

Recruitment and Retention of Paraprofessionals

By Steven L. Dawson, President
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*A working draft presentation to the Institute
of Medicine's Committee on the Future
Health Care Workforce for Older Americans
June 28, 2007*

“What will best facilitate recruitment and retention of the paraprofessional workforce?”

~ IOM Presentation ~

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Steven L. Dawson
President, PHI

Introduction

Thank you. It is an honor to address this Task Force, for the IOM’s decision to explore explicitly the formal, paid workforce needs of serving elders in America is a milestone for long-term care.

Long-term care has long been the poor stepchild of the health care system, yet as Dr. Robyn Stone presented to you earlier, it encompasses many more beds than the nation’s hospitals. And despite our individual hopes to avoid it, the demand for paid long-term care services—in both home- and institutionally-based settings—will continue to soar.

Therefore, within your exploration, I particularly appreciate your inviting me to speak about the paraprofessional workforce, for the evidence is quite clear: Seven out of ten elder services workers in long-term care is a paraprofessional, and at least eight out of every ten hours of paid services provided to an elder in non-acute settings is offered not by a doctor, nor a nurse, but by a paraprofessional worker. These staff—home health aides, certified nurse aides, personal care attendants—provide largely non-medical health care, personal care and supportive services, and thus are the hands, voice and face of long-term care for millions of elders.

And yet, the long-term care system has simply presumed that an endless supply of workers—mostly women, and disproportionately women of color—will always be available to transfer our mothers from bed to wheelchair, or to feed our fathers, no matter how little we pay these workers, or how poorly we supervise them, or whether we even have the decency to offer these health care workers health insurance.

Therefore—while recognizing the equally essential role of healthcare professionals who provide acute and other medical care to older persons—I am pleased that your Task Force has the opportunity to acknowledge the full value of paraprofessional workers. For we cannot recruit and retain those whom we treat as invisible.

Scale

The scale of this workforce is stunning: These workers now number, officially, about 3 million—with hundreds of thousands more in the “gray market.” In the decade ahead, the U.S. Bureau of Labor Statistics (BLS) predicts that the demand for paraprofessionals will increase by 35 percent—nearly one million new positions—growing faster than other health care occupations, and growing three times as fast as all other industries. And looking further ahead, Dr. Joshua Weiner and others project that, under intermediate disability growth scenarios, total paid home care hours for frail elders will more than triple between 2000 and 2040. Clearly, the demand for this labor is inexorable.

And yet, what is less understood is that the supply of labor—both paid and family caregivers—will simply not keep pace:

- On the family caregiving side, the population of adults over age 65 is growing at three times the rate of the population of family members available to care for them (primarily spouses and adult children aged 45 to 64).
- On the workforce side, as the demand for paraprofessionals grows by 35 percent from 2004 to 2014, the traditional labor pool from which these workers are drawn—women aged 25-54—will barely hold its own, increasing during this period by less than 2 percent.

This emerging “care gap” is a tectonic demographic change that is now shifting beneath the long-term care system—one that policy makers are only half aware of: In my work in the states, I constantly meet officials who are aware that demand for elder services is increasing dramatically, yet have little idea that the post-Baby Boom generation will offer so relatively few workers.

The Labor Market Context

I have been asked to speak this afternoon to the recruitment and retention of paraprofessionals. I believe this challenge can only be understood in context, and that context is the low-wage labor market. Within that labor market, the long-term care industry is only one of many competing for workers. With demand for labor growing, and supply relatively flat, workers who in earlier years might have chosen paraprofessional jobs find that they will increasingly have other, better, job alternatives.

And the long-term care industry is a very large actor within that marketplace, with an increasingly voracious appetite for labor: Currently one out of every 12 low-wage workers in the U.S. is a paraprofessional; within ten years—since the long-term care industry is growing so fast—that figure will become one in ten. In some labor markets,

the competition is even more fierce: In New York City, already one out of every seven low-wage workers is a paraprofessional.

Therefore, in the years ahead, our long-term care system faces a fundamental choice: either we continue on our current path, and suffer chronically high vacancy and turnover rates—worsening as the years unfold, and becoming dangerously acute in times of full employment, such as those we faced in 1999 and 2000—or we can improve these jobs to help them compete successfully against those offered by other low-wage industries. It is really a very simple choice.

Poor Job Quality

Unfortunately, the elder services industry has a long way to go to make itself attractive to workers:

- In 2005, the median hourly wage for all paraprofessional workers was \$9.56, significantly less than the median wage of \$14.15 for all U.S. workers, and less than the national median for hairdressers (BLS 2005).
- Assuming full-time, year-round employment, average annual incomes in 2005 were \$19,420 for home health aides; and \$17,710 for personal and home care aides. Yet, these figures overstate what many workers earn, since more than half of the home care workforce is employed part time. For example, a typical home health aide in New York City works 30 hours per week and earns approximately \$13,000 per year.
- As a result of low wages and part-time work, 19 percent of home care aides and 16 percent of nursing home aides return home at night to families living in poverty (US Census).
- These workers face strenuous physical demands and high job-related injury rates compared to other health and non-health related industries. For example, the nursing home aide occupation ranks second only to truck driver in the federal government's list of dangerous professions (BLS 2006).
- Paraprofessionals are three times more likely to rely on food stamps compared to other workers, and of all nursing home and home health aides who are single parents, more than 30 percent receive food stamps (GAO 2001).
- One in every four nursing home workers and more than two out of five home care workers lack health insurance coverage (Lipson and Regan 2004).

As a result, turnover rates are already high, with more than 70 percent annual turnover reported in nursing homes, and between 40 and 60 percent in home care agencies. This

discontinuity of staff leads irrevocably to discontinuity of care—how can the system ensure quality when new workers must be constantly trained, and consumers must endure an endless succession of new workers who are unfamiliar with their clinical needs and personal preferences?

And predictably, as the economy improves, we have encountered in our field work increasing reports of rising vacancy rates: Even in New York City, where high immigration provides an additional flow of labor, home care agencies are reporting heightened difficulty in recruiting new workers.

