for high performance. Edmondson (1999, 2008) asserts that successful learning can take place only when there is both accountability and psychological safety. Accountability without safety creates dysfunctional anxiety, and safety without accountability results in employees who are comfortable but have little motivation to change. And while psychological safety may be the foundation of a positive learning environment, Edmondson stresses that other concrete learning processes and practices are equally necessary. Employees cannot learn from each other if processes for monitoring and analyzing data (e.g. quality improvement measures) are not utilized. Data is meaningless unless employees are offered opportunities for reflection, forums

for exchange, and flexible work processes that allow new ideas to be tested. Leaders must not only create a relational context characterized by psychological safety and accountability, but must implement supportive interventions as well.

Comparing the Three Models. Table 3 interprets and compares key predictions and findings from literature on organization social capital, relational coordination, and learning organizations. Models of organizational social capital emphasize the value of social relationships within and between organizations for achieving a broad range of positive outcomes including enhanced worker attachment and work quality. The literature on organizational learning is drawn in part from studies conducted in hospital settings—and questions related to managing information and learning from failure and success, and innovation. Despite the emphasis on knowledge, researchers find that there is a strong affective component –i.e., psychological safety necessary for open questioning, sharing information and trying out new ideas. While coordination has many facets including knowledge sharing and transfer, Gittell and her colleagues offer insights into how relational content shapes coordination and how work practices, in turn, can strengthen relationships.

The vantage points reflected in these models are complementary rather than mutually exclusive. All three perspectives suggest that greater job attachment and higher quality work will result from management philosophies and practices very different from the top-down hierarchical structures and information flow, formal relationships and functional silos found in traditional nursing home facilities and many other healthcare organizations. The emotional and psychological environment that underpins learning organizations, i.e. “psychological safety” and accountability, is similar to an environment that supports social capital and relational coordination characterized by trust, mutual respect and shared goals. Since learning is both an implicit and explicit dimension of communication, it is difficult to separate the act of learning from high quality communication. All three models are consistent with Eaton’s description of high quality/low turnover nursing homes.

Related to this emphasis on a trusting and “safe” work environment, all three approaches emphasize practices that support relationship building and interaction in real time. In addition, the relational coordination and learning organization frameworks give particular attention to middle managers or frontline supervisors who interact directly with line staff. One difference between these two approaches is that the learning organization model appears to give more

Table 3: A comparison of findings on the relational context of HPWPs

Organizational Characteristics	Organizational Social Capital	Learning Organizations	Relational Coordination
Industry context	General (includes childcare workers and teachers)	General (includes health care)	General (including health care and nursing homes)
Normative context for model	Trust, and share goals benefit employees and employers.	The value of an engaged employees and their potential contribution to effective, competitive organizations.	Employees important for motivation, commitment, knowledge and skills—including relational skills
Characteristics of relational environment created by organizational leadership	Leadership promotes workforce stability, trust, and associability. Interpersonal relations and information sharing create organizational value.	Creating an environment characterized by high psychological safety and high accountability. Ensure that specific organizational resources, processes and practices support learning	Creating an environment characterized by trust and mutual respect. Ensuring that <i>roles</i> within the organization incorporate “relational coordination” Ensuring implementation of HPWPs that support relational coordination
HRM Practices: e.g. wages, benefits, worker supports, training	Promoting stability and trust through positive HR practices including wages, health and educational benefits, and training	Train in team skills. Provide time to learn. Use best knowledge available.	Recruit and select staff with relational as well as functional competence Nursing homes: improve training, pay and status of nursing aides
Job design and work practices	Stable employee base Knowledge sharing Low monitoring Collective goals and rewards	Opportunities for reflection and forums for exchanging ideas, e.g. “after action review,” participatory training, quality improvement methodologies, work teams, networks. Work process data collected and analyzed. Flexible work protocols that allow testing new ideas.	Cross functional performance measures, shared rewards, employee selection for relational competence, conflict resolution, boundary spanners, meetings

emphasis to collecting process data and institutionalizing formal feedback loops (e.g. “after action reviews”) to prevent the loss of critical insights. Gittel and her colleagues appear to give more emphasis to informal networks or “webs of supportive relationships” in which problems can be dealt with “on the fly.” Similarly, the social capital perspective relies more on organization and workgroup norms with less focus on the direct supervisor.

Evolving research and theory on social capital, learning organizations and relational coordination elaborate on earlier understandings of high performance work practices and provide insight into how practices can be aligned with specific organizational goals, e.g. to promote innovation, or improve communication. Much work remains to be done, however, to specify appropriate work practices for nursing home settings where accountability and trust are needed in equal measure.

Additional Observational Studies.

The descriptive research on the LTC workforce addresses some of these same issues, although little of this work is theory-driven. Nonetheless, this literature offers important insights on how the theories described above may be translated for direct care settings like nursing homes. The relationship between positive management practices and engaged frontline staff is the highlight of survey results from more than 3,500 CNAs and 6,500 families drawn from 156 nursing facilities (Tellis-Nayak, 2007). This cross-sectional analysis reveals that nursing assistants’ engagement (satisfaction, loyalty and commitment) is tied to their perceptions of management, that perceptions of work environment quality are closely tied to perceptions of the quality of management, and that the association between loyalty and supervisory practice disappears when the perceived quality of management is controlled in the analysis. Tellis-Nayak emphasizes that managers have a pervasive influence in a CNA’s work life, noting that CNAs rate their managers almost identically to their work environment. The study also finds that CNAs ratings of the quality of management and the work environment are strongly associated with two indicators of quality of care: (1) families’ ratings of the quality of management and the work environment; and (2) facility results on state surveys. This analysis suggests that interventions to improve LTC organizations focused solely at the level of frontline supervisors are unlikely to be successful.

Drawing on theories of complexity science, Anderson et al. (2003) examine the relationship between management practices and patient outcomes. Findings are based on

surveys of approximately 160 DONs and 200 staff RNs from Texas nursing homes, and archival data on patient outcomes. Management practices that promote “self organizing” were strongly related to one or more indicators of better patient outcomes (lower restraint use, less aggressive/disruptive behavior, lower complications of immobility and occurrence of fractures). Conversely, facilities in which DONs and RNs reported more formalization (greater specification and monitoring of work rules and procedures) reported a higher prevalence of complications of immobility. Since the majority of hands-on care is provided by CNAs, the study is limited by reliance on the perspective of DONs and nurses. Because the data are cross-sectional, we cannot infer cause and effect (e.g., are less disruptive patients the cause or the effect of a “self organizing” approach by management?). At the same time, the concept of “self-organizing” and the key management practices that serve as independent variables in this study—quality of communication, openness, decision-making, relationship-oriented leadership—overlap with key aspects of social capital, relational coordination and learning organizations.

Intervention Studies

Through the RWJF/Atlantic Philanthropy *Better Jobs Better Care* (BJBC) program and other initiatives, stakeholders seeking to improve—and in some cases “transform” – nursing homes are testing the impact of HRM practices in long-term care settings. Evaluations of a number of these interventions show promising, if somewhat mixed, results. Harris-Kojetin, et. al. (2004), Stone and Weiner (2001), Kemper et. al. (2008) and the Institute of Medicine (2008) provide additional descriptive information on these evaluations. Harris-Kojetin and colleagues also analyze challenges in evaluating interventions, including the need to measure effects over the long-term, determining whether successful models can be replicated, and using strong evaluation designs. These interventions center variously on the quality of direct supervision, peer mentoring programs, the infusion of support personnel, establishing career paths, and instituting empowered work teams.

Improving Supervision. Several organizations have launched programs to teach frontline nursing supervisors how to work more effectively with direct care workers. For example, Mather Institute on Aging’s workforce development initiative program, LEAP (Learn-Empower-Achieve-Produce), provides train-the-trainer workshops for nurses and direct care staff. The program for nurse managers and staff nurses includes participatory course modules on leadership and clinical roles. The program for direct care workers includes modules on person-

centered care, communication, teamwork, and mentoring new staff. The goal is to provide effective training methodologies for creating and maintaining “learning organizations” – a framework that LEAP’s creators note has been little used in LTC settings (Hollinger-Smith & Ortigara, 2004). A pre/post intervention evaluation of LEAP’s implementation at fourteen LTC facilities found small but significant improvements in nurse and CNA assessments of employee empowerment, leadership effectiveness, job satisfaction, and work effectiveness based on combined results from surveys from over 500 nurses and CNAs conducted at three, six and twelve month intervals following the training. Improvements seemed to be sustained over time, and in some cases they increased. Concerns voiced by nurses at the outset of the program included not having time to take on additional responsibilities. Following the training, participants still expressed challenges about “empowerment issues” and whether administrators would continue to support enhanced roles.

WIN A STEP UP, an ongoing workforce development program in North Carolina supported by the BJBC initiative, offers a similar intervention for nurses and CNAs (Morgan & Konrad, 2008). The educational intervention includes 33 hours of clinical and interpersonal skill training for CNAs, and a seven-module “Coaching Supervision” training to teach nurses how to support problem solving among their staff. The program offered financial incentives and retention bonuses to nurse aide participants. Researchers used a mixed method evaluation design that included pre- and post-intervention interviews with managers, organizational-level data, surveys of nursing assistants and participants in the Coaching Supervision program. Each participating facility was matched with two “control” facilities. Findings three months following implementation included positive program assessments by nursing home managers, modest reductions in turnover, statistically significant improvements in measures of teamwork, and positive qualitative responses to the Coaching Supervision modules. Given the fact that the intervention included multiple components (training for CNAs, financial incentives for CNAs, and training for nurses), it is difficult to know which component of the intervention is driving the results. The failure to directly measure impacts on resident outcomes was seen as a limitation of this study.

