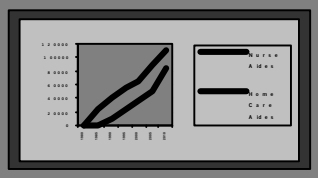
A REPORT TO THE

PENNSYLVANIA INTRA-GOVERNMENTAL COUNCIL ON LONG TERM CARE



PENNSYLVANIA'S FRONTLINE

WORKERS IN LONG TERM CARE

THE PROVIDER ORGANIZATION PERSPECTIVE

February 2001

Prepared by
Polisher Research Institute at the Philadelphia Geriatric Center
Jenkintown, PA

PENNSYLVANIA INTRA-GOVERNMENTAL COUNCIL
ON LONG TERM CARE

Pennsylvania's Frontline Workers in Long Term Care

THE PROVIDER ORGANIZATION PERSPECTIVE

Joel Leon, Ph.D., Principal Investigator
Jonas Marainen, B.A.
John Marcotte, Ph.D.

This study was supported in part by a grant to the Pennsylvania Department of Aging, grant No. 90-AM-2302, from the Administration on Aging, Department of Health and Human Services. Grantees undertaking projects under government sponsorship are encouraged to express fully their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official Administration on Aging policy

© 2001 Polisher Research Institute at the Philadelphia Geriatric Center
The Pavilion – Suite 427
261 Old York Road
P.O. Box 728
Jenkintown, PA 19046-7128
Phone 215-780-1000 • Fax 215-780-1029

Table of Content

List of Figures ii
List of Tables ii
List of Appendix Tables iii

PREFACE v

EXECUTIVE SUMMARY vii

SECTION 1 INTRODUCTION
Study Purpose and Auspices 1
Pennsylvania's Long Term Care Workforce 1
Causes Behind the Shortages 2
Study Goals and Objectives 3
Organization of the Report 4

SECTION 2 METHODS
Pennsylvania Long Term Care Providers 5
Technical Advisory Panel 6
Construction and Selection of the Sample 6
Development of the Survey Instrument 7
Data Collection Effort 7
Response Rates Sample Weights 7
Representativeness of the Resulting Sample 7
Accuracy of the Data 8

SECTION 3 REVIEW OF RELATED MATERIALS
Findings from the Literature 11
Extent/Dimensions of the Problem 12
Underlying Causes of the Recruitment and Retention Problems 12
Problems Associated with Worker Shortages, Recruitment Difficulties, and High Levels Of Turnover 15
Empirical Results Regarding Provider Interventions 16
State Efforts to Address the Recruitment and Retention of Frontline Workers 18

SECTION 4 FINDINGS
Findings from the Survey of Administrators 23
Introduction 23
The Pennsylvania Frontline Workforce 23
- Full and Part Time Composition 24
- Job Tenure 24
- Entrance Requirements 24
- Formal Training 24
- Wages 25
- Benefits 26

Welfare to Work Program 27
Act169 Criminal Background Check 27
Changes in Job Performance of New Workers 29
Reported Degree of Worker Shortages 30
Reported Recruitment and Retention Problems 34
Consequences of Staff Shortages on
- Provider Operations 36
- Access to Services 37
- Quality of Care 38

Training Costs and Cost of Turnover 40
Recurring Annual Costs of Training 40
Strategies for Handling Recruitment and Retention Difficulties 43
Broader Barriers to Recruitment and Retention 44
- Effect of County Unemployment 44
- Effect of County Age Structure 45

Effects of Wages 46
- Wage Effects on Recruitment 46
- Wage Effects on Retention 47

Effects of Employee Benefits 48
Training, Staff Development and Job Re-structuring 49
- Effects of Training 49
- Effects of Other Staff Development Activities 50
- Effects of Culture Change 50

Targeted Recruitment Efforts 52
Other Community Issues 53

SECTION 5 RECOMMENDATIONS
Guiding Principles 55
Policy Recommendations 56

BIBLIOGRAPHY 61

APPENDIX A
Detailed Tables

APPENDIX B
Technical Notes on Methods

APPENDIX C
Members of Pennsylvania Intra-Governmental Council on Long Term Care
Members of Workforce Task Group
Members of Technical Advisory Panel

APPENDIX D
Survey Instrument

List of Figures

4-1 Percent of Providers Requiring Prior LTC Work Experience…….25
4-2 Starting Wage Rates by Provider Types…… 26
4-3 Benefit Coverage for Full and Part-Time Workers…… 27
4-4 Welfare to Work Participants…… 28
4-5 Job Applicants Rejected Under Act 169…….. 29
4-6 Perceived Change in New Worker Performance…… 30
4-7 Job Vacancy Levels by Degree of Recruitment and Retention Problems……... 34
4-8 Providers Reporting Very Serious Recruitment and Retention Problems…… 35
4-9 Overlap of Recruitment and Retention Problems…….. 36
4-10 Use of Overtime and Level of Retention Problems by Nursing and Large Personal Care Homes with Staff Shortages……..38
4-11 Home Health/Home Care Providers Reporting Service Cut Backs……... 39
4-12 Percent of Providers in Regions Reporting Service Cut Backs…… 39
4-13 Cost of Training……40
4-14 One Time Total Costs of Training by Region…… 42
4-15 One-Time Cost of Training Workers to Fill All Vacant Positions by Region…… 43
4-16 Unemployment and Recruitment Problems……..45
4-17 Unemployment and Retention Problems……..45
4-18 Wage Increment After Probation by Job Vacancy Level……47
4-19 Contributions to Family Health Coverage and Retention Problems…… 49
4-20 Relationship Between Level of Training and Staff Retention for Certified Home Health Agencies…50
4-21 Involvement in Care Planning and Job Vacancy Level……..51
4-22 Involvement in Care Planning and Reported Level of Staff Retention Problems……51
4-23 Specific Recruitment Efforts……52

List of Tables

2-1 Sample Response Rates. . ……...8
3-1 State Actions in Response to Frontline Worker Recruitment and Retention Problems……19
4-1 Degree of Reported Staff Shortages……... 31
4-2 Job Vacancy Levels…… 32
4-3 Effects of Staff Shortage on Providers Reporting Shortage…… 37
4-4 Measures Used in the Evaluating Recruitment and Retention Strategies……44

Appendix Tables……Appendix A

List of Appendix Tables

1 Mean Number of Frontline Workers per Provider……A-4
2 Number of Frontline Workers in Pennsylvania…… A-5
3 Length of Employment……..A-6
4 Reported Recruitment and Retention Problems……...A-7
5 Reported Serious Recruitment and Retention Problems……...A-8
6 Change in Level of Recruitment Problem Over the Past Two Years…….. A-9
7 Change in Level of Retention Problem Over the Past Two Years……..A-9
8 Single Largest Reason for the Recruitment Problem……A-10
9 Single Largest Reason for the Retention Problem…… A-10
10 Reported Staff Shortage……...A-11
11 Effects of Staff Shortage on Providers Reporting Shortages…… A-12
12 Vacancy Levels……... A-13
13 Frontline Job Openings in Pennsylvania……A-14
14 Wage Rates…… A-15
15 Increases in Starting Wage in the Past Two Years…….. A-16
16 Providers Who View Their Increase in Starting Wage as Effective in Easing Recruitment……A-17
17 Reported Reasons Why Increased Starting Wage Rates Helped Ease Recruitment…… A-18
18 Reported Reasons Why Increased Starting Wage Rates Did Not Help Ease Recruitment…… A-18
19 Across the Board Wage Increases in the Past Two Years……... A-19
20 Providers who View Their Across the Board Wage Increase as Effective in Improving Retention… A-20
21 Providers That Offer Any Type of Benefits……A-21
22 Providers That Offer Selected Types of Benefits to Full-Time and Part-Time Workers……A-22
23 Other Reported Benefits…… A-23
24 Providers That Have Changed Benefits in Past 2 Years for Recruitment or Retention Reasons….. A-23
25 Hours and Cost of Training…….. A-24
26 Annual Cost of Training Due to Staff Turnover……A-25
27 Educational and Work Experience Requirement……A-26
28 Perceived Change in Job Performance of New Workers over Past 2 Years…… A-27
29 Length of the Probationary Period…… A-28
30 Percent of Job Applicants Rejected Due to Act 169 Criminal Background Check Requirement…. A-29
31 Satisfaction with Act 169 Criminal Background Check Requirement……A-30
32 Main Reason for Being Dissatisfied with Act 169 Criminal Background Check……A-31
33 What Dissatisfied Providers Would Like to Change About Act 169……A-31
34 Other Worker Development Programs, Beyond State-Required Training…… … A-32
35 Reported Efforts to Change the Nature of the Frontline Worker's Job……... A-32
36 Degree of Worker Influence over Care Planning and Work Scheduling…… ...A-33
37 Retention Problems by Degree of Worker Involvement in Care Planning……... A-34
38 Strategies Used for Handling Recruitment Problems……... A-35
39 Strategies Used for Handling Retention Problems…… A-35
40 The Most Important Thing that the State Government Could Do to Help with Recruitment and Retention…… A-36

Pennsylvania's Long Term Care Workforce

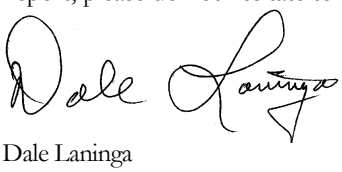
Preface

Pennsylvania and the nation are experiencing a severe shortage of frontline workers in long term care. In response, the Pennsylvania Intra-Governmental Council on Long Term Care has undertaken a broad initiative to understand the extent of the problem of recruitment and retention and to gather information that can lead to strategies to improve the situation. The initiative involved the commissioning of two parallel efforts: one seeking information directly from the workers; the other seeking the experience of the provider organizations. Reports of both efforts will be submitted to the Council for consideration.

The following report, as the title implies, presents the findings from the study examining the problem from the provider organizations' perspective. This report would not have been possible without the cooperation of the Commonwealth's long term care industry. The Council wishes to express its thanks to the administrators who took the time and the effort to participate and to thank the trade associations representing all aspects of Pennsylvania's long term care industry for their extensive and conscientious efforts to encourage their members to participate in the study. We would also like to thank the research team at the Polisher Research Institute at the Philadelphia Geriatric Center for their efforts in successfully conducting the study. Finally, thanks to the Work Force Issues Work Group which provided the impetus and guided the efforts to completion.

To fully understand the dimensions of the workforce issues, readers are encouraged to examine the results from the companion effort which has been compiled into a report entitled, "In Their Own Words: Pennsylvania's Frontline Workers in Long Term Care." Copies of that report are available from the Council.

Speaking for the Council, I hope that you will find both reports of great value. Should you have any questions about either report, please do not hesitate to contact me.



Dale Laninga
Executive Director
Pennsylvania Intra-Governmental Council
on Long Term Care
555 Walnut Street, 5th Floor
Harrisburg, PA 17101-1919
Phone: (717) 783-1550 • Fax: (717) 772-3382
E-mail: Dlaninga@state.pa.us

Pennsylvania's Long Term Care Workforce

Executive Summary

Study Purpose and Auspices

Finding and retaining frontline workers in the long term care industry (i.e., paraprofessional direct care workers such as nurse aides, home health aides, and personal care attendants) is a rapidly growing problem in the Commonwealth of Pennsylvania as it is throughout the nation. A decided change has occurred in the industry. As reports of service cutbacks have spread, concern has shifted. It is no longer limited to the 'quality of care,' but has expanded to include access, and as worker shortages have increased, the concern over access has grown. As a result, the Pennsylvania Intra-Governmental Council on Long Term Care through its Workforce Issues Work Group commissioned a study in the fall of 2000 to better understand the actual dimensions of the problem in the Commonwealth and to generate a range of alterative actions for consideration based on empirical and quantifiable rather than anecdotal information. The present study was part of a larger initiative launched by the Council to study frontline workers in long term care in Pennsylvania. This larger initiative included a series of focus groups with the frontline workers themselves conducted in the fall of 2000. In total 167 frontline workers participated in 15 focus groups conducted across the Commonwealth. Observations from those focus groups were compiled in a companion report entitled "In Their Own Words—Pennsylvania's Frontline Workers in Long Term Care" that is available from the Pennsylvania Intra-Governmental Council on Long Term Care.

Study Goals, Objectives, and Methods

The project goal was to amass factual information and translate it into a range of suggestions that the Pennsylvania Intra-Governmental Council on Long Term Care could use to pinpoint concrete actions. The study consisted of two components: (1) an extensive review of the existing literature and (2) a survey of over 900 long term care administrators. The detailed project report provides a comprehensive description of study methods and findings. The detailed report also contains extensive appendix tables and a copy of the interview instrument used in the survey of administrators. This executive summary contains thumbnail descriptions of the methods and findings and concentrates on the recommendations.

Methods

Review of the Literature

The literature review was comprehensive in its scope. It included a broad range of materials covering issues related to shortages in the availability of frontline workers. The review examined materials from scientific and professional publications, government reports and statistics, as well as materials representing activities undertaken in other states facing the same worker shortages. The review included materials available through the end of November, 2000.

> Results from the survey present an accurate picture of the long term care providers in the Commonwealth . . .

Survey of Administrators

The survey collected information on recruitment and retention problems and the strategies employed for dealing with them from administrators representing the long term care industry in Pennsylvania. Of interest were long term care providers serving functionally impaired elderly and non-elderly adults with physical disabilities.

The survey consisted of a 15 to 25 minute telephone interview with administrators. The project assembled a Technical Advisory Panel of experts in long term care, public policy research and quantitative methods to assist in the development of the sample and the survey instrument.

> Frontline workers have very high levels of physical and emotional burnout

The sample of administrators was representative of the entire state, its diverse geographic regions, and its urban and rural communities. It was also representative of administrators at government- and privately operated nursing homes, adult day care centers, home health and home care agencies, centers for independent living, and large and small personal care homes.[1] The field period for the survey was September through December of 2000.

> . . .42 out of 48 states . . . consider the recruitment and retention of frontline long term care workers a major workforce issue.

[1] State regulations do not presently distinguish between personal care homes and assisted living facilities.

The sample reached its goal of 901 completed interviews. The overall response rate was 71 percent. The sample represented 26 percent of all (3,411) providers in the Commonwealth. The overall sampling error for the survey was 4.2 percent. Survey results present an accurate picture of the long term care providers in the Commonwealth and the data can be used with a high level of confidence. Readers interested in more details about the survey methods should consult the full project report.

From the Literature

A great deal of recent attention has been focused on the issues of recruitment and retention among frontline workers in long term care. There is a basic consensus regarding the dimensions and the causes for the shortages. Analysts generally agree that the shortage is significant and, given the dynamics of the age structure, will grow worse over time. The most visible cause for the shortage is attributed to the strong economy and the accompanying low unemployment levels. But the current shortfall in frontline workers is not simply the temporary result of a robust economy. Rather it is the result of converging forces including major demographic trends, dramatic growth in the long term care industry due to the rising demand, changing patterns in the provision and types of available service modalities, as well as underlying factors related to the conditions and the nature of the work itself, a key aspect being low pay. For example, in Pennsylvania the reported median hourly wage of front-line workers was $7.76 compared to $9.21 paid to unskilled factory workers. The literature review in the full report providers many more examples and comparisons, but the message in the literature is very clear. The work is difficult and physically and emotionally demanding. It is low paying and offers few opportunities for career advancement.

The work is not attractive compared to many low paying jobs, and those who do enter frontline jobs, experience very high levels of physical and emotional burnout contributing to high levels of turnover.

The shortage of workers and the high level of turnover cause a multitude of problems for the long term care industry. On the most basic level, it is limiting the amount of long term care that the industry can provide and is having a negative effect on quality of care. Furthermore, the high turnover rates are thought to place a considerable financial burden on providers due to high recruitment and training costs.

Many studies report on the actions provider organizations have taken to address recruitment and retention problems. However, the claims of effectiveness of many of these studies should be regarded with caution. Many simply report best-practice models that may not be easily replicated elsewhere. Few of the reports offer or substantiate their claims of effectiveness with conclusive evidence. The strongest case may be made for wage increases and increased worker influence over care planning and work scheduling. Although not conclusive, there is rather strong evidence that wage and benefit levels affects retention and presumably recruitment, and several studies seem to indicate that greater worker involvement in decision-making and care planning is associated with better retention. According to the literature, other provider-level interventions that may be effective include:

- Positive feedback to workers;
- Good training of supervisors;
- Thorough worker orientation programs;
- Efforts to decrease physical strain and work injuries.

Despite the lack of clear evidence as to what to do, it is clear from the literature that the problem of frontline worker shortages is widespread. A recent survey of state administrators showed that 42 out of the 48 responding states consider the recruitment and retention of frontline long term care workers a major workforce issue. Thirty-six states have taken some form of action to try and address worker shortages and 23 states have implemented "pass-through" wage increases in order to raise the wages of frontline workers. As the full review discusses, states have employed many alternative strategies including:

- Shift differentials;
- Transportation reimbursements;
- Subsidization of training;
- Regulations to establish career ladders.

Wage 'pass-throughs' have been implemented by at least 23 states.

Although the present economic boom has crystallized the frontline worker shortage, the forces underlying the shortages are not likely to disappear even if the growth of the economy slows and unemployment rates rise. To provide high quality long term care services requires the successful recruitment and retention of a qualified workforce. How to do this effectively is the question. Many states have implemented programs to correct the shortfall. However, formal evaluations of the effectiveness of these efforts have not been reported so guidance as to what to do remains more a matter of guesswork and the replication of 'best-practice' models.

Survey Results

In the late fall of 2000 there were an estimated 94,150 persons employed in frontline jobs across the 3,400 providers comprising Pennsylvania's long term care industry serving the elderly with functional limitations and adults with physical disabilities. Across these providers there were an additional 11,300 open job positions.[2]

Frontline workers and vacancies were concentrated in specific types of providers and in specific areas of the state. Nursing homes accounted for 46 percent of the positions and 53 percent of the openings; large personal care homes accounted for 23 percent of the positions and 16 percent of the openings. Home health and home care

. . . [survey results found] extensive, reports of worker shortages throughout Pennsylvania . . .

[2] The survey data estimates on the number of nursing and personal care home aides are within two percent of extrapolated projections from Pennsylvania Department of Labor and Industry.

agencies represented 20 percent of the positions and 23 percent of the openings.

Providers in the Northeast region of the state, that is the urban counties of Lackawanna and Luzerne (the Scranton/Wilkes-Barre metropolitan area) and the rural counties of Carbon, Monroe, Pike, Schuylkill, and Wayne, reported the highest job vacancy rate, on average, over 16 percent. Providers in the Southeast, the region encompassing the Philadelphia metropolitan area, reported an average vacancy rate of nearly 11 percent. The 4,500 job openings in this area accounted for fully 40 percent of the open positions in the state. The Southwest, the area containing the Pittsburgh metropolitan area accounted for 21 percent of the open positions in the state.

> . . . 77 percent of privately operated nursing homes, [and] 71 percent of the home health and home care agencies, reported frontline worker shortages . . .

The full report provides a detailed profile of the frontline workforce covering:

- Full/part-time makeup of the workforce;
- Worker job tenure;
- Entrance requirements;
- Levels of Formal Training
- Wages and benefits;
- The Welfare to Work Program;
- Act 169 Criminal Background Check;
- Perceived changes in job performance of new workers.

Reported Worker Shortages

Frontline worker jobs, as previously indicated, are concentrated in specific types of providers and in specific state regions. The providers and regions that constitute the greatest proportion of the frontline workforce reported significant degrees of worker shortages. Over 77 percent of the privately operated nursing homes, the single largest sector of industry, reported shortages and 12 percent reported that the shortages were severe. Over 71 percent of the home health and home care agencies, a segment accounting for 20 percent of frontline worker jobs also reported shortages, with 18 percent reporting them to be severe.

The significance of these shortages becomes clearer by examining job vacancy levels. Across the state there was a job vacancy rate of about 11 percent. Rates were highest among nursing homes and home health and home care agencies. Combined, these three provider types represented 65 percent of all the reported vacancies. There was also considerable variation within the same types of providers. Over 18 percent of nursing homes and more than 26 percent of home health and home care agencies had job vacancy rates exceeding 20 percent.

Several regions contained disproportionately high percentages of providers with vacancy rates exceeding 20 percent: 21 percent in the Northeast, 19 percent in the Central, and 18 percent in the Lehigh Valley. In the Southeast region, the region representing 30 percent of all state providers, 16 percent were operating with job vacancy rates exceeding 20 percent.

Summarizing the findings on workforce shortages and job vacancy levels: first, although shortages are not universal they are extensive across many types of providers and across many regions in the state. Secondly, the levels of shortages among providers are more heavily concentrated among certain types of providers and in certain regions. Third, although all nursing homes appear to suffer from chronic worker shortages, the privately operated nursing homes appear to be more acutely affected by worker shortages and home health and home care providers appear to be experiencing the greatest level of worker shortages.

Reported Worker Recruitment and Retention Problems

Nearly 70 percent of providers reported significant problems with either recruitment or retention and 35 percent reported that the problems were extreme. Most of the providers reporting very serious recruitment and retention problems indicated the problems have worsened over the last 2 years. Additionally, more providers in the Lehigh Valley, Northwest, and Central regions reported serious problems than in other areas of the state.

Between the two problems, serious recruitment problems were more frequently reported. Across all providers, 32 percent reported very serious recruitment problems but only 13 percent reported very serious retention problems. Among the different types of providers, serious problems were most frequently reported by home health/home care agencies and privately operated nursing homes. Forty-five percent of the certified home health agencies reported serious recruitment problems; 17 percent reported serious retention problems. Reported levels for privately operated nursing homes were 39 and 18 percent, respectively.

> Forty-five percent of the certified home health agencies reported serious problems with recruitment . . .

Recruitment and retention problems overlap in some providers: ten percent simultaneously reported extreme problems in both and 42 percent reported a combination of significant problems in both. Although they overlap, the problems of recruitment and retention operate somewhat independently of one another and appear to result from different causes.

Recruitment problems appear to be much more sensitive to the local unemployment rates and more closely tied to the levels of competition for a more limited pool of available female workers between the ages of 25 and 54. Increased levels of retention problems were more related to higher levels of competition between local long term care providers, as measured by wage competition. It also appears that retention problems were more closely associated with the way providers operated their businesses. As will be discussed, some providers simply run their operations in a way that makes working conditions more attractive to their workforce and as a result, have fewer problems with retention.

Broader Barriers to Recruitment and Retention

The issues of unemployment rates, local area wage rates, and the availability of potential workers are beyond the control of administrators. However, these 'larger community issues' have a direct effect on recruitment and retention problems.

County Level Unemployment

Of these broader issues, local unemployment rates appeared as the single most important factor. The 25 percent of providers that faced the lowest local unemployment rates were significantly more likely to report very serious recruitment problems. The relationship between unemployment levels and retention problems were not as strong but there was a pattern of increasing retention problems with falling unemployment.

Despite these clear patterns, unemployment rates alone are not driving staff shortage levels or problems with recruitment and retention.

Effect of County Level Age Structure

Women, age 18 to 54, comprise the vast majority of frontline workers in long term care. As the size of this group of potential workers decreases relative to the number of persons 65 and older, the greater the problems in recruitment and retention. Analyses indicated that the age structure in local areas has an impact on recruitment but the relationship is not the predominant factor is determining labor force shortfalls. Unemployment is more clearly related to recruitment and retention problems.

Consequences of Staff Shortages

Of providers reporting staff shortage, 75 percent increased their use of overtime, 29 percent reported increased use of independent contractors or agency personnel, and 25 percent reported service cutbacks.

Provider Operations

Consequences differed dramatically by provider type and region. Ninety percent of the nursing homes and 82 percent of the large personal care homes reporting shortages increased their use of overtime. As could be expected, the prolonged periods of overtime added to retention problems.

Access to Care

The data showed that staff shortages reduced access, particularly among home health and home care agencies. Seventy percent of home care providers reported staff shortages, and of those, 65 percent reported cutbacks in service. This means that across all home care providers, 46 percent reported service

cutbacks. Since home care is one of the fastest growing segments of the long term care industry both for the nation as well as for Pennsylvania, and the type of service most preferred by consumers, such cutbacks demand attention and must command a response.

Service cutbacks also more strongly affected certain regions. With the exception of the Southwest region encompassing the Pittsburgh metropolitan area, at least 10 percent of all providers reported service cuts. However, more than 20 percent of providers in the Southern Alleghenies, Northeast, and Lehigh Valley regions reported service cuts.

> . . . across all home care providers, 46 percent reported service cutbacks . . .

Quality of Care

Quality of care is also an important outcome. The survey did not attempt to directly collect information on quality, but the increased use of independent contractors and personnel from temporary employment agencies has decided implications on service quality. The literature on the quality of care repeatedly makes references to the negative influence the use of 'agency personnel' has on quality. Similar information has been obtained in focus groups of direct care staff. Privately operated nursing homes and Centers for Independent Living turned to outside personnel much more frequently as did providers in the Southcentral and Southeast regions. The over reliance on outside personnel has to be considered as an important 'red flag' and could be used as a quality indicator by consumers in choosing which providers to use.

Lack of Parity in Training, the Cost Of Turnover, and the Impact on Providers

Levels of formal training for new workers and their related costs vary greatly by type of provider primarily because state and federal regulations mandate training levels only for nursing homes On average, government operated nursing facilities reported providing 105 hours of formal training; privately operated nursing homes reported 78 hours. Excluding nursing homes, training averaged 34 hours. The amount and cost of training were directly related. The average training cost for a new worker at nursing facilities was $1,096. Excluding nursing homes the average cost was $460.

> . . . estimated annual training costs in 2000 of at least $35 million across all providers . . .

Across all providers, the estimated total annual (recurring) cost of training due to turnover in 2000 was at least $35 million. Nursing homes accounted for $23.9 million; and home health/home care accounted for $4.8 million. Because the number of workers and the mix of provider types within regions vary, the distribution of annual training costs due to turnover also varied across regions. The regions encompassing the large metropolitan areas accounted for 75 percent of the costs.

In addition to the training costs due to turnover, there is the need to pay training costs for filling the large number of currently open jobs. Statewide, this one time training cost is estimated at $13.5 million. Again, the amounts vary greatly across different types of providers and across different regions.

Because there is no training parity across providers under normal operations, in times when extraordinary levels of training are required, those providers that typically carry the bulk of the training burden, principally nursing homes in the case of Pennsylvania, end up carrying additional training liability. It could well be imagined that in such unusual circumstance, the extra training burdens affect other aspects of provider operations. In the end, such consequences have the potential of reducing the overall quality of care.

Strategies for Handling Recruitment and Retention Difficulties

Effects of Wages

Information was collected on entry-level wage rates, wage rate after probationary, and wages for the highest paid frontline workers. The average entry-level wage rate across providers was $7.29, although entry-level rates varied both by provider type and by region. Between different types of providers, entry-level rates ranged from a high of $8.91, offered by government-operated nursing homes, to $6.10

offered by small personal care homes. Across the different regions of the state, entry-level rates varied from a high of $8.24 in the Southeast to $6.22 in the Southern Allegheny region. Although some providers do use the ending of the probationary period to substantially increase starting wage levels, the typical increases were small.

On average across providers, the increase raised hourly wage rates to $7.58, or an average increase of $.29. In general wage rates for frontline workers do not increase very much over the length of employment. On average the highest paid frontline workers received an hourly wage rate of $9.51, about a 26 percent increase over the average regular (post-probationary) wage rate.

Providers with relatively large post-probationary wage increases had significantly lower recruitment problems, job vacancy levels, and staff shortages.

Wage Effects on Recruitment

The effects of differences in entry-level wage rates on recruitment are positive. Providers with highest starting wages among their peers (same type of provider in the same region) reported lower recruitment problems. Analyses of vacancy rates and entry-level wages indicate the same positive pattern. However, while positive, the effect of higher starting wages were not dramatic.

Providers also specifically raised their entry-level wages in response to recruitment problems. The providers who instituted the largest increases among their peers (same type of provider in the same region) more frequently reported that their increases helped in reducing their recruitment difficulties.

Increments to the starting wage instituted after completion of the probationary period have a decided positive effect on recruitment. There was a strong relationship between offering a relatively large increase in wages after the probationary period and having comparatively low recruitment, vacancy, and staff shortage problems.

In summary, entry-level wage increases did appear to have a positive effect on alleviating recruitment problems, but increases in entry-level wages is not a panacea for eliminating recruitment problems, particularly in areas with very low unemployment rates, higher average wages in other industries, and in areas with relatively small pools of potential workers.

Wage Effects on Retention

Top payers were significantly less likely to report very serious retention problems and were slightly more likely to report no retention problems at all. Top payers also had slightly better levels of staff retention, and providers that implemented across-the-board wage increases, reported improved staff retention.

From the analysis on wages it appears that wage increases affect recruitment and retention somewhat differently. For recruitment, increased starting wages were a necessary but not a sufficient condition to overcome large recruitment problems. In terms of retention, increased wages appear to have a more important effect. Nonetheless, although providers who substantially increased wages did report an easier time in recruiting and retaining workers, the increases by themselves did not completely eliminate the problems. What the data on wages might be indicating is that individual providers are likely to be increasing their wage rates in an attempt to match the competition in their local areas. Thus while necessary, increased wages by individual providers are only part of the solution.

Effects of Employee Benefits

Despite the literature that indicates the lack of benefits contribute to making frontline worker jobs less attractive to prospective employees and adds to the problems of worker retention, in general, the present analyses did not find that the availability of benefits led to either less reported recruitment or retention problems nor to reductions in job vacancy levels. In most situations, the data indicates that providers that offer benefits more frequently reported greater levels of recruitment and retention problems and were probably trying to make their jobs more attractive to prospective employees. There were two exceptions. Providers that make additional contributions toward premiums for employees who elect family health coverage reported significantly less retention problems. Also, certified home health agencies that offered transportation benefits reported having less retention problems.

Providers were asked if they had changed their benefits package in the last 2 years in order to improve their recruitment or retention problems. Over 22 percent of the providers indicated that they had implemented changes, however, in analyses examining the effect, no relationships were uncovered. It is possible that the effects of the changes simply have not yet taken effect.

> Training in home care agencies was clearly associated with lower reported recruitment problems

In summary, despite the claims in the literature that postulate positive effects, the data from the present study, with fewer exceptions, found that benefits had no clear positive impact on either recruitment or retention.

Training, Staff Development Activities and Job Re-structuring

The literature has also indicated that both staff development activities, including training, and job re-structuring, also referred to as 'culture change' lead to improvements in recruitment and retention problems.

Effects of Training

The results on the effects of training were somewhat ambiguous, but they did point to the conclusion that training has a more positive effect on retention and a much weaker effect on recruitment. Although the differences were not dramatic, providers with the highest amounts of training were slightly more likely to report minor or no recruitment problems. However, home health and home care agencies were the exception. For these agencies more training was clearly associated with lower reported recruitment problems.

The relationship between hours of training and reported levels of retention problems was positive but weak. However, the relationship was again particularly strong for certified home health agencies.

> . . . providers that have instituted 'culture change features' reported better retention.

Effects of Culture Change Features

The literature has strongly suggested that changing the status and role of the frontline worker can have vast ramifications on the provision of long term care including helping to make such jobs more attractive and thus resulting in easier recruitment and retention of workers. The survey included a series of questions to determine if providers were undertaking such changes and a series of analyses were conducted to determine if the implementation of such changes were affecting reported levels of recruitment and retention problems.

Across all providers, 44 percent reported that their frontline workers were highly involved in the care planning process and 34 percent reported a lot of involvement in the work scheduling. Additionally, 29 percent of the providers indicated undertaking other types of actions to change the nature of frontline worker jobs which included more balanced workloads, seeking input from workers, and instituting teamwork environments. Interestingly, the literature gives great value to developing career ladders, but very few providers indicated such efforts, less than 1 percent.

The degree of frontline worker involvement in the care planning process showed very dramatic and consistent effects. Across all types of providers, greater staff involvement was repeatedly associated with lower levels of recruitment and retention problems, lower reported rates of staff shortages, and fewer job vacancies. The effect was found for both recruitment and retention, but the positive effect is less dramatic for recruitment, but very clear for worker retention. Providers that reported workers being highly involved in the care planning process, less frequently reported very serious staff retention problems and more frequently reported no retention problems at all.

There is strong evidence that providers who have initiated institutional changes that have lead to 'culture change' for their frontline workers also experienced improved worker retention.

Targeted Recruitment Efforts

Beyond raising starting wages and modifying benefit packages, providers reported many different types of activities to overcome their recruitment problems. Since many of these activities have been recently initiated or have been employed by a very limited number of providers, it is not

possible to assess how effective they have been in reducing recruitment problems. The most common approaches were the use of special recruiters and specialized recruitment efforts such as targeted advertising and job fairs. Other efforts involved active recruitment at local community colleges, and the use of 'work study' type programs.

Providers Suggest

Providers were asked to offer one suggestion that the Commonwealth might undertake to help alleviate current worker shortages. As could be anticipated, the vast majority suggested increasing reimbursement rates in order to facilitate wage increases.

Study Recommendations

Worker shortages and problems with the recruitment and retention clearly go beyond the capacities of individual providers. More systemic actions are needed and require shared participation by providers and the Commonwealth. How those actions are translated into specific directives are not within the purview of this study or this report, but actions are needed and this section outlines general recommendations for consideration. They emerge jointly from the review of the literature that includes actions taken by other states facing and from the results of the survey of administrators in Pennsylvania. Each recommendation is more fully developed in the complete report and substantiated by the evidence from the existing literature and/or the findings from the survey.

Three Overarching Principles

In determining the future direction for actions to be taken by the Commonwealth, it is suggested that three principles be considered to guide the decision-making.

Guiding Principle 1. All actions need to approach solutions that can be implemented to alleviate problems faced by specific types of providers and providers in specific geographic areas while being general enough to be helpful for all types of providers across the Commonwealth. At the same time solutions must incorporate the flexibility to cover both quick fixes and long term solutions.

Guiding Principle 2. Workable solutions are possible only if there is close cooperation between the various government departments and agencies and between the different provider segments within the long term care industry.

Guiding Principle 3. The cost of new initiatives must be a public/private partnership where, depending on the nature of the initiative, either the Commonwealth or private resources may carry the primary financial responsibility.

Policy Recommendations

1. Recommendation: Statewide initiatives must recognize that the dynamics that underlie recruitment and retention problems differ. Overcoming recruitment and retention problems implies different types of actions, which should include short and long term strategies.

2. Recommendation: Statewide initiatives must recognize that to correct labor force shortages in the long term care industry, approaches need to be targeted. The approaches also need to take into account the fact that problems vary by type of provider and by geographic regions within the Commonwealth. Abundant evidence from the survey of administrators clearly shows that reports of labor shortages, are particularly troublesome for specific segments of the industry, such as the home health/home care sector, and for geographic regions such as the Northeast region.

3. Recommendation: There is a need to explore statewide strategies that will permit long term care providers the capacity to increase entry-level wages so they are competitive with other local employers. Without the ability to increase starting wages, long term care providers will not overcome their difficulties in recruiting new workers.

4. Recommendation: Statewide initiatives should be explored that relate directly to non-wage recruitment issues and explore ways of developing pilot programs directed towards strategies that can increase the supply of workers in those areas facing the most extreme shortages resulting from demographic imbalances and low unemployment.

5. Recommendation: Examine ways to increase wage parity for similar types of frontline workers employed by different sectors of the industry and seek ways to build pay scales that would lead to career ladders.

6. Recommendation: Statewide initiatives and strategies should be explored that will directly stimulate the development of culture change efforts within long term care provider organizations to improve worker retention problems and job turnover.