Critical Trends

And most importantly, massive changes are occurring within long-term care that will exacerbate the challenge: The demand by elders to be cared for in their homes—reinforced by the untested presumption on the part of state policy makers that home care will save money compared to nursing home care—will combine to produce two profound results:

1. **Within home settings:** Since states are changing their service delivery systems to allow consumers at nursing-home levels of care to live in non-institutional settings, home-based workers will be asked to provide not only an increasing amount of personal care and supportive services to elders, but also more high-level care for those with higher acuity needs. Yet even though these home-based jobs require greater skill, judgment and personal accountability, they tend to be less-well-paid, less-supported, and far more difficult to supervise than comparable nursing home positions, requiring workers to face these challenges in relative isolation.
2. **Within nursing homes:** Workers will be asked to provide support and assistance to residents with ever higher levels of acuity and who are on the whole considerably older and more frail than the nursing home population served, say, in the mid-1970s. To provide care to this older, higher-need population, workers need specialized training and supervision that currently are neither required nor funded within the system.

In general, an increasingly home-based system of eldercare suggests an increasingly decentralized system—and with the advent of consumer-directed care, at times an even atomized one. These one-on-one consumer/worker relationships may well yield the benefits of individualized services and supports, yet they may also bear the risks of unsupervised and unregulated services for consumers, and an unprotected job environment for workers.

We are particularly concerned that the vast majority of states that are racing toward home-based care—while welcomed by all of us as consumers—are to date unwilling to

develop a comparable workforce strategy capable of bearing the weight of this massive policy shift. While many states are beginning to realize that they must invest in their paraprofessional workforces, their efforts tend to be disparate and sporadic. {In my written testimony, I have provided a chart that lists selected state efforts to address the paraprofessional workforce infrastructure.}

Evidence Base for Effective Practice

The encouraging news is that the long-term care field is now building a growing evidence-base concerning the recruitment and retention of a high-quality paraprofessional workforce. Foundation-funded efforts—such as the Better Jobs / Better Care demonstration program, funded by The Atlantic Philanthropies and the Robert Wood Johnson Foundation—along with a range of other state and federal initiatives, have been developing a foundational knowledge base of “what works.”

From this pool of research and evaluation, and PHI’s own extensive field operations, we have developed a construct of the “Nine Essential Elements of a Quality Job for Caregivers:” Our premise is that—in order to recruit and retain a stable paraprofessional workforce—the long-term care industry must enter the labor market offering jobs that are competitively attractive compared to other industries. The nine elements are:

Φ Compensation

1. Family-sustaining **wages**;¹
2. Affordable **health insurance** and other family-supportive benefits; and
3. **Full-time hours** if desired, stable work schedules, balanced workloads, and no mandatory overtime.

Φ Opportunity

4. **Excellent training** that helps the worker develop and hone *all* skills—both technical and relational—necessary to support long-term care consumers;
5. **Participation in decision making**, acknowledging the expertise that paraprofessional workers contribute, not only to workplace organization and care planning, but also to public advocacy; and
6. **Career advancement** opportunities.

Φ Support

¹ See the “Family Economic Self-Security” standard, authored by *Wider Opportunities for Women*, at <http://www.sixstrategies.org/sixstrategies/selfsufficiencystandard.cfm>.

7. **Linkages** to both organizational and community services, as well as to public benefits, in order to resolve barriers to work;
8. **Supervisors** who set clear expectations and require accountability, and at the same time encourage, support and guide each paraprofessional worker; and
9. **Owners and managers** willing to lead a participative, on-going “quality improvement” management system—strengthening the core caregiving relationship between the long-term care consumer and the paraprofessional worker.

To accompany my presentation, I have provided the Task Force with a summary of the evidence base for each of these nine elements. This will always be a work-in-progress, as more and more researchers are now offering new evidence nearly every month. Already, however, we believe the field has developed a compelling knowledge base concerning how to recruit and retain paraprofessionals—and also, is beginning to document the link between higher quality jobs and better care outcomes.

In the interest of time, I will highlight three of the key elements—one within each of the three clusters of compensation, opportunity and support:

Compensation

Element #1: Family-sustaining wages

Wages play a critical role in determining the adequacy and stability of the paraprofessional workforce. Lower wages are associated with higher turnover and lower quality of care.

- Higher wages lead to lower rates of turnover for paraprofessional workers. For example:
 - In Michigan, a \$1 per hour wage increase in turn decreased the odds that a paraprofessional worker would leave by 15%, and for nursing home workers in particular, by 27% (Mickus et al., 2004).
 - A near doubling of wages for homecare workers in San Francisco County over a 52-month period was associated with an increase in the annual retention rate of new workers from 39% to 74%. This improved retention translated into a 57% decrease in the turnover rate for new workers (Howes, 2005).
 - A \$1.00 increase in an hourly wage of \$8.00—the average wage paid to homecare workers in the U.S. in 2004—increases the probability of a new

homecare worker remaining in her job for a year or more by 17% (Howes, 2005).

- In Wyoming, the average wage of experienced direct-support workers increased from \$7.38 to \$10.74 over a three-year period beginning in 2001. Over the same period, full-time staff turnover declined from 52% to 32%. The wage increase was funded by a 28% increase in appropriations for the adult developmental disabilities waiver to improve staff reimbursement and retention, followed by two cost-of-living increases for workers (Office of the Governor of Wyoming, 2005).
- Increases in nursing aide and LPN turnover are associated with decreases in the quality of care experienced by nursing home residents, as measured by rates of physical restraint use, catheter use, contractures, pressure ulcers, psychoactive drug use, and certification survey quality-of-care deficiencies (Castle et al., 2005a; Castle, 2007b).
- In Wisconsin, nursing homes with higher turnover have lower quality of care as measured by the average numbers of complaints, violations, and deficiencies (Hatton et al., 2003).

...And I would like to emphasize that the other compensation elements we list are equally compelling: Research findings suggest that health insurance and other benefits may be more important for retention than higher wages. And unstable hours undermine both income and the ability to secure benefits.

Opportunity:

Element #4: Excellent training

Creating an organizational culture that values training—both technical and relational—sends a message to paraprofessional workers that their development is important and that the entire facility or agency is committed to improving job performance and the work environment. In addition, improved or continuing training leads to better quality care.

- When nurse aides reported that their training prepared them well for their jobs, intent to leave and actual workforce turnover were lower (Castle et al., 2007a).
- In Pennsylvania's home health care agencies, more staff training was found to be associated with lower reported recruitment and retention problems (Leon et al., 2001).

- In a Pennsylvania best practices project, technical training of nursing facility staff in clinical protocols resulted in decreased rates of resident ADL decline and improvements in other quality indicators such as resident rate of mood decline (Goldman et al., 2004).
- Several program evaluations show that combining clinical and interpersonal education with organizational culture change initiatives and/or payment incentives can have a positive impact on workforce stability (increasing job satisfaction and reducing turnover) and on care quality (Stone et al., 2002; Konrad et al., 2004; Hollinger-Smith, 2002).