Peer Mentoring. Peer mentoring is included in the initiatives implemented in four states as part of the BJBC program (Kemper, et. al. 2008). Results of these interventions have not yet been published. A pre-post comparison group study of peer mentoring programs implemented in

eleven New York State nursing homes found a 15% increase in retention three months following the intervention (Hegeman, 2003). The intervention was expanded to an additional 14 nursing homes; pre-post comparisons of retention were found to be statistically significant six months following implementation (Foundation for Long-Term Care, undated).

HR Supports. In another BJBC intervention study, trained “retention specialists” were assigned to advocate for staff and to implement programs to improve retention in thirty facilities. The intervention led to significant declines in turnover rates when compared to the control facilities, and had positive effects on CNAs’ assessments of the quality of retention efforts and the quality of care provided in the facility. The intervention did not result in a measurable impact on self-reported job satisfaction or stress (Pillemer. et. al. 2008).

Career Lattices and Ladders. The Council for Adult and Experiential Learning (CAEL) – a national non-profit workforce development organization – has created a career lattice program for nurse aides at nine sites (including hospitals and long-term care facilities). The program recruits staff from auxiliary areas such as food staff and housekeeping to be trained for CNA certification. The next step in the training program offers CNAs enhanced training in specific areas such as geriatrics and dementia training, and wages increase with increased responsibilities. The career lattice prepares CNAs to become LPNs and LPNs to become RNs. Data indicate that the program has increased retention and reduced recruitment costs and worker shortages in some facilities (CAEL 2008).

In 2000, Massachusetts established the Extended Care Career Ladder Initiative (ECCLI) as part of a broader program to improve long-term care (Eaton, et. al. 2001). It funds several consortia of workforce training partners and home health and nursing home providers to improve training for direct care workers and their supervisors, encourage career ladders for CNAs, and improve working conditions. Training is linked with small wage increases and culture change programs that require significant investment by participating facilities. An 18- month qualitative evaluation utilizing extensive interviews, along with focus groups and site visits at eight nursing homes and three home health agencies found that ECCLI: “allowed organizations to begin to realize their broadly stated goals of providing workforce development opportunities for frontline caregivers and improving the quality of care to residents and clients” (Washko et. al. 2007). Most organizations reported improvements in “communication, clinical skills, teamwork, respect and self confidence, wages, retention and recruitment, organizational culture and practice change

and resident/client quality of care and quality of life” (Washko et. al., 2007; Heinemann et. al. 2008). There is little evidence available, however, on change in objective measures of quality.

Empowered Work Teams. Empowered work teams are a feature of participatory management that have received considerable attention from a number of theoretical perspectives, including the human relations school, cognitive studies of informational flow and decision making structures, and research on employee attitudes (Leana & Florkowski, 1992). Generally, research findings have been mixed and show stronger support for the effects of empowerment on attitudes rather than actual work behaviors (Wagner, Locke, Leana & Schweiger, 1997). However, little of this research has been focused in long-term care settings¹² although an intervention by a group of Wisconsin nursing homes (the “Wellspring model”) prepares CNAs to play a leadership role in continuous quality improvement. Training on specific clinical skills such as preventing incontinence and pressure ulcers prepares CNAs to participate in care planning and decisions about patient care as leaders of clinical resource teams. Results show that the intervention has had a measurable impact in several areas including staff satisfaction and retention, resident satisfaction and resident quality of life (Reinhard & Stone, 2001).

Yeatts and Cready (2007) utilize a quasi-experimental, pre-post research design to compare the results of an intervention that prepared and implemented 21 empowered CNA work teams in five nursing homes, and collected comparable data from five “control” nursing homes. Implementation included obtaining support from facility leadership, orienting and training CNAs, nurses and managers, and providing on-site support during the initial team meetings. While the study design has clear limitations (e.g. non-random selection of facilities, missing data from post intervention surveys), observational, qualitative and quantitative data suggest a positive impact on performance. Findings regarding CNA attitudes were more complicated: Although the teams encouraged CNAs to develop a better understanding of resident needs and the opportunity to carry out decisions that they helped shape, the CNAs also reported that integrating these new roles made it more difficult to complete their normal job duties.

Similar issues are raised by Bishop, et. al, (2008). In contrast to their findings about positive supervision, job enhancements such as teamwork, participation and greater autonomy

¹² Yeatts and Cready (2007) provide an overview of this literature.

were not found to be related to CNAs' job commitment (Bishop et. al. 2008). The authors note that given the challenges of direct care work in the nursing home setting, "workers may experience requests for more self-direction and knowledge input as further demands [on their time] rather than job enhancements." This interpretation is consistent with other research (Lopez, 2006a; Gruss et. al, 2004; Stack, 2003). Job enhancements and other interventions that have found value in other types of settings may have limited impact given the average CNA workload in nursing homes. Understanding the extent to which high performance work practices -- even those that strengthen relational ties -- can be effectively integrated into nursing home settings is an issue requiring further exploration. A study conducted in Belgian nursing and "older people's homes" raises a similar issue. The study found little empirical support for hypotheses that HRM practices and programs would lower stress levels among care staff or result in better quality care (DePrins & Hendricks, 2007). While noting the potential relevance of HRM practices, the authors also describe "the difficulty and multi-dimensionality of implementing an HR policy to fit long-term care organizations."

Broader Concerns Regarding Training Interventions and Job Ladders

Expert panels frequently cite the need for more and better training in long-term care (e.g. IOM 2001; 2008). Reviews of CNA and nursing education/continuing education programs support the need for significant improvement of both curriculum content and teaching methodologies (PHI, 2003; Hollinger-Smith & Ortigara 2004; Wellin 2007; Ducey, 2009) Specific problems include inconsistent and inadequate federal and state requirements for the content and length of paraprofessional training programs, failure to specify the competencies of trainers, ineffective training modalities, and little consensus on what constitutes high quality care. Problems of inconsistent standards and approaches are compounded in community-based settings due to the variation in care environments and the fact that client's preferences may differ from formal standards of care (Wellin, 2007).

Until very recently, there has been little rigorous research on the impact or sustainability of initiatives to improve continuing education programs (Aylward et. al. 2003, Stolee et. al. 2005). The studies reviewed in this section address this gap and offer promising results. However, the implications of these studies for improving jobs and quality of care must be viewed cautiously given structural and institutional constraints on improving jobs and care (Wellin, 2007; Dawson, 2007; Stolee, et. al. 2005). Wellin (p. 41) observes, "Even the most enlightened

approaches to education and training will fail unless conditions—in the labor market and in employing organizations—that undermine continuity and quality of care are addressed.”

Analysis also suggests that it may not be possible, given the existing configuration of jobs and credentialing systems within healthcare, to develop job ladders that provide significant upward mobility for large numbers of direct care workers. Ducey’s (2009) case study of the SEIU 1199 workforce training program in New York, provides evidence that the union’s massive job upgrading and training program did not result in significant improvements in the working conditions of SEIU healthcare workers. In contrast, “health care workers reported being stuck on a training treadmill, circulating through training or education programs that were poorly run and organized and often trained them for jobs no better in terms of wages and chances for upward mobility.” Although the structural constraints on upward mobility in health care are not as severe as those in many service industries, the proportion of “bad jobs” is still much higher than the proportion of “good jobs” (Mitnik and Zeidenberg, 2007).

V. Toward Dynamic Models That Include Individual- and Organization-level Factors

High performance models provide insights into bundles of positive workplace practices linked to better performance in a variety of work settings. As discussed in the previous section, some empirical support has been found for specific practices such as peer mentoring and supervisor training. However, results of studies that examine the adoption of “best practices” in long-term care settings have shown mixed and inconsistent results. Our understanding of the factors that influence an organization’s ability to shape and constrain behaviors in these settings appears far from complete (Schuler & Jackson, 1995; Griffin, Neal & Parker, 2007).

A focus on replicating “best practices” may oversimplify a range of contextual variables including worker discretion over how jobs are actually performed. Although much of the recent research that focuses on worker agency, role performance, and job design has not yet been applied to direct care settings, this literature offers insights that appear to be highly relevant to direct care work, particularly to initiatives to make long-term care more responsive to the individual preferences and needs of care recipients – e.g., Eaton’s “regenerative community” model.

Parker, Williams and Turner (2006) argue that a re-orientation of work design theory may be particularly important given a number of changes in the work context. Some of the changes noted by Parker are being adopted in long-term care settings—e.g. an emphasis on flexibility,

teamwork and functional integration. Drawing on a comprehensive review of work design theory, Parker, et. al recommend a theoretical framework that includes five broad categories of individual, group and organizational variables:

1. *Contextual antecedents.* Work design theory has often overlooked contextual variables that determine whether work design elements successful in one organization can find success in another organization. These contextual antecedents may include environmental factors (e.g. task uncertainty and complexity), organizational practices (e.g. downsizing), or more general workforce characteristics such as general levels of education or training.

2. *Work characteristics.* Although traditional work characteristics such as autonomy and task variety remain important, the authors argue that relationships among a number of variables typical of the contemporary workplace have not been adequately explored. These factors include electronic performance monitoring, opportunities for skill acquisition, role conflict, emotional demands and supports, and group-level work.

3. *Work outcomes.* Work design research could consider a much broader range of outcomes beyond job satisfaction and turnover. Outcomes that have received less attention include process improvements, safety, and the generation and transfer of knowledge. Work design may also impact an array of individual and group characteristics that are relevant to work behavior as well as life outside work. The choice of dependent variables should depend on both the goals of the research and an analysis of variables relevant to the specific work context.

4. *Mechanisms linking work characteristics to outcomes.* Although a number of studies have looked at mechanisms that link work design to performance and other outcomes, findings fall short of a systematic understanding of why characteristics and outcomes are related. An understanding of mediating pathways is critical to predicting contexts in which a given job design feature is likely to be effective.

5. *Contingencies affecting the link between work characteristics and outcomes.* Individual, team and organizational contingencies may also plausibly influence the relationship between work design and outcomes. Including moderating variables—for example, management or union support for an intervention – may also provide insight into why job design interventions are successful in some settings but not others.