7. Recommendation: The Commonwealth in collaboration with the statewide trade associations representing the diverse elements of the state's long term care industry should develop approaches that will improve the public perception of frontline workers and the important role they play in the provision of care within the industry.

8. Recommendation: Appropriate public agencies such as the Department of Public Welfare and the Department of Aging should examine ways to effectively disseminate information about existing public programs available to low income workers.

9. Recommendation: Explore strategies that will reduce the disparity in training across different types of providers, consider ways training could be made more universal across setting, and initiate programs that can offset training costs that overburden segments of the long term care industry.

Section 1

Introduction

Pennsylvania's Long Term Care Workforce

Study Purpose and Auspices

Finding and retaining frontline workers in the long term care industry is a rapidly growing problem in the Commonwealth of Pennsylvania as it is throughout the nation. In this report, the term "frontline workers" refers to paraprofessional direct care workers in long term care. This includes workers such as nurse aides, home health and home care aides, and personal care attendants. In Pennsylvania, recognition of the recruitment and retention problems has increased as anecdotal reports of service cutbacks have spread. A decided change has occurred in the industry. Concern is no longer limited to the 'quality of care,' but has expanded to include access, and as worker shortages have increased, the concern over access has grown. As a result of these growing concerns, the Pennsylvania Intra-Governmental Council on Long Term Care through its Workforce Issues Work Group commissioned a study in the fall of 2000 to better understand the actual dimensions of the problem in the Commonwealth and to consider alterative actions based on empirical and quantifiable rather than anecdotal information.

Pennsylvania Intra-Governmental Council on Long Term Care

The Pennsylvania Intra-Governmental Council on Long Term Care is a legislatively mandated body established in 1988 under Act 185. It was reconstituted by Governor Ridge in 1996 with the appointment of new Council members representing the diverse interests of long term care consumers, providers and purchasers. The Chairperson of the Council is Secretary Richard Browdie, the head of the Pennsylvania Department of Aging. Among a broad list of specified goals and duties, the Council is mandated to serve as a public forum for the discussion and debate of long term care issues. It is also mandated to analyze and assess Pennsylvania's current long term care system, and to examine options and suggest recommendations for action. It is under this broad mandate that the Council has chosen to focus on the growing workforce crisis and to commission the study. In conducting the present study, the work has been guided by the Workforce Issues Work Group under the direction of its Chairperson, Dr. Lori Griswold, Vice President of Special Care Inc. and the Council's Executive Director, Dale Laninga.

Causes Behind the Shortages

A booming economy typically leads to expanded job opportunities and the present economic expansion has certainly contributed to the frontline worker shortage facing the long term care industry. But the current shortfall is not simply the temporary result of a robust economy. Rather it is the result of converging forces including two major demographic trends as well as a host of changing patterns in the long term care industry.

First and foremost, there has been a dramatic increase in the demand for long term care services driven by an aging population and supplemented by the growth in the number of non-elderly disabled who also require assistance from long term care providers. This growing demand for long term care services directly translates into an increasing need for frontline workers. Moreover, given the current age structure, this need for a growing number of frontline workers will continue to accelerate over the coming decades both nationally as well as within the Commonwealth of Pennsylvania. Pennsylvania is among the states with the highest proportion of older persons and the number of older persons in Pennsylvania will continue to grow for the next several decades.[3]

A second major demographic trend that underlies the worker shortage is the decreasing proportion of the population who typically fill the ranks of the frontline workforce. Women, age 25 to 45, who comprise 90 percent of the home health aides and 70 percent of the nursing home aides, are decreasing as a percentage of the available workforce.[4] As with the aging of the population, this trend also is forecasted to continue over several decades and will occur both nationally and within the Commonwealth. Additionally, job opportunities outside of the typical service industries are also increasing for this contracting pool of potential workers further decreasing the number of available persons to fill frontline long term care positions. Thus, even if the growth of the economy slows and broadens the pool of workers temporarily, the problems imposed by these overarching demographic trends will continue to plague the industry for decades.

Outside of the demographic trends, several other forces are at work that further add to the workforce pressures within the industry. The long term care industry is undergoing dramatic changes. There has been and continues to be dramatic growth in the provision of home and community-based services. Additionally, there has been the rapid introduction of new forms of long term care services. For example, nationally, home care alone is expected to more than quadruple in the next two decades[5] and in Pennsylvania the number of home health aides is expected to nearly double in the next five years, from 15,330 in 2000 to 26,700 in 2005.[6] In addition to home care, there has been tremendous growth in assisted living facilities as well as growth in other community-based services such as adult day services. For example, nationally the number of assisted living beds increased by 30 percent between 1998 and 2000. In Pennsylvania where assisted living facilities are presently classified as personal care homes, the number of beds between 1998 and 2000 increased by more than 22 percent.[7] Rapid expansion in the demand for home care and the increasing availability of newer forms of long term care service options translates into increasing intra-industry demand for what is now recognized as an ever diminishing supply of persons. Thus contributing to the emergence of labor force shortages is the growing competition

[3] Long-Term Care 2000 Statistics and Information: Demographics of the Aging Population, Long-Term Care Nursing Facilities, and Personal Care Homes, The Pennsylvania Association of Non-Profit Homes for the Aging, Winter, 2000

[4] Overview of LTC Workforc: Trends and Issues, Center for Health Workforce Studies, New York State University at Albany, 2000.

[5] Congressional Budget Office. Projections of Expenditures for Long-Term Care Services for the Elderly. 1999. Washington, DC, Congressional Budget Office.

[6] Pennsylvania Workforce 2000, Pennsylvania Department of Labor and Industry

[7] Long-Term Care 2000 Statistics and Information: Demographics of the Aging Population, Long-Term Care Nursing Facilities, and Personal Care Homes, The Pennsylvania Association of Non-Profit Homes for the Aging, Winter, 2000, State Assisted Living; Policy, National Academy for State Health Policy, July, 2000. Report on the Growth of Personal Care Homes in Pennsylvania, Intra-Governmental Council on Long Term Care, November 30, 2000.

among long term care providers for a very limited pool of available workers.

A factor that is of equal importance and is directly contributing to the current staffing crisis is the way the industry, and more broadly the public, view frontline long term care workers. Frontline workers, while filling vital roles in the delivery of long term care services, are certainly among the lowest paid workers with limited access to benefits despite the fact that they face occupational injury rates that are among the highest across all job classifications including those jobs involving heavy labor. Moreover, frontline long term care workers are characterized as unskilled, poorly trained, and commanding and receiving little respect despite the demanding role they perform. The jobs are perceived as difficult and 'dead end' with little or no career opportunities. In comparison, other service jobs such as 'flipping burgers' are believed to offer better pay, more financial security, and more respect and dignity. The end result of this diminished image, whether or not it accurately reflects the actual circumstances, directly contributes to the difficulties providers face in recruiting new workers and retaining their present workers.

Thus while the present economic boom has crystallized the frontline worker shortage, the dynamic forces that underlie the shortages are not likely to disappear even if the growth of the economy slows and unemployment rates rise. To provide high quality long term care services requires the successful recruitment and retention of a qualified workforce.

However, to date, most of what is known about successful recruitment and retention of frontline worker remains at the level of anecdote and intuition.

Study Goals and Objectives

The primary goal of this project, entitled "Pennsylvania's Frontline Workers in Long Term Care—The Provider Organization Perspective," was the amassing of factual information that could be translated into a range of recommendations that the Pennsylvania Intra-Governmental Council on Long Term Care could use to suggest concrete actions. The study consisted of two components: (1) an extensive review of the existing literature and. (2) a survey of long term care administrators. The survey was designed so that the sample of administrators was representative of the entire state, its diverse geographic regions, and its urban and rural communities. The sample was also designed to be representative of administrators across different sectors of the long term care industry. These different sectors included both government and privately operated nursing homes, adult day care center, home health and home care agencies, Centers for Independent Living, and large and small personal care homes.[8] The content of the survey focused on collecting information about worker experience and training, compensation and benefits, the extent of the worker shortfall, the seriousness of the recruitment and retention problems, the impacts resulting from the shortages, and the strategies providers use for dealing with the recruitment and retention problems. This last area was included with the intention of discovering 'best practice models' that would guide the development of useful recommendations. The field period for the survey was between September 6th and November 15th of 2000.

The literature review was comprehensive in its scope. It included a broad range of materials covering issues related to shortages in the availability of frontline, non-professional (paraprofessional) long term care workers. The review sought to examine the materials from the scientific and professional publications, government reports and statistics, as well as materials representing activities undertaken in other states facing the same worker shortages. Collection of the materials reviewed also concluded in November.

[8] State regulations do not presently distinguish between personal care homes and assisted living facilities. The present study does distinguish between large personal care homes (resident capacities greater than 20) and small personal care homes (capacities under 20).

Organization of the Report

The sections of this report and the accompanying appendices provide a complete description of the project, its methods, its findings, and the suggested recommendations. Section Two of the report provides an overview on the project's methodology. This section summarizes the procedures followed in constructing the sample of administrators and the representativeness of the completed surveys. More detailed technological descriptions of the survey methods and representativeness of the results are located in Appendix B: Technical Notes on Methods.

Section Three of the report presents a detailed summary of the reviewed literature. This section of the report synthesizes the materials obtained from rather diverse sources and emphasizes the actions taken by other states in their efforts to correct their workforce shortages. This section helps to illustrate what types of actions might be appropriate for the situation faced by the Commonwealth.

Section Four focuses on findings from the administrator's survey. It is divided into sub-sections that describes the extent of reported staff shortages, the consequences resulting from the shortages, and profiles present working conditions including compensation levels, benefit, training and its costs. A final sub-section focuses on strategies employed by administrators for handling recruitment and retention difficulties. This last sub-section also discusses 'best practice models.' These subsections summarize key findings and emphasize results that are important at different levels of analysis. Throughout the section, the discussion considers the results for the State as a whole, for issues as they relate to specific geographic areas, and for critical differences that exist between urban and rural communities and between different types of long term care providers. Included tables highlight important differences. For more extensive comparisons, the reader should consult the Appendix Tables (Appendix A).

Section Five presents a series of recommendations that emerge from the findings and are informed by the materials contained in the review of the literature and by actions taken by other states. In most circumstances the recommendations are presented as a series of options. This section is presented to assist the Pennsylvania Intra-Governmental Council on Long Term Care to propose specific action steps.

Section 2

Methods

A key component of this study is a survey of administrators representing the long term care industry in the Commonwealth. This section of the report provides a summary of the sample, the survey instrument and data collection procedures. This section also assesses the representativeness of the resulting sample and the level of accuracy of the results. Readers who are interested in a more formal description of the methods should consult *Appendix B: Technical Notes on Methods.*

Pennsylvania Long Term Care Providers

The purpose of the survey is to collect information from long term care providers in Pennsylvania. Providers of interest are both community-based and facility-based organizations that serve the long term care needs of the elderly with functional impairments. In addition, relevant providers included those Centers for Independent Living that operate the consumer-delegated portions of the statewide attendant care programs. These programs serve the community-based long term needs of those mentally-alert adults with physical disabilities and those qualified elderly recipients who choose to receive their services through agency-delegated rather than the consumer-directed portion of the Commonwealth's attendant care programs.

The focus of this study is the facility-based and community-based providers serving the long term care needs of the elderly and the physically disabled adults. In the fall of 2000, this group included 3,411 government-operated and privately operated nursing homes, Centers for Independent Living, Medicare/Medicaid certified home health agencies, licensed, non-certified home health agencies, unlicensed home care agencies, adult day care centers, and large and small personal care homes.[9] Excluded were providers that serve physically disabled children, children and adults with developmental disabilities, as well as children and adults with mental illness.

[9] As previously indicated, large personal care homes are facilities with resident capacities greater than 20 and small personal care homes have capacities under 20).

Technical Advisory Panel

To help ensure the proper development of the sample and the survey instrument, the project assembled a Technical Advisory Panel. Members of this panel are experts in long term care, public policy research and quantitative methods. The panel reviewed the sampling plan and the survey instrument, and project staff incorporated suggestions from the panel. A list of the Technical Advisory Panel and their affiliations can be found in Appendix C.

Construction and Selection of the Sample

The sample was drawn from lists of different types of long term care providers supplied by the Intra-Governmental Council. The goals of the study sample were three-fold:

I. To be representative of all types of relevant facility- and community-based providers;
II. To ensure that urban and rural areas of the Commonwealth were also represented;
III. To ensure that all regions of the Commonwealth were represented while still providing valid numbers for Pennsylvania as a whole.

To achieve these goals, the study selected a random sample that represented all relevant providers and at the same time represented all regions of the Commonwealth. Lists of providers were assembled by type and by region and differentiated urban from rural communities.

The types of providers in the sample are:

- Adult Day Care Centers
- Centers for Independent Living
- Nursing Homes
- Home Health Agencies
- Home Care Agencies
- Personal Care Homes

The regions for the sample correspond to Workforce Investment Areas as defined by the Pennsylvania Department of Labor and Industry. The ten regions (with counties) are:

1. Northwest (Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, Warren)
2. North Central (Cameron, Clearfield, Elk, Jefferson, McKean, Potter)
3. Northern Tier (Bradford, Sullivan, Susquehanna, Tioga, Wyoming)
4. Northeast (Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, Wayne)
5. Central (Centre, Clinton, Columbia, Lycoming, Mifflin, Montour, Northumberland, Snyder, Union)
6. Southwest (Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Washington, Westmoreland)
7. Southern Alleghenies (Bedford, Blair, Cambria, Fulton, Huntingdon, Somerset)
8. South Central (Adams, Cumberland, Dauphin, Franklin, Juniata, Lebanon, Perry, York)
9. Southeast (Berks, Bucks, Chester, Delaware, Lancaster, Montgomery, Philadelphia)
10. Lehigh Valley (Lehigh, Northampton)

In addition, each region was divided into urban and rural areas. The region and urban/rural groups (strata) are sampled proportionately to allow the collection of information that was representative for the entire Commonwealth. Within region groups (strata), providers were randomly sampled. The provider strata were sampled disproportionately to ensure that statistically sufficient numbers of different types of providers were in the sample. Within the groupings, the lists of providers were randomized so that the providers were contacted in a random order.

The sample allows the estimation of valid descriptive statistics for each type of provider and for the entire Commonwealth. Furthermore, the sample also permits comparisons between urban and rural areas when data are aggregated over provider-type. While all regions in the Commonwealth are represented in the sample, budgetary limits prevented the construction of a sample with sufficient numbers to permit the calculation of valid statistics depicting specific types of providers within specific geographic regions.

Development of the Survey Instrument

The survey instrument is a telephone interview that lasted between 15 and 25 minutes. Respondents were administrators of long term care facilities or agencies in the Commonwealth. The questionnaire covered five topic areas:

I. Basic characteristics of the facility or agency including number of persons served and number of frontline workers
II. Worker experience and training
III. Worker compensation and benefits
IV. Recruitment and retention problems
V. Strategies for dealing with recruitment and retention

Polisher Research Institute (PRI) staff developed the survey instrument. The Technical Advisory Panel reviewed preliminary drafts of the questionnaire and suggested improvements. Responses to the questions reflect both the actual provider situation as well as the administrator's perceptions of recruitment and retention problems. A complete copy of the questionnaire is included in Appendix D.

Data Collection Effort

Data collection occurred during September, October and November 2000. PRI contracted with CODA, Inc., a data collection firm, to conduct interviews. CODA conducted 901 interviews, thus reaching the project's goal of 900. The overall response rate is 71 percent. The 901 providers are 26 percent of all (3,411) providers in the Commonwealth.

Response Rates

As shown in Table 2-1, response rates vary by provider type and range from 63 percent for licensed, certified home health agencies to 91 percent for adult day care centers. The share of all Pennsylvania providers of each type that was interviewed also varies by provider type, from 20 percent for personal care homes to 81 percent for government nursing homes.

The regional response rate varies from 64 percent in Southeast to 92 percent in the Northern Tier. The share of providers interviewed in each region varies, from 26 percent in Southeast to 30 percent in the Northern Tier

The response rates for urban and rural areas are 67 and 78 percent, respectively. In both types of areas, about 26 percent of all providers were interviewed.

Sample Weights

The data are weighted to correspond to the actual distribution of providers by type, region and urban/rural area. Counts presented in tables therefore reflect the estimated, statewide counts. For more information about how weights were designed, please refer to the detailed technical notes (Appendix B).

Representativeness of the Resulting Sample

The representativeness of a sample depends on how well it captures the diversity of the universe. For this study, the strata (provider-type, region, urban-rural area) ensure that the sample contains a diverse set of providers. Even if a sample is designed to be representative, non-response can distort the data obtained from the sample. The relatively good response rates of greater than 70 percent for this sample are an indication that the sample does not have a significant non-response problem. For strata where the response rates are lower than 70 percent, the sample is still representative since the non-response does not appear to be systematic.

In a more technical assessment of the sample based on standard survey research methods, the sample can be considered representative of the universe of providers. These standard criteria are:

1. **Completeness of the sampling frame** (the roster of providers in the universe) The roster of providers as supplied by the Intra-Governmental Council is the most complete list available
2. **Random selection from the sampling frame -** PRI selected providers with computer-generated random numbers.
3. **Random non-response -** Analysis of non-response did not reveal any systematic pattern.
4. **Completed interviews from every strata -** At least one provider from every region and area completed an interview and are in the data.

TABLE 2-1. Sample Response Rates

	Response Rate	Number of Completed Cases	Providers in the State	Percent of Providers in Sample
All providers	71%	901	3411	26.4%
Provider type:				
Adult Day Care Centers	91%	114	236	48.3%
Centers for Independent Living	80%	16	31*	51.6%
Licensed, Certified Home Health Agencies	63%	112	332	33.7%
Licensed, Non-Certified Home Health Agencies	76%	41	112	36.6%
Unlicensed, Non-Certified Home Care Agencies	67%	20	50	40.0%
Private Nursing Homes	70%	186	755	24.6%
Government Nursing Homes	81%	38	47	80.9%
Small and Large Personal Care Homes	67%	374	1848	20.2%
Urban-rural status:				
Urban	67%	568	2149	26.4%
Rural	78%	333	1262	26.4%
Region:				
Northwest	81%	63	228	27.6%
Northcentral	76%	25	101	24.8%
Northern Tier	92%	23	77	29.9%
Northeast	72%	84	302	27.8%
Central	83%	39	146	26.7%
Southwest	68%	242	980	24.7%
Southern Alleghenies	79%	46	176	26.1%
Southcentral	78%	85	279	30.5%
Southeast	64%	260	1003	25.9%
Lehigh Valley	69%	34	119	28.6%

* Some of the CILs only administer the consumer-driven attendant care program

Since the sample meets all of these standard criteria, it is representative of Pennsylvania long term care providers.

Accuracy of the Data

All sample data have a margin of error because of sampling. The margin of error indicates the maximum amount that estimates would change if a different random sample (from the same universe) were drawn. Although the size of the error is not a measure of representativeness per se; it does indicate whether information from the sample can be confidently generalized to the universe. Most surveys and polls strive to obtain a 10 percent or less margin of error. The overall margin of error for this survey is 4.2 percent. For most provider-types in the data, the margin of error is less than 10 percent, and except for unlicensed home care agencies, the margin of error for all types is less than 15 percent. The margins of error for urban and rural areas are 4.6 and 6.8 percent, respectively. For regions, the margins of error are much more variable. Southeast has the lowest error at 6.9 percent while Northern Tier, North Central and Lehigh Valley have errors in excess of 20 percent. The remaining regions, South Central, Central, Southern Alleghenies, Southwest, Northeast and Northwest have less than 18 percent margin of error.

For most of the data items collected in the survey of administrators, there are no known external sources of information that can be used to validate the accuracy of the data. However, the survey data on the number of persons employed in the industry can be compared with employment information from

the Pennsylvania Department of Labor and Industry. In the publication *Pennsylvania Workforce 2000*, the Department of Labor and Industry provided statistics of the number of Pennsylvania jobs for 1998 and projections for 2005. Extrapolating from their projections, estimates indicate that by 2001 there will be approximately 76,330 nursing and personal care home aides and 21,010 home health/home care aides. Estimates from the survey data place the number of positions at 77,615 and 21,286 respectively. Thus the survey data estimates these same categories of frontline worker positions within two percent.

Using this external source and considering the good overall response rate and the generally low margin of error built into the sample, the results from the survey provide an accurate picture of providers in the Commonwealth. The data can be used with a high level of confidence.

Section 3

Review of Related Materials

Findings from the Literature

An extensive review of the available literature was undertaken in order to gauge what is known nationally and locally about the recruitment and retention of frontline workers in the long term care industry. The Southwest Pennsylvania Partnership for Aging (SWPPA) located and collected a large number of articles, reports and studies on staff issues in long term care, which were reviewed by staff at the Polisher Research Institute who also complemented the work of SWPPA with a more extensive search for available studies and reports. The review of the literature informed the design of the study and administrator questionnaire and provides a background for understanding the underlying issues regarding the recruitment and retention problems faced by long term care providers in the Commonwealth.

Much of the available literature on recruitment and retention issues in long term care focuses on the recruitment and retention of nurses. However, this literature is of limited value for understanding the recruitment and retention problems of frontline workers, since frontline workers (nurse aides, personal care assistants, and home care workers) can be expected to respond to different issues than registered nurses and licensed practical nurses.[10,11,12] This leaves a considerably smaller body of articles and studies. There are a small number of systematic and descriptive studies of recruitment and retention of frontline workers; a comparatively large number of articles offering practical tips for long term care providers based on professional experience; and a few reviews of state activities relating to frontline long term care workers.

Regarding the practice literature, it must be recognized that many of the methods and approaches described in this body of literature have not been tested systematically and may not apply or work well when applied in new settings. The suggested solutions are often based on best-practice cases that may not be easily replicated elsewhere. The solutions and results

---

[10] Cohen, A. and N. Hudedeck. "Organizational Commitment-Turnover Relationship Across Organizational Groups: A Meta-Analysis," *Group and Organizational Management*, 18 (1993): 188-213.

[11] Atchley, S.J. *What Do Nurses Want: Critical Factors in Recruiting and Retaining RNs in Long-Term Care*. Oxford, OH: Scripps Gerontology Center, 1992.

[12] Atchley, R.C. *Frontline Workers in Long-Term Care: Recruitment, Retention, and Turnover Issues in an Era of Rapid Growth*. Oxford, OH: Scripps Gerontology Center, 1996.

may also have been implemented and obtained as part of studies funded by special grants, and may be hard to implement under a normal operating budget.[13] Also, it is an inherent characteristic of the trade press in which these interventions usually are reported that typically only the successful applications of a given intervention get described, whereas administrators or researchers are far less inclined to publish and call attention to failed interventions. The often enthusiastic descriptions in the trade press of best practice models must hence been regarded with caution.

Extent / Dimensions of the Problem

There is a consensus that, nationally, there is a significant shortage in frontline workers in long term care.[14,15] The shortage is a result of problems on two levels: the *recruitment* of frontline workers, which refers to all the steps undertaken by a provider to identify applicants, solicit and process applications, and hire new staff, and the *retention* of workers once they are hired, which refers to a providers ability to keep front-line workers. The long term care industry is experiencing problems on both these levels. That problems manifest themselves on both levels is not surprising, since many of the same factors that may encourage workers to leave long term care providers are likely to affect their probability to seek and accept employment in the long term care industry to start with. Similarly, at the level of individual providers, few recruitment problems may often be accompanied by low retention problems, since the same factors that attract workers to a seek and accept employment at a given provider may encourage them to remain with that employer.

Retention is often expressed in terms of *turnover*, which usually is calculated as an organization's new hires in a given time period (such as one year) divided by the organization's average number of positions during that time period. Turnover rates have been very high in the long term care industry for a long time,[16,17,18] averaging about 45 percent nationally in nursing homes and 10 percent for home health agencies and home care agencies.[19] The variation in rates is significant, ranging from as little as 5 percent for some individual providers up to 200 percent annually for others. However, it should be noted that these figures can be somewhat misleading, since many or even the most of an organization's frontline workers may stay for longer periods of time while a few positions with extremely high rates of turnover may account for most of the annual turnover rate.[20] In this report, we have therefore elected to measure and report the actual length of employment of current Pennsylvania frontline workers, rather than focusing only on the turnover rates.

A recent survey of state administrators showed that 88% of U.S. states (42 states out of 48 responding) consider the recruitment and retention of frontline long term care workers to be a major workforce issue.[21]

Underlying Causes of the Recruitment and Retention Problems

There are two main direct causes for the current shortage of frontline workers. One is the strong economy, which has provided potential frontline workers with greater employment opportunities outside the long term care industry. Frontline workers have typically been drawn from a rather

---

[13] Ibid.

[14] Atchley, 1996

[15] Crown, W.H., D.A. Ahlburg, and M. MacAdam. "The Demographic and Employment Characteristics of Home Care Aides: A Comparison with Nursing Home Aides, Hospital Aides, and Other Workers," *The Gerontologist*, 35 (1995): 162-170.

[16] Schwartz, A.. "Staff Development and Morale Building in Nursing Homes," *The Gerontologist*, 14 (1974): 50-53.

[17] Halbur, B.T. "Nursing Personell in Nursing Homes: A Structural Approach to Turnover." *Work and Occupations*, 10 (1983): 381-411.

[18] Harrington, C. "The Nursing Home Industry: A Structural Analysis." In M. Minkler and C.L. Estes (eds.), *Critical Perspectives on Aging; The Political and Moral Economy of Growing Old*. Amitville, NY: Baywood, 1991

[19] Atchley, 1996

[20] Ibid.

[21] North Carolina Division of Facility Services. *Comparing State Efforts to Address the Recruitment and Retention of Nurse Aide and Other Paraprofessional Aide Workers*. September 1999.

limited labor pool: married, middle-aged women without a college education.[22,23,24] The robust economy and low unemployment levels have resulted in an increased competition among employers for these workers. Although the long term care industry has started to reach out to other groups of potential workers, a comparatively small pool of available workers remains a key reason for the current shortage of frontline workers.

The second direct reason for the shortage of frontline workers is the growth on the long term care industry. The demand for formal long term care has been and is growing rapidly, due to the aging of the U.S. population (which is increasing the number of disabled elderly) and due to changes in the demographic and social structure of the country which is decreasing the supply of available informal caregivers.[25,26] Silverstri projected that nationally, the number of frontline nursing home workers would have to increase by 600,000 workers or by 45 percent between 1992 and 2005 to meet this growing demand.[27] The number of home health and home care workers is projected to increase from 500,000 workers in 1994 to 1,250,000 workers in 2005.[28]

While the good economy during the past 8 years and the expansion in the long term care industry can be seen as direct causes of the labor shortages in long term care, the underlying causes for the recruitment and retention of frontline workers are usually thought to be the nature of the work in combination with current industry wage levels.

Direct care work in the long term care industry is usually quite strenuous and has a comparatively high risk of work injury. According to the US Bureau of Labor Statistics, nursing homes rank first among all U.S. industries in terms of overexertion of workers leading to work injury and lost worktime. Such overexertion typically happens while lifting or moving residents, a common task expected of nurse aides, and usually results in injuries such as disabling sprains and strains or non-specified pain, often to the back.[29] Furthermore, of all occupations that the Bureau of Labor Statistics tracks, nurse aides have the highest risk of being assaulted on the job (typically by patients), facing more than three times as many assaults per year and 10,000 workers than police officers and private guards.[30] Home health and home care aides face similar working conditions and, like nurse aides, have high rates of overexertion and work-related injuries.[31] Moreover, long term care work may arguably have become harder and more dangerous over the last 15 years, as patients, especially in nursing homes, have become somewhat sicker and more dependent; injury rates in nursing homes seem to have climbed significantly during the last 11 years for which data is available.[32]

Employment as a frontline worker is also considered to be very stressful. Direct care workers in general face considerable emotional demands and must daily respond to socially distressing situations. For paraprofessional frontline care staff such as nurse aides and home

---

[22] Cantor, M.H. and E.R. Chichin. *Stress and Strain Among Homecare Workers of the Frail Elderly*. New York, NY: Brookdale Research Institute on Aging, 1990.

[23] Crown, W.H. "A National Profile of Homecare, Nursing Home, and Hospital Aides," *Generations*, 18 (1994): 29-33.

[24] Glock, P. *Home Health Aide and Homemaker Survey Report*. Columbus, OH: Ohio Department of Aging, 1995.

[25] Congressional Budget Office. *Projections of Expenditures for Long-Term Care Services for the Elderly,* Washington, DC, 1999.

[26] Kingson, E. R. "Ways of thinking about the long-term care of the baby-boom cohorts." *Journal of Aging and Social Policy*, 7 (1996): 3-23.

[27] Silverstri, G.T. "The American Work Force, 1992-1995," *Monthly Labor Review* (November 1993): 58-86.

[28] US Bureau of Labor Statistics, 1997a. "Injuries to Caregivers Working in Patient's Homes". *Issues in Labor Statistics*. Washington, D.C., February.

[29] US Bureau of Labor Statistics , 1997b. *Lost-Worktime Injuries: Characteristics and Resulting Time Away from Work, 1995*. Office of Safety, Health, and Working Conditions, Case & Demo News Release, OS NR 06/12/97. Washington, D.C.. http://www.bls.gov/oshwc/osh/case/osnr0004.txt

[30] 1992/1993 data from Toscano, G. and W. Weber. *Violence in the Workplace*. Office of Safety, Health, and Working Conditions, US Bureau of Labor Statistics. http://www.bls.gov/oshwc/cfar0005.pdf

[31] US Bureau of Labor Statistics, 1997a

[32] Service Employees International Union, 1997. *Caring til it Hurts: How Nursing Home Work Is Becoming the Most Dangerous Job in America*. Washington, DC.

health aides, the stress may be compounded by the fact that they usually have little or no influence over care planning, may have few chances to communicate their experiences and concern to co-workers and management, may feel inadequate, and may have difficulties communicating with severely disabled clients.[33,34,35,36,37,38] Studies have found that at least in the case of nurse aides, the high stress can result in emotional exhaustion, a sense of depersonalization, and feelings of low accomplishment, which in turn may lead to staff burnout and turnover. [39,40,41,42] In addition to the hard work and stressful nature of the work, other aspects of the job, such as caring for the personal hygiene of sometimes incontinent persons, may seem unappealing to many potential employees.

The second factor besides the nature of the work that repeatedly has been cited as a major, underlying reason for the recruitment and retention problems in the long term care industry, is the relatively low wages paid to front-line workers. Recent calculations by the North Carolina Division of Facility Services based on data from the US Bureau of Labor Statistics showed that in 1997, the nationwide median hourly wage of frontline long term care workers was $7.56.[43] This was well below the average wage paid to unskilled factory workers ($10.30) and retail sales persons ($8.64), and barely matched the wages paid to unskilled hand packers and packagers ($7.46) and food preparation and food service workers ($6.21). The situation in Pennsylvania was similar to the situation nationwide, although frontline long term care workers appeared to have been paid slightly more in Pennsylvania at the time. The reported median hourly wage of front-line workers in Pennsylvania was $7.76, compared to $9.21 per hour paid to unskilled factory workers, $6.79 to retail salespersons, $7.66 to unskilled hand packers and packagers, and $5.71 to food preparation and food service workers. It therefore seems clear that current frontline workers and potential frontline workers may command similar or sometimes higher wages in other jobs that do not require higher levels of starting experience or skills. Many analysts have argued that given the comparatively heavy work required of frontline long term care workers, it is therefore not surprising that the long term care industry is experiencing severe recruitment and retention problems.

Furthermore, there is usually little room for career advancement at individual providers and throughout the industry.[44,45] Relatively few providers have tiers that allow direct care staff to advance in terms of job duties and wage level. This has led to the frequent description of work in the long term care industry as a 'dead-end' job and may contribute to make new or continued work in the industry unappealing for many current and potential employees.

With regard to wage levels as a cause for labor shortages in the long term care industry, it should be noted that the largest purchaser of long term care is the federal and state governments, mainly through the Medicare and Medicaid programs. At the same time, some

---

[33] Firth, H. and P. Britton. "'Burnout,' Absence and Turnover amongst British Nursing Staff," *Journal of Occupational Pscychology*, 62 (1989): 55-59.

[34] Iglehart, A.P. "Turnover in the Social Services: Turning Over to the Benefits," *Social Service Review*, 64 (1990): 649-657.

[35] Jackson, S.E., R.L. Schwab, and R.S. Schuler. "Towards an Understanding of the Burnout Phenomenon," *Journal of Applied Psychology*, 71 (1986): 630-640.

[36] Hughes, D. And G. Peters. "Organizational Position and Perception of Problems in a Nursing Home," *Journal of Gerontology*, 33 (1978): 279-287.

[37] Waxman, H.M., E.A. Caner, and G. Berkenstock. "Job Turnover and Job Satisfaction among Nursing Home Aides," *The Gerontologist*, 24 (1984): 503-509.

[38] Banaszak-Holl, J. and M.A. Hines. "Factors Associated with Nursing Home Staff Turnover," *Gerontologist*, 36 (1996): 512-517.

[39] Jackson et al., 1986

[40] Maslach, C. *Burnout: The Cost of Caring*. Englewood Cliffs, NJ: Prentice-Hall, 1982.

[41] Maslach, C. and S.E. Jackson. "Patterns of Burnout Among a National Sample of Public Contact Workers," *Journal of Health and Human Resources Administration*, 7 (1984): 189-212.

[42] Bowers, B. and M. Becker. "Nurse's Aides in Nursing Homes: The Relationship between Organization and Quality," *The Gerontologist*, 32 (1992): 360-366.

[43] North Carolina Division of Facility Services, 1999

[44] Banaszak-Holl, J. and M.A. Hines

[45] Glock

states mandate minimum resident-to-staff ratios and/or hours of care per patient day for residential care settings. It is therefore a common conception, inside and outside the long term care industry, that the wage levels in the industry should be seen in the context of current government regulations and reimbursement rates.

In conclusion, there are a host of reasons that contribute to explaining the worker shortages experienced by the long term care industry in Pennsylvania and elsewhere. Low unemployment levels and the growing size of the long term care industry may and have been cited as the direct reasons for the industry, but the underlying reasons may be better described as the nature of the work in combination with the wage level of long term care positions relative to that of alternative jobs.

Problems Associated with Worker Shortages, Recruitment Difficulties, and High Levels of Turnover

The recruitment and retention problems experienced by the industry are thought to have significant effects on both the providers themselves as organizations and on the level and quality of care that they deliver. It is obvious that aggregate worker shortages in the industry limits the amount of direct care that the industry can deliver at any given point and limits the pace at which the industry can grow. It is also likely that the shortages are having a negative impact on the quality of care because individual workers are being stretched to provide care for more patients during their shifts.

Additional problems are created by the high incidence of quick turnover (i.e., workers quitting soon after being hired). Some turnover in the long term care industry is inevitable, as in all other industries, as employees move, retire, die, or get promoted to other positions. There are obviously costs associated with this type of turnover, but these costs are usually incurred by the employer after a relatively long time of productive employment. What becomes problematic for long term care providers is when a) valuable employees voluntarily quit, or b) newly-trained workers quit (which means that the recruitment and training investment is lost without any return on the investment). The latter type of turnover is very common in the long term care industry; a very high proportion of new workers quit within a few weeks of being hired.[46,47] Since the cost of recruiting and training a replacement worker can be significant and range into thousands of dollars, this turnover can pose a significant financial burden on long term care providers. One study that examined the cost and process of hiring replacement home care workers due to turnover, found that recruitment efforts alone (such as advertising, interviewing, and checking references) cost $398 per replacement hired. Orientation expenses were $675 in total, while training expenses amounted to $1,859. In total, the cost of replacing one worker was $3,362.[48] This amount did not include the cost of lost production while the newly hired worker is being trained, and neither did it account for the cost of workers who joined but quit or stopped showing up before training was over. In one reported example from a home care agency, about 20 percent of workers who started training quit or stop showing up before training was over and work was supposed to start.[49]

High levels of turnover may also lead to problems with the quality and the continuity of care. Front-line workers are often the persons best able to monitor the day-to-day physical and mental health of clients and residents. Constant turnover means that frontline workers do not develop in-depth knowledge of the people they serve which limits the workers' ability to recognize and communicate important changes in health status and functioning. As a result, professional health care practitioners lose an important source of information regarding the well-being of patients.[50] In addition, the

---

[46] Harrington, 1991

[47] Banaszak-Holl, J. and M.A. Hines, 1996

[48] Zahrt, L.M. "The Cost of Turnover in a Home Care Agency," *Caring* (April, 1992): 60-66.