Support:

Element # 8: Excellent supervision

Supervisors have a powerful impact on the lives of paraprofessional workers. An aide's relationship with her supervisor is often the most influential factor in determining whether or not she feels valued and respected in her work. It is also key to her job satisfaction and ability to adequately care for her clients.

- After satisfaction with wages, benefits, and advancement opportunities was accounted for, the presence of good basic supervision was the most important factor affecting nursing assistants' intent to stay in their jobs. In addition, greater intent to stay was associated with higher resident satisfaction (Bishop et al., 2006).
- Nursing assistant satisfaction with supervision was significantly related to better overall job satisfaction and greater intent to stay in current position (Parsons et al., 2003).
- The job satisfaction, loyalty, and commitment of nursing assistants deepen when supervisors care about aides as people, appreciate their work, evaluate them fairly and communicate with them on important matters (Tellis-Nayak, 2007).
- The adoption of a *Coaching Supervision* approach to supervisory training at a set of nursing homes in Pennsylvania favorably impacted paraprofessional workers' perceptions of the supportiveness of their work environment, the engagement of management, and the aides' sense of empowerment. It also was associated with a reduction in intent to leave and in actual facility turnover (Brannon et al., 2006).

...as you will read in my submission, we have assembled comparable levels of evidence for all nine of the essential elements. And yet while the evidence for each is solid, I would underscore that it is unwise to characterize research findings as necessarily attributable to a single intervention. Often the studies cited are actually reporting on

multifaceted interventions that address a number of the elements at the same time—for example, Robyn Stone’s analysis of *Wellspring* in Wisconsin and Bob Konrad’s *Win-A-Step-Up* program in North Carolina. Ultimately, it is this “cocktail of interventions” that holds the most promise—indeed, all nine elements are essential to recruit and retain a high-quality paraprofessional workforce.

Thus I submit to the Task Force that the eldercare field, to a very large degree, now knows *how* to recruit and retain paraprofessional workers. Simply put, there is no mystery here: If tomorrow we paid these individuals a livable income, offered them health insurance, trained them better, supervised and supported them—*listened* to them—we would solve this unnecessary “workforce crisis” in a matter of months. Literally.

Which is not to say that we know everything, nor that we can’t deepen our knowledge of “effective practice.” Certainly more research will be useful to increase both the effectiveness and efficiencies of these practices. Indeed, more research is needed to understand the financial ramifications of these interventions—building the “business case” for workforce investment—and most importantly to understand the causal link between quality jobs and quality care outcomes.

Systems Change

Therefore, I ask the Task Force to view the challenge of recruitment and retention as not simply a question of “best practice,” but rather to understand this challenge strategically, in terms of “system change,” for the paraprofessional workforce is a critical element within a larger service delivery system. And changing any system requires not only knowledge, but also both the capacity and motivation to apply that knowledge. Therefore, I urge you to go beyond findings of “best practice,” and address the true limiting factors that face us: a system-wide absence of what I will call “implementation capacity,” and a profound absence of political motivation.

Absence of Implementation Capacity

First, the absence of capacity: while we believe the field has a strong and growing knowledge base, the absence of a capacity to deliver and implement this knowledge is a fundamental weakness in our long-term care system. Nationwide there is a dearth of trainers who know how to deliver adult-centered learning; limited numbers of nurse supervisors who know how to guide and support paraprofessional workers; and, finally, an absence of administrators who know how to create a work environment that is truly person-centered—for both consumers and workers. The tools exist; an adequate supply of craftsmen does not.

This is, in essence, the “workforce crisis behind the workforce crisis.” Currently, the long-term care industry has neither the infrastructure nor the human capital in place to train and support a rapidly growing paraprofessional workforce. Therefore, for example, when your Task Force addresses the nursing crisis, we recommend that it ask not only how to increase the gerontological expertise of healthcare professionals, but also how to attract and train nurses who know how to supervise frontline staff—which, by the way, could begin simply by informing them that, indeed, a large part of their responsibility in the nursing home or home care agency will be supervision.

Similarly, our experience in state after state has demonstrated to us that our country lacks a system for training workforce trainers—each state has an admixture of fractured and ad hoc training delivery systems that are inadequate and inefficient. Many of the individuals who deliver training to paraprofessionals arrive at their jobs pretty much by chance. There is no “school” for trainers of paraprofessional workers—a troubling thought, given that over the next ten years we must train nearly one million new paraprofessionals.

Absence of Motivation

Finally, at the root of the problem lies the absence of motivation. The facts are these: elder consumers consistently report that paraprofessional workers are centrally important to their care satisfaction; seven out of ten elder services staff are paraprofessionals; paraprofessional already number in the millions; and the demand for paraprofessionals is growing at a rate faster than any other elder care occupation. And yet, the unwillingness of policy makers to address the needs of the paraprofessional workforce—a problem for which there are known solutions—suggests an absence of motivation much more than an absence of knowledge.

This absence of motivation, or lack of political will, might have many causes. As I’ve noted, policy makers may falsely believe that there still exists an endless supply of women willing to work for low pay and few benefits. Or it might be due to the fact that 70 percent of long-term care is paid for by third-party government programs, and we know that those third-party payors are not only under great pressure to control costs, but that structurally they also respond very slowly, if at all, to market forces. Personally, I believe a central cause is that policy makers are usually of a different race, class and gender from the low-income workers who typically provide this care, and therefore these workers are, simply, invisible.

Whatever the cause, the problem of recruiting and retaining an adequate, stable, and competent paraprofessional workforce is not a complex one. Yet politically it is, admittedly, a very difficult one—one that will require vision, a new national framework of workforce indicators and employer expectations, and substantial public and private resources.

For this is the historic opportunity that I believe your Task Force holds. The Institute of Medicine has enormous influence among policy makers as a finder of facts: your willingness to look squarely at the facts of the eldercare workforce—simply to acknowledge in your report the out-sized and central role of paraprofessional workers—will be of incalculable benefit not only to these workers, but to the millions of elders whom they serve.

Finally, we submit PHI's recommendations, which are three-fold, for consideration by your Task Force:

I. Knowledge Base

Encourage research and demonstrations that explore:

- a. The "business case" for "high investment—high retention" interventions.
- b. Causation between quality paraprofessional jobs and quality of care outcomes.
- c. Refinement of research and evaluation metrics needed for measuring improvements in workforce outcomes and quality of care.