This framework suggests a far more careful analysis of the complex reality of implementing changes in work design and practice – an issue particularly relevant to the

challenges of implementing interventions and predicting work outcomes in long-term care settings. Noting the prevalence of cross-sectional studies that rely on self-reported measures of both the independent and dependent variables, Parker and her colleagues encourage stronger research designs, e.g. longitudinal studies that include comparison groups, studies that combine quantitative and qualitative data, and case studies. Applied to specific types of work (e.g. long-term care settings), such studies would allow the development of more complex, empirically-derived models that allow more confident prediction of outcomes.

Role Performance: A Focus on Individual-level Variables

Work design theorists have also used empirical studies to scrutinize factors that contribute to work performance (Griffin, Neal & Parker, 2007). In contrast to the traditional view of role performance as “task completion”—familiar within the hierarchical environment of many traditionally-run nursing homes—there is a growing recognition that jobs are performed under varying degrees of uncertainty and interdependence. In these environments, it becomes more difficult to formalize task requirements (Ilgen & Hollenbeck, 1991). Individuals operating in situations of high predictability (e.g. assembly lines) may be evaluated on their proficiency in fulfilling formalized role requirements. However, successful role performance in occupations that offer less predictability requires workers to be both adaptive (i.e., responding to change) and proactive (i.e., initiating change). Griffin, Neal and Parker (2007) propose a framework that includes nine sub-classifications of work role behaviors as shown in Table 4 below.

The researchers test this model based on a correlation analysis of job performance ratings from approximately 500 supervisors from 32 organizations, and self-ratings from more than 2,000 employees in two organizations. The results support conceptual distinctions among these role behaviors. The framework also refines and extends previous distinctions between “citizenship performance” and “task proficiency” by demonstrating that proficiency, adaptivity and proactivity can be directed at the individual, group or organizational level.

Although this model has a number of theoretical and practical implications, it is emphasized here because it offers insights into the multiple levels at which care workers may be expected to perform within their organizations, and the various skills and capacities expected within these various roles. As suggested by Leana, Appelbaum and Shevchuk’s (2009) findings, proactive behavior may be especially valuable in direct care work – whether in early childhood or long-term care settings – since the challenges of meeting the emotional, psychological and

physical needs of care recipients provide endless opportunities for improvisation and problem-solving. However, until recently the factors promoting proactive behavior at work have not been well understood. Building on previous research, Parker, et al. (2006) explore work environment and personality as factors that may influence cognitive motivational states that in turn drive proactive behavior. Data from a survey of nearly 300 production employees in a manufacturing facility supported the following links to proactive behavior: (1) individual difference (proactive personality); and (2) perceived work environment variables (job autonomy, co-worker trust). In addition, cognitive-motivational states (role breadth, self-efficacy, and flexible role orientation) were found to mediate the relationship between the independent variables (proactive personality, job autonomy and co-worker trust) and proactive behavior.

Table 4 – Model of Positive Work Role Behaviors (Griffin, Neal and Parker 2007)

Individual Work Role Behaviors	Proficiency Fulfills the prescribed or predictable requirements of the role	Adaptivity Copes with, responds to, and supports change	Proactivity Initiates change, is self-starting and future-directed
Individual Task Behaviors Behavior contributes to individual effectiveness	Individual Task Proficiency e.g., ensures core task are completed properly	Individual Task Adaptivity e.g., adjust to new equipment, processes, or procedures in core tasks	Individual Task Proactivity e.g., initiates better way of doing core tasks
Team Member Behaviors Behavior contributes to team effectiveness rather than individual effectiveness	Team Member Proficiency e.g., coordinates work with team members	Team Member Adaptivity e.g., responds constructively to team changes (e.g., new members)	Team Member Proactivity e.g., develops new methods to help the team perform better
Organization Member Behaviors Behavior contributes to organization effectiveness rather than individual and team effectiveness	Organization Member Proficiency e.g., talks about the organization in positive ways	Organization Member Adaptivity e.g., copes with changes in the way the organization operates	Organization Member Proactivity e.g., makes suggestion to improve the overall efficiency of the organization

Particularly relevant to the literature on direct care worker empowerment in long-term care settings, the study finds that job autonomy’s effect on self-efficacy builds slowly as new skills are mastered. The authors note that the impact of empowerment may be overlooked in cross-sectional studies or longitudinal studies with short time frames. Co-worker trust had a small effect on flexible role orientation. Although the findings suggest the importance of basic personality characteristics, they also indicate that work design influences employee learning and development. Additional research indicates that flexible role orientation is an important influence on job performance in the context of self-managed work teams and high autonomy jobs (Parker, 2007).

Job Crafting and Related “Worker-Centered” Perspectives

Studies of job crafting overlap with theories of role performance while giving even greater emphasis to worker agency. In developing a theory of job crafting, Wrzesniewski and Dutton (2001) focus on the individual job crafter and, citing Gergen (1994), the individual’s psychological construction of the workplace. They define job crafting as “the physical and cognitive changes individuals make in the task or relational boundaries of their work” to expand the content and meaning of their jobs. (p. 179). The authors assert that motivations for job crafting include: (1) the need for personal control; (2) the desire to create a positive self image as well as a positive image in the eyes of others; and (3) needs for connection with others and finding meaning through connection. The authors illustrate their model through data collected in interviews and observations of hospital cleaners who build relationships with patients and thus enhance the meaning of their work and forge a more positive work identity.

Wrzesniewski and Dutton acknowledge that opportunities for job crafting are shaped by job design. For example, task interdependence may limit job crafting by tying the worker to the timing and schedules of other workers, while perceptions of a high level of job autonomy and freedom from job monitoring enlarge opportunities for job crafting. In addition, jobs can be variously perceived in terms of meeting needs for financial reward, career advancement, or in terms of personally-fulfilling, socially useful work (a calling). These very different types of “work orientation” may lead individuals to craft their jobs in quite different ways. Finally, the authors distinguish between intrinsic motivations for job crafting, in which the individual is focused on the work for its own sake, and extrinsic motivations in which the work is done to achieve an external goal. They suggest that intrinsic motivations are more likely to lead to more expansive job crafting while extrinsic motivations are less likely to lead workers to alter tasks.

Leana et al.’s (2009) multi-method study of classroom staff in childcare settings extends job crafting theory. In addition to the predictors identified by Wrzesniewski and Dutton, these authors note that individuals holding higher-status jobs are more likely to encounter opportunities for job crafting due to the greater complexity of their work and discretion in carrying it out. They also cite previous studies indicating that job crafting can be a collaborative as well as an individual phenomenon (Orr, 1996; Brown & Duguid, 1991; Orlikowski, 1996) and suggest that collaborative job crafting may be influenced more than individual crafting by work demands and culture. Wrzesniewski and Dutton assert that task interdependence should

discourage individual crafting; Leana et al. offer the complementary perspective that task interdependence should promote collaborative crafting. In addition, the quality and structure of relationships in the workplace — or social capital — is predicted to have an especially strong effect on collaborative job crafting.

Based on detailed surveys of nearly 250 teachers and teacher's aides and independent quality of care performance assessments in 69 child care centers, the researchers found that individual and collaborative job crafting were predicted by rather different sets of variables. Individual job crafting was associated with discretion, orientation toward career advancement and job status (teacher vs. aide or assistant). Collaborative job crafting was significantly related to discretion, supportive supervision and social capital with peers.

Within the context of childcare classrooms, individual job crafting also appears to have different effects on the work and care environment than collaborative job crafting. Individual crafting was not related to measures of quality of care, employees' organizational commitment or turnover intention. Findings that individual crafting is negatively related to job satisfaction lead the authors to hypothesize that in such highly collaborative care settings, individual job crafting may indicate alienation rather than engagement. In contrast, collaborative job crafting was positively related to quality of care, organizational commitment and job satisfaction.

Although collaborative crafting results in only a slight increase in quality of care among more experienced teachers, the association with quality among less experienced teachers is much more dramatic. Collaborative job crafting was also associated with a decrease in turnover among teachers in high quality classrooms, and an increase in turnover among poorly-performing teachers. The study has clear implications for workplace practices and policies in care settings (e.g., childcare centers, nursing homes), including creating work environments organized to promote strong relationships among care providers, and supportive supervisors that establish a safe environment for innovation. In long-term care and other direct care settings, insights about collaborative crafting could be particularly useful in informing implementation of preceptor, peer mentoring programs and team based work assignments.

Job crafting theory—whether individual or collaborative—offers a “worker centered” perspective. Perceived job characteristics and the types of interactions and relationships available with co-workers and supervisors provide the structure and raw materials used by the employee to try to shape a role that responds to her individual motives, talents and values.

Hodsdon (2001) also emphasizes workers' creativity and desire for meaning. In analyzing a series of qualitative case studies he finds that "workers are surprisingly enterprising and active in transforming jobs with insufficient meaning into jobs that are more worthy of their personal stature, time and effort." He argues that meaningful work is essential to individual dignity and that workers in low wage jobs are in a constant struggle to overcome challenges to their dignity, including overwork, mismanagement and abuse, lack of autonomy and barriers to participation in decisions that affect their jobs. These challenges are all too familiar to many direct care workers, as well as hourly workers in many other work contexts. As shown by Mittal, et al. (2009), these challenges may drive much of the turnover in long-term care workplaces.