[49] White, M. "Homecare Consortium Addresses Frontline Worker Issues," *Generations*, 18 (1994): 54-56.

[50] For the role of nurse aides, see Jackson, S.E. and K. Schaefer. "Identifying Clues to Infection in Nursing Home Residents," *Journal of Gerontological Nursing*, 19 (1993): 33-42, and Smyer, M., D. Brannon, and M. Cohn. "Improving Nursing Home Care through

provision of good care by frontline staff is often simplified if not necessitated by the direct care staff knowing and being on personal terms with clients. Significant turnover of frontline care workers can therefore lead to problems maintaining quality of care, and may increase training costs.[51,52,53,54,55]

Empirical Results Regarding Provider Interventions

Studies have attempted to establish what types of provider interventions and provider characteristics have an effect on recruitment and retention, but the literature can not be said to offer any conclusive evidence regarding most types of characteristics and efforts. Furthermore, as was discussed in the introduction of this section, it is usually hard to extrapolate from the findings of one study or program, as the findings may be the result of extraordinary circumstances and may not be easily reproduced elsewhere; and there is also a bias in terms of what results get described in the literature.

What has been reported may be summarized as follows.

Salary and benefit levels. There is a strong conception among long term care managers and most analysts that competitive pay and benefits is associated with less recruitment and retention problems.[56] The fact that unskilled work at fast food restaurants and large stores such as WalMart may pay as well or more than work as a frontline worker is considered as a key reason for why many long term care providers are experiencing difficulties. Comparatively high-paying providers are believed to be better off, or at least, raising wages is considered to be an effective recruitment and retention tool. This is very logical on the face of it, but nevertheless the effectiveness of higher wages on recruiting and retaining frontline workers has not been rigorously studied. There is, however, some evidence that suggests that low wage levels account for part of the industry's retention problems. One study of home care workers who resigned found that 55 percent cited the wage level as a reason for quitting, and 50 percent cited poor benefits as a reason.[57] Another study reported similar results for nurse aides.[58] Furthermore, a study of certified nurse assistants (CNAs) in Iowa found that of the 57 percent of CNAs in the study who had considered leaving their jobs, 33 percent said that low wages and inadequate benefits were the main reason for considering doing so.[59] This provides some support to the theoretically sound notion that retention by long term care providers are affected by wage and benefit levels.

Worker influence over care planning and work scheduling. Another organizational characteristic that is widely thought to be related to turnover and staffing problems, is the degree of worker involvement in decisionmaking and care planning. Management consensus seems to be that giving frontline workers a voice and an influence over care planning and work tasks is associated with better retention. There is some evidence that supports this. According to a 1991 study, nurse aides involved in care planning were less likely to express a wish to leave.[60] A more recent study, also of nurse aides, found that aide turnover was reduced significantly by aide involvement in interdisciplinary care plan meetings.[61] Furthermore, as has been pointed

Training and Job Redesign," *The Gerontologist*, 32 (1992): 327-333.

[51] Cherniss, C. *Staff Burnout: Job Stress in the Human Services*. Beverly Hills, CA: Sage, 1980.

[52] Waxman et al.

[53] Wagnild, G. "A Descriptive Study of Nurse's Aide Turnover in Long-Term Care Facilities," *Journal of Long-Term Care Administration*, 17 (1988): 19-23.

[54] Iglehart

[55] Banaszak-Holl, J. and M.A. Hines

[56] Atchley, 1996

[57] Gilbert, N.J. "Home Care Worker Resignations: A Study of the Major Contributing Factors," *Home Health Care Services Quarterly*, 12 (1991): 69-83.

[58] Bowers and Becker

[59] Iowa Caregiver Association/Hill Simonton Bill. *Certified Nursing Assistant (CAN) Recruitment and Retention Project. Phase I: Survey Results*. Des Moines, IA, December, 1998.

[60] Caudill, M. and M. Patrick. "Turnover among Nursing Assistants: Why They Leave and Why They Stay," *Journal of Long-Term Care Administration*, 19 (1991): 29-32.

[61] Banaszak-Holl, J. and M.A. Hines

out by Atchley,[62] differences in turnover rates between home care workers and nursing home workers may be explained by differences in level of worker autonomy and influence over care planning. Home care workers, working in clients' homes without close supervision from supervisors, have considerably greater possibilities to negotiate work tasks and scheduling than do nurse aides, who work in facility-based settings under more inflexible schedules. Incidentally, turnover rates among home care workers has been reported to be significantly lower than among nursing home workers.[63,64,65] Another study found that of home care workers who did resign, a considerable portion cited working conditions including lack of input over care plans as a key reason for resigning.[66] This offers more credence to the idea that more worker involvement in care planning may improve retention.

Supervision and administration. Some studies indicate that dissatisfaction with supervisors and administrative routines are important reasons for job dissatisfaction and/or turnover in long term care.[67,68] In one study, CNAs cited several aspects of supervision as main reasons for job satisfaction and job dissatisfaction, and problems with management was stated as a common reason for considering quitting. The same study found that CNAs who had considered quitting their jobs were more likely than those who had not considered quitting to state that they were unable tell from their administrator's action that he or she expected excellent care. Furthermore, the CNAs who had considered quitting were more likely to indicate that they did not receive any positive feedback from their administrator. On the other hand, most of the CNAs who had quit did not explicitly cite relations with management as reason for leaving, although answer categories such as "I got another job" may have included such cases.[69] Good supervisors and/or training of supervisors, and positive reinforcement by administrators, could hence be factors that may influence retention, according to the literature.

Work injuries. As has been discussed elsewhere, work related injuries are very common in long term care work. One study found that fully 19 percent of former CNAs reporting that they quit because of "illness, injury, or pregnancy".[70] Efforts at the provider level to decrease the incidence of strains while lifting residents (through e.g., the use of assistive devices such as bed swings, or policies mandating that at least two persons need to assist in lifts) may potentially have a positive effect on retention.

Outreach efforts to help recruitment. Long term care providers have attempted a wide range of strategies for identifying potential employees and enticing them to apply for positions. These include referrals by current employees and local organizations, advertisements, job fairs, use of local employment agencies, and recruitment at schools. Currently, the majority of frontline workers seem to be hired as a result of personal referrals.[71],[72] There is little evidence that other recruitment strategies are efficient, although this probably varies from provider to provider.

Screening applicants. It goes without saying that a careful screening of applicants may reduce turnover, since some applicants clearly will be better cut out for work as a direct care worker than others, and/or may be more serious about their application. However, it is hard to offer any uniform recommendations as to how such screening procedures can or should be designed. Furthermore, many providers that are experiencing worker shortages may not have the luxury of being able to screen out applicants. Such providers may prefer to hire each applicant and simply hope for the best.

---

[62] Atchley, 1996

[63] Close, L., C.L. Estes, K.W. Linkins, and E.A. Binney. "A Political Economy Perspective on Frontline Workers in Long-Term Care," *Generations*, 18 (1994): 23-28.

[64] Marion Merrell Dow. *Managed Care Digest, Long Term Care Edition*. Kansas City, MO: 1993.

[65] Marion Merrell Dow. *Managed Care Digest, Long Term Care Edition*. Kansas City, MO: 1994.

[66] Gilbert

[67] Feldman, P.H. '"Dead-End' Work or Motivatin Job? Prospects for Frontline Paraprofessional Workers in Long-Term Care," *Generations*, 18 (1994): 7-12.

[68] Iowa Caregiver Association/Hill Simon Bell, L.C.

[69] Ibid.

[70] Ibid.

[71] Atchley, 1996

[72] Glock

Orientation programs. Once workers are hired, they need to be given orientation and training. Under ideal circumstances, orientation programs can produce knowledgeable workers who feel enthusiastic about their job. There have been reports that effective orientation programs may reduce staff turnover.[73]

Training. Training is believed to be related to turnover, but little hard data is available to support this proposition. Some studies have found that training programs in nursing homes did not have much of an effect on the performance by nurse aides, but that it could serve as a tool for communicating to aides that their work was important.[74,75] However, carelessly designed training programs may heighten workers awareness of negative aspects of the job and may increase turnover.[76]

Other provider characteristics. Several other factors have been discussed as possibly having an impact on recruitment and retention of frontline workers. However, most of these factors have either not been studied in depth, or are factors that can not be easily changed by providers (such as provider size; provider profit/non-profit status; and so on).

State Efforts to Address the Recruitment and Retention of Frontline Workers

The overwhelming majority of states (88%) report that they consider the recruitment and retention of frontline long term care workers to be a major workforce issue.[77] In response to the long term care workforce shortages, states have attempted a number of strategies to alleviate the problems. Approximately 36 states have taken some sort of action, and at least 2 states are considering taking action.[78] However, most of these efforts have only recently been implemented or are just getting started. Therefore, little is yet known about the effectiveness of these interventions. As of January 2001, no real evaluations of state efforts seem to be available that could help guide the Commonwealth of Pennsylvania in its choice of future action.

The main types of actions taken by each state is listed in Table 3-1.

Pass-Through Wage Increases. The most common public policy action so far has been what is known as a "pass through" wage increase. This is an increase of reimbursement levels for which some or all of the increase is earmarked exclusively for salaries and/or benefits for direct care staff. As of the end of 2000, 23 states had implemented some form of a pass through wage increase. Ten of these 23 states (Colorado, Kansas, Massachusetts, Missouri, Oregon, Rhode Island, South Carolina, Texas, Virginia, and Washington) implemented pass throughs that raised wages by fixed dollar amounts. The increases ranged from $0.50 per hour, to $2.14 per hour and $4.93 per patient day. Eight of the states (California, Connecticut, Illinois, Maine, Michigan, Minnesota, Montana, and Wisconsin) implemented wage pass throughs by raising reimbursement rates and mandating that a fixed percentage of the rate increase go to wages and benefits for frontline workers.[79] Vermont instituted monthly wage supplements to all nursing homes to be used for wages and benefits for direct care staff and/or non-direct care staff, and Florida allocated $40 million to

[73] Iannone, J.M. and M.G. Bye. *An Orientation Manual for Long-Term Care Facilities*. New York, NY: Springer, 1993.

[74] Smyer, Brannon, and Cohn,

[75] Brannon, D. and M.A. Smyer. "Good Work and Good Caring in Nursing Homes," *Generation*, 18 (1994): 34-38.

[76] Waung, M. "The Effects of Self-Regulatory Coping Orientation on Newcomer Adjustment and Job Survival," *Personnel Psychology*, 48 (1995): 633-650.

[77] North Carolina Division of Facility Services, 1999

[78] North Carolina Division of Facility Services, 1999; Paraprofessional Healthcare Institute. *Workforce Issues in Long-Term Care: Working Update on State Activities*. Bronx, NY, 1999.; *Results of a Follow-Up Survey to States on Wage Supplements for Medicaid and Other Public Funding To Address Aide Recruitment and Retention in Long-Term Care Settings*, North Carolina Division of Facility Services, November 2000; *Nursing Homes - Success of Quality Initiatives Requires Sustained Federal and State Commitment*, Testimony Before the Special Committee on Aging, United States Senate, General Accounting Office, September 28, 2000 authors' own queries.

[79] Ibid.

TABLE 3-1. State Actions in Response to Frontline Worker Recruitment and Retention Problems

State	Is Recruitment and Retention an Issue?	Has Implemented a Wage Pass-Through	Is Action Being Taken by State to Address Frontline Worker Issues?	Is Action Being Considered by the State?	Type of Action Taken/Being Considered *
Alabama	No	No	No	No	-
Alaska	Yes	No	Yes	Yes	1, 2, 3, 6 ,8
Arizona	Yes	No	Yes	Yes	1
Arkansas	Yes	No	Yes	No	5
California	Yes	Yes	N/R	N/R	3
Colorado	Yes	Yes (not mand.)	Yes	Yes	3
Connecticut	Yes	Yes	Yes	N/R	3
Delaware	Yes	No	Yes	Yes	1,2,5,6
Florida	Yes	Yes (extra funds)	Yes	No	1,2,5
Georgia	Yes	No	Yes	No	7
Hawaii	No	No	No	No	4
Idaho	Yes	No	No	No	4
Illinois	Yes	Yes	Yes	No	3
Indiana	Yes	No	No	No	-
Iowa	Yes	No	Yes	Yes	8,3
Kansas	Yes	Yes (not mand.)	Yes	No	3
Kentucky	No	No	No	No	1,3,7
Louisiana	No	No	No	No	3
Maine	Yes	Yes	Yes	Yes	1,2,4,3,6
Maryland	Yes	No	Yes	Yes	1,3
Massachusetts	Yes	Yes	No	Yes	3
Michigan	Yes	Yes	Yes	No	2,3
Minnesota	Yes	Yes	Yes	Yes	1,3,8
Mississippt	Yes	No	Yes	No	2,6
Missouri	Yes	Yes	Yes	No	1,3,8
Montana	Yes	Yes	Yes	No	3
Nebraska	Yes	No	Yes	No	1
Nevada	Yes	No	Yes	No	1
New Hampshire	Yes	No	Yes	No	8
New Jersey	No	No	Yes	No	5
New Mexico	No	No	No	Yes	5,8
New York	Yes	No	No	No	-
North Carolina	Yes	No	Yes	Yes	2,6,7,8
North Dakota	Yes	No	Yes	No	2

* Key for Type of Action being considered or taken by states:

1 Workgroup / Task Force
2 Changes / Increases in training
3 Wage pass-through
4 Required benefits
5 Exploring alternate employable populations (volunteers, former welfare recipients, etc.)
6 Development of a career ladder
7 Data collection regarding wages, benefits, and other aide issues
8 Other

TABLE 3-1 (Continued). State Actions in Response to Frontline Worker Recruitment and Retention Problems

State	Is Recruitment and Retention an Issue?	Has Implemented a Wage Pass-Through	Is Action Being Taken by State to Address Frontline Worker Issues?	Is Action Being Considered by the State?	Type of Action Taken/Being Considered *
Ohio	N/R	No	N/R	N/R	1
Oklahoma	Yes	Yes	Yes	No	1,3
Oregon	Yes	Yes	Yes	No	1,2,3
Pennsylvania	Yes	No	Yes	Yes	1
Rhode Island	Yes	Yes	Yes	Yes	1,3,8
South Carolina	Yes	Yes	Yes	No	1,3,5
South Dakota	Yes	No	No	No	-
Tennessee	Yes	No	No	No	-
Texas	Yes	Yes	Yes	No	3,7
Utah	Yes	Yes	No	No	3
Vermont	N/R	Yes	Yes	N/R	3
Virginia	Yes	Yes	Yes	Yes	1,3
Washington	Yes	Yes	Yes	No	3
West Virginia	Yes	No	No	No	-
Wisconsin	Yes	Yes	Yes	N/R	3
Wyoming	Yes	Yes	No	No	3
	Yes: 88%	Yes: 46%	Yes: 71%	Yes: 31%	---

* Key for Type of Action being considered or taken by states:

1 Workgroup / Task Force
2 Changes / Increases in training
3 Wage pass-through
4 Required benefits
5 Exploring alternate employable populations (volunteers, former welfare recipients, etc.)
6 Development of a career ladder
7 Data collection regarding wages, benefits, and other aide issues
8 Other

Sources: *Comparing State Efforts to Address the Recruitment and Retention of Nurse Aide and Other Paraprofessional Aide Workers* , North Carolina Division of Facility Services, September 1999; *Workforce Issues in Long Term Care: Working Update on State Policy Activities* , Paraprofessional Healthcare Institute and NCCNHR and the National Ombudsman Resource Center, Novermber 1999; *Results of a Follow-Up Survey to States on Wage Supplements for Medicaid and Other Public Funding To Address Aide Recruitment and Retention in Long-Term Care Settings* , North Carolina Division of Facility Services, November 2000; *Nursing Homes - Success of Quality Initiatives Requires Sustained Federal and State Commitment* , Testimony Before the Special Committee on Aging, United States Senate, General Accounting Office, September 28, 2000; Authors' own inquiries

increase staffing and wage levels in nursing homes. Oklahoma, Utah, and Wyoming had also instituted some form of wage pass through.

Another two states (Louisiana and Maryland) had passed legislation that authorized wage pass throughs, but had not yet implemented these measures.

Of the states that established wage pass throughs, 10 did so only for nursing home workers, 9 sought to raise wages only for home care aides, and 4 passed wage increases for both types of workers. Most of the states mandated that the wage pass throughs should be distributed equally to all frontline workers, although a few allowed the providers to

determine which workers should receive the additional funds.[80]

Sanctions for failing to use the earmarked funds for their intended purpose—wages and benefits for frontline staff—typically consists of immediate repayment of the extra funds, although Missouri stipulates that providers who violate the requirements could have their Medicaid status revoked. The majority of the states that passed wage pass throughs did not expect the monitoring of providers' compliance to be an undue burden for state agencies.[81]

It should be recognized that a one-time wage pass through is at best a short to medium term solution for helping attract more workers to the long term care industry. If the economy keeps growing at its present pace and wages in other low-level jobs keep increasing, then the wages rates paid for jobs comparable to frontline worker positions will within a few years catch up with the increased wage rate for frontline workers. Therefore, if a wage pass through is the only action taken by a state, the state may find itself facing the same problems again in a few years time.

With one exception, no substantiated evaluations of wage pass troughs were available as of January 2001. A survey of 12 of the states that have implemented wage pass throughs showed that 4 (33 percent) reported that that pass through had had a positive impact on recruitment or retention, or that it was assumed to have had a positive effect.[82] Three states (25 percent) reported no impact, and three states (25 percent) indicated that the effect was unknown. [83] None of these findings were backed up by data. The only substantiated claim was from Michigan, which implemented a pass-through for nursing homes in 1990. Michigan administrators had reported that turnover rates at nursing homes dropped from 74.50 percent in 1990 to 67.45 percent in 1998. However, it is not clear if this change can be attributed to the wage pass through.

Enhancement incentives. Rhode Island has implemented a system in which reimbursement rates to some degree are tied to performance by providers and staff. The state has made available additional funds that are allocated to providers depending on client satisfaction, level of patient acuity, level of provider accreditation, continuity of care, and level of worker satisfaction. The objective is to provide incentives for providers and staff to increase quality of care. In addition, extra hourly reimbursements are available for certain shifts. The result is an enhancement system in Rhode Island in which bonuses above the base rate can range from $0.50 per hour up to $6.00 per hour.[84]

Raised reimbursement rates for certain shifts. New Jersey, like Rhode Island, has created a system in which reimbursements are higher for home care aide services provided at night, weekend, and holidays. This is expected to help home health agencies and home care agencies to find and pay workers for these hard-to-fill shifts. It should be noted that many providers already pay such shift differentials; however, New Jersey and Rhode Island now explicitly provides state funding for such shift differentials.

Transportation reimbursements. Many but not all home health agencies and home care agencies reimburse staff for traveling time and/or traveling expenses, or provide some type of transportation service. However, this is typically not mandated by state regulations. Washington has passed legislation that mandates reimbursements for traveling time, and has also made additional funds available to providers for that purpose. In Florida, a state workgroup has recommended that the state review transportation reimbursement options.[85]

Career ladders. A possibility for career advancement has frequently been cited as a factor that is likely to improve retention of frontline workers. Therefore, states have been

[80] Ibid.

[81] North Carolina Division of Facility Services, 1999

[82] North Carolina Division of Facility Services, 2000

[83] Of the remaining two states in the survey, one (Texas) had implemented a wage pass through shortly before the survey and could hence not yet evaluate the effectiveness of the pass through, and one state (Colorado) indicated that the pass through to a considerable degree had not been used for its intended purpose.

[84] North Carolina Division of Facility Services, 1999

[85] Ibid.

urged to consider aiding in the development of career ladders for frontline workers. Mississippi has established standards for homemaker and personal care aides as a basic career ladder, and Illinois has established a separate category of workers in nursing homes who receive special training. Maine, Michigan, Alaska, and Delaware are considering creating some type of career ladder.

Training. A number of states have implemented training programs for existing workers to give them an incentive to stay in the profession, and/or training programs for welfare recipients and others to entice them to enter the long term care workforce as paid workers or volunteers. States that provide training for nurse aides include Mississippi, Delaware, and Maine, whereas New Jersey provides training to welfare recipients that reportedly has resulted in a number of new home health aides. Workgroups New Mexico and Florida have suggested steering welfare recipients into training programs, and a number of state workgroups have recommended an increased use of volunteers after appropriate training.

In the face of conditions over which administrators have little direct influence, other states have used a variety of strategies to tackle 'community problems.' Special commissions or coalitions of providers and trade associations have undertaken such efforts, generally in collaboration with government agencies. Efforts have included public information campaigns to promote a more positive image of the work done by frontline personnel. Other efforts have included special employment programs to encourage workers to seek employment opportunities in less densely populated areas.

Section 4

Findings

Findings from the Survey of Administrators

Introduction

This section reports on the results of the survey of administrators. Although some of the presented material serves as background information, this section is organized into topic areas related to potential policy recommendations. The section begins with a brief snapshot characterizing the current working conditions of the frontline workforce in Pennsylvania. The worker profile is followed by a description of the extent and patterns of worker shortages. The final section examines the reported consequences resulting from the shortages and the strategies used by providers to deal with the shortages. This section also discusses the 'best practices' providers have employed to overcome the shortages. The appendix tables at the back of this report provides a more complete description of survey results and includes the results to virtually all of the survey questions. As previously indicated, a copy of the survey instrument is also located in Appendix D.

The Frontline Workforce In Pennsylvania

Based on the administrative survey completed in the late fall of 2000, it is estimated there were approximately 94,150 persons employed in frontline jobs across the 3,400 providers comprising Pennsylvania's long term care industry as previously defined. It is also estimated that across these providers there were an additional 11,300 open job positions.

Frontline worker jobs were not uniformly distributed across providers or across the state. Jobs were concentrated in specific types of providers and specific regions (see Table 2-1, and Appendix Tables 1 and 2 in Appendix A). Privately operated nursing homes, referred to as privately operated nursing homes, represented about 22 percent of all providers, but accounted for 37 percent of the jobs. Although few in number, the government-run nursing homes accounted for about 8 percent of the jobs, so the nursing home segment of the industry accounted for 45 percent of all jobs. Combined, the home health and home care agencies, while representing 14 percent of providers, accounted for 20 percent of the positions. The other large employer segment was personal care homes. Representing 20 percent of the providers, it accounted for 29 percent of the jobs where 23 percent of the jobs were accounted for by the 800 or so large personal care homes. All together, nursing homes, home health/home care agencies, and the large personal care homes represented 88 percent of all the frontline worker jobs in the Commonwealth.

Full and Part Time Composition

On average, the typical provider employed 28 frontline workers although the average number of workers varied by the type of provider (see Appendix Table 1 in Appendix A). For example the average number of workers employed by adult day care centers was 10 compared to 46 at privately operated nursing homes. Although for the average Pennsylvania provider half of their frontline workers were employed full time and half part-time, the balance between full and part-time workers also varied by type of provider (also Appendix Table 1). For example, at the typical nursing home the composition of their frontline workforce contained 69 percent full time and 31 percent part-time workers compared to Medicare certified home health agencies where only 39 percent of their workers were full time and 61 percent were part-time. In general, home care and community-based providers typically had a higher proportion of part-time workers compared to residential providers who typically had greater percentages of full time workers.

Job Tenure

In terms of job tenure, for the average provider, about 29 percent of their frontline workers had been employed by the organization less than 1 year and about 43 percent had been with the particular organization for more than 3 years. In contrast to the full time/part-time composition of their workforces, job tenure across providers was remarkably constant (see Appendix Table 3). Of the 3,400 long term care providers, about 74 percent have been in operation for at least ten years. For the typical provider in operation for at least ten years, on average, about 19 percent of the frontline workers had been with their current employers for more than 10 years.

Entrance Requirements

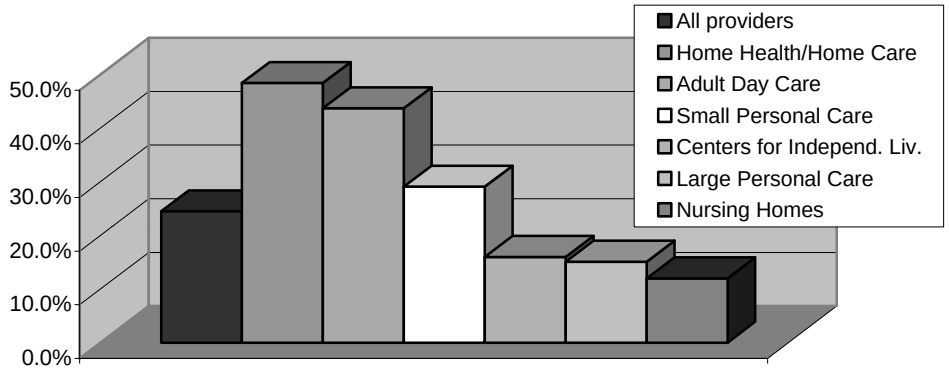
Job entrance requirements for new workers differed by provider type (see Appendix Table 27). Although educational requirements differed somewhat across different types of providers, the requirement of prior work experience showed very dramatic differences. Across all types of providers, two-thirds required applicants to have a high school diploma or at least a G.E.D. equivalent. Across provider types, the high school requirement was fairly uniform and narrowly ranged between 89 percent for adult day care providers and 63 percent for small personal care homes. In contrast, across all providers, only 25 percent required that their new workers have prior long term care work experience, and as shown in Figure 4-1, the requirement of prior work experience showed considerable variation across different types of providers. Nearly 48 percent of the home health and home care providers and 44 percent of the adult day care programs required prior long term care work experience compared to 15 percent for large personal care homes and 12 percent for nursing homes. Moreover, only 12 percent of the providers reported reducing their work experience requirement in the past two years.

Formal Training

For newly hired frontline workers, the level of formal skill training also varied greatly by type of provider. Because of training requirements mandated under Medicare and Medicaid regulations, nursing homes routinely require the greatest number of hours of training (see Appendix Table 25). On average, government-operated nursing facilities reported providing 105 hours of formal training; privately-operated nursing homes on average reported 78 hours. If nursing home providers are excluded, the other types of providers average only 34 hours of training. This lack of parity regarding training may partially explain why some types of providers more frequently require prior work experience. The described patterns between training for entry-level workers and the requirement of prior long term care work experience indicates that within the Pennsylvania long term care industry, there is almost a two-level system, where nursing facilities, serve as the entry-level provider for the industry. This disparity becomes most clear when the costs of training are considered.

Although many elements are associated with the costs of training, costs are directly related to the number of hours of training as is evident in Appendix Table 25. When training costs are viewed across provider types, the costs for training new frontline workers ranged from a high of $1,604 to a low of $256, where the highest costs were reported by nursing homes. The reported average cost of training for new workers at government-operated nursing homes was $1,604; for privately operated nursing homes, the reported average cost

Figure 4-1. Percent of Providers Requiring Prior Long Term Care Work Experience



of training was $1,066. The average training cost for training a new worker at nursing facilities was $1,096. Excluding nursing homes, the average reported cost of training is $460, or about 42 percent of the costs reported by nursing homes. Clearly if nursing homes are serving as the entry-level provider for the industry, they are carrying the bulk of the training costs for the industry. Much of the variation in the level and cost of training is directly related to state and federal regulations that mandate training levels for nursing homes and not for other aspects of the long term industry.

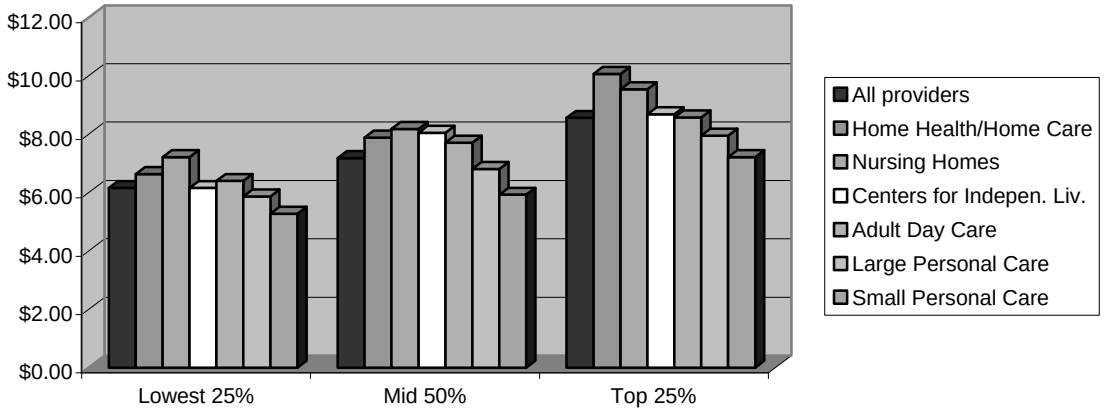
Wages

The survey included a number of questions about wages. Information was collected on entry-level wage rates, wage rate after probationary periods, and wages for the highest paid frontline workers, typically workers with the longest job tenure. The average entry-level wage rate across providers was $7.29, although entry-level rates varied both by provider type and by region as presented in Appendix Table 14 in Appendix A. Between different types of providers, entry-level rates ranged from a high of $8.91, offered by government-operated nursing homes, to $6.10 offered by small personal care homes. Entry-level wage rates offered by providers in urban areas were $7.60 compared to $6.75 for providers in rural areas. Across the different regions of the state, entry-level rates varied from a high of $8.24 in the Southeast to $6.22 in the Southern Allegheny region.

Figure 4-2 clarifies the variation between starting wage rates for different types of providers. It shows the average starting wage rates where providers are categorized into high, middle, and low levels depending on their level of starting wages compared to peers. For example, on average, starting wage rates among the top paying home health/home care providers was $10.07 compared to $7.22 for highest paying small personal care homes. The Figure dramatizes that large and small personal care homes consistently pay the lowest starting rates compared to other types of providers irrespective of whether comparisons are made among providers with the highest, middle, or lowest starting wage rates. The figure also shows that in comparing the entry-level wage rates between highest and lowest payers across the different types of providers, the range was most dramatic among home health/home care providers where the difference between the high ($10.07) and low ($6.64) payers was $3.43. In comparison, for the other providers, the differences between the highest and lowest payers were much narrower, ranging between $1.94 (for small personal care homes) and $2.32 (for nursing homes).

After a specified probationary period, typically 3 months (see Appendix Table 29), most frontline workers received a wage increase. Although some providers do use the ending of the probationary period to substantially increase starting wage levels, the typical increases were small. About 12 percent of the providers increase hourly wages by as much 10 percent, but more than 50 percent of providers reported raising hourly rate by no more than 3 percent and the average increase was 4 percent (see Appendix Table 14). On average across providers, the increase raised hourly wage rates to $7.58, or an average increase of $.29.

Figure 4-2. Entry-Level Wage Rates by Provder Types



In general wage rates for frontline workers do not tend to increase very much over the length of employment as indicated in Appendix Table 14. On average the highest paid frontline worker received an hourly wage rate of $9.51, about a 26 percent increase over the average regular or post-probationary wage rate. There is some variation across different types of providers. The highest wage rates were reported by government-run and privately operated nursing homes, and by adult day care providers. These higher wage rates are probably related to greater job tenure, because these three types of providers also reported the highest percentages of workers with job tenures greater than 10 years.

Benefits

Access to employee benefits by Pennsylvania frontline workers is complex (see Appendix Table 21). Access varies by type of benefit, by type of provider, by urban and rural location, by region, and by whether the worker is full-time or part-time. Across all categories of providers, 68 percent reported that they provided health insurance for their full workers and 40 percent report coverage for their part-time workers. A somewhat similar pattern was reported for paid vacations, 72 percent reported coverage for full time and 52 percent reported coverage for part-time workers. For sick leave benefits, fewer providers reported coverage for either type of worker: 51 percent for full time; 31 percent for part-time. For providers who reported the provision of health insurance for full time workers, virtually all (98 percent) reported employer contributions towards the insurance premiums. A somewhat lower proportion (80 percent) reported contributions for part-time workers. Equally important, 31 percent of providers reported that they contributed to the cost of premiums for family coverage.

In general, urban compared to rural providers more frequently reported benefit coverage for full time workers, but for part time workers, benefits coverage showed few differences. Differences among providers across the geographic regions reiterate the differences between urban and rural providers. Differences across regions generally reflected whether the region contained a major metropolitan area. However, fewer providers in the Southwest, the area containing the Pittsburgh metropolitan area, reported benefit coverage. For example, in contrast to the Southeast (Philadelphia), the Northeast (Scranton/Wilkes-Barre) or the Northwest (Erie), where a vast majority of providers reported coverage for health insurance for full time workers, only 50 percent of the providers in the Southwest reported such coverage. The pattern was similar for part time workers and generally held across the other types of benefits.

There is considerable variation in benefit coverage across different types of providers (Figure 4-3). Virtually all nursing homes provide some form of health insurance and paid vacations for their full time workers and less complete coverage for their part time workers. Adult day care and home care providers and large personal care homes show very similar patterns regarding health insurance and paid

vacations. Reported coverage of paid sick leave was less extensive even among nursing homes. The reported coverage for part time workers was particularly low. It is clearly apparent that few small personal care homes offer benefits of any type irrespective of full or part time status.

The implications for the provisions of benefits for full and part-time workers becomes most evident when benefit coverage are examined by provider type because the full/part-time composition of the workforce varies for different types of long term care providers. For example, even through 80 percent of the home care agencies reported health insurance coverage for their full time workers, because more than 60 percent of their workers were part time, the fact that only half of the home care providers reported coverage for part time workers implies that relatively few frontline workers in home care have access to health insurance coverage.

Welfare to Work Program

Administrators were asked about the number of workers they hired through the state's welfare to work program. They reported that in total approximately 4,000 workers had been hired. As presented in Figure 4-4, most of the welfare to work hires occurred in nursing (33 percent) and large personal care homes (32 percent). Home health and home care agencies and small personal care homes accounted for another 19 and 14 percent respectively. Few were reported by either adult day care organizations or by Centers for Independent Living. As also displayed in Figure 10, 75 percent of the welfare to work hires occurred in urban areas and were concentrated in the Southwest (45 percent) and Southeast regions (34 percents) of the state. The remaining 21 percent of the hires were scattered throughout the other regions.