II. Implementation Capacity

- a. Call for a public investment in the training of those who shape the quality of paraprofessional jobs:
 - i. Trainers of paraprofessional workers.
 - ii. Supervisors—nurses, social workers, staff coordinators.
 - iii. Administrators—in how to create person-center agencies that support both consumers and workers.
- b. Call for investments in state-based training systems:
 - i. Funding for efficient, comprehensive entry-level training programs that adequately prepare paraprofessionals for both home- and facility-based care settings.
 - ii. Support for portable credentials that create career ladders *within* paraprofessional care services, based on an apprenticeship model.
 - iii. Support for statewide requirements and core competencies that rationalize and integrate paraprofessional occupational titles and job descriptions.

III. Motivation

- a. Acknowledge in your final IOM Task Force Report the full value and importance of the paraprofessional workforce for elder services.

- b. Given the vital link between quality of care and the quality of jobs, support the development of national job quality/workforce indicators for paraprofessional occupations—such as turnover rates, staffing levels, wages, and benefits—that can be used by public policymakers, as well as industry leaders, to create incentives for adequate and safe staffing, better education and training for paraprofessionals, and greater workforce stability.
- c. Call for a full and realistic public investment in the long-term care workforce, adequate to support the “Nine Elements of a Quality Job.”

...I thank you for this opportunity, and welcome your questions.

Φ Φ Φ Φ Φ

PHI, www.PHInational.org, works to improve the lives of people who need home care and residential care—by improving the lives of the workers who provide that care. Our goal is to ensure caring, stable relationships between consumers and workers, so that both may live with dignity, respect and independence.

With a staff of 44, PHI works to strengthen our nation’s long-term care direct-care workforce—home health aides, certified nurse aides, and personal care attendants—developing recruitment, training, supervision, and client-centered caregiving practices; and effective public policy. PHI’s premise is that creating quality jobs for direct-care workers is essential to providing high-quality, cost-effective services to long-term care consumers: *Quality Care through Quality Jobs*.

In New York City, PHI sponsors “Pathways to Independence,” a service and training network that includes **Cooperative Home Care Associates**, a 1000-worker, employee-owned home care agency in the South Bronx; the **SKILL Center**, which trains more than 500 inner-city women annually to become home health aides; and **Independence Care System**, a nonprofit managed long-term care program, currently serving more than 1000 members living with physical disabilities. PHI’s Pathways system totals over \$80 million in annual services.

Nationally, through its technical assistance *practice*, PHI helps providers across the long-term care spectrum adapt field-tested practices to fit their workforce and consumer needs. A recognized leader in long-term care workforce *policy*, PHI also works with federal agencies such as the **Centers for Medicare and Medicaid Services** and the **U.S. Department of Labor** to help create a more stable direct-care workforce. PHI’s state-based policy and practice experts work with providers, consumers, and worker/labor organizations in over a dozen states, with field staff in New York, New England, Pennsylvania and Michigan.

PHI also staffs the **National Clearinghouse on the Direct Care Workforce**, www.directcareclearinghouse.org, a national “on-line library” of news, research, best practices, and other information to solve the direct-care staffing crisis in long-term care. The Clearinghouse currently receives more than 30,000 distinct web visits each month.

Finally, our expertise in integrating industry practice and public policy has made PHI a valued partner to both industry stakeholders and national foundations. For example, in affiliation with the *Institute for the Future of Aging Services*, PHI drew upon this dual expertise in its role as designated technical assistance provider for the national **Better Jobs / Better Care** (www.bjbc.org), a four-year research and demonstration project funded by the Robert Wood Johnson Foundation and The Atlantic Philanthropies.



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U.S. Department of Health and Human Services

Project Home - Loretto System, Syracuse, New York

U.S. Department of Labor

SEIU Local #775 (Washington State)

National Institute on Disability and Rehabilitation Research



Selected State Initiatives to Improve the Long-Term Care Paraprofessional Workforce

Initiatives	State Efforts
Provide Adequate Funding to Support Worker Wages and Benefits	<ul style="list-style-type: none"> ❖ Reimbursement Analysis (VT, PA, ME) ❖ Labor Market Analysis (WY, LA, VA, RI, VT) ❖ State/Local Efforts to Improve Wages and Benefits <ul style="list-style-type: none"> ▪ Worker Wage Pass Throughs – (DC, LA, WY) ▪ Living Wage Laws – (MD, NYC, SF) ▪ Collective Bargaining – (CA, MI, WA, OR) ▪ State Minimum Wage Indexed for Inflation – (WA, OR, VT, CO, OH, AZ, FL, MO, MT, NV) ▪ Rate Enhancements – (RI, TX) ▪ Wage Floor – (DC, LA, ME) ▪ Health Benefits – (CA, MT, NY, WA)
Include Workforce Standards in Quality Assurance Efforts	<ul style="list-style-type: none"> ❖ Contracting/procurement standards (PA, WI) ❖ Incentive awards (NC, VT, IA, RI, TX)
Increase Training Standards	<ul style="list-style-type: none"> ❖ Core competencies (DC, OR, PA, VT, WA, NY) ❖ Universal, core curricula (PA) ❖ Apprenticeship (IN, KS, MI, PA, WA)
Create Supportive System Infrastructure	<ul style="list-style-type: none"> ❖ Comprehensive registries (MA/CT/NJ, WA, MI) ❖ Public authorities (CA, IA, MA, MI, OR, WA) ❖ Worker associations (ME, NC, VT, PA)

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ELEMENTS OF A QUALITY JOB FOR CAREGIVERS

Key Research Findings

June 2007



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THE NINE ESSENTIAL ELEMENTS OF A QUALITY JOB

To ensure that all paraprofessional workers are able to provide the highest-*quality care* to all long-term care consumers, the Paraprofessional Healthcare Institute (PHI) advocates for nine essential elements of a *quality job*:

Φ Compensation

1. Family-sustaining **wages**;²
2. Affordable **health insurance** and other family-supportive benefits; and
3. **Full-time hours** if desired, stable work schedules, balanced workloads, and no mandatory overtime.

Φ Opportunity

4. **Excellent training** that helps the worker develop and hone *all* skills—both technical and relational—necessary to support long-term care consumers;
5. **Participation in decision making**, acknowledging the expertise that paraprofessional workers contribute, not only to workplace organization and care planning, but also to public advocacy; and
6. **Career advancement** opportunities.