Consistent with job crafting theory, Hodsdon (2001) finds that individuals may use their agency in many different ways—not all of which promote the interests of their organizations. Safeguarding dignity can involve resistance (a withdrawal of cooperation), citizenship activities (taking initiative that goes beyond formal job requirements to help the organization reach its goals), or expanding one's role or forming relationships with co-workers and clients (job crafting). Like other researchers, Hodsdon finds that characteristics of the work environment play a role in influencing these choices. Increased employee involvement intensifies all aspects of social relations at work, which may have both positive and negative effects on co-worker relationships and work outcomes (Hodsdon 2008). "Mismanagement" undermines the positive aspects of worker agency (leading to resistance behaviors), while opportunities for citizenship behaviors is a powerful determinant of the employee's sense of well-being (Hodsdon 2001). Hodsdon (2001) also highlights the extent to which most measures of job satisfaction fall short of capturing the human need for work that provides opportunities for meaning and creativity and satisfies the desire for fulfillment, growth and development. Again, more recent research by Mittal, et al. (2009) supports this view, and describes motivations like spirituality and advocacy that build job attachment for long-term care workers.

Studies that explore the perceptions of direct care workers through interviews and focus groups are consistent with these worker-centered perspectives on workers' needs for dignity and meaning. Home care workers find dignity in their ability to perform much needed "dirty work" (Stacey, 2005) and nursing home workers create a positive identity, meaning and value, in part, as a way of defending against the negative messages they receive from managers, families and residents (Pfefferle & Weinberg, 2008). A number of qualitative case studies on direct care

work provide evidence for the creativity with which frontline staff craft—or attempt to craft—their jobs to more fully meet the needs of their clients and their own needs to find meaning and satisfaction in their work (Lundgren & Browner, 1990; Gass, 2005; Stone, 1999, 2002).

However, as we might expect based on the various theories outlined in this section, not all workers experience similar organizational contexts in the same way. For example, Leana, Rosen and Mittal (2007) find that direct care workers who stay in their jobs perceive and evaluate the intrinsic rewards of their work quite differently than leavers, even while describing the same basic work conditions. In Wrzesniewski and Dutton’s terms, workers who stay may experience caring for the elderly as a calling, while for those more likely to leave, it is “just a job.”

Other case studies suggest that frontline caregivers, often with the tacit approval of their managers, disregard policies and regulations in order to meet the needs of the individuals in their care. For example, Stone’s interviews with home care workers reveal the extent to which humane home care depends on the willingness of workers to ignore federal Medicare regulations that limit the types of tasks they are allowed to perform for their clients (Stone, 1999, 2000). Direct care workers also bend rules to cope with unmanageable workloads. A number of ethnographic case studies document the extent to which direct care workers must choose between “going by the book” and the shortcuts that allow them to cope with otherwise unmanageable workloads (Lopez, 2006a; Gass, 2005; Diamond, 1990). Leana, et al. (2007) also report “rule breaking” based on client needs and preferences regarding things like food and hygiene. Stone (1999; 2000) observes that having to choose between following federal policies/agency requirements and meeting the needs of their patients adds guilt and fear to the stress of caregivers’ jobs.

Emotional Labor and Emotional Care

Research on emotional labor provides another window into the challenges and rewards of direct care work, as well as the tensions inherent in the nature and impact of this aspect of caregiving. In the influential book, *The Managed Heart* (1983), Hochschild describes jobs in which workers are expected to display personal emotions as part of their regular duties, as well as the ways that gender roles shape these expectations. For example, women flight attendants may be expected to be more nurturing and to tolerate more abuse from passengers than male flight attendants. The consequences for the worker can include stress, burnout, and depersonalization—in Hochschild’s view, the workers’ sense of agency and ownership of their own emotional life is at risk.

In his ethnographic study of nursing home work, Lopez (2006b) distinguishes Hochschild's concept of "emotional labor" from what he calls "organized emotional care" to describe work situations typified by the *absence* of feeling rules or affective requirements. He notes that emotional labor and organized emotional care represent alternative organizational approaches to care work. Emotional labor occurs in organizations in which managers prescribe appropriate emotional display ("feeling rules"); organized emotional care is a strategy that creates conditions allowing genuine relationships to develop between caregivers and care recipients.

To illustrate the differences between these approaches, Lopez contrasts two facilities. At a facility he refers to as "The Meadows" the organizational culture requires nurses and aides to "stoically accept abuse from patients" and "practice indifference to the organized routines that cause suffering to patients." He compares The Meadows with another facility – "The Pines" – that (within broad limits) does not attempt to control workers' emotional displays and proactively supports opportunities for compassionate care giving. For example, The Pines identifies emotionally isolated residents who receive few visitors and allows unscripted one-on-one staff visits to compensate at least in part for this isolation. Staff at the Pines found the opportunity to form meaningful relationships with residents. This attention to the emotional needs of residents promotes a more relaxed atmosphere in which caregivers do not need to put so much effort into maintaining their emotional defenses around lonely residents demanding their attention. Such an approach can be viewed through the lens of job crafting: Staff at the Pines are given time (a crucial resource in nursing homes) to provide emotional care on their own terms.

Lopez also calls attention to a type of emotional labor familiar to those who spend time in nursing home environments. In his words, many nursing home workers "confront horrific human suffering on every shift." Some of this is related to physical illness but a great deal of the suffering relates to the common problem of environments that are dehumanizing and/or fail to meet the emotional needs of residents. When staff are only given time to care for the residents' bodies, then they must perform the emotional work of distancing themselves from the residents' need for human contact and suppress their own empathetic responses to the residents' suffering.

The types of emotional labor and the consequences of withholding emotional responses are in fact quite different in settings devoted to the care of vulnerable clients than in other types of service work. Contrasting his perspective with Hochschild's analysis of emotional labor, Lopez (p. 149) observes, "It is one thing, after all, for flight attendants to withhold smiles—and

quite another thing for a nurse's aide or housekeeper in a total institution to withhold compassion from the elderly who are sick and disabled." The concept of organized emotional care is an important reminder of the specific challenges of care work, the need for job design/role performance theory and practice to consider the human needs that are central to this work, and the potential opportunities for workers to enhance their sense of agency by crafting their work to meet their own needs and the emotional and physical needs of care recipients.

Comparing Key Theories Discussed in Section V

The theoretical framework proposed by Parker, et al, (2006) challenges researchers to identify and analyze the many different factors operating in the work environment and the variety of potential work outcomes. The theories considered in this section offer a number of parallels as well as some differences:

- For the most part, the theories assume that individual motivations, capacities and/or values play a key role in shaping how the work is performed and the results of the work.
- Task interdependence and discretion in job performance emerge as key variables shaping role performance (Wrzesniewski & Dutton, 2001; Leana et al. 2009; Lopez, 2006b)
- All of these approaches consider impacts on individual workers (e.g. meaning, satisfaction, commitment, stress and burnout) as well as on organizational performance (e.g. quality of care, citizenship or resistance).
- Management support (or lack thereof) is an important factor in shaping job performance (Leana, et. al. 2009; Hodsdon. 2001; Lopez. 2006b).
- Several of these studies, perhaps most notably Leana, et al.'s work on collaborative job crafting and Lopez's study of organized emotional care, have relevance to current policy and/or practice in care work settings.

Although theories of job crafting, worker agency and the antecedents and consequences of emotional labor and emotional care are more worker-centered than traditional theories of job design and role performance, these differences are largely a matter of emphasis and perspective. The value of these theories goes beyond identification of potentially relevant variables to a more dynamic understanding of the interplay of individual motivations, needs and capacities and a range of organizational and environmental variables. Within these interactive theoretical frameworks exists the possibility of individual growth and change—(e.g. Parker, et. al's

observation that job autonomy's impact on self-efficacy builds slowly over time; the heightened impact of collaborative job crafting on job performance for less experienced teachers found by Leana, et al.; or the changes in a nursing home environment for the workers and residents observed by Lopez). These changes might be expected to shape further individual or organizational consequences over time in a dialectical process of change. Studies that offer longer periods of observation may provide additional insights into the interplay of human initiative and the rules, constructs and designs introduced intentionally by organizations.

VI. Summary and Conclusions

Achieving a stable and competent direct care workforce is necessary to creating the residential and home-based care environments we want for ourselves and for our family members. This cannot be accomplished without improving the jobs and working conditions of the millions of direct care workers who shoulder much of the physical and emotional burden for this care. Literature from a variety of disciplinary perspectives provides convincing evidence for the ties between work and care environments.

In this paper we provide a broad overview of theory, research, and practice related to direct care work. As noted in Section I, this is a large and growing segment of the U.S. workforce. These are difficult, low-paying jobs which, as noted in Section II, are disproportionately held by women, racial minorities, and recent immigrants, contributing to their on-going devaluation. Decades of studies seeking to correlate facility turnover and retention patterns with objective characteristics (described in Section III) have provided insights into environmental, organizational and workforce characteristics associated with turnover. Given variations in construction of key variables and study designs, however, it is perhaps not surprising that this body of research raises a multiplicity of questions, explains only a small amount of the variance between high and low turnover organizations, and falls short of offering consistent direction for change. These research results also omit a number of variables (child care issues, mental and physical health, intrinsic vs. extrinsic motivations) that influence the decision to leave a job, and offer few insights into intermediate or mediating variables, such as the specific organizational practices embedded in global constructs like "supportive management." Related to both the facility-based focus and the cross-sectional design of most of these studies, this research does not tell us why workers leave or where they go. Finally, only a

few large-scale studies have examined turnover among workers in home and community-based settings.

Extending this work to respond to these shortcomings is only one direction for future research. Our discussion of studies drawn from organization and human resource theory (Section IV) and more worker-centered theoretical perspectives (Section V) suggests the need for building stronger links between applied research and grounded theories of individual behavior within organizational settings. A review of this research also demonstrates the value of understanding work context through qualitative methods like detailed case studies and ethnographic techniques, focus groups, and interviews. Research utilizing longitudinal designs that can capture change over time is also much needed. Taken together, such approaches exemplify an “industry studies” perspective in research and show the added value and richness of this perspective.