Act 169 Criminal Background Check

As with other states, the Commonwealth of Pennsylvania requires that any person who is employed or who enters into a contractual relationship to provide care to a care-dependent individual for monetary consideration must have gone through a criminal background check to establish that there are no criminal convictions as specified in the statute. The original law was defined under the Older Adults Protective Services Act. The original law was amended and made more stringent in 1996 and 1997 through the passage of what has become known as "Act 169" which prohibits long term care providers from

Figure 4-3. Benefit Coverage for Full and Part-Time Workers

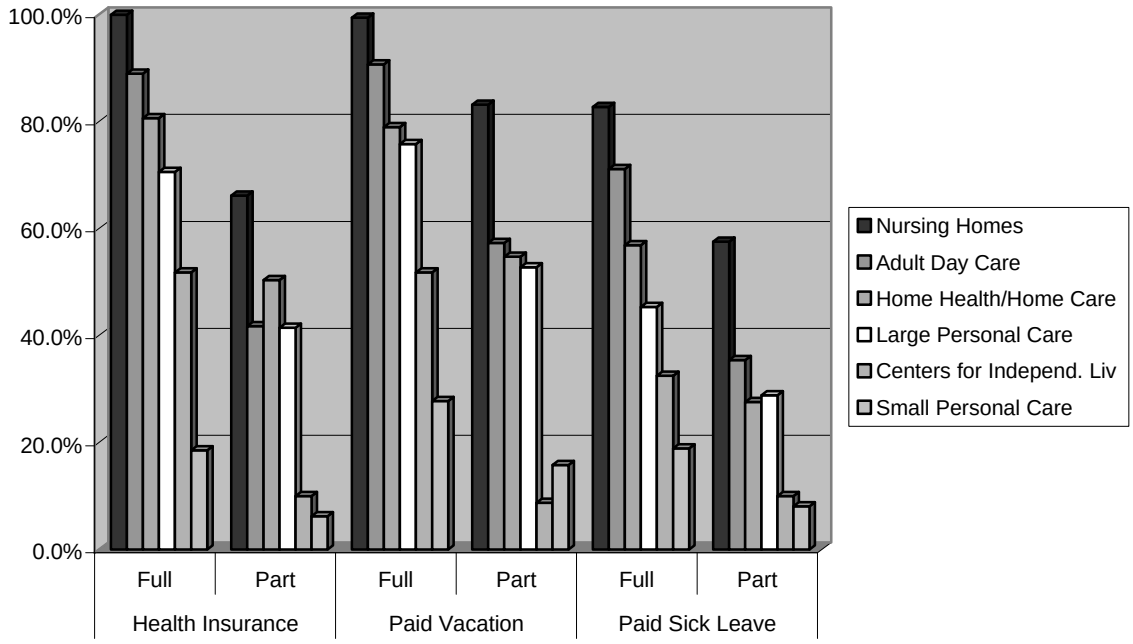
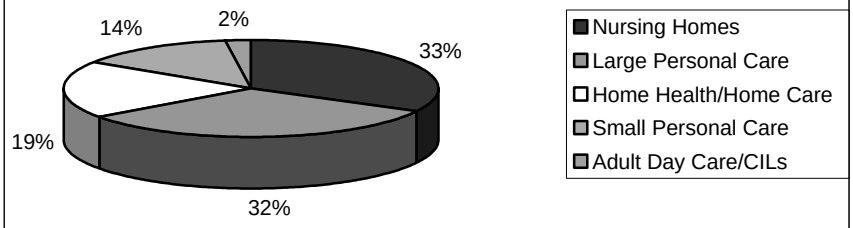
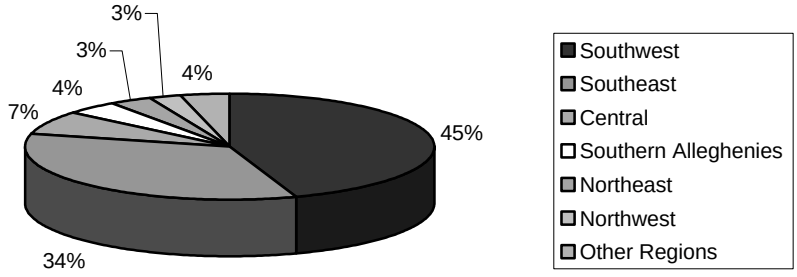


Figure 4-4. Welfare to Work Participants

Provider Type



Region



employing persons who have been convicted of any felonies and misdemeanors listed in the statute which include both crimes against persons as well as crimes against property. The criminal background check requirement mandated by Act 169 became effective in July, 1998.

Commonly referred to as the Act 169 Criminal Background Check, the requirement prevents the hiring of any person as a frontline worker who has been convicted of any crime specified in the statute. Because concerns have been raised as to how the criminal background check might be complicating the hiring of frontline staff, particularly in the face of a worker shortage a series of questions regarding the criminal background check were included in the survey. Questions in the survey asked administrators about the percent of their applicants rejected based on the results of the check, their level of satisfaction with the check, and if dissatisfied, their main reason for the dissatisfaction and how they would like to change the requirement (see Appendix Tables 30-33).

As presented in Appendix Table 30, although 64 percent of all providers indicated that the criminal background check had no effect on their job applicant pools, the remaining 36 percent were affected, at least to some degree. Moreover, about 12 percent reported that at least 30 percent of their applicants were rejected based on the background check. As highlighted in Figure 4-5, provider types were not uniformly affected. The vast majority of small personal care homes and adult day care centers reported no effect and when combined with providers who reported that less than 5 percent of their applicants were rejected, virtually all of these types of providers were unaffected. In contrast, greater numbers of administrators from nursing homes, Centers for Independent Living, and large personal care homes, reported much more significant effects. Over 56 percent of the nursing home administrators and 64 percent of administrators from the Centers for Independent Living reported the rejection of at least a proportion of their applicant pools, and over 30 percent of the homes and 39 percent of the Centers reported that much greater proportions of their applicants were rejected. The same pattern holds for the large personal care homes, but to a somewhat smaller degree where only 25 percent of the large personal care providers reported greater proportions of rejected applicants. Part of the explanation for the variation in effect lies with the typical size of the provider. Clearly, providers with larger numbers the frontline workers reported greater levels of effect. It may also be the case that because most of these providers do not require prior long term care experience, these providers face a larger pool of unscreened applicants. Providers that require previous long term care experience are recruiting from pools of workers

who have already been through the background check. From Appendix Table 30, it is also apparent that providers in urban areas also reported that greater percentages of their applicants were rejected, and the effect on urban versus rural providers was also reflected in the variation in providers across different regions of the state.

Despite the variation by provider type and region, the effects of the criminal background check do appear to be having at least a limited impact on the available pool of workers, and for some types of providers the impacts appear to be more substantial (see Appendix Table 30). These patterns were reflected in the opinions of administrators when specifically asked about the criminal background check requirement (Appendix Table 31). Although 81 percent of all administrators indicated at least some satisfaction with the criminal check, the levels of satisfaction varied by provider type in a pattern that complements the reported levels of rejected applicants. More administrators of nursing homes, Centers for Independent Living, and large personal care homes reported dissatisfaction. Irrespective of provider type or region, overall, relatively few administrators (6 percent) reported complete dissatisfaction. However, 16 percent of administrators for the Centers for Independent Living, and 11 percent of nursing home administrators reported that they were completely dissatisfied with the criminal background check.

When the 19 percent of the administrators who indicated dissatisfaction were queried about the main reason for their dissatisfaction, the most common reasons given were concern that the check went back too far into the applicant's history and that the clearance process takes too long to complete. As written in the current statute, any convicted offense as described by the Act that appears on the individual's criminal record must be used in determining employment eligibility regardless of date of the occurrence.

The suggestions offered by the dissatisfied administrators echo the expressed reasons for the dissatisfaction. Nearly 32 percent of the dissatisfied administrators suggested imposing some form of statute of limitations on at least certain offenses, and another 31 percent suggested speeding up the processing time of applications. A handful of administrators suggested more use of the Internet in conducting the clearance process.

Perceived Changes in Job Performance of New Workers

As the pool of available workers for frontline jobs has contracted, the question has been raised as to whether the quality of new workers has declined as a result of providers being more desperate to fill open jobs. Administrators were asked their opinions about whether the job performance of

Figure 4-5. Job Applicants Rejected Under Act 169

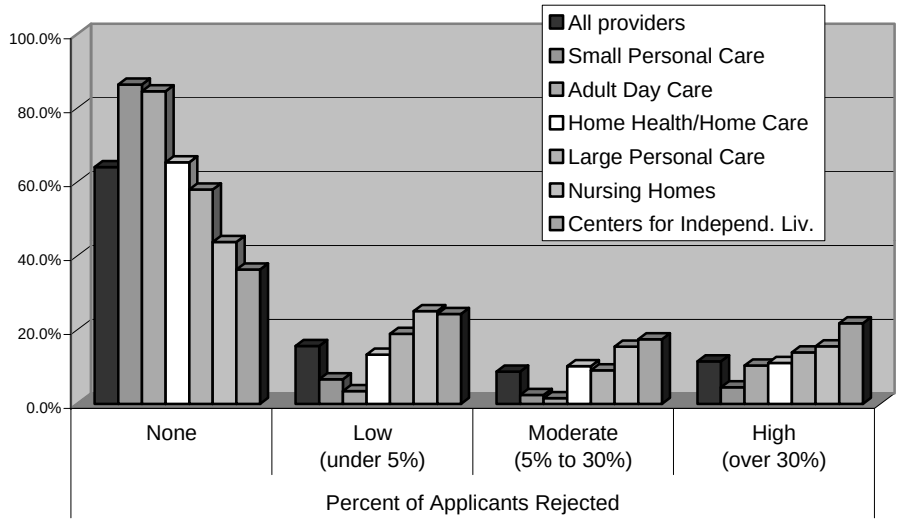
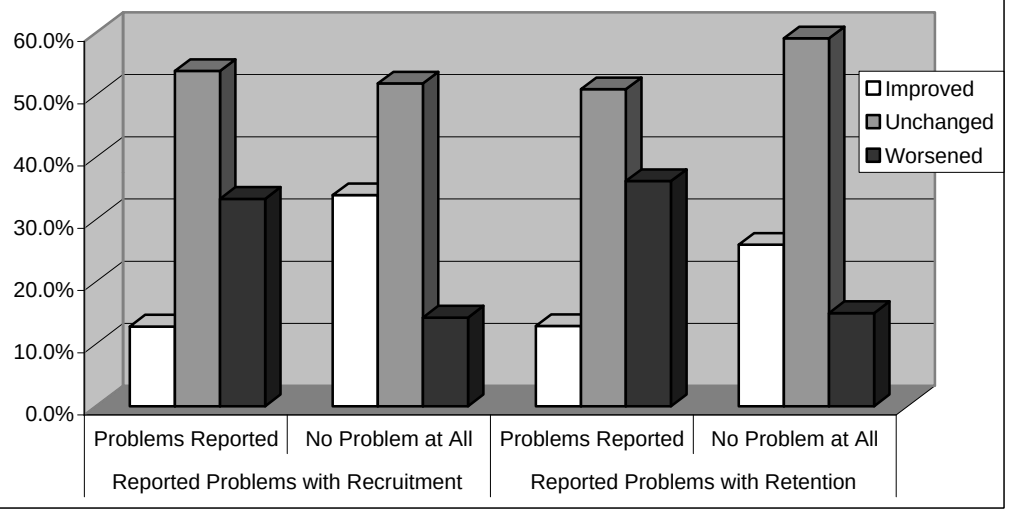


Figure 4-6. Perceived Change in New Worker Performance



their new workers has declined over the last two years. As presented in Appendix Table 28, across all providers, 30 percent indicated that they thought job performance had declined; 17 reported improvements, and 53 percent reported no change over the last two years. Although relatively consistent across different types of providers and across regions, there were exceptions. Over 42 percent of the administrators at privately operated nursing homes indicated that they thought job performance had declined. Across the regions, more of the administrators in the Northeast region also reported that they thought job performance had declined (37 percent). In contrast, more of the administrators in the Southern Alleghenies region reported that they thought job performance had improved (27 percent). The general impression from the administrators' opinions would indicate some decline in job performance. Thus the concern regarding the quality of the workforce in the face of severe shortages seem justified.

Perceptions of changes in job performance were directly related to the reported levels of problems in the recruitment and retention of workers. As demonstrated in Figure 4-6, providers who reported no problems at all with recruitment were much more likely to report that they believed job performance of new workers had improved and for providers who experienced recruitment problems, more reported that job performance of new workers had worsened. Although only 17 percent of all providers reported improved job performance, 34 percent of those with no recruitment problems reported improved job performance. Whereas 30 percent of all providers reported that job performance had worsened, when providers with severe recruitment problems are considered, 41 percent reported job performance declines. Although less strong the same pattern exists for providers reporting no retention problems. Because the data is cross-sectional in nature, essentially a snapshot of providers at a single moment in time, the absolute direction of this relationship is impossible to establish, but it is likely that those providers who perceive worsening job performance are those providers having the most difficulties in hiring and retaining a productive workforce. The question now turns to the extent of the worker shortages.

Reported Degree of Worker Shortages

If frontline workers were uniformly distributed across all providers, the Commonwealth would not be facing a labor shortage, for while across the state 58 percent of providers characterized their organizations as having shortages, only 8 percent described them as severe (Table 4-1). However, as previously indicated, frontline worker jobs are concentrated in specific types of providers and specific regions (see Table 2) and the providers and

TABLE 4-1. Degree of Reported Staff Shortages

	Current Degree of Staff Shortage		
	No Staff Shortage	Some Staff Shortage	A Severe Staff Shortage
All providers	42.2%	49.8%	8.0%
Provider type:			
Adult Day Care Centers	51.1%	45.7%	3.2%
Centers for Independent Living	0.0%	89.0%	11.0%
Licensed, Certified Home Health Agencies	27.3%	52.1%	20.6%
Licensed, Non-Certified Home Health Agencies	40.5%	50.2%	9.3%
Unlicensed, Non-Certified Home Care Agencies*	17.3%	64.8%	17.8%
For-Profit and NFP Nursing Homes	23.3%	64.8%	11.9%
Government Nursing Homes	17.8%	77.8%	4.4%
Large Personal Care Homes	43.7%	51.4%	5.0%
Small Personal Care Homes	66.6%	29.6%	3.8%
Urban-rural status:			
Urban	38.1%	52.9%	9.1%
Rural	49.1%	44.6%	6.3%
Region:			
Northwest	30.5%	58.4%	11.1%
Northcentral*	58.9%	35.5%	5.6%
Northern Tier*	59.2%	31.0%	9.8%
Northeast	36.8%	48.1%	15.2%
Central	33.7%	52.4%	13.9%
Southwest	51.7%	45.4%	2.9%
Southern Alleghenies	52.2%	47.8%	0.0%
Southcentral	46.5%	45.9%	7.5%
Southeast	34.2%	55.4%	10.4%
Lehigh Valley*	28.0%	59.4%	12.6%

*Caution: Margin of sampling error for this group is greater than 20%

regions that constitute the greatest proportion of the frontline workforce reported significant degrees of worker shortages. Privately operated nursing homes constitute the largest segment of the long term care industry in the state. They represent 22 percent of providers and account for 45 percent of the state's frontline worker jobs. Over 77 percent of the privately operated nursing homes reported shortages and 12 percent reported that the shortages were severe. Home health and home care agencies, although constituting only 14 percent of providers, account for 20 percent of the jobs.

Seventy-one percent of the home health and home care agencies reported shortages and 18 percent reported them to be severe. As depicted in Table 4-1, there is considerable variation in reported levels of shortages across other types of providers and across the different geographic regions. The significance of these differences becomes clearer by examining job vacancy levels. Based on the survey results, we estimate that in the fall of 2000 there were about 94,200 frontline workers across the state plus approximately another 11,300 unfilled positions, a job vacancy rate of about 11 percent (see Appendix Tables 12 and 13).[86] Job vacancy

[86] As previously mentioned job estimates from the survey are within 2 percentage points of Department of Labor and Industry projections.

TABLE 4-2. Job Vacancy Levels

	Job Vacancy Level			
	None	Low (less than 10%)	Moderate (10% to 20%)	High (greater than 20%)
All providers	40.6%	22.9%	23.4%	13.2%
Provider type:				
Adult Day Care Centers	61.1%	13.4%	15.6%	9.9%
Centers for Independent Living	5.0%	83.0%	12.0%	0.0%
Licensed, Certified Home Health Agencies	30.7%	23.6%	20.3%	**25.4%**
Licensed, Non-Certified Home Health Agencies	39.0%	15.2%	18.4%	**27.5%**
Unlicensed, Non-Certified Home Care Agencies*	17.8%	45.0%	13.3%	23.8%
For-Profit and NFP Nursing Homes	14.1%	33.1%	33.7%	19.1%
Government Nursing Homes	10.6%	40.6%	42.1%	6.6%
Large Personal Care Homes	39.4%	28.3%	26.8%	5.5%
Small Personal Care Homes	69.6%	5.6%	13.2%	11.6%
Urban-rural:				
Urban	36.6%	23.0%	24.7%	15.7%
Rural	47.2%	22.8%	21.1%	8.9%
Region:				
Northwest	33.3%	31.2%	28.7%	6.9%
Northcentral*	50.2%	20.5%	19.4%	9.9%
Northern Tier*	63.3%	15.7%	10.0%	11.0%
Northeast	30.4%	25.0%	23.9%	20.7%
Central	28.7%	22.3%	30.2%	18.8%
Southwest	49.9%	18.0%	19.8%	12.3%
Southern Alleghenies	61.2%	23.1%	9.4%	6.3%
Southcentral	42.1%	20.0%	32.7%	5.2%
Southeast	33.5%	24.9%	26.0%	15.6%
Lehigh Valley*	20.8%	39.4%	21.7%	18.2%

*Caution: Margin of sampling error for this group is greater than 20%

rates were highest among certified home health providers (15 percent), licensed, non-certified home health agencies (14 percent), and privately operated nursing homes (13 percent). Combined, these three provider types represented 65 percent of all the reported vacancies.

In terms of state regions, the Northeast region that includes the urban counties of Lackawanna and Luzerne, the Scranton/Wilkes-Barre metropolitan area, and the rural counties of Carbon, Monroe, Pike, Schuylkill, and Wayne reported the highest job vacancy rate, over 16 percent. Although the frontline workers in the Northeast region represent only 8 percent of frontline workers in the state, this area accounted for over 13 percent of all vacancies in the state. Other regions presented vacancy rates that ranged between 9 and 11 percent. The Southeast, the region encompassing the Philadelphia metropolitan region, reported a vacancy rate of 10.6 percent. The 4500 job openings in this area accounted for 40 percent of the open positions in the state. Not surprisingly, the other region representing the greatest concentration of openings was the Southwest, the region that includes the Pittsburgh metropolitan area. The Southwest reported a similar job vacancy rate, 10.4 percent, and the 2,400 openings represented 21 percent of the state's open positions. In total unfilled positions in the Northeast, Southeast, and Southwestern regions accounted for three quarters of the state's job vacancies and form areas with critical levels of vacancies.

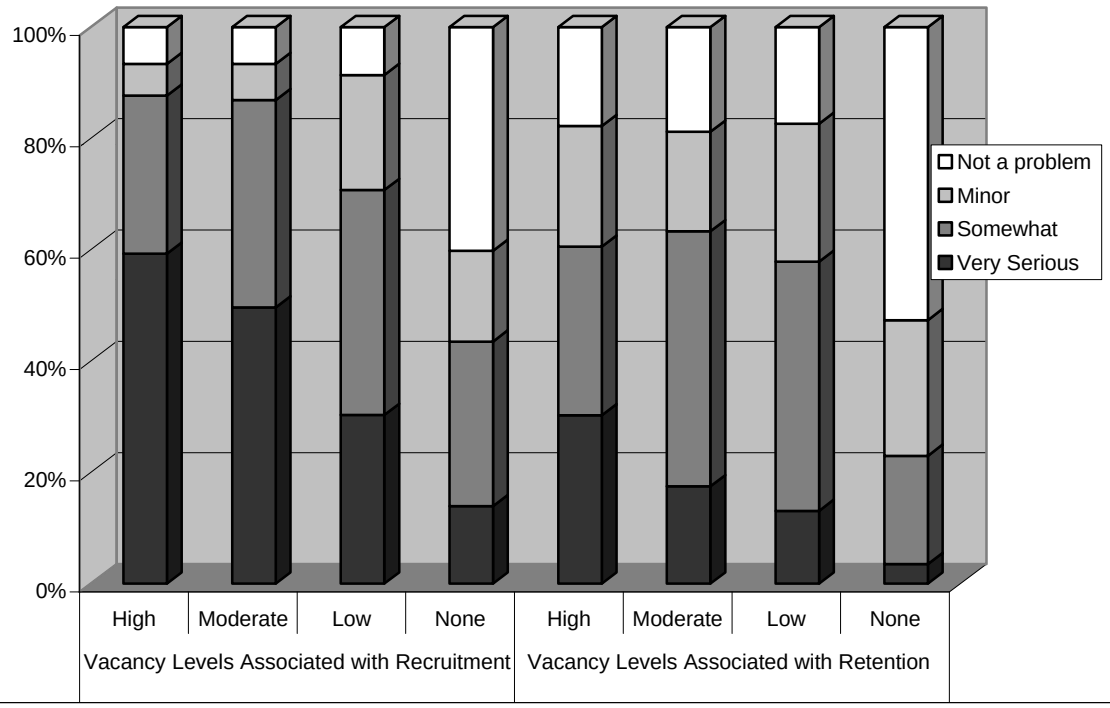
Although vacancy rates differed across providers and regions, there is also considerable variation within the same types of providers and for providers in the same geographic regions. Table 4-2 shows the distribution of provider vacancy rates categorized into none, low, moderate, and high.[87] Across the state, 13 percent of providers reported vacancy rates exceeding 20 percent. All types of nursing homes appeared to have chronic levels of job vacancies, but while only 6 percent of government facilities had high job vacancy rates, greater than 19 percent of the privately operated facilities had vacancy rates greater than 20 percent. A disproportionate percentage of home health and home care agencies also had high job vacancies rates. More than 25 percent of the certified home health providers and 27 percent of the licensed, non-certified home health agencies had vacancy rates exceeding 20 percent. Of course many home care agencies have small workforces. It could be assumed that because home care agencies tend to be small operations, high vacancy rates are an artifact of their size, after all, with a staff of 12, 3 unfilled positions translates into a 25 percent vacancy rate. However, small compared to larger providers typically showed lower job vacancy rates. For example, the mean job vacancy rate for small providers was 8 percent compared to 9 percent for moderately sized and 12 percent for the largest providers, and when vacancy levels were examined among similarly sized providers, nearly 71 percent of the smallest providers reported no vacancies at all. Of course when small providers have higher vacancy rates, the relative magnitude of such shortages could be expected to have a greater negative effect on their operations. Clearly smaller providers are more dependent on their staffs and smaller providers with significant labor shortages would have more difficulties maintaining adequate levels of service, to say nothing about the added burdens resulting from the need to devote time and resources to the recruitment effort. Because home care agencies tend to be small and a significant portion presented high vacancy rates, these types of providers are likely to be experiencing the greatest negative impact resulting from the labor shortages.

Several regions also contained a disproportionate segment of providers presenting vacancy rates exceeding 20 percent (also Table 4-2): 21 percent in the Northeast, 19 percent in the Central, and 18 percent in the Lehigh Valley. The Southeast region, the region representing 30 percent of all state providers, also contained a significant proportion of providers (16 percent) operating with job vacancy rates exceeding 20 percent. Additionally, in the Northwest, Northeast, Central, Lehigh Valley, and Southeast regions, the vast majority of providers were experiencing some level of job vacancy problems.

In summarizing the findings on reported workforce shortages and job vacancy levels, first, although workforce shortages are not universal they are extensive across many types of providers and across many regions in the state. Secondly, the levels of shortages among providers are more heavily concentrated among certain types of providers and in certain regions. Third, provider size is an important factor when considering the effects of worker shortages and in considering strategies for alleviating those effects. Fourth, although all nursing homes appear to suffer from chronic worker shortages, the privately operated nursing homes appear to be more acutely affected by worker shortages and home health and home care providers appear to be experiencing the greatest level of worker shortages.

[87] Where vacancy rate is defined as percentage of vacant jobs over all jobs and where low are vacancy levels greater than 0 but below 10 percent, where moderate are levels between 10 and 20 percent, and where high levels are those greater than 20 percent.

Figure 4-7. Job Vacancy Levels by Degree of Recruitment and Retention Problems



Reported Worker Recruitment and Retention Problems

There was a strong, although not absolute correspondence between staff shortages and reported problems with recruitment and retention problems. Many providers, particularly large providers indicated that some staff turnover is a normal process in doing business and thus do not characterize their organizations as having a staff shortage. However, nearly 69 percent of providers reported more than minor problems and 35 percent reported very serious problems with either recruitment or retention (see Appendix Table 6). Moreover, 77 percent of the providers reporting very serious recruitment problems indicated that, compared to 2 years ago recruitment problems have grown more intense with a similar pattern regarding retention problems. Of providers that reported very serious problems with retention, 68 percent indicated the problems have grown worse in the last two years (see Appendix Table 7).

It would seem that staff shortages would be a direct function of both recruitment and retention problems, but in general, vacancy levels were more closely associated with problems around worker recruitment and less with worker retention. Figure 4-7, shows the relationships between job vacancy rates and reported levels of recruitment and retention problems. Of the providers with vacancy rates greater than 20 percent, 59 percent reported very serious recruitment problems compared to only 30 percent who reported very serious problems with retention. In other analyses, recruitment problems explain nearly twice as much of the variation in job vacancy rates as does retention. Even among providers with no job vacancies, 14 percent reported very serious problems with recruitment while less than 4 percent reported very serious problems with retention.

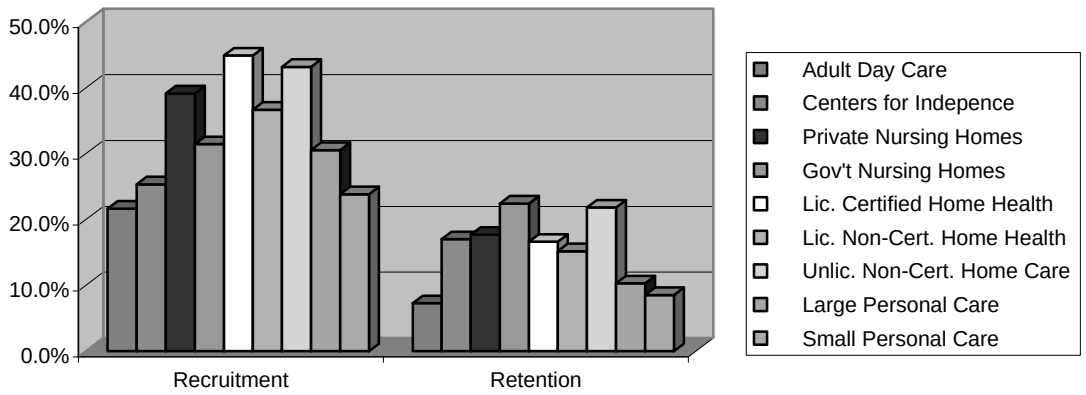
As with job vacancy levels, there was considerable variation in the degree of recruitment and retention problems across different types of providers and across different regions. Compared to the other

types of providers, more of the privately operated nursing homes and home health/home care agencies reported serious problems. In terms of regions, more of the providers in Lehigh Valley, Northwest, and Central regions reported serious problems. What is also clear is that regardless of type or region, providers consistently reported more serious problems with recruitment (see Figure 4-8.).

Among all providers, although 32 percent reported very serious recruitment problems, only 13 percent reported very serious retention problems. Figure 4-8 highlights this consistent pattern across the different types of providers. For example, 45 percent of the certified home health agencies and 39 percent of privately operated nursing homes reported serious recruitment problems while, respectively, 17 and 18 percent reported serious problems with retention.

serious retention problems, 94 percent also reported very and somewhat serious recruitment problems, and less than 6 percent reported only minor or non-existent recruitment problems. This non-reciprocal relationship again indicates that recruitment is a much more widespread problem and that for some providers recruitment and retention problems result from different causes. Recruitment problems were much more sensitive to the local unemployment rates as both reported by administrators (see Appendix Table 8) and in analyses examining reported levels of recruitment problems compared to county level unemployment rates. As could be expected, the lower the unemployment rate the greater the level of reported recruitment problems. There is also some evidence that greater levels of reported recruitment problems were associated with higher levels of competition for a limited pool of available workers within local employment markets. Using the ratio between the

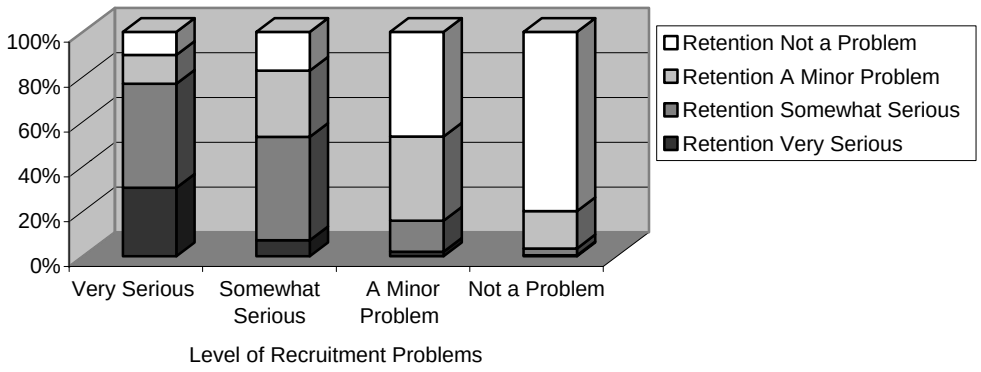
Figure 4-8. Providers Reporting Very Serious Recruitment and Rentention Problems



Recruitment and retention problems do overlap in the same providers. Although only 10 percent of providers reported serious simultaneous problems in both, 42 percent reported a combination of very and somewhat serious problems in both. While the problems are clearly not operating independently of one another, the problems are not entirely reciprocal, as illustrated in the two charts forming Figure 4-9. Of the providers that reported very and somewhat serious recruitment problems, 65 percent also reported very or somewhat serious retention problems, but 35 percent reported that retention problems were either minor or non-existent. For providers reporting very or somewhat

number of females between the ages 25 to 54 to the number of persons 65 and older within a county, as the ratio decreased, the level of reported recruitment problems increased. This relationship did not hold for reported retention problems. Increased levels of retention problems appeared to be more related to higher levels of competition between long term care providers, as measured by wage competition and the ability of some providers to simply run their operations in a way that makes working conditions more attractive.

Figure 4-9. Overlap of Recruitment and Retention Problems



In summarizing the findings on reported problems with recruitment and retention, it appears that recruitment is the more prominent issue irrespective of the setting or the region. Equally important, while recruitment and retention problems appear to be related, many providers reported recruitment problems without the presence of retention problems. This lack of correspondence indicates that the causes of recruitment are somewhat independent of the causes for retention. In the case of recruitment, the causes may be more associated with low unemployment, limited pools of workers and competition between long term care providers and employers in other sectors of the local markets whereas retention problems may be more associated with the quality of management displayed by providers and the level of competition between long term care providers located in the same local markets.

Consequences of Staff Shortages on Provider Operations

As previously discussed, one consequence of the staff shortages is the perception that the job performance of new workers has declined, but the growing staff shortages also have had decided consequences on provider operations. Across all providers reporting staff shortages, the most common reaction has been to increase the use of overtime and to alter scheduling practices to include more flextime options (see Table 4-3). Almost half of the providers reporting staff shortages (49 percent) have done both. Somewhat less frequently reported consequences have been to reduce services and limit the number of persons served (25 percent) and to increase the use of independent contractors or the use of agency personnel (29 percent).

Consequences differed by provider type and varied by region depending on the particular types of consequences (Table 4-3). Examining the consequences by provider type, the vast majority of nursing and large personal care homes that reported shortages had increased their use of overtime. Of the 77 percent of the privately operated and 82 percent of the government-run nursing homes reporting shortages, respectively 90 and 89 percent reported increased use of overtime. For the 56 percent of the large personal care homes reporting staff shortages, 82 percent increased their use of overtime. Although not all nursing or large personal care homes reported shortages, when considering all providers, this means that 69 percent of all nursing and 44 percent of all large personal care homes increased their use of overtime. Since more than 68 percent of the frontline workers are found in these residential settings, it is clear that a very large number of workers face extended workweeks.

It could be expected that prolonged periods of overtime would have its own negative consequences on worker retention. As shown in Figure 4-10, of nursing and large personal care homes reporting staff shortages, the use of

TABLE 4-3. Effects of Staff Shortage on Providers Reporting Shortage

	Percent of Providers with Staff Shortage Who Have:		
	Cut down or limited the number of persons served	Increased the use of overtime labor	Increased the use of independent contractors or agency temps
All providers	25.1%	75.1%	28.6%
Provider type:			
Adult Day Care Centers	14.5%	39.5%	29.8%
Centers for Independent Living	35.3%	73.4%	55.7%
Licensed, Certified Home Health Agencies	64.7%	62.0%	16.1%
Licensed, Non-Certified Home Health Agencies	65.7%	63.8%	27.7%
Unlicensed, Non-Certified Home Care Agencies*	66.5%	37.7%	37.7%
For-Profit and NFP Nursing Homes	21.2%	90.0%	47.0%
Government Nursing Homes	26.2%	89.0%	34.2%
Large Personal Care Homes	9.3%	81.6%	21.6%
Small Personal Care Homes	19.1%	62.1%	10.1%
Urban-rural:			
Urban	25.0%	76.4%	33.8%
Rural	25.5%	72.3%	17.9%
Region:			
Northwest	18.6%	78.9%	15.7%
Northcentral*	30.4%	61.7%	11.3%
Northern Tier*	26.9%	54.7%	4.9%
Northeast	37.8%	69.8%	31.9%
Central	21.0%	66.4%	19.4%
Southwest	14.4%	79.1%	22.2%
Southern Alleghenies	43.8%	68.7%	7.2%
Southcentral	29.6%	82.1%	43.9%
Southeast	26.7%	74.8%	40.4%
Lehigh Valley*	31.9%	78.1%	11.7%

Excludes all cases in which behavior or staff shortage is unascertained

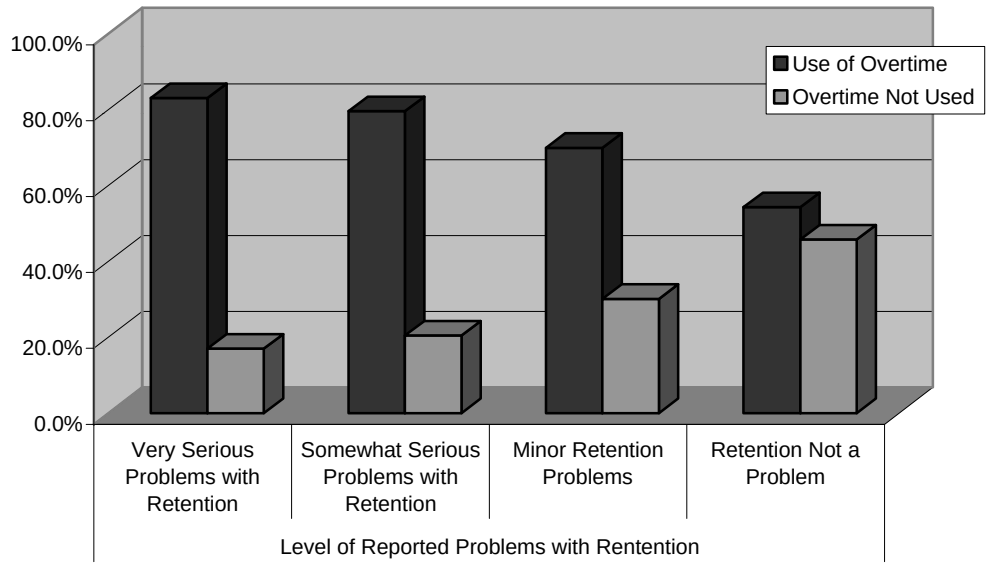
*Caution: Margin of sampling error for this group is greater than 20%

overtime is clearly associated with greater levels of reported problems with retention. This same relationship between retention problems and use of overtime holds for all providers reporting staff shortages. While the cross-sectional nature of the data cannot show definitively that the use of excessive overtime leads to increased retention problems, the data does indicate such a relationship is likely.