Φ Support

7. **Linkages** to both organizational and community services, as well as to public benefits, in order to resolve barriers to work;
8. **Supervisors** who set clear expectations and require accountability, and at the same time encourage, support and guide each paraprofessional worker; and
9. **Owners and managers** willing to lead a participative, on-going “quality improvement” management system—strengthening the core caregiving relationship between the long-term care consumer and the paraprofessional worker.

² See the “Family Economic Self-Security” standard, authored by *Wider Opportunities for Women*, at <http://www.sixstrategies.org/sixstrategies/selfsufficiencystandard.cfm>.

1. Family-sustaining wages

Wages play a critical role in determining the adequacy and stability of the paraprofessional workforce. Lower wages are associated with higher turnover and lower quality of care.

- Higher wages lead to lower rates of turnover for paraprofessional workers. For example:
 - In Michigan, a \$1 per hour wage increase in turn reduced the odds that a paraprofessional worker would leave by 15%, and for nursing home workers, in particular, by 27% (Mikus et al., 2004).
 - A near doubling of wages for homecare workers in San Francisco County over a 52-month period was associated with an increase in the annual retention rate of new workers from 39% to 74%. This improved retention translated into a 57% decrease in the turnover rate for new workers (Howes, 2005).
 - A \$1.00 increase in an hourly wage of \$8.00—the average wage paid to homecare workers in the U.S. in 2004—increases the probability of a new homecare worker remaining in her job for a year or more by 17% (Howes, 2005).
 - In Wyoming, the average wage of experienced direct-support workers increased from \$7.38 to \$10.74 over a three-year period beginning in 2001. Over the same period, full-time staff turnover declined from 52% to 32%. The wage increase was funded by a 28% increase in appropriations for the adult developmental disabilities waiver to improve staff reimbursement and retention, followed by two cost-of-living increases for workers (Office of the Governor of Wyoming, 2005).
- Increases in nursing aide and LPN turnover are associated with decreases in the quality of care experienced by nursing home residents, as measured by rates of physical restraint use, catheter use, contractures, pressure ulcers, psychoactive drug use, and certification survey quality-of-care deficiencies (Castle et al., 2005a; Castle, 2007b).
- In Wisconsin, nursing homes with higher turnover have lower quality of care as measured by the average numbers of complaints, violations, and deficiencies (Hatton et al., 2003).

2. Affordable health insurance and other family-supportive benefits

Many paraprofessional workers do not have access to affordable health insurance and/or other family supportive benefits. This is particularly true for paraprofessional workers who work less than full-time at their frontline jobs, either by choice or because of employer job design.

Researchers have found a strong, positive link between health insurance benefits and worker retention. Employer coverage rates for paraprofessional workers have been declining, with less than half of nursing home aides and only 23 percent of home care aides covered by employer-provided health insurance. Several recent studies show that, for paraprofessional workers, the provision of health insurance may play a stronger role than wages alone in promoting retention and recruitment.

In addition to health insurance, other family-supportive benefits can play important roles in promoting job retention and family well-being for paraprofessional workers, who, because they are low-income, have the fewest financial resources to sustain themselves during unpaid time off. These other benefits include: paid sick leave, vacation benefits, paid parental or family leave, and retirement benefits. Of full-time paraprofessional workers, 55% of personal and home care aides and 35% of nursing, home health and psychiatric aides were not offered sick days in 2006 (IWPR, 2007).

- **Health insurance may be more important than wages in reducing turnover or increasing the supply of paraprofessional workers and hours worked (Rodin, 2006).**
- **Frontline healthcare workers enrolled in employer health insurance plans have more than twice the tenure of those who do not have employer coverage (Duffy, 2004).**
- **Providing health insurance increased the retention rate of homecare workers in San Francisco County by 21% (Howes, 2005).**
- **In predicting staff turnover in Community Care Facilities for people with developmental disabilities in California, wages were less important than paid holidays and vacation (Wheeler et al., 2002).**
- **An analysis of the most recent survey findings of the National Study of the Changing Workforce by the Families and Work Institute concludes that more generous fringe benefits have more favorable effects on both job satisfaction and retention among low-wage/income employees than mid- and high-wage/income employees. The survey was nationally representative and included 3,504 workers and 222 small business owners (Bond et al., 2006).**

3. Full-time hours, stable schedules & balanced workloads

The staffing and scheduling practices of long-term care employers profoundly impact paraprofessional workers' predictability of hours, income stability, and ability to achieve full-time work, if desired. They also impact the reasonableness of their workloads, the consistency of their assignments, and ultimately their ability to provide high-quality care.

The standard staffing model in the home care industry assumes: part-time employees or per diem workers, minimum wage hourly compensation, and no benefits. As a result of this irregular, part-time structure, many home and personal care workers have difficulty piecing together 35-hour work weeks. Furthermore, workers typically bear the entire risk of lost hours and income due to changes in client status resulting from events such as hospitalization, death, or client refusal or reduction of care.

In the nursing home industry, aides are often assigned to more residents than they can properly care for ("short staffing") and scheduling typically relies on rotating assignments as opposed to consistent or permanent assignments. When workloads are unbalanced and unrealistic, care tends to be delivered in a hurried fashion and residents' needs may go unmet. When care assignments lack consistency, constant change undermines care quality and satisfaction for residents as well as job satisfaction for workers. In sum, inadequate staffing compromises the very relationships between aides and care recipients that are crucial to ensuring quality care (Bowers et al., 2000). It has detrimental effects on the physical and psychological experience of residents, and, for workers, it increases staff injuries and illness, and creates psychological distress for aides who feel that they are delivering inadequate care.

Examples of staffing and scheduling practices that have been shown to improve the stability of hours and income, and to achieve balanced workloads include:

- *Consistent scheduling*
 - At a *skilled nursing facility* in New York, Schoellkopf Health Center, consistent assignment has had a positive impact on resident care and staff satisfaction, contributing to more successful recruitment and retention, a 40% decrease in pressure ulcers, an 83% decrease in formal resident and family complaints, and a 50% decrease in staff injuries (National Clearinghouse on the Direct Care Workforce).