Within health care and other direct care settings such as early childhood education, there is a need for more dynamic and explicit understandings of how individual, organizational and environmental factors shape effective communication, collaboration, and innovation. One contribution of this paper is in demonstrating the extent to which researchers from various disciplines are creating bodies of work that offer complementary characterizations of factors that shape a caring work environment. It is hoped that future researchers will consider ways to borrow broadly from these theories and approaches to develop more multi-layered theoretical frameworks and a broader scope for testing ideas in applied settings.

Inadequate reimbursements, low wages, inadequate training, low staffing ratios and high workloads, and a regulatory and enforcement system focused on preventing abuses rather than creating environments that are good places to live and work, provide significant challenges to bringing potentially transformative practices into direct care settings. Translating organizational insights into practices that can be successfully integrated by long-term care organizations will continue to require the combined efforts of advocates and practitioners, policymakers and researchers. Our goal here has been to strengthen this collaborative process with a focus on the contributions and promise of rich theory and rigorous research.

References

- Abel, E. & Nelson, M.K. 1990. Circles of care: An introductory essay. In E. Abel and M.K. Nelson (Eds.) *Circles of Care: Work and Identity in Women's Lives*. Albany, NY: State U. of New York Press.
- AAHSA (American Association of Homes and Services for the Aging). 2002. Assisted living salary and benefits report. Washington, D.C. author.
- Adler, P. & Kwon, S. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, 27: 1, 17–40.
- Adler, P., Kwon, S-W, & Heckshur C. 2008. *Professional work: The emergence of collaborative community*. *Organization Science* 19(2): 359-376.
- Anderson R, Issel, L.M., & McDaniel, R.R. 2003. Nursing Homes as Complex Adaptive Systems, *Nursing Research* 52(1):12 – 21, 2003.
- Appelbaum, E. Bailey, T., Berg, P., & Kalleberg, A.L. 2000. *Manufacturing Advantage: Why High Performance Work Systems Pay Off*. Ithaca, NY: Cornell University Press.
- Appelbaum, E., & Batt, R. 1995. *The New American Workplace: Transforming Work Systems in the U.S.* Ithaca: Cornell University Press.
- Appelbaum, E., Berg, P. Frost, A. & Preuss, G. 2003. “The effects of work restructuring on low-wage, low-skilled workers in U.S. hospitals,” in (Berhardt, A., Appelbaum E. & Murnane, R.J. (Eds.) *Low Wage America: How Employers Are Re-Shaping Opportunity in the Workplace*. New York: Russell Sage Foundation.
- Appelbaum, D. Gittell, J.H, & Leana, C. 2008. High Performance Work Practices and Economic Recovery. Unpublished policy paper - November 23.
- Argote, L. 1999. *Organizational Learning: Creating, Retaining and Transferring Knowledge*. New York: Springer.
- Aylward, S., Stolee, P., Keat, N., & Johncox, V. (2003). Effectiveness of continuing education in long-term care: A literature review. *The Gerontologist*, 43, 259-271.
- Ash, J. & Basu, K. 2009. Nursing homes face Medicaid cuts as lawmakers face budget gap. *Florida Today*, <http://www.tcpalm.com/news/2009/jan/07/nursing-homes-face-medicaid-cuts>.
- Baker, B. 2007. *Old Age in a New Age: The Promise of Transformative Nursing Homes*. Nashville, Vanderbilt University Press.
- Baines, C. 2006. Staying with people who slap us around: Gender, juggling responsibilities and violence in paid (and unpaid) care work. *Gender, Work and Organization* 13(2): 129-151.

Banaszak-Holl, J. & Hines, M.A. 1996. Factors associated with nursing home staff turnover. *The Gerontologist* 36(4):512-17.

Barry, T., Kemper, P., & Brannon, S.D. 2008. Measuring worker turnover in long-term care: Lessons from the Better Jobs, Better Care demonstration. *The Gerontologist*, 48(3), 394-400

Benjamin, A.E. 2001. Consumer directed services at home: A new model for people with disabilities. *Health Affairs* 20 (6): 80 – 93.

Bishop, C., Weinberg, D.B., Leutz, W. Dossa, A., Pfefferle S., & Zinzivage. R.M. 2008. Nursing assistants' job Commitment: Effect of nursing home organizational factors and impact on resident well-being. *The Gerontologist* 48 (special issue 1): 36-45.

Boris, E. & Klein, J. 2007. We were the invisible workforce: Unionizing home care. *The Sex of Class: Women Transforming American Labor*. D. Cobble (Ed.) Ithaca, NY: ILR Press, 177 – 193.

Brannon, D., Zinn, J., Mor, V., & Davis, J. 2002. An exploration of job, organizational, and environmental factors associated with high and low nursing assistant turnover. *The Gerontologist* 42 (2) 159-168)

Brannon, D, Barry, T., Kemper, P. Schreiner, A., & Vasey, J. 2007. Job Perceptions and Intent to Leave among Direct Care Workers: Evidence from the Better Jobs Better Care Demonstrations. *The Gerontologist* 47(6): 820-829.

Brennan, P.L. & Moos, R.H. 1990. Physical Design, social climate and staff turnover in skilled nursing facilities. *The Journal of Long-Term Care Administration*. (Summer): 22 – 27.

Bronfenbrenner, K. & Juravich, T.1995.*Union Organizing in the Public Sector* Ithaca: ILR Press.

Brown, J. S. & Duguid, P. 1991. Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science*, 2: 40-57.

Browne, C.V. & Braun, K.L. 2008. Globalization, women's migration, and the long-term care workforce. *The Gerontologist* 48(1): 16-24.

Cancian, F.M. 2000. Paid emotional care. In M. Harrington Meyer (ed.) *Care Work: Gender, Class and the Welfare State*. New York: Rutledge.

Castle, N. 2005. Turnover begets turnover. *The Gerontologist*, 45(2), 186-195.

Castle, N., & Engberg, J. 2005. Staff turnover and quality of care in nursing homes. *Medical Care*, 43(6), 616-626.

Castle, N., Degenholtz, H. & Rosen, J. 2006. Determinants of staff job satisfaction of caregivers in two nursing homes in Pennsylvania. *BMC Health Services Research*, <http://www.biomedcentral.com/1472-6963/6/60> (retrieved 7-20-09).

Castle, N., Engberg, J., Anderson, R., & Men, A. 2007. "Job satisfaction of nurse aides in nursing homes: Intent to leave and turnover. *The Gerontologist* 47(2): 193-204.

Castle, N. 2008. Nursing home caregiver staffing levels and quality of care, *Journal of Applied Gerontology*, 27(4): 375-405.

Centers for Medicare and Medicaid Services. (2002). Report to Congress: Appropriateness of minimum nurse staffing ratios in nursing homes phase II final report. Retrieved April 7, 2005, from <http://cms.hhs.gov/medicaid/reports/rp1201home.asp>

CAEL (Council for Adult and Experiential Learning). 2008. *CAEL/DOL nursing career lattice program*. http://www.doleta.gov/oa/brochure/CAELDOL_Nursing_Career_Lattice_Program.pdf (retrieved 7-6-09).

Chang, G. 2000. *Disposable Domestic: Immigrant Women Workers in the Global Economy*. Cambridge, MA: South End Press.

Cobble, D.S. 1991a. *Dishing It Out: Waitresses and Their Unions in the Twentieth Century*. Urbana: University of Illinois Press.

Cobble, D.S. 1991b. "Organizing the Post-industrial Work Force: Lessons from the History of Waitress Unionism." *Industrial and Labor Relations Review* 44 (April): 419-36.

Cobble, D.S. 1994. Making Postindustrial Unionism Possible. In *Restoring the Promise of American Labor Law*. Friedman, S., Hurd, W., Oswald, R. & Seeber, R. (Eds.) Ithaca: ILR Press, 285-302.

Cobble, D.S. 1996 "The Prospects for Unionism in a Service Society." In *Working in the Service Society*. Macdonald, C. & Sirianni, C. (Eds.) Philadelphia: Temple University Press, 333-58.

Cobble, D.S. 1999. "'A Spontaneous Loss of Enthusiasm': Workplace Feminism and the Transformation of Women's Service Jobs in the 1970s." *International Labor and Working-Class History* 56 (Fall): 23-44.

Cobble, D.S. 2001. "Lost Ways of Unionism: Historical Perspectives on Reinventing the Labor Movement." In *Rekindling the Movement: Labor's Quest for Relevance in the 21st Century*, Turner, L., Katz, H. & Hurd, R. (Eds.) Ithaca, NY: Cornell University ILR Press, 82-96.

Cobble, D.S. 2005. "A 'Tiger by the Toenail': The 1970s Origins of the New Working-Class Majority." *Labor: Studies in Working-Class History of the Americas* 2:3 (fall): 103-114.