Consequences of Staff Shortages on Access to Services

Another area for concern is the effect staff shortages have on access to needed services. The data shows that as a result of staff shortages access to care has been reduced, particularly among home health and home care agencies and to a somewhat lesser degree on the agency-delegated attendant care services offered by the Centers for Independent Living. Consistent across all types of home health and home care programs, 70 percent reported staff shortages, and of those reporting shortages, 65 percent reported cutbacks in service. Thus across all home care providers, 46 percent reported cut backs in services as a result of staff shortages. Since for both the nation and for Pennsylvania, home health/home care is projected to experience the greatest levels of growth over the next decade, cut backs in service by 46 percent of the home care providers in the state has to be

Figure 4-10. Use of Overtime and Level of Retention Problems by Nursing and Large Personal Care Homes with Staff Shortages



considered an extremely important negative consequence.

Service cut backs have also differentially affected regions in the state. Appendix Table 11 shows the percent of providers reporting service cuts as a result of staff shortages. Figure 4-12 shows the overall effects of service cut backs by region. With the exception of the Southwest region, the region encompassing the Pittsburgh metropolitan area, at least 10 percent of all providers reported service cuts. Additionally, more than 20 percent of all providers in the counties encompassing the Southern Allegheny, Northeast, and Lehigh Valley regions reported service cut backs.

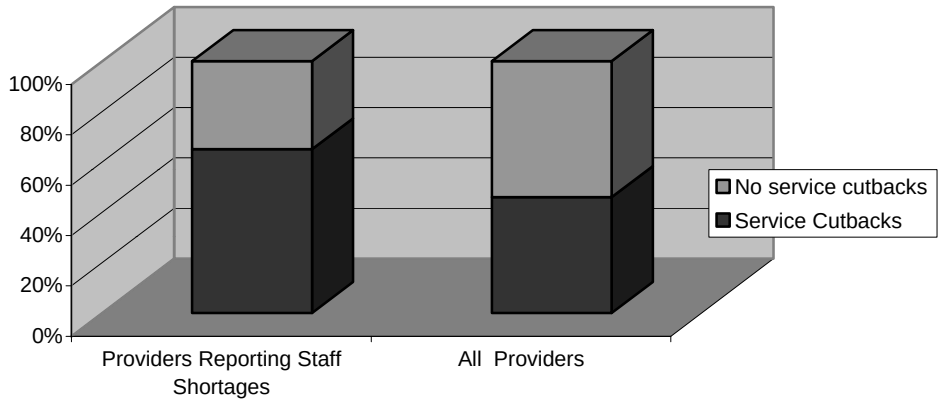
Although the data does not permit an assessment of the actual number of persons who could not receive services as a result of the cut backs, the results clearly indicate that certain areas within the state have experienced greater cuts in service.

Consequences of Staff Shortages on Quality of Care

Access to care is certainly not the only consequence of staff shortages that directly affect the recipients of care. Quality of care is also an important outcome. The survey did not attempt to directly collect information on quality, but the increased use of independent contractors and personnel from temporary employment agencies has decided implications on service quality. The literature on the quality of care repeatedly makes references to the negative influence the use of 'agency personnel' has on quality. Similar information has been obtained in focus groups of direct care staff. Although only 29 percent of all providers with staff shortages reported the increased use of such outside personnel, privately operated nursing homes and Centers for Independent Living turned to outside personnel much more frequently as did providers in the Southcentral and Southeast regions. The over reliance on outside personnel has to be considered as an important 'red flag' and could be used as a quality indicator by consumers in choosing which providers to use.

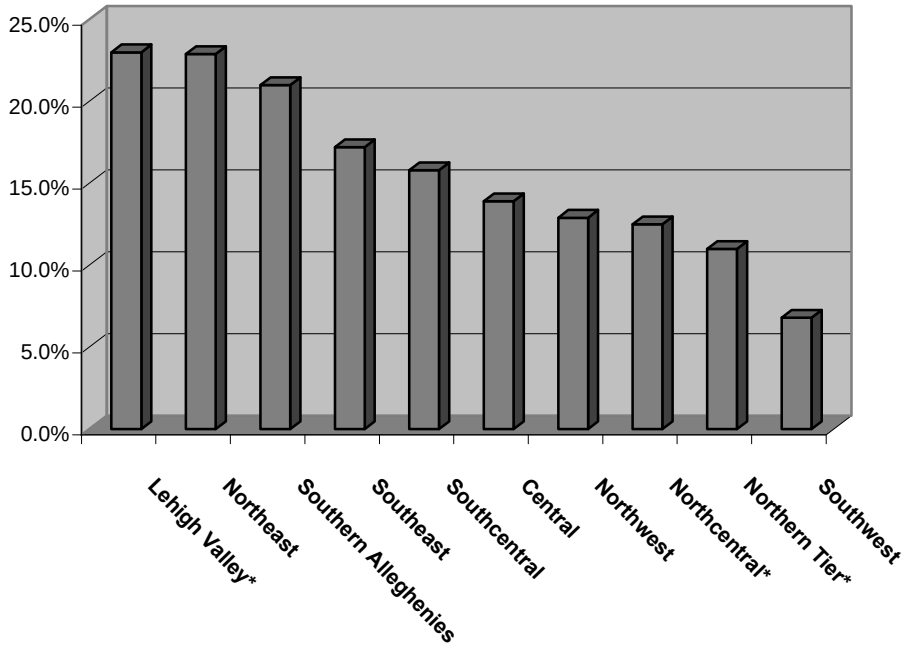
In summarizing the way staff shortage have affected the operations of providers, several conclusions can be drawn. For many providers, particularly the large personal care homes and nursing facilities, staff shortages has created the need to more heavily rely on the use of overtime and this over reliance on overtime in turn further aggravates staff retention problems. In addition, excessive overtime could be expected to have a

Figure 4-11. Home Health/Home Care Providers Reporting Service Cut Backs



negative consequence on the quality of care being expected to be less attentive to the needs of the care recipients, less patient, more prone to errors, and likely to lead to more instances of neglect and perhaps even outright abuse. Staff shortages have also led to the more frequent use of 'outside personnel.' This practice also holds potential offered. Staff that is over extended could be negative implications on the quality of care being delivered by the state's long term care providers. It interferes with the building of effective care providing teams and 'temporary staff' could also be expected to have less of an investment in the persons being served.

Figure 4-12. Percent of Providers in Regions Reporting Service Cut Backs



A final and most disturbing consequence of staff shortages is the reduction in service access. Although different types of providers have reported cut backs in services, the most dramatic and widespread appears to have occurred in home care services. Since home care is among one of the fastest going segments of the long term care industry, and the segment that is the most preferred by consumers, such cut backs demand attention and must command a response.

Training Costs and Cost of Turnover

One of the more hidden consequences associated with the difficulties of recruitment and retention is the cost of turnover. Although there are a number of associated costs that providers incur with staff turnover, including such costs as staff time required to screen and interview applicants, the loss of efficiency until new workers become accustomed to their surroundings and duties, as well as the more concrete costs of advertising job vacancies, the largest and most visible cost is associated with training. The survey asked providers to estimate the costs of training a new worker. As previously described, the extent of training varies greatly across different types of providers and the costs of training across providers are related to the number of hours of training.

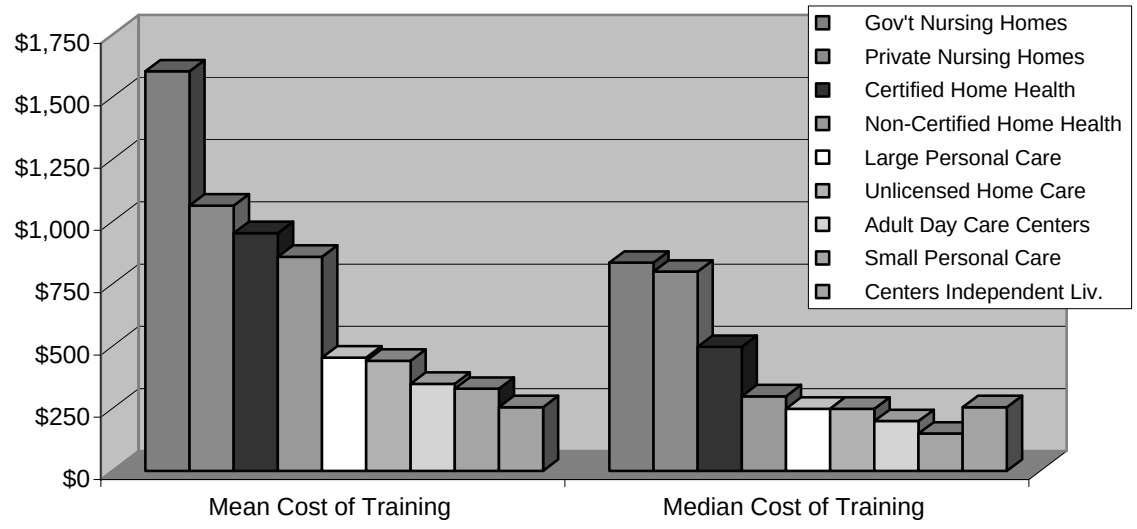
Figure 4-13 compares the average and median training costs by provider type. The median is presented since the range of estimated training costs varied greatly even within provider types. As the Figure shows, the variation across provider type is large whether the comparisons are based on means or medians. If either is used to rank order provider types by training costs, government-operated and privately run nursing homes rank first and second followed by Medicare certified home health agencies.

Training costs for frontline workers in long term care requires a significant allocation of resources. Using the average costs of training, the estimated number of jobs turned over annually, and the reported number of open positions, three estimates were derived. The first two are the total annual (recurring) costs of training incurred by providers, the first being based on the training costs for the current workforce (currently filled jobs) and the second being based on the costs if, in addition to current jobholders, all vacant positions were filled. Somewhat independent of the recurring training costs, the third estimate is the total one time cost of training required to fill the current number of vacant positions.

Recurring Annual Costs of Training

The estimate of recurring training costs is based on the percent of the workforce at each provider working for the provider for less then one year. Admittedly this is a very crude measure of job turnover, but the reasoning is based on the assumption that the current composition of the

Figure 4-13. Cost of Training



workforce at each provider represents the typical job tenure distribution. For example, if the provider indicated that of their 100 frontline workers, 30 percent had been working at the provider for less than one year, that employer could be expected to fill at least 30 percent of those 100 jobs each year. This approximation is more likely to be an under rather than an over estimate of job turnover, since for an unknown number of those positions, several new workers will have come and gone within the year. Again, for the first estimate of recurring training costs, the turnover rate is based on the number of currently held positions, for the second, the estimate is based on the currently filled jobs plus the current number of vacant positions.

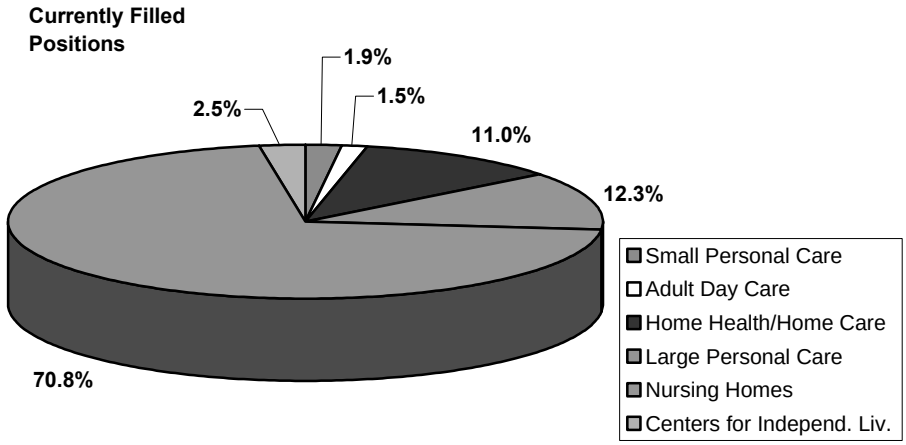
As presented in Appendix Table 26, total annual training costs for currently filled positions is estimated to be $30.4 million. If all jobs were filled, the annual cost would be closer to $34.9 million. Clearly the annual cost of training varies across providers based on the numbers of new hires, the average cost of training per worker, and the typical level of turnover. Figure 4-14 shows the distribution of training costs across different types of providers. For estimates of total training costs for currently filled jobs, nursing homes, the largest segment of the industry, accounts for $21.6 million or 71 percent of all training costs. The portion of training costs borne by nursing homes if all positions were filled is $23.9 million or 69 percent of all costs. Home health/home care and large personal care homes comprise the next largest segments.

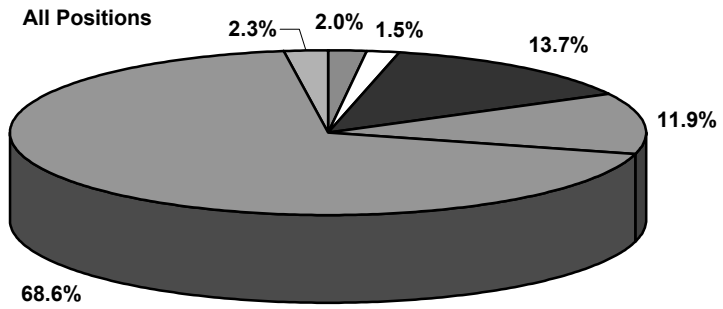
The annual cost of training varies across regions based on the number of workers and the mix of provider types within the region. The regions encompassing the Philadelphia (Southeast), Scranton/Wilkes-Barre (Northeast), and the Pittsburgh (Southwest) metropolitan areas account for most of the training costs . For currently filled positions, the Southeast region accounts for $11.1 million (37 percent); the Northeast accounts for $7.0 million (23 percent), and the Southwest accounts for $4.8 million (16 percent). In total these three areas account for about 75 percent of the total costs for recurring training.

In addition to the recurring training costs, it is also important to recognize the significant amount of resources necessary to pay for the training in order to fill the estimated number of currently open jobs. As Appendix Table 26 shows, across the state, this one time training cost is estimated to total $13.5 million. Again these costs vary greatly across the different types of providers and across the different regions of the state. As presented in Figure 4-15, the distribution across the regions are dramatic and again dominated by the same three regions although because the overall job vacancy level is greater for the Southwest than for the Northeast, the order of magnitudes is somewhat different. The Southeast accounts for $5.3 million or 39 percent of the total; the Southwest accounts for $2.4 million or 18 percent of the total; and the Northeast accounts for $2.0 million or 15 percent of the total.

In summary, training costs can be thought of from two perspectives, as a recurring cost faced by providers as result of high levels of turnover and as a one-time cost needed to fill currently open positions. Although the accuracy of the present estimates is certainly open for argument, the estimates do serve to provide insight into the significant burdens facing long term care providers. Clearly the total costs for both training challenges are large and vary across different types of providers and the burdens are not uniformly distributed across the state, but rather highly concentrated within specific geographic areas. However, the recurring burden of training resulting from turnover is a cost that many providers already anticipate because turnover is a predictable event within the industry. It is doubtful that providers have been able to anticipate the extremely high rates of turnover that have recently resulted from the extraordinary high levels of recruitment or retention problems. Moreover, it is highly unlikely that current budgets have accounted for the need to fill so many vacant positions.

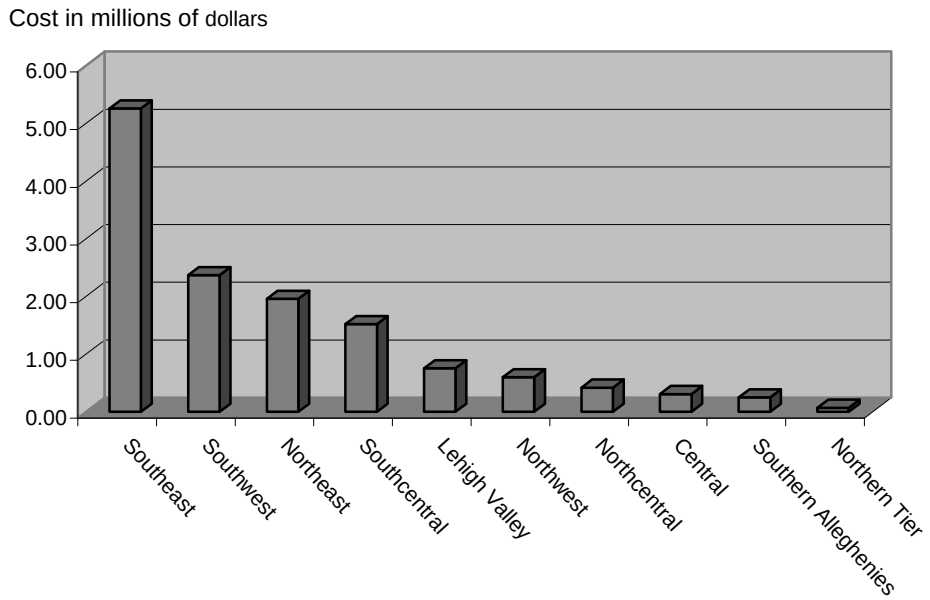
Figure 4-14. Distribution of Recurring Training Costs by Type of Provider





Since, as previously discussed, there is no training parity across providers under normal operations, certain types of providers naturally end up shouldering an inequitable training burden for the industry. Thus in times when extraordinary levels of training are required as a result of greater recruitment and retention problems, those providers that typically carry the bulk of the training burden, principally nursing homes, end up carrying additional training liability. It could well be imagined that in such circumstances, the extra training burdens for new workers begins to affect other aspects of provider operations including placing limits on continuing in-service training for more seasoned staff which in the end has the potential of reducing the overall quality of care. Finding a method to offset these extra training costs, either through some form of training subsidy or through the establishment of some form of centralized uniform training, would seem to be a potentially useful strategy for helping providers who are facing unusually severe recruitment and retention problems.

Figure 4-15. One-Time Cost of Training Workers to Fill All Vacant Positions by Region



Strategies for Handling Recruitment and Retention Difficulties

Two complementary approaches are used in examining the effectiveness of strategies in reducing problems with recruitment and retention. The first approach analyzes the observed variation in staff shortages and reported levels of difficulties in recruitment and retention that occurs across providers. The second is based upon specific questions asked of providers regarding what they perceive to be working.

Since the study is cross-sectional in nature, that is a single point in time observation, the data does not permit the independent establishment of a causal relationship between the implementation of a strategy at one point in time and an observed outcome at a later point in time. Rather, because there is variation in the levels of staffing, recruitment, and retention problems as well as variation in the strategies used by providers, the data does permit the determination as to whether providers who have employed a particular strategy also present better outcomes regarding staff shortages and reports of recruitment and retention problems. For example, if higher starting wage rates lead to lower problems with recruitment, than those providers with significantly higher starting wages should also report, on average, lower levels of recruitment problems.

In examining the variation in staff shortages, staff recruitment and retention problems, five measures are used as outcomes. As defined in Table 4-4, three are based on administrator self-assessments and two are derived measures. The approach uses these measures as outcomes when examining different strategies.

A key in assessing what strategies appear to work is the correspondence between the objective determination of a relationship and reports by administrators. Unfortunately, the data does not always permit such comparisons.

Table 4-4. Measures Used in Evaluating Recruitment and Retention Strategies

Self-Assessed Recruitment Problem. Administrators were asked to assess how serious a problem the recruitment of frontline workers was for their organization at the time of the interview: very serious, somewhat serious, a minor problem, or not a problem.

Self-Assessed Retention Problem. Similar to recruitment, administrators were asked to assess how serious a problem the retention of frontline workers was at their organization at the time of the interview: very serious, somewhat serious, a minor problem, or not a problem.

Self-Assessed Level of Staff Shortage. Administrators were asked to assess the current level of staff shortage: a severe staff shortage, some staff shortage, or no staff shortage.

Length of Employment of Current Workers. A standardized and somewhat more objective measure of retention is based on the proportion of workers who had been employed at the provider for more than three years. Providers were classified into good, fair, or poor based on the distribution of the proportion of a provider's workforce with job tenure greater than 3 years. The top 25 percent of the distribution were classified as having 'good retention. Providers in the lowest 25 percent of the distribution were classified as having 'poor retention. The third group ('fair retention'), was comprised of the remaining middle 50 percent of the providers. The 10 percent of the providers who had less than 3 years of operations, were excluded.

Job Vacancy Level. To complement the self-assessed staff shortage measure, a more objective measure of worker shortage was created using job vacancy level. In operational terms, job vacancy level is the percent of vacant positions divided by the total number of filled and vacant positions. Providers were classified into four job vacancy level groups: severe, moderate, some, none where severe means having a job vacancy rate of more than 20 percent, where moderate means a job vacancy rate between 10 and 20 percent; where some means greater than zero and less than 10 percent.

Broader Barriers to Recruitment and Retention

The issues of unemployment rates, local area wage rates, and the availability of potential workers are beyond the control of administrators. However, as previously discussed under the section discussing the extent to which recruitment and retention are problems for providers, it was clear that these 'larger community issues' have a direct effect on recruitment and retention problems. Of these broader issues, local unemployment rates appeared as the single most important factor.

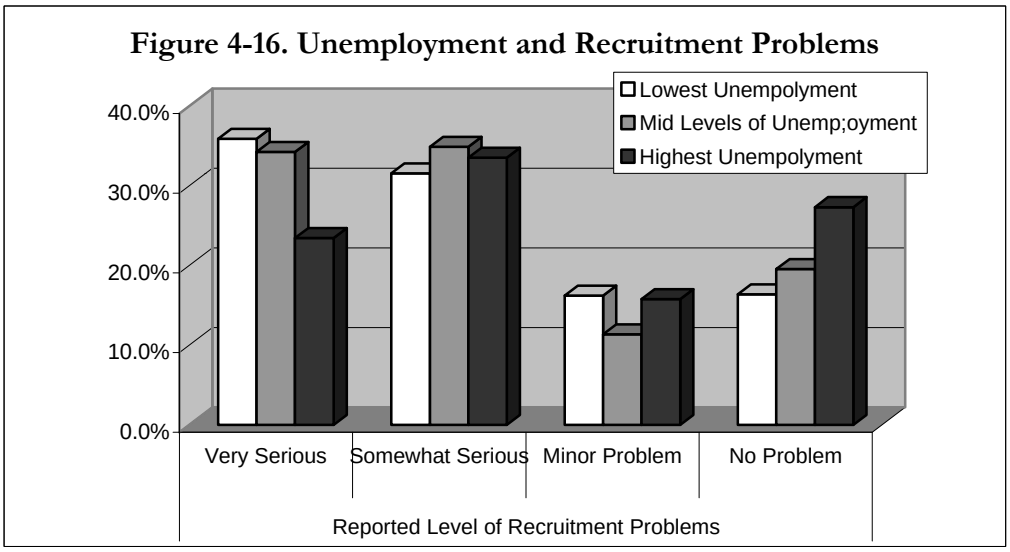
Effect of County Level Unemployment

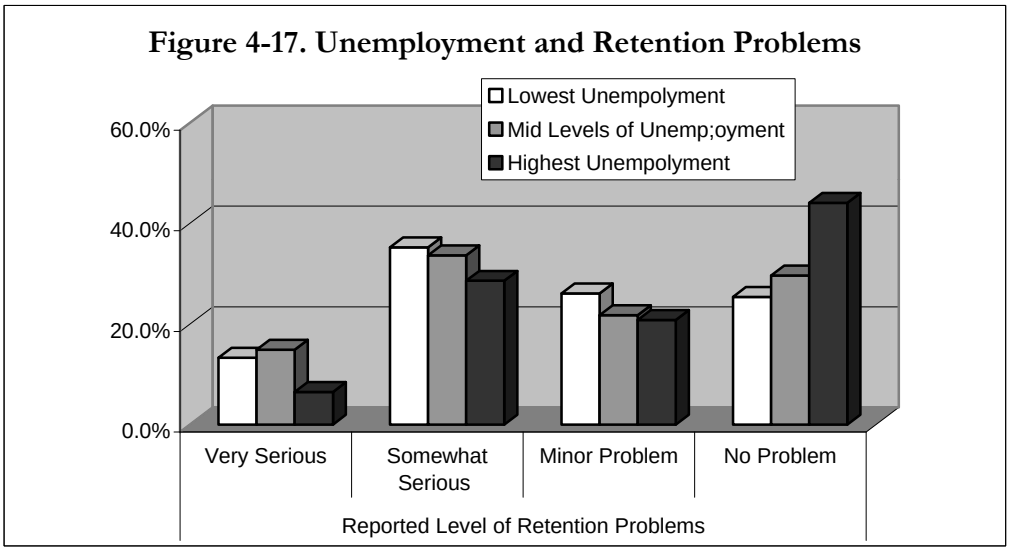
There is a clear relationship between local unemployment levels and the reported levels of the recruitment and retention problems faced by providers. County unemployment had an effect on recruitment problems (see Figure 4-16). The 25 percent of providers that face the lowest local unemployment rate were significantly more likely to report that they have a very serious recruitment problem. Conversely, the 25 percent of providers facing the highest local unemployment rates were significantly more likely to report that they have no recruitment problem at all.

The relationship between county unemployment levels and problems with retention were not as strong (see Figure 4-17), but comparing self-reported retention levels, providers located in areas with the highest local unemployment rates were much more likely to report that they have no problem at all with retention. When looking at retention as measured by percent of workers who have worked at the provider more than 3 years, there is a similar relationship. Although not strong, there was a pattern of increasing retention problems with falling unemployment.

Regarding county unemployment rates and reported staff shortages, there was a clear pattern of increasing staff shortage with falling local unemployment level. There was similar although not as strong pattern when county unemployment rates and job vacancy levels were compared. As job vacancy levels increased, local unemployment fell.

The more objective information of the effects of low unemployment were echoed by administrators. In their answers to the question as to the main reason for recruitment problems, 32 percent reported low local unemployment rates (see Appendix Table 8).





Despite these clear patterns, unemployment rates alone are not driving staff shortage levels or problems with recruitment and retention. However, given the findings, it seems that to undertake efforts to increase the supply of workers entering the long term care field would help in overcoming the effects of low unemployment.

Effect of County Level Age Structure

As previously indicated, traditionally, women, age 18 to 54, comprise the vast majority of frontline workers in long term care. They comprise 90 percent of the home health aides and 70 percent of the nursing home aides. As the size of this group of potential workers decreases relative to the number of persons 65 and older, the greater the problems in recruitment and retention.

This relationship has been widely discussed in the literature. In this report, we have labeled it as the long term care burden and is parallel to the concept of a dependency ratio that demographers use to describe the proportion of working age persons (18-64) to age groups characterized as having dependency needs, those under 18 and those 65 and older. Analyses were conducted to examine the relationship between the ratio of working age women (18-54) and those 65 and older in each county to the levels of reported problems in recruitment and retention. In interpreting the ratio,

a higher value means that there are more potential workers per older person. Thus higher ratios should lead to less problems with recruitment and retention.

When counties were combined into the state regions used throughout this report, the ratios differed significantly between regions. For example, the ratio of women 18-54 to persons 65 and older ranges from a low of 1.38 in the Northeast to a high of 1.94 in the Southeast. Although the relationship was not universally true across all regions, analyses generally indicated that providers in counties with more potential workers per older person were more likely to report no recruitment problems. However, some regions with more potential workers per older person also reported higher levels of retention problems. This apparent contradiction could be the result that retention problems are not as closely tied to the labor market situation as recruitment.

In summary, the age structure in local areas has an impact on recruitment but the relationship is not the predominant factor is determining labor force shortfalls. Unemployment is more clearly related to recruitment and retention problems.

Effects of Wages

As previously shown, wages vary greatly across different types of providers and across different regions of the state. To evaluate whether wage levels have an effect on recruitment and retention, analyses must control for this variation, otherwise it would be impossible to determine if any observed effects are the results of actual wage differentials. To control for provider and region differences, the analyses make peer-to-peer comparisons, meaning that comparisons were made between similar types of providers within regions. Also, since recruitment and retention are somewhat different problems, separate analyses have been conducted in evaluating the effects of wages.

Wage Effects on Recruitment

To examine wage effects on recruitment, three analyses were conducted: (1) on the variation in entry-level wages; (2) on provider initiated increases in entry-level wages in response to recruitment problems; and (3) on increments to starting wage after probation.

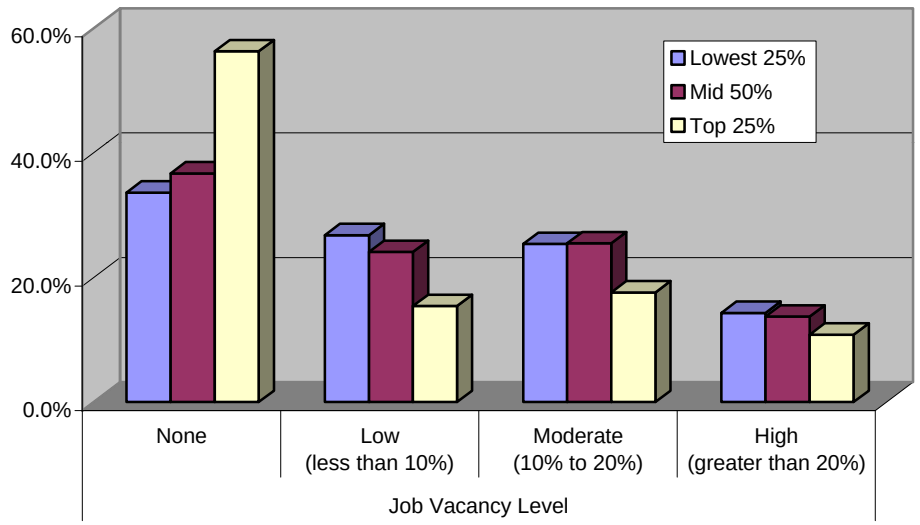
The effects of differences in entry-level wage rates on recruitment are positive. Providers with highest starting wages among their peers (same type of provider in the same region) reported lower recruitment problems. Analyses of vacancy rates and entry-level wages indicate the same positive pattern. However, while positive, the effect of higher starting wages were not dramatic. When providers are categorized into three groups based on whether they are in the top 25 percent, middle 50 percent, and lowest 25 percent of their peers, providers in the top paying group were better off than providers in the middle 50 percent, particularly in urban areas, but the differences were small.

Providers also specifically raised their entry-level wages in response to recruitment problems. The providers who instituted the largest increases among their peers (same type of provider in the same region) more frequently reported that their increases helped in reducing their recruitment difficulties. Sixty-eight percent of the providers whose increases were in the top 25 percent, an increase of at least 11 percent (in terms of dollars, the increments were between $0.75 and $1.42 per hour) reported that the wage increase made it easier to recruit new staff. Of the providers with wage increases between 4 and 11 percent (the mid 50 percent of providers), only 44.9 percent reported that the wage increase helped with recruitment. Of the providers in the lowest 25 percent, increases of less than 4 percent, only 35.3% reported that the wage increase was effective.

At a quick glance it may seem that the findings from the two analyses are somewhat contradictory. Higher entry-level wages from the first analysis shows only a small positive effect on recruitment problems while the second analysis indicates that substantial increases in entry-level wages eases recruitment problems, but the findings are actually complimentary, and are clarified by the third analysis which examines the relationship between recruitment problems and increments to starting wages after the traditional probationary period.

Increments to the starting wage instituted after completion of the probationary period have a decided positive effect on recruitment. There was a strong relationship between offering a relatively large increase in wages after the probationary period and having comparatively low recruitment, vacancy, and staff shortage problems. In other words, providers that raise wages the most once the

Figure 4-18. Wage Increment After Probation by Job Vacancy Level



probationary period is over often had fewer job vacancies and reported less problems with recruitment. The mean percent increment for the top 25 percent of providers was a 13 percent increase over the original entry-level starting wage. In terms of actual dollars, the mean increase was $0.81 with a range between $0.35 and $3.15.

In more detailed breakdowns by provider type, region, and urban and rural status, similar results were found. There were a few exceptions, particularly with regard to certified home health agencies where wage increases in entry-level rates did not show any effect on reducing recruitment problems. Additionally, in the Central region, all levels of increases were reported to be equally effective in reducing recruitment problems.

Wage Effects on Retention

To examine wage effects on retention, two analyses were conducted: on the variation in regular wage levels and on provider initiated across-the-board increases in regular wages. In examining the effects of regular wage levels on retention, providers were again classified by dividing peers (same type of provider in the same region) along the wage rate distribution into high (top 25 percent), middle (middle 50 percent), and low (lowest 25 percent) categories. It is important to keep in mind that the term top payer is relative, and on average across providers, the mean regular wage difference between the top 25 percent and the bottom 25 percent is $2.28 per hour. Top payers were significantly less likely to report having a "very serious" retention problem and were slightly more likely to report that they have no retention problem at all. Top payers also have slightly better levels of retention as measured by the proportion of workers who have been with the provider for more than 3 years. However, there are no readily discernible differences between the groups with regard to vacancy levels, although as shown in previous analyses, vacancy levels were more closely associated with problems with recruitment and far less regarding retention.

Providers that implemented across-the-board wage increases, reported improved staff retention and while the level of increase only showed a perceptible improvement in the objective measure of retention, providers who implemented the greatest levels of increases more frequently reported greater improvements in retention. Across providers, the across-the-board increases ranged between $0.50 and $1.35. As before, providers were categorized by the distribution of wage increases and divided into the top 25 percent, the middle 50 percent, and the lowest 25 percent. Of those in the top 25 percent of providers (increases

of more than 8.4 percent) fully 81 percent reported that the wage increase had a positive effect on retention. Of the providers in the middle range of increases (increases between 3.0 and 8.3 percent) the proportion reporting positive effects on retention was 67.9%, and those in the lowest 25 percent of providers (increases of 3% or less), the proportion was 61.6 percent.

From the analysis on wages it appears that wage increases effect recruitment and retention somewhat differently. For recruitment, increased starting wages are necessary but not sufficient condition to overcome large recruitment problems. In terms of retention, increased wages appear to have a more important effect. Nonetheless, although providers who substantially increased wages did report an easier time in recruiting and retaining workers, the increases, by themselves did not eliminate the problems. What the data on wages might be indicating is that individual providers are likely to be increasing their wage rates in an attempt to match the competition. Thus while necessary, increased wages by individual providers are only part of the solution. Industry-wide increases in wage rates might make the industry more competitive in bringing in new workers, but the increased wages will not eliminate the problems.

Effects of Employee Benefits

Despite the literature which indicates that a lack of benefits contribute to making frontline worker jobs less attractive to prospective employees and adds to the problems of worker retention, in general, the present analyses do not find that the availability of benefits leads to either less reported recruitment or retention problems or to reductions in job vacancy levels.

The provision of health insurance generally showed no positive affect on either recruitment or retention irrespective as to whether the benefits were available only for full time workers or whether they were available for both full and part-time workers. This lack of a positive affect is likely the result that among some provider types, most or all offer some form of health insurance. There were some exceptions. Those Centers for Independent Living and certified home health agencies that offered health insurance, particularly to part time workers, less frequently reported recruitment and retention problems.