- At a *home care agency* in New Hampshire, Quality Care Partners (QCP), employees choose between one of four scheduling options (full-time work; part-time days, evenings and overnights; full-time evenings; full-time overnights). This system allows QCP to deliver steady and reliable care to its clients, with clients receiving care from the same caregiver or care team nearly 90% of the time. It has also benefited workers who now have a regular day off, enabling them to plan for personal appointments (National Clearinghouse on the Direct Care Workforce).
- ***Steady Hours and Income***
 - **Guaranteed Hours Program:** At Cooperative Health Care Associates (CHCA) in the Bronx, aides who have been with the agency at least three years are paid for at least 30 hours a week, even if they work less than this threshold amount, if they accept case assignments on alternating weekends and any substitute assignments offered. This arrangement guarantees senior aides reliable hours and a stable income, and allows the agency to cover more difficult-to-fill assignments (PHI, 2007).
 - **Steady Work Fund:** To address the problem of fluctuations in hours in home care work and the resulting financial instability for workers, Quality Care Partners (QCP) in New Hampshire instituted a Steady Work Fund. This voluntary benefit provides that, when an employee loses more than 20% of her weekly hours due to a change in client status, the employee receives an amount of pay per week, up to 80% of the hours previously worked, to reduce her lost hours and income. The fund is financed by required employee contributions of one earned-time hour per month, with part-time employees making a pro-rata contribution.
- ***Safe and adequate staffing practices***

In nursing homes, higher staffing hours per resident have been found to be consistently and significantly associated with overall quality of care as measured by a wide range of indicators (IOM, 2003; Schnelle et al., 2004; Castle et al., 2007b). Better staffing ratios are also associated with lower worker injury rates (Trinkoff et al., 2005) and fewer litigation actions (Johnson et al., 2004). Restricting mandatory overtime has been found to reduce hospital nurse errors and poor quality care (Rogers et al., 2004).

4. Excellent training

Creating an organizational culture that values training—both technical and relational—sends a message to paraprofessional workers that their development is important and that the entire facility or agency is committed to improving job performance and the work environment. In addition, improved or continuing training leads to better quality care.

- When nurse aides reported that their training prepared them well for their jobs, intent to leave and actual workforce turnover were lower (Castle et al., 2007a).
- In Pennsylvania's home health care agencies, more staff training was found to be associated with lower reported recruitment and retention problems (Leon et al., 2001).
- In a Pennsylvania best practices project, technical training of nursing facility staff in clinical protocols resulted in decreased rates of resident ADL decline and improvements in other quality indicators such as resident rate of mood decline (Goldman et al., 2004).
- Several program evaluations show that combining clinical and interpersonal education with organizational culture change initiatives and/or payment incentives can have a positive impact on workforce stability (increasing job satisfaction and reducing turnover) and on care quality (Stone et al., 2002; Konrad et al., 2004; Hollinger-Smith, 2002).

5. Participation in decision making

When their skills and expertise are not acknowledged through policy and practice, paraprofessional workers tend to feel devalued and their job commitment is undermined. By creating a culture that promotes workers' participation in workplace organization and care planning, employers will benefit not only from staff expertise in terms of better care quality, but also economically through increased workforce stability.

- Nurse aide satisfaction with involvement in decision making and professional growth was significantly related to better overall job satisfaction and greater intent to stay in nursing home jobs (Parsons et al., 2003).
- Greater paraprofessional worker involvement in decision making and care planning is associated with lower retention problems and job vacancy, and decreased turnover (Leon et al., 2001; Banaszak-Holl et al., 1996).
- The amount of influence nurse aides have in resident care decisions has a significant, positive relationship to the social engagement of residents (Barry et al., 2005).
- When paraprofessional workers have positive views of their organizational culture—experiencing high morale, teamwork, and participation in decision making—they report higher levels of job satisfaction and organizational commitment, and residents report greater satisfaction (Sikorska-Simmons, 2005 and 2006).

6. Career advancement opportunities

When opportunities for career advancement are nonexistent, paraprofessional jobs essentially become “dead end” jobs. Promotional opportunities, whether due to tenure, experience, and/or advanced skill acquisition, serve to increase worker job satisfaction and commitment to the facility or agency.

- Nurse aide satisfaction with advancement and professional opportunities was significantly related to better overall job satisfaction and greater intent to stay in current position (Bishop et al., 2006; Parsons et al., 2003). Furthermore, when nursing assistants’ commitment to their jobs was high, residents were found to be more satisfied with their relationships to nursing staff (Bishop et al., 2006).
- Using a peer mentoring program to create a rung in the Certified Nurse Assistant career ladder can be beneficial to both mentors and mentees in terms of skill-building. Furthermore, it can have a positive impact on retention (Richardson et al., 2002).

7. Linkages to supports

Low wages mean that workers are not only faced with the normal challenges of life, but with the additional challenges that come with low family income and even poverty. Many nursing homes and home care agencies are recognizing these challenges, and providing flexibility and support for employees in times of trouble, including emergency loan programs and adjustments to schedule (“workplace flexibility”). Employer and state initiatives can also help low-income workers better afford the two most substantial costs of employment: transportation³ and child care.

Finally, access to public benefits (e.g., tax credits, Food Stamps, child care assistance, public health insurance, and housing subsidies), tuition assistance for further training and continuing education, and even home computer loan programs can improve paraprofessional workers’ productivity and reliability on the job as well as their children’s well-being.

- In long-term care facilities where an individual was trained as a Retention Specialist—charged with serving as a “retention advocate” and diagnosing and addressing low job satisfaction and resulting turnover—the turnover rate decreased from 21% to 11% in a year. In facilities without a retention specialist, turnover remained about the same. The Retention Specialists employed strategies such as career ladders, mentoring, leadership training, work/family issues, management strategies and communication programs. They also provided information and supports concerning financial well-being, healthy lifestyles, parenting, transportation and childcare as well as linkages to human service organizations in their regions such as cooperative extension education centers, health departments and daycare councils (Pillemer et al., 2006).
- The availability of child care assistance is associated with better work outcomes for low-income parents and higher job retention (Matthews, 2005; Boushey, 2004). Further, the lack of reliable, affordable child care has been shown to lower retention for low-income mothers (Lee, 2004), negatively affecting employers by leading to tardiness, absenteeism, and terminations (Matthews, 2005).
- Participation in key work support programs can increase family income and improve job retention (Patel et al., 2002), and positively affect child well-being (Huston et al, 2003).

³ In many areas of the country, the high cost and inaccessibility of public transportation make it difficult for paraprofessional staff to apply for jobs and remain on the job, once hired. Even for workers who have their own vehicles, parking fees, fuel, and maintenance expenses may be difficult to afford.