- Cobble, D.S. & Merrill, M. 1994. "Collective Bargaining in the Hospitality Industry." In *Contemporary Collective Bargaining in the Private Sector in the 1980s*, edited by Paula Voos. Ithaca: Cornell University ILR Press, 447-89.
- Cobble, D.S. & Merrill, M. 2008. "The Promise of Service Worker Unionism," in *Service Work: Critical Perspectives* (C. McDonald and M. Korczynski, Eds.). London: Routledge.
- Collier, E & Harrington, C. 2008. Staffing characteristics, turnover rates and quality of resident care in nursing facilities. *Research in Gerontological Nursing* 1(3): 157-170.
- Cohen, J.W. & Spector, W.D. 1996. The effect of Medicaid reimbursement on quality of care in nursing homes. *J. of Health Economics* 15(1): 23-48.
- Cohen-Mansfield, J. 1997. Turnover among nursing home staff: A review. *Nursing Management* 28(5): 59-62, 64.
- Dawson, S.L. 2007. *Recruitment and Retention of Paraprofessionals*. Institute of Medicine's Committee on the Future Health Care Workforce for Older Americans. Presentation, June 28.
- De Castro, A.B., Fujishiro, K., Sweitzer, E., & Oliva J. 2006. How immigrant workers experience workplace problems: A qualitative study. *Archives of Environmental and Occupational Health* 61(6): 249-258.
- De Prins, P & Henderick, E. 2007. HRM effectiveness in older people's and nursing homes: The search for best (quality) practices. *Nonprofit and Voluntary Sector Quarterly* 36:549 – 571.
- Decker, F., Gruhn P., Matthews-Martin, L., Dollard, J., Tucker, A., & Bizette, L. 2003 Results of the 2002 AHCA survey of nursing staff vacancy and turnover in nursing homes.
- Delp, L. & Quan, K. 2002. Homecare worker organizing in California: An analysis of a successful strategy. *Labor Studies Journal* 27(1): 1-23.
- Diamond, T. 1990. Nursing homes as trouble. In E. Abel and M.K. Nelson (Eds.) *Circles of Care: Work and Identity in Women's Lives*. Albany, NY: State U. of New York Press.
- Direct Care Alliance. 2009. *The Evelyn Coke Case Fact Sheet: Long Island Care at Home vs. Evelyn Coke*. <http://www.directcarealliance.org/index.cfm?fuseaction=page.viewpage&pageid=485> (retrieved 7-22-09).
- Doty, M.M., Koren, M.J. & Sturla, E.L. 2008. *Culture Change in Nursing Homes: How Far Have We Come? Findings from the Commonwealth Fund 2007 National Survey of Nursing Homes*. The Commonwealth Fund. <http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2008/May/Culture-Change-in-Nursing-Homes--How-Far-Have-We-Come--Findings-From-The-Commonwealth-Fund-2007-Nati.aspx#citation> (retrieved 7-22-09).

- Ducey, A. 2009. *Never Good Enough: Health Care Workers and the False Promise of Job Training*. Ithaca: ILR, Cornell University Press.
- Eaton, S.C. 2000. Beyond unloving care: Linking human resource management and patient care quality in nursing homes. *International Journal of Human Resource Management* 11: 591-616.
- Eaton, S.C. 2005. Eldercare in the U.S.: Inadequate, inequitable, but not a lost cause. *Feminist Economics* 11(2): 37 – 51.
- Eaton, S.C. 2002. *What a difference management makes! Nursing staff turnover variation within a single labor market. Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes: Report to Congress, Phase II*. Released June 12, 2002 by the Center for Medicare and Medicaid Services.
- Eaton, S., Green, Wilson, R., and Osypuk, T. 2001. Extended Care Career Ladder Initiative (ECCLI): Baseline evaluation report of a Massachusetts Nursing Home Initiative. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=292944 (retrieved 7-27-09).
- Edmondson, A.C. 2008. The competitive imperative of learning. *Harvard Business Review* July-August: 60-67.
- Edmondson, A.C. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly* 44(2): 350 – 83.
- Ejaz, F.K., Noelker, L.S., Menne, H.L. & Bagakas, J.G. 2008. The impact of stress and support on direct care workers' job satisfaction. *The Gerontologist* 48(1): 60-70.
- England, P. 1992. *Comparable Worth: Theories and Evidence*. New York: Aldine de Gruyter.
- England, P. 2005. Emerging theories of carework, *Annual Review of Sociology* 31:381–99.
- England, P., Budig, M. & Folbre N. 2002. Wages of virtue: The relative pay of care work. *Social Problems* 49(4): 455–473,
- England, P. & Folbre, N. 1999. The cost of caring. *Annals of the American Academy of Political and Social Science* 561: 39-51.
- England P, Thompson J, & Aman C. 2001. The sex gap in pay and comparable worth: an update. In *Sourcebook of Labor Markets: Evolving Structures and Processes*, Ed. I Berg, AL Kalleberg, pp. 551–65. New York: Kluwer Academic/Plenum.
- Filer R. 1989. Occupational segregation, compensating differentials, and comparable worth. In *Pay Equity: Empirical Inquiries*, ed. RT Michael, HI Harmann, B O'Farrell, pp. 153–70. Washington, DC: Natl. Acad. Press

Finch, J. & Groves, D. *A Labour of Love: Women, Work and Caring*. London: Routledge and Kegan Paul.

Fisher, B. & Tronto, J. 1990. "Toward a Feminist Theory of Caring," in E. Abel and M.K. Nelson (Eds.) *Circles of Care: Work and Identity in Women's Lives*. Albany: State U. of New York Press.

Folbre N. 1995. Holding hands at midnight: The paradox of caring labor. *Fem. Econ.* 1:73–92.

Folbre, N. 2001. *The Invisible Heart: Economics and Family Values*. NY: The New Press.

Folbre, N. 2006. Demanding quality: worker/consumer coalitions and "high road strategies in the care sector. *Politics & Society* 24(1):11-31.

Folbre, N. 2008a. Reforming care. *Politics & Society* 36(3): 373-387.

Folbre, N. 2008b. When a commodity is not exactly a commodity, *Science*, 319:1769-1770.

Folbre, N. 2008c. *When a commodity is not exactly a commodity*. Web blog entry April 4, 2008. <http://www.blogs.umass.edu/folbre/> (retrieved 7-22-09).

Folbre, N. & Nelson J.A. 2000. For love or money—or both. *Journal of Economic Perspectives*, 14(4): 123-140.

Foundation for Long-Term Care. (Undated). *Growing Strong Roots Shows Improvement Again*. <http://www.nyahsa.org/foundation/n00000025.cfm> (retrieved 7-7-09).

Garvin, D.A., Edmondson, A.C. & Gino, F. 2008. Is yours a learning organization? *Harvard Business Review* March: 109-116.

Gass, T. 2005. *Nobody's Home: Candid Reflections of a Nursing Home Aide*. Ithaca: ILR Press.

Gergen, K.J. 1994. *Realities and Relationships: Soundings in Social Constructionism*. Cambridge: Harvard U. Press.

Gilligan, C. 1982. *In a Different Voice: Psychological Theory and Women's Development*. Boston: Harvard U. Press.

Gittell, J.H. 2001. 'Supervisory span, relational coordination and flight departure performance: A reassessment of post-bureaucracy theory'. *Organization Science*, 12(4): 467–482.

Gittell, J.H. 2002. 'Coordinating mechanisms in care provider groups: relational coordination as a mediator and input uncertainty as a moderator of performance effects. *Management Science*, 48(11): 1408–1426.

Gittell, J.H. 2003. *The Southwest Airlines Way: Using the Power of Relationships to Achieve High Performance*. New York: McGraw-Hill.

Gittell, J.H. 2006. Relational coordination: coordinating work through relationships of shared goals, shared knowledge and mutual respect. In O. Kyriakidou and M. Ozbilgin (Eds), *Relational Perspectives in Organizational Studies: A Research Companion*, Cheltenham: Edward Elgar Publishers.

Gittell, J.H. 2008. Relationships and resilience: Care providers' responses to pressures from managed care. *The Journal of Applied Behavioral Science* 20 (20): 1-24.

Gittell, J.H., Fairfield, K., Bierbaum, B., Jackson, R., Kelly, M., Laskin, R., Lipson, S., Siliski, J., Thornhill, T. & Zuckerman, J. 2000. 'Impact of relational coordination on quality of care, postoperative pain and functioning, and length of stay: a nine-hospital study of surgical patients'. *Medical Care*, 38(8): 807–819.

Gittell, J.H., Seidner, R. & Wimbush, J. 2009. A relational model of high performance work systems. *Organization Science*, forthcoming.

Gittell, J.H., Weinberg, D.B., Bennett, A. & Miller, J.A. 2007. *Is the doctor in? A relational approach to job design and the coordination of work*. Working paper, Heller School, Brandeis University.

Gittell, J.H., Weinberg, D.B., Pfefferle, S., & Bishop, C. 2008. Impact of relational coordination on job satisfaction and quality outcomes: a study of nursing homes. *Human Resource Management* 18(2):154-170.

Graham, H. 1983. Caring: a labour of love, in *A Labour of Love: Women, Work and Caring*, In J. Finch & D. Groves (Eds). London: Rutledge.

Griffin, M., Neal, A. & Parker, S. 2007. A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50, 327-347

Gruss, V., McCann, J., Edelman, P. & Faran, C. 2004. Job stress among nursing home certified nursing assistants. *Alzheimer's Care Quarterly*, 5(3): 207-216.

Harrington, C. 2007. How to improve nursing homes—one expert's 30-year view. *Aging Today* 28(5): 3-4.

Harrington, C., Zimmerman, D., Karon, S. Robinson, J., & Beutel, P. 2000. "Nursing Home Staffing and Its Relationship to Quality." *Journal of Gerontology: Social Sciences* 55B (5): S278-S287, September.