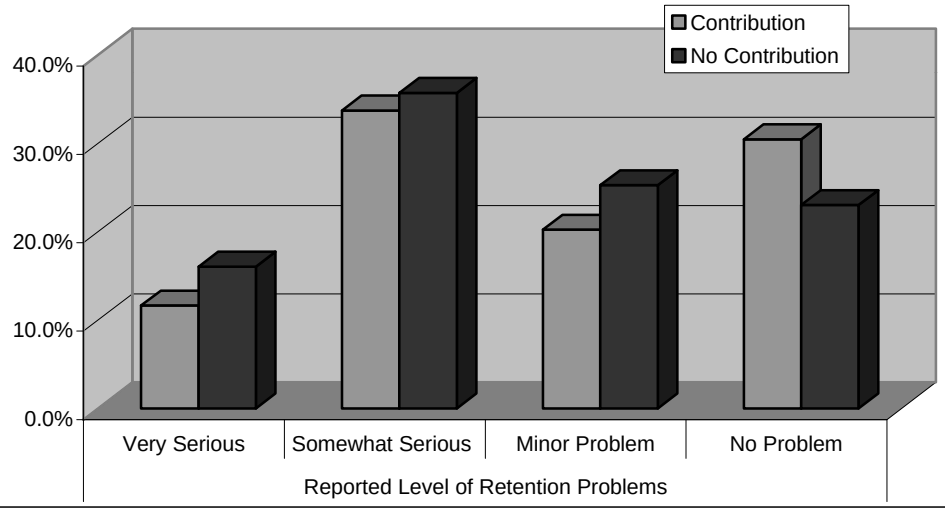
In terms of health insurance there was one clear positive effect (see Figure 4-19). Providers that made additional contributions toward premiums for employees who elect family health coverage reported significantly less retention problems. However, although the relationship was statistically significant, it was not a strong or consistent finding.

In general, offering a transportation benefit did not show any effect on reported levels of recruitment or retention problems. Even when examined separately for each type of provider, the provision of a transportation benefit did not influence reported levels of recruitment. However, the offering of transportation benefits by home health and home care agencies did show a positive effect on reported levels of retention problems, particularly among Medicare certified home health agencies. For certified home health agencies not offering the benefit, 37 percent reported having a serious retention problem. In contrast, for those agencies that did offer a transportation benefit, only 13 percent reported serious retention problems. For licensed, non-certified home health providers, the relationship held but was weaker. Interestingly, offering a transportation benefit had no effect on recruitment for any type of health health/home care provider. Presumably, the importance of such a benefit is not something that dawns on most newly hired home health/home care workers until they have started working.

A question was asked of providers if they had changed their benefits package in the last 2 years to address their recruitment or retention problems. Over 22 percent of the providers indicated that they had implemented changes in their benefits package. However, in analyses examining the effect the reported changes, no relationships were uncovered. It is possible that the effects of the changes simply had not yet taken effect.

It is also likely that benefits make prospective employers more competitive, but this effect may be overwhelmed by other recruitment and retention issues or by "problem providers" instituting benefits in response to their problems. The results do not indicate that better benefits cause the problems. Rather, the results point to the conclusion that improved benefit, in themselves, will not overcome the recruitment and retention faced by long term care providers.

Figure 4-19. Contributions to Family Health Coverage and Retention Problems



In summary, despite the claims in the literature that postulate an effect of benefits on the recruitment and retention of workers, the data from the present study, with few exceptions, found that benefits had no clear positive impact on either recruitment or retention.

Training, Staff Development Activities and Job Re-structuring

The literature has also indicated that both staff development activities, including training, and job re-structuring, also referred to as 'culture change' have been presented as ways providers can improve recruitment and retention problems.

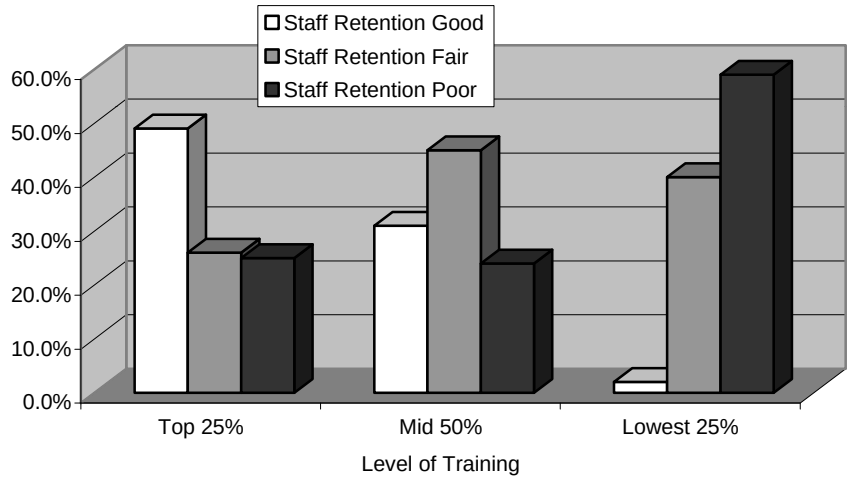
Effects of Training

The analyses broke down providers into quartiles according to their reported hours and cost of training. The breakdowns were made within provider type because of the previously described variation in training across different types of providers. The analyses classified providers (within type) into the top 25 percent, the middle 50 percent, and the lowest 25 percent and then compared these provider groups across the outcome measures: level of reported recruitment and retention problems; reported staff shortage level; and the more objective measures of worker retention (percent of workers with 3+ years of job tenure) and job vacancy levels.

The results are somewhat ambiguous, but they do point to the conclusion that training has a more positive effect on retention and a much weaker effect on recruitment. The providers who reported the highest number of hours of training were more likely to report very serious recruitment problems. However, the differences are not dramatic, and a slightly higher proportion of the top 25 percent providers than the mid 50 percent providers reported minor or no recruitment problems. Exceptions exist by provider type. The certified home health and non-certified home health agencies showed a positive correlation between reported recruitment and high amounts of training (see Figure 4-20). Furthermore, the relationship for private nursing homes showed a more positive effect for providers in urban areas but much weaker for providers in rural areas. There appears to be no relationship between hours of training and vacancy level.

The relationship between hours of training and reported levels of retention problems was positive but weak. The relationship was less positive in providers in rural areas. However, the relationship between hours of training and the "objective" retention measure was strongly positive and supports the idea that more training has a positive effect on retention. The relationship was

Figure 4-20. Relationship Between Level of Training and Staff Retention for Certified Home Health Agencies



particularly strong for certified home health agencies (see figure)

Looking at the cost of training presents parallel findings. The strongest relationship was found between providers that spent the largest amounts for training and the objective measure of staff retention. As with hours, those in the top 25 percent of providers (providers that spend the most) reported were more likely to have good retention and far less likely to have poor retention. This relationship was even stronger among providers in rural areas.

Effects of Other Staff Development Activities

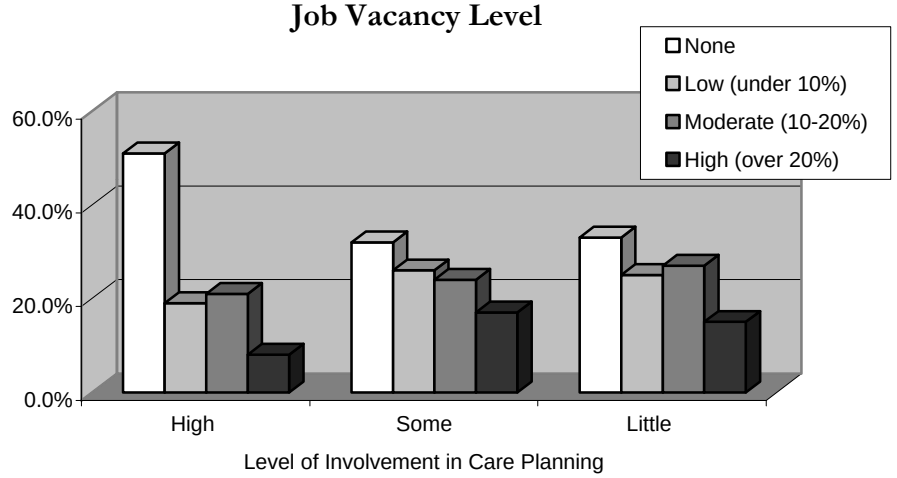
The survey queried administrators if their organizations undertook any special staff development activities outside of those mandated by state or federal regulations. Although 48 percent of the providers indicated undertaking special staff development efforts, ranging from special in-service opportunities to job improvement opportunities, the analyses indicated no positive effects on any of the outcome measures.

Effects of Culture Change

A new conceptual framework has emerged in the long term care arena. It is sometimes referred to as the "pioneer" movement and sometimes as the culture change model of care. The basic idea behind the term is the notion supporting changes in the status of the frontline worker by promoting institutional change. A key component to this change is empowering frontline workers by recognizing their critical role in the care providing context and making them a more prominent role within this context. The literature has strongly suggested that changing the status and role of the frontline worker will have vast ramifications on the provision of long term care including helping to make such jobs more attractive and thus resulting in easier recruitment and retention of workers. The survey included a series of questions to determine if providers were undertaking such changes and a series of analyses were conducted to determine if the implementation of such changes were differentially effecting reported levels of recruitment and retention problems. The three questions asked about the role of the frontline worker in the care planning process, their influence over scheduling, and any other strategies providers were using to change the nature of the frontline worker jobs.

Appendix Table 36 shows the variation in the degree of worker influence in the care planning process and over work scheduling. Across all providers, 44 percent reported that their frontline workers were highly involved in the care planning process and 34 percent reported a lot of involvement in the work scheduling. Additionally, 29 percent of the providers (shown in Appendix Table 35) indicated undertaking other types of actions to change the nature of worker jobs. When

Figure 4-21. Involvement in Care Planning and Job Vacancy Level

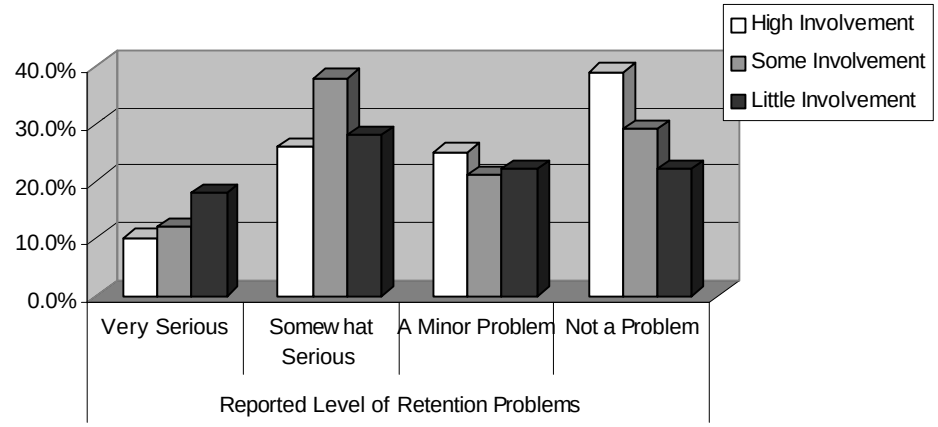


asked what these other job change efforts involved, the answers were wide ranging and (as shown in Appendix Table 35), these included providing more balanced workloads, seeking input from workers, and instituting a teamwork environment. Interestingly, the literature gives great value to developing career ladders, but very few providers indicated such efforts, less than 1 percent.

One 'culture change' indicator showed a very dramatic and consistent effect; the degree of frontline worker involvement in the care planning process. Across all types of providers, greater staff involvement was repeatedly associated with lower levels of recruitment and retention problems, lower reported rates of staff shortages, and fewer job vacancies. As shown in Figure 4-21, for providers reporting high worker involvement in care planning, 51 percent had no job vacancies and only 8 percent reported job vacancy levels exceeding 20 percent. This contrasts dramatically with providers reporting low worker involvement..

The effect was found for both recruitment and retention, but the positive effect is less dramatic for recruitment, but very clear for worker retention, as shown in Figure 4-22. Providers that reported workers being highly involved in the care planning process, only 10 percent reported very serious staff retention problems compared to 18 percent of providers that indicated low staff involvement. More dramatic, 39 percent of providers reporting

Figure 4-22. Involvement in Care Planning and Reported Level of Staff Retention Problems



highly involved staff reported no retention problems at all compared to 22 percent that reported low involvement.

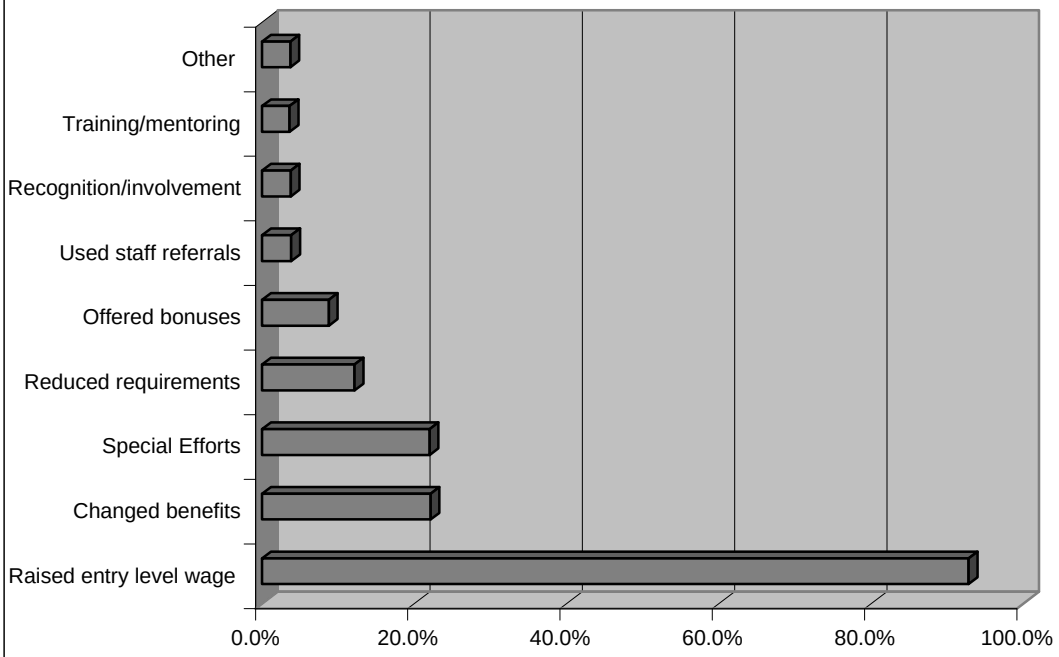
In summary, there is strong evidence that providers who have initiated institutional changes experience fewer problems with worker shortages. Although such changes appear to positively effect both recruitment and retention problems, the effect of institutional changes appears more pronounced regarding worker retention. Providers who reported greater involvement of their frontline workers in the care planning process reported significantly lower levels of problems with worker retention.

Targeted Recruitment Efforts

As shown in Figure 4-23, providers reported many different types of activities to overcome their reported problems with recruitment. Previous analyses have explored the effectiveness of the most frequently employed strategies, raising starting wages and modifications to benefit packages, but many providers have also employed other specific strategies. Since many of these activities have been recently initiated or have been employed by a very limited number of providers, it is impossible to assess how effective they have been in reducing recruitment problems. Nonetheless the strategies are worth mentioning and should be considered for broader implementation since they also reflect strategies suggested in the literature concerning frontline worker shortages.

Over 22 percent of the providers have also employed the use of special recruiters. Unlike the general human resource approaches which are reactive, these recruiters have used proactive approaches. They have consisted of special forms of advertising, job fairs, efforts to involve local community colleges, and the use of work study-type programs. In this regard the literature has indicated that such specific recruitment efforts can be more successful in at least reaching the segments of the working age population with the greatest potential interests. The literature has also suggested that the use of specialized recruiters, hired to represent more than a single employer can be successful in broadening the search efforts beyond what one provider might be able to do. Such

Figure 4-23. Specific Recruitment Efforts



efforts have not only targeted younger workers, but have also successfully directed towards older workers who may be interested in different careers, or interested in only working part-time. This specialized approach has also focused on encouraging current workers to seek out friends and relatives who might be job prospects thus building on the notion of using social networks as one aspect of recruitment.

Other Community Issues

Providers were asked to offer one suggestion that the Commonwealth might undertake to help alleviate current worker shortages. As shown in Appendix Table 40, as could be anticipated, the vast majority suggested increasing reimbursement rates in order to facilitate wage increases. But beyond this one suggestion, a number of providers suggested that the Commonwealth help providers directly with recruitment and to help reach the broader community with the message about the important and valuable role played by frontline workers in the delivery of long term care. The suggestion to reach the broader community with a positive message, speaks directly to some form of public information campaign. The public image of the frontline workforce has also been recognized as a larger barrier to the employment problems faced by individual providers, particularly regarding the recruitment of new workers. Another important suggestion dealt with worker training, both in terms of reducing the large disparities that presently exist regarding training requirements across different types of providers and in helping to offset the costs of training.

Section 5

Recommendations

Rapid expansion in the array of long term care services, growth in the demand for services driven by increasing numbers of older persons and adults with physical disabilities, and a decreasing supply of available workers as a result of both a robust and prolonged period of economic growth and an age structure with a smaller proportion of working age adults have culminated in a shortage of frontline workers in the Commonwealth's long term care industry. The issues clearly go beyond the capacities of individual providers and more systemic actions are needed. Such actions require direct joint participation by providers and the Commonwealth. How those actions are translated into specific directives are not within the purview of this study or this report, but actions are needed and this section outlines general recommendations that are submitted to the Council for consideration. The suggestions emerge jointly from the extensive review of literature that includes actions taken by other states facing similar shortfalls in frontline workers and from the results of the survey of administrators.

Three Overarching Principles

In determining the future direction for action, it is suggested that three principles be considered to guide the decision-making.

Guiding Principle 1. All actions need to approach solutions that can be implemented to alleviate problems faced by specific types of providers and providers in specific geographic areas while being general enough to be helpful for all types of providers across the Commonwealth. At the same time solutions must incorporate the flexibility to cover both quick fixes and long term solutions.

The level of recruitment and retention problems faced by providers is not uniformly distributed either by specific types of providers or across the state. Solutions must be able to address statewide concerns but at the same time provide solutions that are flexible in design so they can address the needs of specific types of providers and providers within specific geographic regions. For example, home health/home care providers face the most pressing immediate needs for additional workers, yet an action directed only towards home health will be insufficient. A more fundamental approach that can address both the immediate pressing needs of home health and home care providers but also help providers within residential settings would be preferable and in the long run most beneficial to Pennsylvania.

Similarly, in constructing solutions that can be implemented rapidly so as to quickly fill job vacancies in critical areas and at providers whose ability to sustain adequate levels

of care are threatened, solutions need to be designed so that they set into place mechanisms that will sustain all providers over a long period of operation.

There is clearly a need for immediate action because of the robust economy and low unemployment, but even if the economy slows, the need for ever increasing numbers of frontline long term care workers will continue for decades given the Commonwealth's demographic structure. Solutions must be broad enough to permit the accomplishment of both sets of goals.

Guiding Principle 2. Workable solutions are possible only if there is close cooperation between the various government departments and agencies and between the different provider segments within the long term care industry.

The complex of issues associated with staff shortages in the long term care industry transcend the boundaries that exist between state agencies. Efforts to establish workable solutions will require participation from state agencies that regulate the programs that support the provision of long term services, from agencies that license and certify providers, as well as those agencies responsible for the implementation of manpower training and related workforce initiatives.

It is equally true that solutions must transcend the boundaries and rivalries that exist between different provider segments of the long term care industry. Private for profit and non-profit providers sharing the same segment of the industry have often viewed each other with suspicion. The industry as a whole is comprised of many different factions. However, in any type of state initiated solution, resources will need to be equitably distributed and in some cases shared. Solutions that go beyond quick fixes will absolutely require such cooperation and enterprise

Guiding Principle 3. The cost of new initiatives must be a public/private partnership where, depending on the nature of the initiative, either the Commonwealth or private resources may carry the primary financial responsibility.

It is conceivable that program initiatives will require the Commonwealth to contribute first dollars when common resources are needed or to insure equitable distribution across the state. At the same time, public expenditures should not be substituted for private dollars when individual providers will directly benefit from the initiative. Exceptions would exist where a public subsidy is necessary to sustain an effort or insure that adequate levels of service access are maintained.

It is our belief that the use of these guiding principles can be used as a context for designing state initiatives that can emerge from the following set of broad policy recommendations.

Policy Recommendations

1. Recommendation: Statewide initiatives must recognize that the dynamics that underlie recruitment and retention problems differ. Overcoming recruitment and retention problems implies different types of actions, which should include short and long-term strategies.

To alleviate recruitment problems in the short run requires increases in starting wages. Evidence from both the actions taken by others and from the results of the survey of administrators in Pennsylvania indicates that wage rate differentials directly influence the level of difficulty providers face in recruiting new workers. Substantial increases expand the pool of job applicants. Higher starting wages that include larger wage increments after probation will help in correcting immediate shortages. But long term solutions require efforts that address issues beyond wages and directly face the problems presented by the ever increasing ratios of persons needing care to the number of available workers and by the serious image problems related to the roles played by frontline workers.

Retention problems, while also influenced by wages, are more closely tied to worker

attitudes, the treatment workers receive, job and career opportunities, and the nature of the job within the institutional context of the provider organization.

2. Recommendation: Statewide initiatives must recognize that to correct labor force shortages in the long term care industry approaches need to be targeted because problems vary by type of provider and by geographic regions within the Commonwealth.

Abundant evidence from the survey of administrators clearly shows that reports of labor shortages, recruitment and retention problems and job vacancies are particularly troublesome for specific segments of the industry, such as the home health/home care sector, and for geographic regions such as the Northeast region encompassing the urban counties of Lackawanna and Luzerne, the Scranton/Wilkes-Barre metropolitan area, and the rural counties of Carbon, Monroe, Pike, Schuylkill, and Wayne which reported the highest job vacancy rates of all regions within the state.

3. Recommendation: Explore strategies for statewide initiatives that will permit long term care providers the capacity to increase entry-level wages to levels where they are competitive with other local employers.

Higher entry-level wages have been frequently mentioned in the literature as a key to overcoming recruitment difficulties in the long term care industry. It is clear from the existing wage rate studies that frontline long term care workers are typically paid lower initial wage rates when compared to other jobs in the service sector. Evidence from the present study clearly supports the fact that higher entry-level wages levels do ease recruitment, particularly when the higher wages occur after the new workers successfully complete the probationary period.

Twenty-three states have used wage pass-throughs in order to establish the needed wage parity. However, although it could be assumed, even based upon the data presented in this report, that the wage pass-through mechanism would be successful, little data is available on the effectiveness of such mechanisms.

As an alternative to a broad wage pass-through, the Commonwealth could undertake other types of initiatives. One such initiative could include a small scale, or pilot wage pass through program targeted at a segment of the long term care industry facing the most difficult recruitment problems and confining the pilot to specific geographic regions also experiencing the greatest worker recruitment problems. With a restrictive pilot project, the state could require a thorough evaluation and require some form of contribution from that segment of the industry where the pilot would occur.

Another option for the state would be a public information campaign to encourage providers to use their post-probationary pay increases more effectively. Such a strategy is clearly supported from the present study.

4. Recommendation: Statewide initiatives should be explored that relate directly to non-wage recruitment issues and explore ways of developing pilot programs directed towards strategies that can increase the supply of workers in those areas facing the most extreme shortages resulting from demographic imbalances and low unemployment.

Outside of wages, overcoming short-term recruitment problems also implies strategies that find workers. Such initiatives could include the use of special recruiters, special advertising, and special inducements. One strategy that has been used is the creation of centralized recruiting mechanisms. Whether by industry sector or geographic region, centralized efforts assist small providers who otherwise could not mount proactive recruitment efforts. Public dollars could be used to either offset the extra costs of finding additional personnel, or be used to actually set up special programs that help providers develop effective advertising and recruiting strategies.

Longer-term solutions could include efforts at enlarging the pool of potential workers. Such efforts could include strategies like 'Job Corp' type initiatives, identification of critical need areas, enhanced special 'work-study' type programs and tuition benefits, or subsidized educational benefits in the way the armed forces have used education benefits to entice recruits.

5. Recommendation: Examine ways to increase wage parity for similar types of frontline workers employed by different sectors of the industry and seek ways to build pay scales that would lead to career ladders.

Abundant evidence from the survey of administrators shows that both entry-level as well as regular wage rates vary greatly between different types of providers. Although not conclusive, there is some evidence suggesting that wage variation exists between different types of providers within regions. Such disparities make it more difficult for some providers to compete in the market place for prospective workers. Survey evidence also indicates that it is the disparities in wages rather than the disparities in benefits that directly influence the levels of reported problems in recruitment and retention.

Reports referenced in the literature review also frequently cite that career advancement opportunities for frontline personnel improve worker retention. But for career ladders to be recognized and accepted as legitimate they must simultaneously include increased training, job-skills requirements, responsibilities, and wage differentials.

6. Recommendation: Statewide initiatives should be explored that will directly stimulate the development of culture change efforts within long term care provider organizations to improve worker retention problems and job turnover.

Evidence from the existing literature indicates that retention problems are closely tied to worker attitudes, the treatment workers receive, job and career opportunities, and the nature of the job within the institutional context of the organization. Short-term strategies directed towards retention problems can benefit from wage increases, but wages will not solve more these more fundamental questions. There is clear evidence from the survey of administrators in Pennsylvania that providers who incorporated culture change elements into their organization reported improved worker retention and decreased turnover.

Efforts at simulating the expansion of culture change initiatives across the state would have a positive effect on worker retention. Efforts should be directed at changing institutional attitudes towards the role of the frontline worker, the redesigning of frontline worker jobs, as well as more extensive culture change initiatives would contribute to establishing a more stable, long term care frontline worker labor force.

The Commonwealth could undertake a pilot program directed towards encouraging and facilitating the ability of organizations to initiate culture change activities. Such initiatives have occurred in other states and anecdotal evidence suggests that these initiatives have been successful.

7. Recommendation: The Commonwealth in collaboration with the statewide trade associations representing the diverse elements of the state's long term care industry should develop approaches that will improve the public perception of frontline workers and the important role they play in the provision of care within the industry.

There is evidence in the literature that the general public has a very negative image of frontline workers in the long term care industry. This negative image also dissuades many prospective individuals from pursuing job opportunities in this field. The undertaking of some form of a broad public information campaign to promote a more positive image of the important work done by frontline, paraprofessional personnel would encourage more and perhaps a wider

spectrum of potential workers. Other states have initiated similar efforts although it is unclear just how much of an impact such activities has had on the recruitment of frontline workers.

8. Recommendation: Appropriate public agencies such as the Department of Public Welfare and the Department of Aging should examine ways to effectively disseminate information about existing public programs available to low income workers.

Evidence from the survey indicates that employers who contribute to the costs of health insurance for family coverage have somewhat higher worker retention. There are currently available but underutilized state programs that make available to qualified low-income workers certain types of benefits such as subsidized training, child care, and children's health insurance. It is likely given their generally low wages that many frontline workers would qualify for such programs, particularly among the large number of part time workers. Appropriate State government departments such as the Department of Public Welfare and the Department of Aging should examine ways to make sure both providers and frontline workers are aware of these programs and take the opportunity to participate when appropriate.

9. Recommendation: Explore strategies that will reduce the disparity in training across different types of providers, consider ways training could be made more universal across settings, and initiate programs that can offset training costs that overburden segments of the long term care industry.

Evidence from the survey and reiterated in the long term care literature, document that there are great disparities in training of frontline workers among different types of providers. This disparity leads to greater unevenness in terms of the quality of care, but it also means that certain types of providers serve as the entry-level opportunities for the industry and carry a larger training burden. Finding strategies that could reduce this disparity would be useful to the industry and to specific providers. Examining the possibility of having more standard core training requirements across different types of providers could also help to create a class of universal frontline workers which could then serve as a beginning rung of a more formal career ladder.

Other approaches could also be explored where public dollars are used more directly to either provide training opportunities or help offset the cost of training. Moving towards more universal training requirements would help justify the greater use of public dollars for training because it would be serving a more generalized public need and not simply subsidize the training costs for a single segment of the industry. This type of effort could also encourage more rapid growth of the non-residential segments of the industry.

Bibliography

Atchley, R.C. *Frontline Workers in Long-Term Care: Recruitment, Retention, and Turnover Issues in an Era of Rapid Growth*. Oxford, OH: Scripps Gerontology Center, 1996.

Atchley, S.J. *What Do Nurses Want: Critical Factors in Recruiting and Retaining RNs in Long-Term Care*. Oxford, OH: Scripps Gerontology Center, 1992.

Banaszak-Holl, J. and M.A. Hines. "Factors Associated with Nursing Home Staff Turnover," *Gerontologist*, 36 (1996): 512-517.

Bowers, B. and M. Becker. "Nurse's Aides in Nursing Homes: The Relationship between Organization and Quality," *The Gerontologist*, 32 (1992): 360-366.

Brannon, D. and M.A. Smyer. "Good Work and Good Caring in Nursing Homes," *Generation*, 18 (1994): 34-38.

Cantor, M.H. and E.R. Chichin. *Stress and Strain Among Homecare Workers of the Frail Elderly*. New York, NY: Brookdale Research Institute on Aging, 1990.

Caudill, M. and M. Patrick. "Turnover among Nursing Assistants: Why They Leave and Why They Stay," *Journal of Long-Term Care Administration*, 19 (1991): 29-32.

Cherniss, C. *Staff Burnout: Job Stress in the Human Services*. Beverly Hills, CA: Sage, 1980

Close, L., C.L. Estes, K.W. Linkins, and E.A. Binney. "A Political Economy Perspective on Frontline Workers in Long-Term Care," *Generations*, 18 (1994): 23-28.

Cohen, A. and N. Hudedeck. "Organizational Commitment-Turnover Relationship Across Organizational Groups: A Meta-Analysis," *Group and Organizational Management*, 18 (1993): 188-213.

Congressional Budget Office. *Projections of Expenditures for Long-Term Care Services for the Elderly,* Washington, DC, 1999.

Crown, W.H., D.A. Ahlburg, and M. MacAdam. "The Demographic and Employment Characteristics of Home Care Aides: A Comparison with Nursing Home Aides, Hospital Aides, and Other Workers," *The Gerontologist*, 35 (1995): 162-170.

Crown, W.H. "A National Profile of Homecare, Nursing Home, and Hospital Aides," *Generations*, 18 (1994): 29-33.

Feldman, P.H. "'Dead-End' Work or Motivatin Job? Prospects for Frontline Paraprofessional Workers in Long-Term Care," *Generations*, 18 (1994): 7-12.

Firth, H. and P. Britton. "'Burnout,' Absence and Turnover amongst British Nursing Staff," *Journal of Occupational Pscychology*, 62 (1989): 55-59.

General Accounting Office. *Nursing Homes; Success of Quality Initiatives Requires Sustained Federal and State Commitment*. Testimony Before the Special Committee on Aging, United States Senate. Washington, D.C., September 28, 2000.

Gilbert, N.J. "Home Care Worker Resignations: A Study of the Major Contributing Factors," *Home Health Care Services Quarterly*, 12 (1991): 69-83.

Glock, P. *Home Health Aide and Homemaker Survey Report*. Columbus, OH: Ohio Department of Aging, 1995.

Halbur, B.T. "Nursing Personell in Nursing Homes: A Structural Approach to Turnover." *Work and Occupations*, 10 (1983): 381-411.

Harrington, C. "The Nursing Home Industry: A Structural Analysis." In M. Minkler and C.L. Estes (eds.), *Critical Perspectives on Aging; The Political and Moral Economy of Growing Old*. Amitville, NY: Baywood, 1991

Hughes, D. And G. Peters. "Organizational Position and Perception of Problems in a Nursing Home," *Journal of Gerontology*, 33 (1978): 279-287.

Iannone, J.M. and M.G. Bye. *An Orientation Manual for Long-Term Care Facilities*. New York, NY: Springer, 1993.

Iglehart, A.P. "Turnover in the Social Services: Turning Over to the Benefits," *Social Service Review*, 64 (1990): 649-657.

Iowa Caregiver Association/Hill Simonton Bill. *Certified Nursing Assistant (CAN) Recruitment and Retention Project. Phase I: Survey Results*. Des Moines, IA, December, 1998.

Jackson, S.E. and K. Schaefer. "Identifying Clues to Infection in Nursing Home Residents," *Journal of Gerontological Nursing*, 19 (1993): 33-42.

Jackson, S.E., R.L. Schwab, and R.S. Schuler. "Towards an Understanding of the Burnout Phenomenon," *Journal of Applied Psychology*, 71 (1986): 630-640.

Kingson, E. R. "Ways of thinking about the long-term care of the baby-boom cohorts." *Journal of Aging and Social Policy*, 7 (1996): 3-23.

Long-Term Care 2000 Statistics and Information: Demographics of the Aging Population, Long-Term Care Nursing Facilities, and Personal Care Homes, The Pennsylvania Association of Non-Profit Homes for the Aging, Winter, 2000

Marion Merrell Dow. *Managed Care Digest, Long Term Care Edition*. Kansas City, MO: 1993.

Marion Merrell Dow. *Managed Care Digest, Long Term Care Edition*. Kansas City, MO: 1994.

Maslach, C. *Burnout: The Cost of Caring*. Englewood Cliffs, NJ: Prentice-Hall, 1982.

Maslach, C. and S.E. Jackson. "Patterns of Burnout Among a National Sample of Public Contact Workers," *Journal of Health and Human Resources Administration*, 7 (1984): 189-212.

North Carolina Division of Facility Services. *Comparing State Efforts to Address the Recruitment and Retention of Nurse Aide and Other Paraprofessional Aide Workers*. September 1999.

North Carolina Division of Facility Services. *Results of a Follow-Up Survey to States on Wage Supplements for Medicaid and Other Public Funding To Address Aide Recruitment and Retention in Long-Term Care Settings*. November 2000.

Overview of LTC Workforce: Trends and Issues, Center for Health Workforce Studies, New York State University at Albany, 2000.

Paraprofessional Healthcare Institute. *Workforce Issues in Long-Term Care: Working Update on State Activities*. Bronx, NY, 1999.

Pennsylvania Department of Labor and Industry. *Pennsylvania Workforce 2000*. Harrisburg, PA, 2000.

Pennsylvania Intra-Governmental Council on Long Term Care. *Report on the Growth of Personal Care Homes in Pennsylvania*. Harrisburg, PA, November, 2000.

Schwartz, A.. "Staff Development and Morale Building in Nursing Homes," *The Gerontologist*, 14 (1974): 50-53.

Service Employees International Union. *Caring til it Hurts: How Nursing Home Work Is Becoming the Most Dangerous Job in America*. Washington, DC, 1997

Silverstri, G.T. "The American Work Force, 1992-1995," *Monthly Labor Review* (November 1993): 58-86.

Smyer, M., D. Brannon, and M. Cohn. "Improving Nursing Home Care through Training and Job Redesign," *The Gerontologist*, 32 (1992): 327-333.

State Assisted Living: Policy, National Academy for State Health Policy, July, 2000

Toscano, G. and W. Weber. *Violence in the Workplace*. Office of Safety, Health, and Working Conditions, US Bureau of Labor Statistics. http://www.bls.gov/oshwc/cfar0005.pdf

US Bureau of Labor Statistics, 1997a. "Injuries to Caregivers Working in Patient's Homes". *Issues in Labor Statistics*. Washington, D.C., February.

US Bureau of Labor Statistics , 1997b. *Lost-Worktime Injuries: Characteristics and Resulting Time Away from Work, 1995*. Office of Safety, Health, and Working Conditions, Case & Demo News Release, OS NR 06/12/97. Washington, D.C.. http://www.bls.gov/oshwc/osh/case/osnr0004.txt

Wagnild, G. "A Descriptive Study of Nurse's Aide Turnover in Long-Term Care Facilities," *Journal of Long-Term Care Administration*, 17 (1988): 19-23.

Waung, M. "The Effects of Self-Regulatory Coping Orientation on Newcomer Adjustment and Job Survival," *Personnel Psychology*, 48 (1995): 633-650.