8. Excellent supervision

Supervisors have a powerful impact on the lives of paraprofessional workers. An aide's relationship with her supervisor is often the most influential factor in determining whether or not she feels valued and respected in her work. It is also key to her job satisfaction and ability to adequately care for her clients. Supervisory relationships are at the heart of the problem of turnover, since feeling valued and respected is one of the biggest factors affecting the decision to stay on the job or quit.

In many long-term care settings, supervision has been a euphemism for a disciplinary approach that is often punitive in orientation. Most nurses who are supervisors have received little or no training in supervision, often interacting with aides only when problems rise to levels requiring disciplinary action. But, when aides and supervisors have an on-going relationship and a way to talk through problems, issues can be addressed in other ways that support retention and create mutual commitment.

In particular, *Coaching Supervision* is an approach to supervisory training that emphasizes the supervisor's role in working with frontline employees to develop problem-solving skills (Murphey, 2005). This approach teaches the importance of supervisors who set clear expectations and require accountability, and at the same time encourage, support, and guide each paraprofessional worker.

- **After satisfaction with wages, benefits, and advancement opportunities was accounted for, the presence of good basic supervision was the most important factor affecting nursing assistants' intent to stay in their jobs. In addition, greater intent to stay was associated with higher resident satisfaction (Bishop et al., 2006).**
- **Nursing assistant satisfaction with supervision was significantly related to better overall job satisfaction and greater intent to stay in current position (Parsons et al., 2003).**
- **The job satisfaction, loyalty, and commitment of nursing assistants deepen when supervisors care about aides as people, appreciate their work, evaluate them fairly and communicate with them on important matters (Tellis-Nayak, 2007).**
- **The adoption of a *Coaching Supervision* approach to supervisory training at a set of nursing homes in Pennsylvania favorably impacted paraprofessional workers' perceptions of the supportiveness of their work environment, the engagement of management, and the aides' sense of empowerment. It also was associated with a reduction in intent to leave and in actual facility turnover (Brannon et al., 2006).**

9. “Quality improvement” management system

Changing from a high turnover to a low turnover organization requires a fundamental shift in management assumptions and practices: from a distrust of workers to a belief in them, and from a “command and control” approach to a “serve and support” way of managing. Shifting to a paradigm where workers feel supported, treated fairly, valued, respected, and empowered is essential in order to strengthen the core caregiving relationship between the long-term care consumer and paraprofessional worker.

- Management and work environment were associated with nurse assistant satisfaction, loyalty and commitment. Nurse assistant satisfaction and engagement were higher when the style of management was participative (“managers listened to and cared for their employees and helped out in times of stress”), and when there was ongoing quality improvement (“managers kept the workplace safe, did not stint on tools and supplies, and trained workers well to deal with difficult residents and families”) (Tellis-Nayak, 2007).
- How nurse assistants rated the quality of management and of their work environment significantly correlated with the way residents’ family members rated the residents’ quality of life, care, and services provided (Tellis-Nayak, 2007).
- Higher managerial turnover in nursing homes was found to be associated with facilities that have high nurse aide turnover rates (Castle, 2005b).

Bibliography

- Anderson, R., Corazzini, K., and McDaniel, R. (2004). "Complexity Science and the Dynamics of Climate and Communication: Reducing Nursing Home Turnover," *The Gerontologist*, 44(3): 378-388.
- Banaszak-Holl, J. and Hines, M. (1996). "Factors Associated with Nursing Home Staff Turnover," *The Gerontologist*, 36(4): 512-517.
- Barry, T., Brannon, D., Mor, V. (2005). "Nurse Aide Empowerment Strategies and Staff Stability: Effects on Nursing Home Resident Outcomes," *The Gerontologist*, 45(3): 309-317.
- Bishop, C., Weinberg, D.B., Dodson, L., Gittel, J.H., Leutz, W., Dossa, A., Pfefferle, S., Zincavage, R., and Morley, M. (2006). *Nursing Home Workers' Job Commitment: Effect of Organizational and Individual Factors and Impact on Resident Well-being*. DRAFT. Better Jobs Better Care Research Project.
- Bond, J.T. and Galinsky, E. (2006). *How Can Employers Increase the Productivity and Retention of Entry-Level, Hourly Employees?* Research Brief No. 2, Washington, DC: Families and Work Institute.
- Boushey, H. (2004). *Staying Employed After Welfare: Work Supports and Job Quality Vital to Employment Tenure and Job Growth*. Briefing Paper. Washington, DC: Economic Policy Institute.
- Bowers, B., Esmond, S., and Jacobson, N. (2000). "The Relationship between Staffing and Quality in Long-Term Care Facilities: Exploring the Views of Nurse Aides," *Journal of Nursing Care Quality*, 14(4): 55-64.
- Brannon, D. and Barry, T. (2006). *Addendum to Final Report Evaluating the Supervisor Training Project*. (See: Brannon, D., Barry, T. (2006). *A demonstration project to determine the effect of supervisory training of line supervisors on the retention of paraprofessional staff in long-term care facilities*. Lancaster, PA: Lancaster County Workforce Investment Board.
- Castle, N. and Engberg, J. (2005a). "Staff Turnover and Quality of Care in Nursing Homes. *Medical Care*, 43(6): 616-626.
- Castle, N. (2005b). "Turnover Begets Turnover," *The Gerontologist*, 45(2):186-195.
- Castle, N., Engberg, J., Anderson, R., and Men, A. (2007a). "Job Satisfaction of Nurse Aides in Nursing Homes: Intent to Leave and Turnover," *The Gerontologist*, 47(2): 193-204.
- Castle, N. and Engberg, J. (2007b). "The Influence of Staffing Characteristics on Quality of Care in Nursing Homes," *Health Services Research*. In Press.
- Duffy, N. (2004). *Keeping Workers Covered: Employer Provided Health Insurance Benefits in the Developmental Disabilities Field*. JFK Jr. Institute for Worker Education. City University of New York.
- Goldman, B., Balgobin, S., Bish, R., Lee, R., McCue, S., Morrison, M.H., and Nonemaker, S. (2004). "Nurse Educators are Key to a Best Practices Implementation Program," *Geriatric Nursing*, 25: 171-174.
- Hatton, E. and Dresser, L. (2003) *Caring About Caregivers: Reducing Turnover of Frontline Health Care Workers in South Central Wisconsin*. Jobs With a Future Partnerships. The Center on Wisconsin Strategy.