- Harrington, C., Carrillo, H. & Wellin, V... 2001. *Nursing facilities, staffing, residents and facility deficiencies 1994-2000*. San Francisco: Dept. of Social and Behavioral Sciences, University of California.
- Harrington, C., Ng, T., Kaye S.H., & Newcomer R. 2009. *Home and Community-based Services: Public Policies to Improve Access, Costs, and Quality*. University of CA, San Francisco: Center for Personal Assistance.
- Harrington Meyer, M. 2000. *Care Work: Gender, Class and the Welfare State*. NY: Rutledge.
- Harris-Kojetin, L., Lipson, D., Fielding, J., Kiefer, K. & Stone R. 2004. *Recent findings on frontline long-term care workers: A research synthesis 1999-2003*.
- Hawes, C. & Phillips, C. 2000. *High Service or High Privacy Assisted Living Facilities, Their Residents and Staff: Results from a National Survey*. Washington D.C.: U.S. Dept. of Health and Human Services. (<http://aspe.hhs.gov/daltcp/reports/hshp.htm>) (retrieved 7-1-09).
- HRSA (Health Resources and Services Administration). 2004. *Nursing aides, home health aides and related care occupations: National and local workforce shortages and associated data needs*. Washington, D.C.: U.S. Dept. of Health and Human Services.
- Hegeman, C. 2003. Peer Mentoring of Nursing Home CNAs: A Way to Create a Culture of Caring. *Journal of Social Work in Long-Term Care* 2 (1, 2).
- Heinemann, J.M. 2008. The qualitative evaluation of ECCLI. *Commonwealth Corporation Research and Evaluation Brief* 5(2):1 – 4.
- Hewitt, A., Larson, S., Edelstein, S., Seavey, D., Hoge, M. & Morris, J. 2008. *A synthesis of direct service workforce demographics and challenges across intellectual/ developmental disabilities, aging, physical disabilities, and behavioral health*. Center for Medicaid and Medicare Services, National Direct Service Workforce Center. http://www.dswresourcecenter.org/index.php/dsw/what_s_new/cross_disability_synthesis_white_paper (retrieved 7-22-09).
- Himmelweit, S. 1999. Caring Labor. *The ANNALS of the American Academy of Political and Social Science*, 561(1): 27-38.
- Hochschild, A.R. 1983. *The Managed Heart: The commercialization of human feeling*. Berkeley, CA: U. of California Press.
- Hodsdon, R. 2001. *Dignity at Work*. Cambridge, England: Cambridge University Press.
- Hodsdon, R. 2005. Management behaviour as social capital: A systematic analysis of organizational ethnographies. *British Journal of Industrial Relations* 43(1): 41-65.
- Hodsdon, R. 2008. The ethnographic contribution to understanding co-worker relations. *British Journal of Industrial Relations* 46(1): 169-192.

Hollinger-Smith, L., and Ortigara, A. 2004. Changing culture: creating a long-term impact for a quality care long-term care workforce. *Alzheimer's Care Quarterly* 5(1): 60-70.

Howes, C. 2002. *The impact of a large wage increase on the workforce stability of IHSS home care workers in San Francisco County*. Berkeley: University of California at Berkeley Labor Center. http://www.pascenter.org/publications/publication_home.php?id=57 (retrieved 6-23-09).

Howes, C. 2004. Upgrading California's home care workforce: The impact of political action and unionization. *The State of California Labor* 4: 71-105.

Howes, C. 2005. Living wages and retention of homecare workers in San Francisco. *Industrial Relations* 44:139-163.

Howes, C. 2008. Love, money or flexibility: What motivates people to work in consumer-directed home care? *The Gerontologist* 48(1): 46-59.

Ilgen, D. R., & Hollenbeck, J. R. (1991). Job design and roles. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 2). Palo Alto: Consulting Psychologists Press.

Institute of Medicine (IOM). 1986. *Improving the Quality of Care in Nursing Homes*. Washington, D.C.: National Academy Press.

Institute of Medicine (IOM), Committee on Improving Quality in Long-Term Care. 2001a. In Wonderlich, G.S. and Kohler, P.O. (eds.) *Improving the quality of long-term care*. Washington, D.C.: National Academies Press.

Institute of Medicine (IOM). 2001b. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, D.C. National Academies Press.

Institute of Medicine (IOM), Committee on the Work Environment for Nurses and Patient Safety, 2003. *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, D.C.: National Academies Press.

Institute of Medicine (IOM), Committee on the Future Health Care Workforce for Older Americans, Board on Health Care Services. 2008. *Re-tooling for an Aging America: Building the Healthcare Workforce*. Washington, D.C.: National Academies Press.

Jacoby, D. 2006. Caring about caring labor. *Politics & Society* 34(1): 5-9.

Johnson, N., Oliff, P., & Koulish, J. 2009. *An Update on State Budget Cuts: At Least 39 States Have Imposed Cuts That Hurt Vulnerable Residents: Federal Economic Recovery Funds and State Tax Increases Are Reducing the Harm*. Washington, D.C.: Center on Budget and Policy Priorities (June 29). <http://www.cbpp.org/files/3-13-08sfp.pdf> (retrieved 7-3-09).

Johnson, R.W., Toohey, D., & Weiner, J. 2007. *Meeting the Long-Term Care Needs of the baby Boomers: How Changing Families will Affect Paid Helpers and Institutions. The Retirement Project: Discussion Paper 07-04* Washington, D.C.: The Urban Institute.

Johnston, P. 1994. *Success While Others Fail: Social Movement Unionism and the Public Workplace*. Ithaca, NY: ILR Press.

Kane, R.L., & West, J.C. 2005. *It Shouldn't Be This Way: The Failure of Long-Term Care*. Nashville, TN: Vanderbilt University Press.

Kane, R. 2003. Definition, measurement and correlates of quality of life in nursing homes: Toward a reasonable practice, research and policy agenda. *The Gerontologist* 43:28-36.

Kane, R.A. 2001. Long-term care and a good quality of life. 41: 293-304.

Kemper, P. Brannon, D. Barry T., Stott, A., & Heier, B. 2008. Implementation of the Better Jobs Better Care demonstration: lessons for long-term care workforce initiatives. *The Gerontologist* 48 (special issue 1): 26-35.

Kilbourne B.S., England P., Farkas G., Beron K., & Weir D. 1994. Return to skill, compensating differentials, and gender bias: effects of occupational characteristics on the wages of white women and men. *Am. J. Sociology* 100:689–719

Korczynski, M. & MacDonald, C., eds. (2008) *Service Work: Critical Perspectives*, New York: Routledge.

Kovner, C.T. & Harrington, C. 2002. CMS study: Correlation between staffing and quality. *American Journal of Nursing* 102(9): 65 – 56.

Leana, C., & Florkowski, G. 1992. "Employee Involvement Programs: Integrating Psychological Theory and Management Practice." *Research in Personnel and Human Resources Management*, 10: 233-270.

Leana, C. & Pil, F. 2006. "Social capital and organizational performance: Evidence from urban public schools," *Organization Science*, 13(3), 1-14.

Leana, C.R. and Pil, F. 2009. Applying organizational research to public school reform. *Academy of Management Journal*, forthcoming.

Leana, C.R. and Van Buren, H.J. 1999. Organizational social capital and employment practices. *Academy of Management Review*, 24: 538–555.

Leana, C., Rosen, J. & Mittal, V. 2007. *Quality care through quality jobs: Report on results of phase 1 focus groups and interviews*. Center for Health and Care Work, University of Pittsburgh.

Leana, C., Appelbaum, E., Shevchuk, I. 2009. Work process and quality of care: Encouraging positive job crafting in childcare classrooms. *Academy of Management Journal*, forthcoming.

Lesser, E.L. 2000. Leveraging social capital in organizations. In E.L. Lesser (ed.), *Knowledge and Social Capital: Foundations and Applications*. Boston: Butterworth-Heinemann.

Leutz, W.M. 2007. Immigration and the elderly: Foreign-born workers in long-term care. *Immigration Policy in Focus* 5(12): 1-11.

Levinson, D.R. 2008. Inspector General Memorandum Report: *Trends in Nursing Home Deficiencies and Complaints*, OEI-02-08-00140 <http://oig.hhs.gov/oei/reports/oei-02-08-00140.pdf> (retrieved 5-22-09).

Lipson, D. & Regan, C. 2004. Health Insurance Coverage for Direct Care Workers: Riding Out the Storm, *Better Jobs Better Care Issue Brief No. 3*. Washington, DC: Institute for the Future of Aging Services, American Association of Homes and Services for the Aging.

Lopez, S.H. 2006a. Culture change management in long-term care: A shop floor view. *Politics & Society* 34(1): 55-79.

Lopez, S.H. 2006b. Emotional labor and organized emotional care: Conceptualizing nursing home care work. *Work and Occupations* 33:133 – 160.

Lundgren, R.I & Browner, C.H. 1990. In E. Abel, & M. Nelson (Eds.) *Circles of Care: Work and Identity in Women's Lives*. Albany: State U. of New York Press.

MacDonald, C. & Sirianni, C.1996. *Working in the Service Society*. Philadelphia: Temple Press.

Meagher, G. 2006. What can we expect from paid caregivers? *Politics & Society* 34(1): 33-53.

Milkman, R. 2006. *L.A. Story: Immigrant Workers and the Future of the U.S. Labor Movement*. New York: Russell Sage Foundation.

Mitnik, P.A. & Zeidenberg, M. 2007. *From Bad Jobs to Good Jobs: An Analysis of the Prospects for Career Ladders in the Service Industries*. U. of Wisconsin: Center on Wisconsin Strategy.

Mittal, V., Rosen, J. & Leana, C. 2009. A dual-driver model of turnover and retention in the direct care workforce. *The Gerontologist*, forthcoming.

Morgan, J.C. & Konrad, T.R. 2008. A mixed-method evaluation of a workforce development intervention for nursing assistants in nursing homes: The case of WIN A STEP UP. *The Gerontologist* 48(1): 71-79.

National Clearinghouse on the Direct Care Workforce. 2006. *Factsheet: Who are direct care workers?* Paraprofessional Healthcare Institute.