Waxman, H.M., E.A. Caner, and G. Berkenstock. "Job Turnover and Job Satisfaction among Nursing Home Aides," *The Gerontologist*, 24 (1984): 503-509.

White, M. "Homecare Consortium Addresses Frontline Worker Issues," *Generations*, 18 (1994): 54-56.

Zahrt, L.M. "The Cost of Turnover in a Home Care Agency," *Caring* (April, 1992): 60-66.

Appendix

A

Detailed Appendix Tables

List of Appendix Tables

1 Mean Number of Frontline Workers per Provider……A-4
2 Number of Frontline Workers in Pennsylvania…… A-5
3 Length of Employment……..A-6
4 Reported Recruitment and Retention Problems……...A-7
5 Reported Serious Recruitment and Retention Problems……...A-8
6 Change in Level of Recruitment Problem Over the Past Two Years…….. A-9
7 Change in Level of Retention Problem Over the Past Two Years……..A-9
8 Single Largest Reason for the Recruitment Problem……A-10
9 Single Largest Reason for the Retention Problem…… A-10
10 Reported Staff Shortage……...A-11
11 Effects of Staff Shortage on Providers Reporting Shortages…… A-12
12 Vacancy Levels……... A-13
13 Frontline Job Openings in Pennsylvania……A-14
14 Wage Rates…… A-15
15 Increases in Starting Wage in the Past Two Years…….. A-16
16 Providers Who View Their Increase in Starting Wage as Effective in Easing Recruitment……A-17
17 Reported Reasons Why Increased Starting Wage Rates Helped Ease Recruitment…… A-18
18 Reported Reasons Why Increased Starting Wage Rates Did Not Help Ease Recruitment…… A-18
19 Across the Board Wage Increases in the Past Two Years…….. A-19
20 Providers who View Their Across the Board Wage Increase as Effective in Improving Retention… A-20
21 Providers That Offer Any Type of Benefits…….. A-21
22 Providers That Offer Selected Types of Benefits to Full-Time and Part-Time Workers……A-22
23 Other Reported Benefits…… A-23
24 Providers That Have Changed Benefits in Past 2 Years for Recruitment or Retention Reasons….. A-23
25 Hours and Cost of Training…….... A-24
26 Annual Cost of Training Due to Staff Turnover……A-25
27 Educational and Work Experience Requirement……..A-26
28 Perceived Change in Job Performance of New Workers over Past 2 Years…… A-27
29 Length of the Probationary Period…… A-28
30 Percent of Job Applicants Rejected Due to Act 169 Criminal Background Check Requirement….. A-29
31 Satisfaction with Act 169 Criminal Background Check Requirement……A-30
32 Main Reason for Being Dissatisfied with Act 169 Criminal Background Check……..A-31
33 What Dissatisfied Providers Would Like to Change About Act 169……A-31
34 Other Worker Development Programs, Beyond State-Required Training…… … A-32
35 Reported Efforts to Change the Nature of the Frontline Worker's Job…….. A-32
36 Degree of Worker Influence over Care Planning and Work Scheduling…… ...A-33
37 Retention Problems by Degree of Worker Involvement in Care Planning…….. A-34
38 Strategies Used for Handling Recruitment Problems…….. A-35
39 Strategies Used for Handling Retention Problems…… A-35
40 The Most Important Thing that the State Government Could Do to Help with Recruitment and Retention…… A-36

APPENDIX TABLE 1
Mean Number of Frontline Workers per Provider

	Number of Workers	Percent of Workers Who Are…		Percent of Workers Who Are…	
		Full-Time	Part-Time	Temps	Temps
All providers	28	50.3%	49.7%	5.1%	94.9%
Provider type:					
Adult Day Care Centers	10	35.6%	64.5%	6.3%	93.7%
Centers for Independent Living	195	25.6%	74.4%	4.3%	95.7%
Licensed, Certified Home Health Agencies	31	38.8%	61.2%	11.9%	88.1%
Licensed, Non-Certified Home Health Agencies	19	26.0%	74.0%	11.8%	88.3%
Unlicensed, Non-Certified Home Care Agencies~	131	33.6%	66.4%	11.8%	88.2%
Private Nursing Homes	46	68.5%	31.5%	4.9%	95.1%
Government Nursing Homes	155	77.7%	22.3%	3.9%	96.1%
Large Personal Care Homes	21	56.4%	43.6%	2.0%	98.0%
Small Personal Care Homes	6	37.2%	62.8%	4.9%	95.1%
Urban-rural:					
Urban	32	50.9%	49.2%	5.9%	94.2%
Rural	21	49.4%	50.6%	3.7%	96.3%
Region:					
Northwest	20	57.2%	42.8%	2.3%	97.7%
Northcentral~	17	48.0%	52.0%	4.3%	95.7%
Northern Tier~	13	38.3%	61.7%	8.7%	91.3%
Northeast	26	50.8%	49.2%	10.2%	89.8%
Central	33	55.4%	44.6%	1.0%	99.1%
Southwest	21	49.5%	50.5%	2.9%	97.1%
Southern Alleghenies	23	49.4%	50.7%	1.8%	98.2%
Southcentral	29	51.7%	48.3%	4.9%	95.1%
Southeast	38	50.4%	49.6%	7.8%	92.2%
Lehigh Valley~	33	42.7%	57.3%	1.4%	98.6%

Due to rounding, percentages may not sum to 100

~Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 2
Number of Frontline Workers in Pennsylvania

	Current Number of Frontline Workers	Number of Workers Who Are… Full-Time	Part-Time
All providers	94,159	61,725	32,434
Provider type:			
Adult Day Care Centers	2,269	1,503	766
Centers for Independent Living	3,891	812	3,079
Licensed, Certified Home Health Agencies	9,972	4,762	5,210
Licensed, Non-Certified Home Health Agencies	2,167	701	1,466
Unlicensed, Non-Certified Home Care Agencies*	6,533	3,215	3,319
Private Nursing Homes	34,934	26,161	8,773
Government Nursing Homes	7,294	6,301	992
Large Personal Care Homes	21,998	15,170	6,828
Small Personal Care Homes	5,101	2,953	2,148
Urban-rural:			
Urban	68,086	44,324	23,763
Rural	26,073	17,398	8,675
Region:			
Northwest	4,486	3,121	1,365
Northcentral*	1,773	1,038	734
Northern Tier*	957	605	352
Northeast	7,831	4,995	2,836
Central	4,714	2,939	1,775
Southwest	20,650	13,516	7,134
Southern Alleghenies	3,939	2,697	1,241
Southcentral	8,004	5,595	2,409
Southeast	37,978	24,672	13,306
Lehigh Valley*	3,827	2,538	1,289

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 3
Length of Employment

	Percent of Workers Who Have Worked at the Provider…			
	less than 1 year	1 to 3 years	3 to 10 years	10 years or more
All providers	28.8%	28.6%	24.1%	18.4%
Provider type:				
Adult Day Care Centers	26.7%	31.4%	20.6%	21.3%
Centers for Independent Living	54.0%	21.6%	18.2%	6.2%
Licensed, Certified Home Health Agencies	25.4%	26.8%	29.6%	18.1%
Licensed, Non-Certified Home Health Agencies	27.4%	30.6%	32.9%	9.1%
Unlicensed, Non-Certified Home Care Agencies*	30.6%	28.5%	29.5%	11.4%
Private Nursing Homes	30.8%	33.4%	16.9%	18.9%
Government Nursing Homes	20.5%	34.6%	18.0%	27.0%
Large Personal Care Homes	30.2%	27.2%	26.7%	15.9%
Small Personal Care Homes	26.7%	23.2%	27.2%	22.9%
Urban-rural:				
Urban	29.5%	28.9%	23.1%	18.5%
Rural	27.5%	28.1%	26.1%	18.3%
Region:				
Northwest	32.1%	30.4%	23.7%	13.8%
Northcentral*	29.4%	22.1%	27.6%	20.9%
Northern Tier*	19.9%	30.3%	22.7%	27.1%
Northeast	30.7%	23.9%	30.0%	15.4%
Central	25.4%	34.4%	24.1%	16.1%
Southwest	30.1%	26.0%	23.9%	20.0%
Southern Alleghenies	19.4%	28.8%	26.1%	25.6%
Southcentral	26.1%	32.2%	24.1%	17.7%
Southeast	29.1%	29.8%	21.9%	19.2%
Lehigh Valley*	30.3%	35.9%	26.0%	7.7%

Due to rounding, percentages may not sum to 100

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 4
Reported Recruitment and Retention Problems

	Percent of Providers Who Have a Serious or Somewhat Serious Problem with:	
	Recruitment	Rectruitment or Retention
All providers	65.8%	68.7%
Provider type:		
Adult Day Care Centers	56.5%	59.5%
Centers for Independent Living	87.5%	95.0%
Licensed, Certified Home Health Agencies	68.5%	73.0%
Licensed, Non-Certified Home Health Agencies	71.8%	75.4%
Unlicensed, Non-Certified Home Care Agencies*	82.7%	86.7%
Private Nursing Homes	77.1%	81.2%
Government Nursing Homes	75.6%	79.1%
Large Personal Care Homes	65.8%	67.7%
Small Personal Care Homes	53.5%	55.6%
Urban-rural:		
Urban	68.1%	71.7%
Rural	61.9%	63.7%
Region:		
Northwest	68.1%	75.9%
Northcentral**	49.5%	49.5%
Northern Tier**	64.8%	64.8%
Northeast	78.8%	79.3%
Central	64.6%	64.6%
Southwest	66.5%	67.8%
Southern Alleghenies	57.9%	57.9%
Southcentral	62.1%	63.2%
Southeast	64.0%	69.7%
Lehigh Valley*	74.1%	80.2%

Excludes all cases in which it is unascertained whether the provider has a problem

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 5
Reported Serious Recruitment and Retention Problems

	Percent of Providers Who Have a Serious Problem with:	
	Recruitment	Rectruitment or Retention
All providers	32.0%	34.9%
Provider type:		
Adult Day Care Centers	21.7%	25.6%
Centers for Independent Living	25.3%	31.3%
Licensed, Certified Home Health Agencies	44.9%	47.9%
Licensed, Non-Certified Home Health Agencies	36.7%	43.0%
Unlicensed, Non-Certified Home Care Agencies**	43.2%	45.7%
Private Nursing Homes	39.1%	43.5%
Government Nursing Homes	31.4%	35.8%
Large Personal Care Homes	30.5%	33.2%
Small Personal Care Homes	23.8%	24.6%
Urban-rural:		
Urban	33.3%	36.4%
Rural	29.9%	32.4%
Region:		
Northwest	39.5%	43.1%
Northcentral**	18.1%	22.1%
Northern Tier**	39.5%	40.8%
Northeast	33.3%	35.8%
Central	42.5%	45.4%
Southwest	28.4%	30.9%
Southern Alleghenies	28.4%	28.4%
Southcentral	28.4%	32.9%
Southeast	31.8%	35.3%
Lehigh Valley**	54.8%	54.8%

Excludes all cases in which it is unascertained whether the provider has a problem

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 6
Change in Level of Recruitment Problem Over the Past Two Years

	Compared to 2 Years Ago, Recruitment Problem Has:	
Current Level of Recruitment Problem	**Increased**	**Decreased**
A very serious problem	77.4%	1.8%
Somewhat of a problem	51.9%	7.6%
A minor problem	22.0%	18.6%

Excludes all cases in which level of problem or change in problem is unascertained
Due to rounding, percentages may not sum to 100

APPENDIX TABLE 7
Change in Level of Retention Problem Over the Past Two Years

	Compared to 2 Years Ago, Retention Problem Has:	
Current Level of Retention Problem	**Increased**	**Decreased**
A very serious problem	68.2%	4.6%
Somewhat of a problem	38.7%	8.7%
A minor problem	16.0%	18.7%

Excludes all cases in which level of problem or change in problem is unascertained
Due to rounding, percentages may not sum to 100

APPENDIX TABLE 8
Single Largest Reason for the Recruitment Problem

Reason*	Percent of Pennsylvania Providers with Problem Citing Reason
Low pay	32.7%
Low unemployment	32.3%
Poor quality workers	9.8%
No benefits offered	4.5%
Transportation problems	3.5%
Competition from other health care providers	3.4%
Scheduling problems	3.4%
Location of provider	1.9%
Some other reason	18.6%
Don't know	0.4%

* Some providers cited multiple reasons; therefore, the percentages add up to more than 100

APPENDIX TABLE 9
Single Largest Reason for the Retention Problem

Reason*	Percent of Pennsylvania Providers with Problem Citing Reason
Low pay	35.5%
Low unemployment	17.8%
Difficulty of work	8.1%
Poor quality workers	7.4%
No benefits offered	6.0%
Scheduling problems	5.7%
Competition from other health care providers	5.6%
Burnout	4.1%
Poor transportation	1.2%
Training issues	1.1%
Some other reason	19.9%

* Some providers cited multiple reasons; therefore, the percentages add up to more than 100

APPENDIX TABLE 10
Reported Staff Shortage

	Current Degree of Staff Shortage		
	No Staff Shortage	Some Staff Shortage	A Severe Staff Shortage
All providers	42.2%	49.8%	8.0%
Provider type:			
Adult Day Care Centers	51.1%	45.7%	3.2%
Centers for Independent Living	0.0%	89.0%	11.0%
Licensed, Certified Home Health Agencies	27.3%	52.1%	20.6%
Licensed, Non-Certified Home Health Agencies	40.5%	50.2%	9.3%
Unlicensed, Non-Certified Home Care Agencies*	17.3%	64.8%	17.8%
Private Nursing Homes	23.3%	64.8%	11.9%
Government Nursing Homes	17.8%	77.8%	4.4%
Large Personal Care Homes	43.7%	51.4%	5.0%
Small Personal Care Homes	66.6%	29.6%	3.8%
Urban-rural:			
Urban	38.1%	52.9%	9.1%
Rural	49.1%	44.6%	6.3%
Region:			
Northwest	30.5%	58.4%	11.1%
Northcentral*	58.9%	35.5%	5.6%
Northern Tier*	59.2%	31.0%	9.8%
Northeast	36.8%	48.1%	15.2%
Central	33.7%	52.4%	13.9%
Southwest	51.7%	45.4%	2.9%
Southern Alleghenies	52.2%	47.8%	0.0%
Southcentral	46.5%	45.9%	7.5%
Southeast	34.2%	55.4%	10.4%
Lehigh Valley*	28.0%	59.4%	12.6%

Excludes all cases in which it is unascertained whether the provider has a problem

Due to rounding, percentages may not sum to 100

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 11
Effects of Staff Shortage on Providers Reporting Shortages

	Percent of Providers with Staff Shortage Who Have:			
	Cut down or limited the number of persons served	Increased the use of overtime labor	Increased the use of independent contractors or agency temps	Changed scheduling and flextime options
All providers	25.1%	75.1%	28.6%	60.4%
Provider type:				
Adult Day Care Centers	14.5%	39.5%	29.8%	46.9%
Centers for Independent Living	35.3%	73.4%	55.7%	49.3%
Licensed, Certified Home Health Agencies	64.7%	62.0%	16.1%	53.1%
Licensed, Non-Certified Home Health Agencies	65.7%	63.8%	27.7%	76.3%
Unlicensed, Non-Certified Home Care Agencies**	66.5%	37.7%	37.7%	36.7%
Private Nursing Homes	21.2%	90.0%	47.0%	62.0%
Government Nursing Homes	26.2%	89.0%	34.2%	57.5%
Large Personal Care Homes	9.3%	81.6%	21.6%	62.4%
Small Personal Care Homes	19.1%	62.1%	10.1%	66.3%
Urban-rural:				
Urban	25.0%	76.4%	33.8%	60.5%
Rural	25.5%	72.3%	17.9%	60.3%
Region:				
Northwest	18.6%	78.9%	15.7%	62.0%
Northcentral**	30.4%	61.7%	11.3%	38.9%
Northern Tier**	26.9%	54.7%	4.9%	69.8%
Northeast	37.8%	69.8%	31.9%	60.3%
Central	21.0%	66.4%	19.4%	58.8%
Southwest	14.4%	79.1%	22.2%	64.8%
Southern Alleghenies	43.8%	68.7%	7.2%	71.4%
Southcentral	29.6%	82.1%	43.9%	62.8%
Southeast	26.7%	74.8%	40.4%	52.8%
Lehigh Valley**	31.9%	78.1%	11.7%	86.9%

Limited to the 1566 providers that report having a staff shortage. Percentages do not take into account the minority of cases where respondents did not know or refused to answer whether the provider had implemented a change.

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 12
Vacancy Levels

	Vacancy Level			
	None	Low (less than 10%)	Moderate (10% to 20%)	High (greater than 20%)
All providers	40.6%	22.9%	23.4%	13.2%
Provider type:				
Adult Day Care Centers	61.1%	13.4%	15.6%	9.9%
Centers for Independent Living	5.0%	83.0%	12.0%	0.0%
Licensed, Certified Home Health Agencies	30.7%	23.6%	20.3%	25.4%
Licensed, Non-Certified Home Health Agencies	39.0%	15.2%	18.4%	27.5%
Unlicensed, Non-Certified Home Care Agencies*	17.8%	45.0%	13.3%	23.8%
Privatge Nursing Homes	14.1%	33.1%	33.7%	19.1%
Government Nursing Homes	10.6%	40.6%	42.1%	6.6%
Large Personal Care Homes	39.4%	28.3%	26.8%	5.5%
Small Personal Care Homes	69.6%	5.6%	13.2%	11.6%
Urban-rural:				
Urban	36.6%	23.0%	24.7%	15.7%
Rural	47.2%	22.8%	21.1%	8.9%
Region:				
Northwest	33.3%	31.2%	28.7%	6.9%
Northcentral*	50.2%	20.5%	19.4%	9.9%
Northern Tier*	63.3%	15.7%	10.0%	11.0%
Northeast	30.4%	25.0%	23.9%	20.7%
Central	28.7%	22.3%	30.2%	18.8%
Southwest	49.9%	18.0%	19.8%	12.3%
Southern Alleghenies	61.2%	23.1%	9.4%	6.3%
Southcentral	42.1%	20.0%	32.7%	5.2%
Southeast	33.5%	24.9%	26.0%	15.6%
Lehigh Valley*	20.8%	39.4%	21.7%	18.2%

Excludes all cases where vacancy level is unascertained

Due to rounding, percentages may not sum to 100

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 13
Frontline Job Openings in Pennsylvania

	Current Number of Frontline Workers	Frontline Job Openings
All providers	94,159	11,317
Provider type:		
Adult Day Care Centers	2,269	190
Centers for Independent Living	3,891	225
Licensed, Certified Home Health Agencies	9,972	1,799
Licensed, Non-Certified Home Health Agencies	2,167	342
Unlicensed, Non-Certified Home Care Agencies*	6,533	473
Private Nursing Homes	34,934	5,218
Government Nursing Homes	7,294	828
Large Personal Care Homes	21,998	1,831
Small Personal Care Homes	5,101	411
Urban-rural:		
Urban	68,086	8,562
Rural	26,073	2,756
Region:		
Northwest	4,486	439
Northcentral*	1,773	193
Northern Tier*	957	97
Northeast	7,831	1,515
Central	4,714	477
Southwest	20,650	2,407
Southern Alleghenies	3,939	256
Southcentral	8,004	988
Southeast	37,978	4,520
Lehigh Valley*	3,827	426

Extrapolated from the number of current workers and job openings reported by the providers in the sample

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 14
Wage Rates

	Mean Starting Hourly Wage Rate	Mean Hourly Wage Rate after Probation	Mean Top Hourly Wage Rate
All providers	$7.29	$7.58	$9.51
Provider type:			
Adult Day Care Centers	$7.16	$7.35	$9.77
Centers for Independent Living	$8.31	$8.50	$10.18
Licensed, Certified Home Health Agencies	$8.55	$8.77	$10.76
Licensed, Non-Certified Home Health Agencies	$8.47	$8.64	$10.18
Unlicensed, Non-Certified Home Care Agencies*	$8.12	$8.15	$9.44
Private Nursing Homes	$8.27	$8.56	$11.29
Government Nursing Homes	$8.91	$9.27	$11.96
Large Personal Care Homes	$6.84	$7.14	$9.02
Small Personal Care Homes	$6.10	$6.51	$7.59
Urban-rural:			
Urban	$7.60	$7.88	$10.02
Rural	$6.75	$7.07	$8.63
Region:			
Northwest	$6.83	$7.07	$8.77
Northcentral*	$6.72	$6.92	$8.53
Northern Tier*	$6.43	$6.64	$8.12
Northeast	$7.20	$7.42	$9.53
Central	$6.77	$7.16	$8.99
Southwest	$6.57	$6.89	$8.50
Southern Alleghenies	$6.22	$6.51	$7.95
Southcentral	$8.16	$8.45	$10.51
Southeast	$8.24	$8.54	$10.89
Lehigh Valley*	$7.65	$7.84	$9.78

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 15
Increases in Starting Wage in the Past Two Years

	Percent that Have Raised Starting Hourly Wage	Mean Increase in Starting Wage Rate
All providers	92.8%	8.9%
Provider type:		
Adult Day Care Centers	85.0%	8.8%
Centers for Independent Living	95.0%	13.2%
Licensed, Certified Home Health Agencies	90.1%	8.6%
Licensed, Non-Certified Home Health Agencies	86.6%	8.5%
Unlicensed, Non-Certified Home Care Agencies**	100.0%	8.2%
Private Nursing Homes	100.0%	9.1%
Government Nursing Homes	96.6%	7.2%
Large Personal Care Homes	93.9%	8.1%
Small Personal Care Homes	88.0%	10.2%
Urban-rural:		
Urban	94.5%	9.1%
Rural	89.9%	8.5%
Region:		
Northwest	88.1%	7.1%
Northcentral**	84.2%	8.2%
Northern Tier**	94.5%	9.5%
Northeast	92.7%	8.9%
Central	88.1%	10.6%
Southwest	90.0%	9.8%
Southern Alleghenies	93.6%	7.3%
Southcentral	94.5%	9.0%
Southeast	96.5%	8.7%
Lehigh Valley**	100.0%	6.6%

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 16
Providers Who View Their Increase in Starting Wage as Effective in Easing Recruitment

	Any Increase	By Level of Increase*		
		Top 25%	Mid 50%	Lowest 25%
All providers	48.1%	68.1%	44.9%	35.3%
Provider type:				
Adult Day Care Centers	41.1%	67.5%	41.0%	28.5%
Centers for Independent Living	58.8%	75.0%	45.5%	54.6%
Home Health Agencies/Home Care Agencies†	47.6%	68.0%	36.4%	52.3%
Private Nursing Homes	53.4%	82.6%	42.9%	33.6%
Government Nursing Homes	54.7%	90.2%	52.9%	39.8%
Large Personal Care Homes	50.1%	56.5%	54.7%	37.3%
Small Personal Care Homes	40.0%	56.0%	38.6%	18.9%
Urban-rural:				
Urban	47.6%	69.4%	41.7%	34.8%
Rural	49.2%	65.1%	50.7%	36.0%
Region:				
Northwest	37.3%	100.0%	46.0%	19.7%
Northcentral‡	48.8%	100.0%	28.6%	4.2%
Northern Tier‡	36.6%	40.2%	20.5%	44.8%
Northeast	53.2%	75.1%	49.1%	31.9%
Central	46.9%	50.2%	23.6%	67.7%
Southwest	43.7%	60.5%	37.4%	42.4%
Southern Alleghenies	55.1%	71.7%	44.6%	65.7%
Southcentral	62.4%	88.6%	62.9%	41.0%
Southeast	50.2%	70.2%	47.2%	31.3%
Lehigh Valley‡	38.1%	57.1%	59.4%	11.4%

Limited to providers who have raised their starting wage at some point in the past. Excludes cases in which the effectiveness of the wage increase was unascertained.

*As compared with providers of the same type in the same region and urban/rural status

†Home health agencies and home care agencies have been combined into one category due to small number of cases

‡Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 17
Reported Reasons Why Increased Starting Wage Rates Helped Ease Recruitment

Reason*	Percent of Providers with Improvements in Recruitment Citing Reason
Increase in number of applicants	34.7%
Available applicants more willing to accept position	33.0%
Now competitive with other area employers	7.9%
Attracting staff from other health care providers	2.2%
Attracting staff from other sectors	2.1%
Increased referals by current workers	1.3%
Better qualified applicants	0.4%
Other	9.8%
Don't know	2.9%

Limited to the 1518 providers whose wage increase helped ease recruitment

* Not mutually exclusive; some providers cited multiple reasons

APPENDIX TABLE 18
Reported Reasons Why Increased Starting Wage Rates Did Not Help Ease Recruitment

Reason*	Percent of Providers with No Improvements in Recruitment Citing Reason
No increase in number of applicants	28.6%
Not easier to fill positions	20.5%
Wages still not competitive with other employers	22.2%
Wage is not the issue, the nature of the work is	3.2%
Provider had no recruitment problem to start with	3.1%
Wage is not the issue, benefits are	1.0%
Don't know	3.0%
Other	15.1%

Limited to the 1636 providers whose wage increase did not help ease recruitment

* Not mutually exclusive; some providers cited multiple reasons

APPENDIX TABLE 19
Across the Board Wage Increases in the Past Two Years

	Percent that Have Raised Wages Across the Board	Mean Increase in Wage Rate
All providers	94.5%	6.8%
Provider type:		
Adult Day Care Centers	89.4%	5.3%
Centers for Independent Living	100.0%	6.7%
Licensed, Certified Home Health Agencies	88.3%	7.4%
Licensed, Non-Certified Home Health Agencies	97.8%	7.9%
Unlicensed, Non-Certified Home Care Agencies**	100.0%	7.3%
Private Nursing Homes	96.9%	6.7%
Government Nursing Homes	93.2%	5.3%
Large Personal Care Homes	97.7%	6.5%
Small Personal Care Homes	91.0%	7.7%
Urban-rural:		
Urban	95.1%	7.0%
Rural	93.4%	6.5%
Region:		
Northwest	90.1%	5.1%
Northcentral**	97.1%	6.1%
Northern Tier**	94.5%	8.4%
Northeast	95.4%	7.4%
Central	95.2%	8.0%
Southwest	91.8%	7.4%
Southern Alleghenies	97.3%	5.1%
Southcentral	95.0%	6.4%
Southeast	96.6%	6.9%
Lehigh Valley**	96.0%	6.1%

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 20
Providers Who View Their Across the Board Wage Increase as Effective in Improving Retention

	Any Increase	By Level of Increase*		
		Top 25%	Mid 50%	Lowest 25%
All providers	71.8%	81.0%	67.9%	61.6%
Provider type:				
Adult Day Care Centers	68.0%	78.6%	59.8%	77.9%
Centers for Independent Living	91.3%	100.0%	70.5%	100.0%
Private Nursing Homes	67.5%	87.5%	57.8%	60.7%
Government Nursing Homes	67.9%	100.0%	65.0%	50.0%
Home Health Agencies/Home Care Agencies†	78.8%	74.0%	82.4%	56.2%
Large Personal Care Homes	78.6%	77.6%	80.1%	68.4%
Small Personal Care Homes	62.1%	82.3%	52.8%	43.3%
Urban-rural:				
Urban	73.7%	83.3%	71.3%	58.7%
Rural	68.8%	76.7%	62.5%	64.6%
Region:				
Northwest	70.8%	82.8%	76.7%	26.7%
Northcentral‡	67.9%	100.0%	65.8%	44.2%
Northern Tier‡	67.9%	70.5%	63.0%	76.0%
Northeast	76.8%	85.7%	77.1%	49.8%
Central	62.4%	69.6%	40.3%	81.5%
Southwest	66.1%	74.7%	58.2%	62.4%
Southern Alleghenies	64.9%	64.7%	80.4%	32.4%
Southcentral	85.2%	93.4%	74.9%	90.7%
Southeast	75.7%	87.3%	72.5%	61.1%
Lehigh Valley‡	70.0%	70.9%	70.9%	74.7%

Limited to providers who have raised their starting wage at some point in the past. Excludes cases in which the effectiveness of the wage increase was unascertained.

*As compared with providers of the same type in the same region and urban/rural status

†Home health agencies and home care agencies have been combined into one category due to small number of cases

‡Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 21
Providers That Offer Any Type of Benefits

	Percent Offering Benefits
All providers	74.6%
Provider type:	
Adult Day Care Centers	92.4%
Centers for Independent Living	60.2%
Licensed, Certified Home Health Agencies	96.1%
Licensed, Non-Certified Home Health Agencies	78.2%
Unlicensed, Non-Certified Home Care Agencies*	37.7%
Private Nursing Homes	100.0%
Government Nursing Homes	100.0%
Large Personal Care Homes	78.1%
Small Personal Care Homes	32.0%
Urban-rural:	
Urban	79.4%
Rural	66.5%
Region:	
Northwest	80.3%
Northcentral*	60.5%
Northern Tier*	61.5%
Northeast	84.3%
Central	78.1%
Southwest	58.5%
Southern Alleghenies	51.8%
Southcentral	82.7%
Southeast	88.0%
Lehigh Valley*	91.2%

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 22
Providers That Offer Selected Types of Benefits to Full-Time and Part-Time Workers

	Health Insurance		Paid Sick Leave		Paid Vacation		A Transportation Benefit
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	
All providers	68.1%	40.1%	51.3%	31.0%	71.5%	51.7%	21.0%
Provider type:							
Adult Day Care Centers	89.0%	41.8%	71.1%	35.4%	90.7%	57.3%	37.4%
Centers for Independent Living	51.8%	10.0%	32.5%	10.0%	51.8%	8.8%	41.8%
Licensed, Certified Home Health Agencies	91.7%	54.8%	66.6%	31.1%	89.6%	59.2%	86.1%
Licensed, Non-Certified Home Health Agencies	70.9%	48.1%	48.3%	24.9%	68.5%	51.6%	68.0%
Unlicensed, Non-Certified Home Care Agencies*	31.2%	27.2%	15.3%	11.3%	33.7%	33.7%	35.7%
Private Nursing Homes	100.0%	66.5%	81.6%	57.2%	99.4%	83.7%	8.2%
Government Nursing Homes	100.0%	60.4%	100.0%	62.6%	100.0%	75.7%	20.6%
Large Personal Care Homes	70.6%	41.5%	45.4%	28.9%	75.8%	52.8%	8.6%
Small Personal Care Homes	18.6%	6.3%	18.9%	8.1%	27.8%	15.8%	9.3%
Urban-rural:							
Urban	73.3%	41.5%	56.0%	31.3%	76.8%	54.1%	23.3%
Rural	59.1%	37.9%	43.4%	30.4%	62.6%	47.7%	17.2%
Region:							
Northwest	75.5%	50.5%	54.5%	34.5%	77.3%	64.9%	18.0%
Northcentral*	46.1%	24.1%	35.1%	25.5%	53.7%	28.7%	28.0%
Northern Tier*	48.3%	46.3%	45.2%	25.3%	58.8%	32.0%	25.5%
Northeast	72.0%	45.0%	64.0%	35.6%	81.5%	54.6%	26.2%
Central	75.0%	47.4%	62.9%	42.1%	72.3%	63.7%	20.6%
Southwest	50.8%	26.6%	32.9%	17.1%	55.9%	39.1%	14.0%
Southern Alleghenies	46.9%	34.0%	36.1%	37.6%	47.2%	46.1%	12.7%
Southcentral	81.0%	55.2%	59.0%	41.3%	80.8%	60.3%	18.5%
Southeast	83.2%	46.1%	65.4%	37.8%	86.6%	60.1%	28.5%
Lehigh Valley*	81.9%	45.1%	58.6%	31.1%	77.7%	58.9%	19.8%

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 23
Other Reported Benefits

Benefit	Percent of Providers
Pension benefits/401k plan	21.9%
Dental insurance	16.2%
Education benefits/reimbursement	14.2%
Vision coverage	10.7%
Life insurance	10.5%
Disability insurance	8.2%
Child care/subsidies for child care	3.4%
Discount prescription drugs	2.4%
Dollar bonuses	2.2%
Free meals	0.9%
Accident insurance	0.5%

APPENDIX TABLE 24
Providers that Have Changed Benefits in Past 2 Years for Recruitment or Retention Reasons

	Percent of Providers
All providers	22.1%
Provider type:	
Adult Day Care Centers	23.6%
Centers for Independent Living	59.6%
Licensed, Certified Home Health Agencies	25.8%
Licensed, Non-Certified Home Health Agencies	17.3%
Unlicensed, Non-Certified Home Care Agencies*	26.7%
Private Nursing Homes	25.8%
Government Nursing Homes	21.3%
Large Personal Care Homes	29.8%
Small Personal Care Homes	6.0%
Urban-rural:	
Urban	24.0%
Rural	19.0%
Region:	
Northwest	17.7%
Northcentral*	18.9%
Northern Tier*	34.2%
Northeast	24.5%
Central	15.1%
Southwest	18.4%
Southern Alleghenies	24.8%
Southcentral	21.7%
Southeast	25.1%
Lehigh Valley*	32.5%

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 25
Hours and Cost of Training

	Mean Hours of Training	Mean Cost of Training
All providers	45	$634
Provider type:		
Adult Day Care Centers	28	$350
Centers for Independent Living	17	$256
Licensed, Certified Home Health Agencies	37	$955
Licensed, Non-Certified Home Health Agencies	30	$860
Unlicensed, Non-Certified Home Care Agencies*	8	$442
Private Nursing Homes	78	$1,066
Government Nursing Homes	105	$1,604
Large Personal Care Homes	40	$455
Small Personal Care Homes	30	$330

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 26
Annual Cost of Training due to Staff Turnover

	Current Annual Cost of Training Due to Turnover*	Annual Cost of Training Due to Turnover if All Positions Were Filled*	One-Time Cost of Training Workers to Fill All Vacant Positions
All providers	$30,435,856	$34,856,965	$13,528,766
Provider type:			
Adult Day Care Centers	$445,029	$531,021	$158,961
Centers for Independent Living	$770,252	$812,408	$66,409
Licensed, Certified Home Health Agencies	$2,082,942	$3,398,823	$3,345,829
Licensed, Non-Certified Home Health Agencies	$365,768	$440,598	$337,657
Unlicensed, Non-Certified Home Care Agencies[T]	$887,809	$952,882	$238,005
Private Nursing Homes	$13,899,742	$15,905,825	$6,133,651
Government Nursing Homes	$7,659,744	$7,955,947	$1,687,692
Large Personal Care Homes	$3,756,497	$4,145,166	$1,269,769
Small Personal Care Homes	$568,072	$714,295	$290,793
Region:			
Northwest	$1,406,715	$1,658,324	$602,980
Northcentral[T]	$374,806	$431,174	$422,947
Northern Tier[T]	$161,862	$177,979	$74,758
Northeast	$7,049,840	$7,611,791	$1,963,072
Central	$996,380	$1,099,021	$306,697
Southwest	$4,813,895	$5,532,001	$2,368,058
Southern Alleghenies	$598,502	$638,379	$248,705
Southcentral	$2,827,535	$3,217,022	$1,520,658
Southeast	$11,143,711	$12,940,157	$5,264,336
Lehigh Valley[T]	$1,062,610	$1,551,119	$756,556

Estimates are very conservative as they are based on the proportion of current workers who have worked less than 1 year. Since some positions are filled more than once a year due to recurring vacancies, the true total training costs are most likely higher.