- Hollinger-Smith, L. (2002). *Evaluation of the LEAP replication study*. Available at: http://www.directcareclearinghouse.org/download/eval_LEAP.doc
- Howes, C. (2005). "Living Wages and Retention of Homecare Workers in San Francisco," *Industrial Relations*, 44(1): 139-163.
- Huston, A., Miller, C., Richburg-Hayes, L., Duncan, G., Eldred, C., Weisner, T.S., Lowe, E., McLoyd, V.C., Crosby, D.A., Ripke, M.N., and Redcross, C. (2003) *New Hope for Families and Children: Five-Year Results of a Program to Reduce Poverty and Reform Welfare, Overview*. New York, NY: Manpower Demonstration Research Corporation.
- Institute for Women's Policy Research (2007) *Women and Paid Sick Days: Crucial for Family Well-Being*. Fact Sheet IWPR #B254a. Washington, DC: Institute for Women's Policy Research.
- Institute on Medicine. (2003) *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, DC: National Academy Press.
- Johnson, C.E., Dobalian, A., Burkhard, J., Hedgecock, D.K., and Harman, J. (2004) "Predicting Lawsuits against Nursing Homes in the United States," *Health Services Research*, 39 (6 Pt 1): 1713-1732.
- Konrad, T.R. and Morgan, J.C. (2004). *Workforce Improvement for Nursing Assistants: Supporting Training, Education, and Payment for Upgrading Performance*. North Carolina Department of Health and Human Services. North Carolina Institute on Aging.
- Lee, S. (2004) *Women's Work Supports, Job Retention, and Job Mobility: Child Care and Employer-Provided Health Insurance Help Women Stay on Jobs*. Research-in-Brief C#359, Washington, DC: Institute for Women's Policy Research.
- Leon, J., Marainen, J., and Marcotte, J. (2001). *Pennsylvania's Frontline Workers in Long Term Care: the Provider Organization Perspective*. A Report to the Intergovernmental Council on Long Term Care. Polisher Research Institute at the Philadelphia Geriatric Center.
- Matthews, H. (2005) *Child Care Assistance Helps Families Work: A Review of the Effects of Subsidy Receipt on Employment*. Washington, DC: Center for Law and Social Policy.
- Mickus, M., Luz, Clare C., and Hogan, A. (2004). *Voices from the Front: Recruitment and Retention of Paraprofessional Workers in Long Term Care Across Michigan*. Michigan State University.
- Murphey, E. with S. Joffe (2005). *Creating a Culture of Retention: A Coaching Approach to Paraprofessional Supervision*, PHI Technical Series Publication. Bronx, NY: Paraprofessional Healthcare Institute. Available at: <http://www.paraprofessional.org/publications/PHICoaching.pdf>.
- National Clearinghouse on the Direct Care Workforce. Best Practices--Schoellkopf Health Center: Consistent scheduling. Available at: http://www.directcareclearinghouse.org/practices/r_pp_det.jsp?res_id=50310; Quality Care Partners (QCP): Consistent Scheduling System. Available at: http://www.directcareclearinghouse.org/practices/r_pp_det.jsp?res_id=150910.
- Office of the Governor of Wyoming (2005) "Wyoming Developmental Disabilities Direct Support Professionals Wages and Retention." Release on April 1, 2005. Cheyenne, WY: Office of Governor Dave Freudenthal, State Capitol.

- Paraprofessional Healthcare Institute (2007) *The Guaranteed Hours Program: Ensuring stable, full-time direct-care employment*. Workforce Strategies No. 4. Bronx, NY: Paraprofessional Healthcare Institute.
- Parsons, S.K., Simmons, W.P., Penn, K., and Furlough, M. (2003). "Determinants of Satisfaction and Turnover among Nursing Assistants," *Journal of Gerontological Nursing*, 29(3): 51-58.
- Patel, N., Greenberg, M., Savner, S., and Turetsky, V. (2002) *Making Ends Meet: Six Programs That Help Working Families and Employers. A Guide for Business Leaders and Policymakers*. Washington, DC: Center for Law and Social Policy.
- Pillemer, K. and Meador, R. (2006). *The Retention Specialist Project*. A Better Jobs Better Care Research Study. Available at: http://www.bjbc.org/content/docs/ExecSummary_Cornell_FINALCOLOR8-06.pdf
- Richardson, B. and Graf, N.M. (2002). *Evaluation of the Certified Nurse Assistant Mentor Program*. Program Evaluation Summery. Des Moines, IA: Iowa Caregivers Association.
- Rodin, H.A. (2006) *Increasing the supply of certified nursing assistants*. Ph.D. Dissertation. Minneapolis, MN: School of Public Health, University of Minnesota.
- Rogers, A.E., Hwang, W., Scott, L.D., Aiken, L.H., Dinges, D.F. (2004). "The Working Hours of Hospital Staff Nurses and Patient Safety," *Health Affairs* 23(4): 202-212.
- Schnelle, J.F., Simmons, S.F., Harrington, C., Cadogan, M., Garcia, E., and Bates-Jensen, B.M. (2004) "Relationship of Nursing Home Staffing to Quality of Care," *Health Services Research*, 39(2): 225-250.
- Sikorska-Simmons, E. (2005). "Predictors of Organizational Commitment among Staff in Assisted Living," *The Gerontologist*, 45(2): 196-205.
- Sikorska-Simmons, E. (2006). "Linking Resident Satisfaction to Staff Perceptions of the Work Environment in Assisted Living: A Multilevel Analysis," *The Gerontologist*, 46(5): 590-598.
- Stone, R.I., Reinhard, S.C., Bowers, B., Zimmerman, D., Phillips, C.D., Hawes, C., Fielding, J.A., and Jacobson, N. (2002). *Evaluation of the Wellspring Model for Improving Nursing Home Quality*. Institute for the Future of Aging Services and The Commonwealth Fund.
- Tellis-Nayak, V. (2007). "A Person-Centered Workplace: The Foundation for Person-Centered Caregiving in Long-Term Care," *Journal of American Medical Directors Association*, 8(1): 46-54.
- Trinkoff, A.M. (2005). "Staffing and Worker Injury in Nursing Homes," *American Journal of Public Health*, 95(7): 1220-1225.
- Wheeler, K., Kurtz, D., and Smith, T. (2002) *Evaluation of the Impact of WIC Section 4681.4 (Rate Increase) on Staff Turnover for Direct Support Workers in Licensed Community Care Facilities for People with Developmental Disabilities, 1998-2000*. Submitted to California Department of Developmental Services by University of Southern California, University Affiliated Program.