- NCCHNR (National Citizen's Coalition for Nursing Home Reform). 2001. The Nurse Staffing Crisis in Nursing homes: Consensus of the Campaign for Quality of Care. (http://www.nccnhr.org/govpolicy/51_162_701.cfm (retrieved 7-3-09).
- Needleman, R. 1998. Building relationships for the long haul: Unions and community based groups working together to organize low wage workers. In K. Bronfenbrenner, S. Friedman, R. W. Hurd, R.A. Oswald, and R. L. Seeber (Eds.) *Organizing to Win: New Research on Union Strategies*. Ithaca: ILR Press.
- Nelson, J. & England, P. 2002. Feminist Philosophies of Love and Work. *Hypatia* 17(2); 1- 18
- Orr, J. E. 1996. *Talking about machines. An ethnography of a modern job*. Ithaca, New York: ILR Press, Cornell.
- Orlikowski, W.J. 1996. Improvising organizational transformation over time: A situated change perspective. *Information Systems Research*, 7:63-92.
- PHI (Paraprofessional Healthcare Institute). 2003. *Training quality home care workers. A technical report from the National Clearinghouse on the Direct Care Workforce*. NY: PHI.
- Parker, S. K., Williams, H., M., & Turner, N. 2006. Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91: 636–652.
- Parker, S.K. 2007. That is my job: how employees' role orientation affects their role performance. *Human Relations* 60(3): 403-434.
- Parsons, S.K., Simmons, W.P., Penn, K., & Furlough, M. 2003. Determinants of satisfaction and turnover among nursing assistants: The results of a statewide survey. *J. of Gerontological Nursing* 29(3): 51-58.
- Pear, R. 2002. 9 of 10 Nursing Homes in U.S. Lack Adequate Staff, a Government Study Finds. The New York Times, (February 18). (<http://www.nytimes.com/2002/02/18/us/9-of-10-nursing-homes-in-us-lack-adequate-staff-a-government-study-finds.html>).
- Pear, R. 2008. Violations reported at 94% of nursing homes, *The New York Times*, Sept. 29. (http://www.nytimes.com/2008/09/30/us/30nursing.html?_r=2&hp&oref=slogin).
- Pfefferle, S.G. & Weinberg, D.B. 2008. Certified nurse's assistants making meaning of direct care. *Qualitative Health Research* 10(10): 1-10.
- Pil, F. & Leana, C.R. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. *Academy of Management Journal*, forthcoming
- Pillemer, K., Meadork R., Henderson, C., Robison, J., Hegeman, C., Graham E. & Schultz, L. 2008. A facility retention specialist model for improving retention of nursing home staff: results from a randomized, controlled study. *Gerontologist* 48 (special issue 1): 80-89.

Pioneer Network. <http://www.pioneernetwork.org> (retrieved 3-17-09).

Priester, R. & Reinardy, J.R. 2003. Recruiting immigrants for Long-term care nursing positions. *Journal of Aging and Social Policy* 15 (4):1-19.

“The rights of domestic workers,” (editorial) 2009. *The New York Times*, June 15.

Reinhard, S. & Stone, R. 2001 *Promoting quality in nursing homes: the Wellspring model*. Washington D.C.: The Association of Homes and Services for the Aging.

Rhee, N. & Zabin, C. 2008. Aggregating Dispersed Workers: Union Organizing in the “Care” Industries (Submitted to *Geoforum* -- March 17, 2008).

Schnelle, J.F., Simmons, S.F., Harrington, C, Cagogan, M, Garcia, E., & Bates-Jensen, B.M. 2004. Relationship of nursing home staffing to quality of care. *HSR: Health Services Research* 39(2): 225-249.

Schuler, R. & Jackson, S. 1987. Organizational strategy and organization level as determinants of human resource management practices. *Human Resource Planning*, 10(3):125-141.

Seavey, D. 2004. *The Cost of Turnover in Long-term Care*. Better Jobs/Better Care. http://www.directcareclearinghouse.org/l_art_det.jsp?res_id=130310 (retrieved 7-23-09)

Senge, P. 1990. *The Fifth Discipline: The art and practice of the learning organization*. NY: Doubleday.

Smith, P.R. 1999. Regulating paid household work: Class, gender, race and agendas of reform. *American U. Law Review* 48: 851.

Smith, P.R. 2006. Laboring for child care: A consideration of new approaches to represent low-income service workers. *U. of PA Journal of Labor and Employment Law* 8 (3): 583 – 621.

Smith, P.R. 2007a. Aging and caring in the home: Regulating paid domesticity in the Twenty-First Century. *Iowa Law Review* 92(5): 1835 – 1900.

Smith, P.R. 2007b. Home sweet home? Workplace casualties of consumer- directed home care for the elderly. *Notre Dame Journal of Law, Ethics and Public Policy* 21(2): 537-560.

Smith, P.R. 2007c. Welfare, child care, and the people who care: Union representation of family child care providers. *U. of Kansas Law Review* 55(2): 321-364.

Smith, P.R. 2008. The publicization of home-based care work in state labor laws. *Minnesota Law Review* 92(5): 1390 – 1423.

Sorensen E. 1994. *Comparable Worth: Is It a Worthy Policy?* Princeton, NJ: Princeton Press

Steinberg, R.J. 2001. Comparable worth in gender studies. In N.J. Smelser, P.B. Baltes (Eds) *International Encyclopedia of Social & Behavioral Sciences*. Oxford, UK: Oxford U. Press.

Steinberg, R.J., Haignere, L., Possin, C., Chertos, C.H., & Trieman, D. 1986. *The New York State Pay Equity Study: A Research Report*. Albany, NY: Cent. Women Gov., SUNY Press.

Stack, S. 2003. Beyond performance indicators: A case study in aged care. *Australian Bulletin of Labour* 29: 143-161.

Stacey, C. L., (2005). Finding dignity in dirty work: The constraints and rewards of low-wage home care labour. *Sociology of Health and Illness*, 27, 831-854.

Stolee, P., Esbaugh, J., Aylward, S., Cathers, T., Harvey, D.P., Hillier, L.M., Keat, N., & Feightner, J.W. 2005. Factors Associated With the Effectiveness of Continuing Education in Long-Term Care *The Gerontologist*, 45:399-409.

Stone, D. 2000. Caring by the book. In Harrington Meyer, M. (ed.) *Care Work: Gender, Class and the Welfare State*. NY: Rutledge.

Stone, D. 1999. "Care and Trembling," *The American Prospect* (November 2)
http://www.prospect.org/cs/articles?article=care_and_trembling (retrieved 9-16-08).

Stone, D. 2008. *The Samaritan's Dilemma: Should Government Help Your Neighbor*. NY: The Nation Press.

Stone, R. 2008. "The Long-Term Care Workforce: Current and Future Trends, Challenges, and Potential Solutions," in *From Education to Regulation: Dynamic Challenges for the Health Care Workforce*. American Association of Academic Medical Centers.

Stone, R. & Dawson, S. 2008. The origins of Better Jobs Better Care *The Gerontologist*, 48: 5-13

Stone, R.I. & Wiener, J. 2001. *Who will care for us? Addressing the long-term care workforce crisis*. Washington, D.C.: The Urban Institute and the American Association of Homes and Services for the Aging.

Tellis-Nayak, V. 2007. A person-centered workplace: The foundation for person-centered caregiving in long-term care. *J. American Medical Directors Association* 8: 46-54.

Thomas, W. 1992. *The Eden Alternative*. Columbia, MO: University of Missouri Press.

Tucker, A. & Edmondson, A. 2003. Why hospitals don't learn from failures: organizational and psychological dynamics that inhibit system change. *California Management Review* 45: 55-72.

Ungerson, C. 1983. "Why do women care?" in *A Labour of Love: Women, Work and Caring*, (J. Finch and D. Groves (Eds.) London: Rutledge.

U.S. BLS. 2007a. Table 1. The 30 Fastest Growing Jobs in the 2008 – 2009 Occupational Outlook Handbook. <http://www.bls.gov/news.release/ooh.t01.htm> (retrieved 5-22-09).

U.S. GAO (U.S. General Accounting Office) 2004. Nursing home fire safety: Recent Fires highlight weaknesses in Federal Standards and Oversight. GAO 04-660. (<http://www.gao.gov/new.items/d04660.pdf> (retrieved 7-3-09).

U.S. GAO (U.S. General Accounting Office). 2005. Nursing Homes: Despite Increased Oversight, Challenges Remain in Ensuring High-Quality Care and Resident Safety. GAO 06-117. (<http://www.gao.gov/new.items/d06117.pdf> (retrieved 7-3-09).

Wagner, J.A., Leana, C.R., Locke, E.A., & Schweiger, D.M. 1997. Cognitive and motivational frameworks in U.S. research on participation: A meta-analysis of primary effects. *Journal of Organizational Behavior*, 18, 49-65.

Washko, M., Gottlieb, A., Wilson, K., Heinemann J., Stone, R., & Caro, F. 2007. *Extended Care Career Ladder Initiative (ECCLI) Qualitative Evaluation Project: Final Report*. Prepared by Institute for Aging Services, American Association of Homes and Services for the Aging and The Gerontology Institute U. of Massachusetts Boston.

Waxman, H.M., Carner, E.A., & Berkenstock, G. 1984. Job turnover and job satisfaction among nursing home aides. *The Gerontologist* 24(5): 503- 509.

Wellin, C. (2007). *Paid Care-giving for Older Adults with Serious or Chronic Illness: Ethnographic Perspectives and Evidence*. National Academies Center for Education on Research Evidence Related to Future Skill Demands. Panel on Skill Demands in Growing Service Sector Jobs. Washington, D.C. May 31-June 1, 2007. [http://www7.nationalacademies.org/CFE/Future Skill Demands Christopher Wellin Paper.pdf](http://www7.nationalacademies.org/CFE/FutureSkill_Demands_Christopher_Wellin_Paper.pdf) (retrieved 7-22-09)

Wells, J.C. 2004. The case for minimum nurse staffing standards in nursing homes: A review of the literature. *Alzheimer's Care Quarterly* 5(1): 39-51.

Weiner, J. M. 2003. An Assessment of Strategies for Improving Quality of Care in Nursing Homes *The Gerontologist* 43:19-27.

Wrzesniewski, A. and Dutton, J. E. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26: 179–201.

Yeatts, D.E. and Cready, C.M. 2007. Consequences of empowered CAN teams in nursing home settings: A longitudinal assessment. *The Gerontologist* 47(3): 323-339.

Zhang, X. and Grabowski, D.C. 2004. Nursing Home Staffing and Quality Under the Nursing Home Reform Act. *The Gerontologist*, 44(1), 13-23.