[T]Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 27
Educational and Work Experience Requirements

	Percent Requiring:	
	High Shool Diploma or G.E.D.	Prior Work Experience in the Long-Term Care Industry
All providers	68.5%	24.5%
Provider type:		
Adult Day Care Centers	89.2%	43.7%
Centers for Independent Living	75.5%	16.0%
Licensed, Certified Home Health Agencies	77.3%	49.3%
Licensed, Non-Certified Home Health Agencies	83.0%	52.6%
Unlicensed, Non-Certified Home Care Agencies**	66.8%	33.0%
Private Nursing Homes	66.2%	12.1%
Government Nursing Homes	73.5%	9.8%
Large Personal Care Homes	64.5%	15.1%
Small Personal Care Homes	63.6%	29.1%
Urban-rural:		
Urban	70.7%	26.9%
Rural	64.8%	20.3%
Region:		
Northwest	69.7%	16.8%
Northcentral**	47.4%	18.8%
Northern Tier**	53.5%	18.3%
Northeast	77.9%	30.0%
Central	66.0%	10.3%
Southwest	68.4%	20.7%
Southern Alleghenies	72.4%	29.0%
Southcentral	65.5%	17.6%
Southeast	68.6%	33.8%
Lehigh Valley**	73.8%	13.0%

Excludes all cases in which requirements are unascertained

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 28
Perceived Change in Job Performance of New Workers over Past 2 Years

	Job Performance of New Workers is Perceived as…		
	…Better Now	Same	…Worse Now
All providers	16.9%	53.5%	29.6%
Provider type:			
Adult Day Care Centers	21.1%	55.5%	23.4%
Centers for Independent Living	13.6%	63.5%	22.9%
Licensed, Certified Home Health Agencies	15.9%	61.1%	23.0%
Licensed, Non-Certified Home Health Agencies	15.8%	61.9%	22.3%
Unlicensed, Non-Certified Home Care Agencies**	6.0%	41.7%	52.3%
Private Nursing Homes	10.3%	48.5%	41.2%
Government Nursing Homes	15.4%	51.7%	32.9%
Large Personal Care Homes	17.7%	53.1%	29.2%
Small Personal Care Homes	22.9%	54.0%	23.1%
Urban-rural:			
Urban	18.0%	51.7%	30.3%
Rural	15.0%	56.7%	28.3%
Region:			
Northwest	19.8%	54.8%	25.4%
Northcentral**	31.3%	54.9%	13.8%
Northern Tier**	14.2%	41.1%	44.7%
Northeast	11.4%	51.5%	37.1%
Central	10.4%	61.8%	27.8%
Southwest	16.1%	56.4%	27.6%
Southern Alleghenies	27.1%	41.9%	31.1%
Southcentral	13.7%	59.4%	26.9%
Southeast	17.6%	52.8%	29.6%
Lehigh Valley**	15.8%	38.7%	45.5%

Excludes all cases in which change in work performance is unascertained

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 29
Length of the Probationary Period

	Length of Probationary Period for New Workers					
	No probationary period	1 to 2 months	3 months	4 to 5 months	6 months	7 months or more
All providers	0.8%	12.2%	71.2%	1.8%	12.0%	1.9%
Provider type:						
Adult Day Care Centers	0.0%	3.1%	70.9%	4.2%	20.3%	1.7%
Centers for Independent Living	0.0%	8.0%	74.4%	0.0%	17.7%	0.0%
Licensed, Certified Home Health Agencies	0.0%	7.9%	73.6%	0.0%	18.5%	0.0%
Licensed, Non-Certified Home Health Agencies	0.0%	3.8%	79.9%	0.0%	16.3%	0.0%
Unlicensed, Non-Certified Home Care Agencies**	18.9%	26.4%	45.9%	0.0%	5.5%	3.4%
Private Nursing Homes	0.0%	9.1%	84.3%	1.1%	5.5%	0.0%
Government Nursing Homes	0.0%	16.2%	60.9%	2.1%	20.9%	0.0%
Large Personal Care Homes	1.0%	10.6%	73.5%	2.4%	9.3%	3.3%
Small Personal Care Homes	1.5%	23.1%	53.3%	2.2%	16.6%	3.4%
Urban-rural:						
Urban	0.5%	11.7%	74.2%	1.4%	10.2%	2.0%
Rural	1.4%	12.9%	65.9%	2.6%	15.3%	1.9%
Region:						
Northwest	0.0%	8.5%	53.1%	7.8%	27.3%	3.3%
Northcentral**	6.0%	4.9%	62.4%	1.0%	25.7%	0.0%
Northern Tier**	6.4%	37.6%	49.5%	0.0%	0.0%	6.4%
Northeast	0.4%	12.8%	78.5%	2.0%	4.4%	2.0%
Central	0.0%	11.5%	74.5%	0.0%	14.0%	0.0%
Southwest	0.8%	15.9%	61.7%	2.7%	15.7%	3.3%
Southern Alleghenies	0.0%	9.3%	80.7%	1.9%	8.1%	0.0%
Southcentral	1.6%	7.9%	78.7%	2.3%	8.4%	1.2%
Southeast	0.5%	10.7%	79.7%	0.2%	7.8%	1.2%
Lehigh Valley**	0.0%	7.1%	78.9%	0.0%	14.0%	0.0%

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 30
Percent of Job Applicants Rejected Due to Act 169 Criminal Background Check Requirement

	Percent of Applicants Rejected			
	None	Low (less than 5%)	Moderate (5% to 30%)	High (greater than 30%)
All providers	64.1%	15.7%	8.7%	11.5%
Provider type:				
Adult Day Care	84.6%	3.4%	1.6%	10.4%
Centers for Independent Living.	36.3%	24.3%	17.5%	21.8%
Home Health Agencies/Home Care Agencies	65.4%	13.3%	10.2%	11.1%
Nursing Homes	43.8%	25.1%	15.5%	15.6%
Large Personal Care	58.0%	19.0%	9.1%	13.9%
Small Personal Care	86.4%	6.7%	2.4%	4.5%
Urban-rural:				
Urban	59.0%	17.6%	11.9%	11.5%
Rural	72.7%	12.5%	3.3%	11.6%
Region:				
Northwest	58.0%	16.5%	7.5%	18.0%
Northcentral**	82.0%	12.3%	0.0%	5.7%
Northern Tier**	73.2%	15.7%	5.5%	5.7%
Northeast	66.2%	10.5%	9.8%	13.5%
Central	51.0%	11.6%	11.3%	26.1%
Southwest	66.0%	16.5%	6.4%	11.1%
Southern Alleghenies	80.6%	9.7%	0.0%	9.7%
Southcentral	69.4%	19.5%	3.0%	8.2%
Southeast	60.9%	17.2%	13.2%	8.7%
Lehigh Valley**	39.3%	15.4%	23.0%	22.4%

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 31
Satisfaction with Act 169 Criminal Background Check Requirement

	Percent of Providers who Are:			
	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Completely Dissatisfied
All providers	61.6%	19.9%	12.7%	5.8%
Provider type:				
Adult Day Care Centers	71.0%	13.8%	9.8%	5.4%
Centers for Independent Living	34.0%	8.0%	42.0%	16.0%
Licensed, Certified Home Health Agencies	58.6%	22.3%	16.5%	2.6%
Licensed, Non-Certified Home Health Agencies	58.4%	22.5%	9.5%	9.5%
Unlicensed, Non-Certified Home Care Agencies**	92.0%	4.0%	4.0%	0.0%
Private Nursing Homes	51.5%	21.2%	16.2%	11.1%
Government Nursing Homes	34.2%	32.5%	31.0%	2.3%
Large Personal Care Homes	57.4%	24.0%	13.5%	5.0%
Small Personal Care Homes	74.7%	15.0%	7.2%	3.0%
Urban-rural:				
Urban	57.5%	22.6%	14.2%	5.7%
Rural	68.5%	15.2%	10.3%	6.0%
Region:				
Northwest	51.8%	28.5%	16.4%	3.4%
Northcentral**	91.8%	6.2%	2.0%	0.0%
Northern Tier**	71.5%	17.6%	2.0%	9.0%
Northeast	70.8%	9.9%	8.9%	10.5%
Central	77.6%	8.5%	13.2%	0.7%
Southwest	64.0%	17.5%	13.4%	5.2%
Southern Alleghenies	66.7%	24.9%	8.4%	0.0%
Southcentral	61.8%	25.8%	9.9%	2.6%
Southeast	53.2%	22.2%	15.3%	9.4%
Lehigh Valley**	50.5%	33.0%	16.5%	0.0%

Excludes all cases in which attitude is unascertained

Due to rounding, percentages may not sum to 100

**Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 32
Main Reason for Being Dissatisfied with Act 169 Criminal Background Check

Reason*	Percent of Dissatisfied Providers Citing Reason
The check goes back too many years	37.4%
It takes too long to get the results	35.6%
The type of crime is not considered	19.9%
Criminal background checks can not be justified	5.0%
Other reason	11.0%

Limited to the 629 providers who are dissatisfied with Act 169

* Some providers cited multiple reasons; therefore, the percentages add up to more than 100

APPENDIX TABLE 33
What Dissatisfied Providers Would Like to Change About Act 169

Proposed Change*	Percent of Dissatisfied Providers Proposing
Faster turn-around time	31.5%
A statute of limitations	31.4%
Consider the nature of the crime	15.5%
Enabling providers to get results over the Internet	7.0%
Other change	16.1%

Limited to the 629 providers who are dissatisfied with Act 169

* Some providers proposed multiple changes; therefore, the percentages add up to more than 100

APPENDIX TABLE 34
Other Worker Development Programs, Beyond State-Required Training

Program	Percent of Pennsylvania Providers
In-Service training	19.1%
Training in care of difficult/special patients	6.4%
Job improvement training	6.3%
CPR/First aid	5.3%
Seminars and home care programs	2.5%
Medication training	2.4%

APPENDIX TABLE 35
Reported Efforts to Change the Nature of the Frontline Worker's Job

Effort*	Percent of Pennsylvania Providers
Seeks to give workers a more balanced workload	7.3%
Provides special training for workers	3.1%
Seeks input from workers	3.0%
Seeks to institute a teamwork environment	1.6%
Seeks worker input in scheduling	1.5%
Seeks to give more responsibility to workers	1.5%
Has implemented career ladder	0.5%
Some other effort	11.5%

* Not mutually exclusive

APPENDIX TABLE 36
Degree of Worker Influence over Care Planning and Work Scheduling

	Degree of Worker Involvement in Care Planning			Degree of Worker Influence Over Work Scheduling		
	Highly involved	Somewhat involved	Not very involved	A lot of influence	Some influence	No influence
All providers	44.3%	43.7%	12.0%	33.7%	58.7%	7.6%
Provider type:						
Adult Day Care Centers	55.5%	36.6%	7.9%	32.2%	48.9%	18.9%
Centers for Independent Living	10.9%	25.6%	63.5%	5.0%	84.0%	11.0%
Licensed, Certified Home Health Agencies	31.0%	53.8%	15.3%	31.3%	61.3%	7.4%
Licensed, Non-Certified Home Health Agencies	45.5%	40.6%	13.9%	50.3%	46.1%	3.6%
Unlicensed, Non-Certified Home Care Agencies*	0.0%	65.2%	34.8%	57.0%	31.2%	11.8%
Private Nursing Homes	27.8%	57.3%	14.9%	26.1%	68.1%	5.8%
Government Nursing Homes	19.1%	57.1%	23.7%	12.3%	68.8%	18.9%
Large Personal Care Homes	53.6%	37.3%	9.1%	34.7%	59.4%	5.8%
Small Personal Care Homes	55.2%	35.7%	9.1%	39.2%	52.9%	7.9%
Urban-rural:						
Urban	42.4%	46.0%	11.7%	31.0%	62.2%	6.9%
Rural	47.7%	39.8%	12.5%	38.3%	52.9%	8.8%
Region:						
Northwest	36.0%	44.1%	19.9%	30.6%	64.1%	5.3%
Northcentral*	66.3%	18.4%	15.4%	29.4%	68.7%	2.0%
Northern Tier*	61.7%	33.7%	4.6%	49.8%	38.3%	11.8%
Northeast	50.5%	44.7%	4.8%	33.5%	56.8%	9.7%
Central	41.9%	43.0%	15.1%	32.9%	58.9%	8.3%
Southwest	42.5%	43.8%	13.7%	35.3%	57.4%	7.3%
Southern Alleghenies	53.6%	39.0%	7.4%	39.1%	48.5%	12.4%
Southcentral	44.3%	42.6%	13.7%	45.9%	48.3%	5.8%
Southeast	41.3%	48.7%	10.0%	29.0%	63.1%	8.0%
Lehigh Valley*	44.6%	36.9%	18.6%	25.3%	70.3%	4.4%

Excludes all cases in which degree of involvement in unascertained. Due to rounding, percentages may not sum to 100

*Caution: Margin of sampling error for this group is greater than 20%

APPENDIX TABLE 37
Retention Problems by Degree of Worker Involvement in Care Planning

	Percent of Providers with Retention Problems by Worker Involvement in Care Planning		
	If highly involved:	*If somewhat involved*	*If not very involved:*
All providers	36.2%	50.3%	55.9%
Provider type:			
Adult Day Care Centers	30.2%	29.0%	23.3%
Centers for Independent Living	0.0%	100.0%	75.4%
Licensed, Certified Home Health Agencies	34.4%	44.7%	76.8%
Licensed, Non-Certified Home Health Agencies	27.2%	51.5%	100.0%
Unlicensed, Non-Certified Home Care Agencies[~]	†	60.8%	83.8%
Private Nursing Homes	61.4%	60.2%	70.3%
Government Nursing Homes	58.6%	66.5%	57.4%
Large Personal Care Homes	35.1%	55.7%	54.6%
Small Personal Care Homes	28.6%	34.3%	8.4%
Urban-rural:			
Urban	38.8%	52.7%	51.9%
Rural	32.2%	45.8%	62.3%
Region:			
Northwest	33.9%	58.9%	51.8%
Northcentral[~]	31.4%	62.7%	31.9%
Northern Tier[~]	49.4%	45.6%	100.0%
Northeast	28.7%	57.9%	74.1%
Central	35.1%	49.8%	42.5%
Southwest	30.8%	49.8%	41.1%
Southern Alleghenies	41.4%	32.3%	51.6%
Southcentral	36.3%	44.1%	74.9%
Southeast	42.8%	48.7%	65.2%
Lehigh Valley[~]	39.6%	73.3%	93.4%

Excludes all cases in which degree of involvement in unascertained

[~]Caution: Margin of sampling error for this group is greater than 20%

[†]No such providers

APPENDIX TABLE 38
Strategies Used for Handling Recruitment Problems

Strategy*	Percent of Pennsylvania Providers
Has raised starting wage rate in last 2 years	92.8%
Has changed benefit package†	22.1%
Uses Advertising / Holds job fairs / Recruits at Schools	20.8%
Has reduced work experience requirements in last 2 years‡	12.1%
Offers bonuses	8.8%
Uses staff referrals	3.8%
Tries to give workers recognition/ tries to involve staff	3.8%
Gives special training / mentoring	3.6%
Uses some other strategy	3.7%
Uses an employment agency	1.1%

*Not mutually exclusive; some providers use multiple strategies

†Providers were not asked whether this was for recruitment reasons or for retention reasons

‡May or may not have been done for recruitment reasons

APPENDIX TABLE 39
Strategies Used for Handling Retention Problems

Strategy*	Percent of Pennsylvania Providers
Has raised wages across the board in last 2 years	94.5%
Has worker development programs beyond state-required training†	47.8%
Makes workers highly involved in care planning‡	44.3%
Has tried to change the nature of the paraprofessional worker's job†	28.9%
Has changed benefit package#	22.1%
Gives workers more recognition	23.2%
Flexile scheduling	9.7%
Tries to increase staff involvement	9.2%
Gives bonuses	4.9%
Uses some other strategy	5.4%

*Not mutually exclusive; some providers use multiple strategies

†May or may not have been done for retention reasons

‡Degree of worker involvement is self-assessed. Also, providers were not asked whether this is done for retention

#Providers were not asked whether this was for recruitment reasons or for retention reasons

APPENDIX TABLE 40
The Most Important Thing that the State Government Could Do to Help with Recruitment and Retention

Suggestion	Percent of Pennsylvania Providers *
Increase reimbursement levels	42.1%
Increase SSI payments	7.2%
Give recognition/positive attention to workers/providers	6.7%
Help with the cost of training	6.3%
Provide staff training	4.6%
Decrease the administrative burden placed on providers	4.2%
Provide healthcare benefits for workers	3.3%
Lower the cost of certification	2.7%
Relax Act 169 criminal background check requirement	2.4%
Implement a salary pass-through	1.8%
Other suggestion	2.5%

* Some providers' suggestions could not be sorted into one category only. Some other providers made no suggestion.

Appendix B

Technical Notes on Methods

The notes in this appendix are a formal presentation of the calculation of response rates, weights and sampling error.

Response Rate

The response rate is the number of completed interviews divided by the number of eligible participants: In formal terms, the response rate is:

$$\frac{C}{E}$$

Where

C is the number of completed interviews
E is the number of interviews eligible for completion

While the number of completed interviews (C) is simply the completed sample size, the determination of the number of interviews eligible for completion (E) requires some judgment. The number of eligible interviews is a sub-set of the overall sample. For this study, the eligible interviews excluded any cases that could not have produced valid interviews and any cases that could not have produced valid interviews during the field period. The response rate can be decomposed into these components:

$$\frac{C}{E} = \left(\frac{C}{S}\right) \Big/ \left(\frac{I}{S}\right) \Big/ \left(\frac{E}{I}\right)$$

Where

S is number in the overall sample
I is the number in-scope; **I/S** is the proportion of the sample that are in-scope
E is the number eligible; **E/I** is the proportion of the in-scope that are eligible

Overall, the response rate for this study was 71 percent. The percentage of the sample that was in-scope was 86, and the percent of the in-scope that were eligible for interviews was 98.

Weights

The data from the survey were weighted to correspond to the actual distribution of providers by type, region and urban/rural area. The weights also adjust for any differential non-response associated with these strata. Each combination of provider-type, region and urban-rural area has a unique weight. The weights are defined:

$$W_{ijk} = \frac{U_{ijk}}{S_{ijk}}$$

Where

W_{ijk} is the number providers in the universe for the ith provider, jth region, kth urban-rural area

U_{ijk} is the number providers in the universe for the ith provider, jth region, kth urban-rural area

S_{ijk} is the number providers in the sample for the ith provider, jth region, kth urban-rural area

Sampling Error

The average overall margin of sampling error in the study is 4.2 percent. Statistics in this report may be as much as 4.2 percent higher or 4.2 percent lower than the number reported[88]. For example, a reported value of 50 percent would have a range of 47.9 to 52.1 percent, and an hourly wage rate of $7.50 would range from $7.18 to $7.82. The formulas for computing the high and low values for a statistic, q in the report are:

$$q_{high} = q_{reported}\left(1 + \frac{E}{100}\right)$$

$$q_{low} = q_{reported}\left(1 - \frac{E}{100}\right)$$

Where

E is the margin of error (in this case, 4.2)

$q_{reported}$ is the value reported (if q is a percentage greater than 50, use 100 - q)

q_{high} is the high value

q_{low} is the low value

While all statistics in this report have ranges because of sampling error, the best portrait of the actual situation is the value reported.

Sampling error is inversely related to sample size. As the sample size increases, the sampling error decreases. Sampling error is also related to the proportion of the universe in the sample. As the proportion of the universe in the sample increases, sampling error decreases. The sampling error for any sub-group will be larger than the overall error because of the reduced sample size.

In this study, the sampling error for different provider-types ranges from 4.7 percent for government nursing homes to 21.4 percent for unlicensed home care agencies. The errors for the rest of the providers fall between 7.3 and 14.3 percent. The sampling errors for urban and rural areas are 4.6 and 6.8 percent, respectively. For regions, Southeast has the lowest error at 6.9 percent while Northern Tier has the highest error at 25.7 percent.

The following table shows the detailed breakdown of the sampling error by provider-type, region and urban and rural area.

[88] Based on a 90 percent confidence interval. That is 9 times out of 10, the interval based on the sample will contain the actual value in the population.

Average Margin of Sampling Error[89]

Total	4.2 %

Provider-Type

Adult Day Care Center	7.3 %
Center for Independent Living	12.8 %
Government Nursing Home	4.7 %
Private Nursing Home	9.1 %
Large Personal Care Home	8.0%
Small Personal Care Home	12.4 %
Certified Home Health Agency	8.8 %
Licensed, Non-Cert. Home Health Agency	14.3 %
Unlicensed Home Care Agency	*21.4 %*

Urban/Rural Area

Urban	4.6 %
Rural	6.8 %

Region

Southeast	6.9 %
South-Central	12.7 %
Central	16.8 %
Lehigh-Valley	*21.1 %*
Southern-Alleghenies	17.4 %
Southwest	10.0%
Northeast	10.7 %
Northern-Tier	*25.7 %*
North-Central	*24.4 %*
Northwest	12.2 %

[89] Based on 90 percent confidence interval with adjustments for sample design effects

Appendix C

Pennsylvania Intra-Governmental Council on Long Term Care

Richard Browdie, Chairperson
Pennsylvania Department of Aging

Dale Laninga, Executive Director
Pennsylvania Department of Aging

Sharon Alexander-Keilly
For Profit Nursing Homes

Linda Anthony
Citizens with Disabilities

Marie Beauchamp
Area Agencies on Aging

David Black
Pennsylvania Department of Community & Economic Development

Helen-Ann Comstock
Persons with Alzheimer's Disease

Cynthia Dellecker
Blue Cross

John Diffey
Continuing Care Communities

Bruce Flannery
AIDS Organizations

Ron Ford
County Commissioners

Lucille Gough
Home Health Agencies

Lori Griswold
Home Care Agencies

Dick Hess
Pennsylvania House of Representatives

Edward Horton
Adult Day Care Organizations

Feather Houstoun
Pennsylvania Department of Public Welfare

Yolanda Jeselnick
Rural Housing

J.J. Johnston
Unions

Lynette Killen
Hospitals

Kimberly Kockler
Managed Care Organizations

M. Diane Koken
Pennsylvania Department of Insurance

Diane Menio
Center for Advocacy for the Rights and Interests of the Elderly

Rosemary Meyer
American Association of Retired Persons

Dainette Mintz
Urban Housing

Harold Mowery
Senate of Pennsylvania

Joseph Murphy
Non-Profit Nursing Facilities

Frank Pistella
Pennsylvania House of Representatives

Frank Podietz
Jewish Coalition

Charles Pruitt
Pennsylvania Council on Aging

Cynthia Napier Rosenberg
Geriatric Physicians

Paul Schaediger
Pennsylvania Council of Churches

James Schneider
Primary Care and Geriatric Services

John Schwab
Personal Care Homes

Christine Tartaglione
Senate of Pennsylvania

Ann Torregrossa
Pennsylvania Health Law Project

Sandra Weber
Independent Living

Robert Zimmerman
Pennsylvania Department of Health

Workforce Task Group

Marie Beauchamp
Director
Schuylkill County Area Agency on Aging
Pottsville, PA

Nancy Everson
Berks County Area Agency on Aging
Reading, PA

Felicia Louise Gaines
Employment Development Executive
Bureau of Employment and Training Programs
Pennsylvania Department of Public Welfare
Harrisburg, PA

Lori Griswold
Vice President
Special Care, Inc.
Erdenheim, PA

Toddy Hilliard
Eastern Area Adult Services
Pittsburgh, PA

Suzanne Hogarth
Pennsylvania Department of Public Welfare
Long Term Care Client Services
Harrisburg, PA

Marcia Kollar
UPMC Health System – Western Psychiatric Institute and Clinic
Pittsburgh, PA

Dr. Joel Leon
Director
Polisher Research Institute
Jenkintown, PA

Jim Lyne
Special Assistant to the Secretary
Pennsylvania Department of Public Welfare
Harrisburg, PA

Tammy L. Miller
SEIU/District 1199P
State College, PA

Joe Ostrander
PANPHA
Mechanicsburg, PA

Brinda Carroll Penyak
Pennsylvania Health Care Association
Harrisburg, PA

Charles Pruitt, Jr.
Seniorcare Solutions, LLC
Oakmont, PA

Debra Reicherter
Director
Valley View Nursing Center
Montoursville, PA

James T. Ryan, Ph.D.
Director, District 1199C
AFSCME, AFL-CIO Training and Upgrading Fund
National Union of Hosp. & Health Care Employees
Philadelphia, PA

Judy Sarett
Williamsport, PA

Toni Sweitzer
Berks Home Care
Wyomissing, PA

Bonnie Tabas
CARIE
Philadelphia, PA

Carol A. Tschop
Chairman and President
Institute for Caregiver Education
Chambersburg, PA

Carol Williams
Pennsylvania Office of Auditor General, Policy and Planning
Harrisburg, PA

Technical Advisory Panel

Robert Applebaum, Ph.D.
Director
Ohio Long-Term Care Research Project
Scripps Gerontology Center
Miami University of Ohio
Oxford, OH

Richard Browdie
Secretary
Pennsylvania Department of Aging
Harrisburg, PA

Susan C. Eaton, Ph.D.
Assistant Professor of Public Policy
Harvard University
John F. Kennedy School of Government
Cambridge, MA

Rose Marie Fagan
Pioneer Network at LifeSpan
Rochester, NY

Wendy Fox-Grage
National Conference of State Legislatures
Washington, D.C.

Dr. Lori R. Griswold
Vice President
Special Care, Inc.
Erdenheim, PA

Mary Anne Kelly
Executive Director
Southwestern Pennsylvania Partnership for Aging
Cranberry, PA

Dale Laninga
Pennsylvania Department of Aging
Executive Director
Intra-Governmental Council of Long Term Care
Pennsylvania Department of Aging
Harrisburg, PA

Joel Leon, Ph.D.
Director, Polisher Research Institute
Philadelphia Geriatric Center
Jenkintown, PA

Robyn I. Stone
Executive Director, Institute for Policy Research
American Association of Homes and Services for the Aging
Washington, DC

Steven Taylor, Ph.D.
Professor
Syracuse University
Syracuse, NY

Herbert Traxler, Ph.D., MBA
Senior Economist/Program Officer
Acting Deputy Director
National Center for Health Workforce Information and Analysis
Dept. Health and Human Services Health Resources and Services Administration
Rockville, MD

Dr. Mary Ann Wilner
Direct Care Alliance
c/o Paraprofessional Healthcare Institute
Bronx,NY

Appendix

D

Survey Instrument

ID: _____

PENNSYLVANIA LONG-TERM CARE WORKFORCE STUDY

Hello, may I please speak to (ADMINISTRATOR)?

INTRODUCTION 1 (INFORMED CONSENT): (FIRST CONTACT WITH ADMINISTRATOR)
Hello, my name is ____ and I am calling from CODA Inc. on behalf of the Polisher Research Institute at the Philadelphia Geriatric Center. We are doing a study sponsored by the Pennsylvania Intra-Governmental Council on Long-Term Care and the Pennsylvania Department of Aging. We recently sent you a letter describing the study. You may have also heard about it from your trade association. Have you had a chance to read the letter?

YES, READ LETTER: OK, I want to remind you that all the information you give us during the interview will be confidential and that only information about groups of providers will be reported in the study. Of course, you are free to refuse to answer any question you want, and you can decide to stop the interview at any time. Would it be all right to do the interview now? **GO TO BOX A.**

NO, DID NOT READ LETTER: That is all right. The study is a survey of administrators of long term care providers in Pennsylvania, and the goal of the study is to understand the issues around the recruitment and retention of non-professional direct care staff by long term care providers across the state. We would like to ask you some questions about your experiences as an administrator. The interview would take about 15 to 20 minutes. All information you give us will be confidential, and we will ensure that information from individual providers cannot be identified. Of course, you are free to refuse to answer any question you want, and you can decide to stop the interview at any time. If you have any questions, you can contact the Principal Investigator, Dr. Joel Leon at the Polisher Research Institute. His telephone number is 215-780-1617. Would it be all right to do the interview now?

BOX A
IF OK TO START, CONTINUE WITH "DEFINITION OF TERMS"

IF NOT CONVENIENT, SCHEDULE AN APPOINTMENT – RECORD ON CALL RECORD

INTRODUCTION 2: (READ BEFORE STARTING IF THIS IS A RECONTACT)

Before we start, I would like to repeat some basic information about the purpose of the study. As I have said, the study is done by the Polisher Research Institute at the Philadelphia Geriatric Center on behalf of the Commonwealth of Pennsylvania. The interview will take about 15 to 20 minutes. All information you give us will be confidential, and we will ensure that information from individual providers cannot be identified. You are free to refuse to answer any question you want, and you can decide to stop the interview at any time.

DEFINITION OF TERMS USED IN THE SURVEY (MUST BE READ BEFORE INTERVIEW)

I will ask questions about your experience with paraprofessional direct care workers at your [PROVIDER]. You may use several different terms to refer to these workers. I will refer to these workers as "[WORKERS]". However, what I mean is all paraprofessional direct care workers, so please answer the questions thinking of all paraprofessional direct-care workers. Also, I don't know if you are the administrator or head of several different facilities. If you are the administrator of more than one facility, please note that we are interested in your experiences only at [NAME OF FACILITY]. We want to know what your experiences with paraprofessional direct care workers have been at [NAME OF FACILITY]

ENTER TIME START: _____

I. BASIC CHARACTERISTICS OF THE PROVIDER/FACILITY

I would like to start by asking you some basic questions about your [PROVIDER].

1. NUMBER OF PERSONS SERVED – SEE CARD FOR EXACT WORDING.

_____ # OF PERSONS

2. How many full-time equivalent [WORKER] positions do you currently have at your [PROVIDER]? Please count a full-time [WORKER] as one person and a 20-hour per week [WORKER] as half a person. For example, if you had two people working 20 hours each, that would be one full time equivalent.

_____ # OF POSITIONS

3. What is the total number of individuals working as [WORKERS] at your [PROVIDER]? Please count all of your paid [WORKERS], even those just working part time.

_____ # OF WORKERS

4. How many of these [WORKERS] are temps?

PROBE: How many of the [WORKERS] are agency temps or other temporary workers?

_____ # OF WORKERS

5. How many of the [WORKERS] work part-time?

_____ # OF WORKERS **OR** _____ % OF WORKERS

6. How many job openings for [WORKERS] do you currently have?

_____ # OF OPENINGS

7. How many of the [WORKERS] have been working at the [PROVIDER] less than 1 year?

_____ # OF WORKERS

8. How many of the [WORKERS] have been working at the [PROVIDER] more than 3 years?

_____ # OF WORKERS

OR

NOT APPLIC - PROVIDER NOT
IN SERVICE FOR 3 YEARS 996

9. How many of the [WORKERS] have been working at the [PROVIDER] more than 10 years?

_____ # OF WORKERS

OR

NOT APPLIC - PROVIDER NOT
IN SERVICE FOR 10 YEARS..... 996

II. WORKER EXPERIENCE AND TRAINING

10. Now I would like to ask you some questions about worker experience and training. Do you require new [WORKERS] to have a high school diploma or a G.E.D.?

YES..... 1
NO 2

11. Do you require that new [WORKERS] have prior work experience in the long-term care industry?

YES..... 1
NO 2

12. Have you reduced your work experience requirement in the past two years?

YES..... 1
NO 2

13. On average, how many hours of skill training are given to new [WORKERS]? Please do not count time spent on general orientation regarding administrative duties.

NONE 000 (Q15)

OR

_____ # HOURS

14. What is the average cost of skill training for a new [WORKER]?

$ _____

15. How many [WORKERS] have been hired as part of a welfare-to-work program during the last 12 months?

_____ # OF WORKERS

16. Of the persons who applied for a job as a [WORKER] at your [PROVIDER] in the last year, what percentage were rejected based on the results of the criminal background check?

_____ % REJECTED

17. How satisfied are you with the Act 169 criminal background check requirement? Would you say you are:

Satisfied, ...	1 (GO TO Q18)
Somewhat satisfied	2 (GO TO Q18)
Somewhat dissatisfied, or	3
Dissatisfied?.....	4
NO OPINION	6 (GO TO Q18)

17a. What is the main reason you are dissatisfied with the requirement?

_____

_____

_____

_____

_____

17b. What would you like to change about the requirement?

_____

_____

_____

_____

_____

III. WORKER COMPENSATION AND BENEFITS

18. Now, I have some questions about compensation and benefits. Currently, what is the starting hourly wage for [WORKERS] at your [PROVIDER]?

$_____ PER HOUR

(NOTE: IF RESPONDENT REPORTS THAT THIS "VARIES" OR "DEPENDS" ON EXPERIENCE, ETC., ASK FOR AVERAGE.)

19. What is the hourly wage for [WORKERS] after the probationary period?

$_____ PER HOUR **OR** $_____ HRLY INCREMENT

OR

NOT APPLICABLE –
NO PROBATIONARY PERIOD 9996 (Q21)

(NOTE: IF THE RESPONDENT GIVES ANSWER IN FORM OF INCREMENTAL AMOUNT (E.G., THE HOURLY WAGE IS INCREASED BY 50 CENTS), RECORD THIS AMOUNT AS HRLY INCREMENT. OTHERWISE RECORD THE DOLLAR PER HOUR OF THE WAGE (E.G., "$7.50").

20. And what is the length of the probationary period?

_____ # MONTHS

21. What is the hourly wage of your highest paid [WORKER]?

$ _____

22. Do you offer any benefits to [WORKERS]?

PROBE: By benefits, we mean health insurance, sick leave, vacation, personal leave, paid holidays, transportation, education, retirement benefits, or child care.

YES..... 1
NO 2 (Q33)
REFUSED..... 7 (Q33)

23. Do you offer a health insurance plan to full-time [WORKERS]?

YES..... 1
NO 2 (Q28)

23a. For full-time [WORKERS], does your organization pay all or part of the premiums for the employee's coverage?

YES, PAYS ALL..... 1
YES, PAYS PART..... 2
NO, PAYS NOTHING..... 3

24. Do you offer a health insurance plan to part-time [WORKERS]?

YES..... 1
NO 2 (Q25)

24a. For part-time [WORKERS], does your organization pay all or part of the premiums for the employee's coverage?

YES, PAYS ALL..... 1
YES, PAYS PART..... 2
NO, PAYS NOTHING..... 3

25. In general, does the amount of the employer contribution increase with the length of employment of the [WORKER]?

YES..... 1
NO 2

NOT APPLICABLE – EMPLOYER PAYS ALL 3

26. Does the employer make an additional contribution for those who choose family coverage?

YES..... 1
NO 2

FAMILY COVERAGE NOT AVAILABLE 3
EMPLOYER PAYS ALL FAMILY COVERAGE..... 4

27. After how many months of employment do [WORKERS] become eligible for health insurance?

_____ # OF MONTHS *[0 IF IMMEDIATELY]*

28. How many days of paid sick leave do you offer your full-time [WORKERS] per year?

NONE 00 (Q29)

OR

_____ # OF DAYS SICK LEAVE.

28a. After how many months of employment do full-time [WORKERS] become eligible for paid sick leave?

_____ # OF MONTHS *[0 IF IMMEDIATELY]*

28b. For part-time [WORKERS], do you offer paid sick leave?

YES..... 1
NO 2

29. How many days of paid vacation and paid personal leave do you offer your full-time [WORKERS] per year?

NONE 00 (Q30)

OR

_____ # OF DAYS LEAVE

29a. After how many months of employment do full-time [WORKERS] become eligible for paid vacation and paid personal leave?

_____ # OF MONTHS *[0 IF IMMEDIATELY]*

29b. For part-time [WORKERS], do you offer paid vacation and paid personal leave?

YES..... 1
NO 2

30. How many paid holidays do you offer your full-time [WORKERS] per year?

NONE 00 (Q31)

OR

_____ # OF DAYS PAID HOLIDAYS

30a. For part-time [WORKERS], do you offer paid holidays?

YES..... 1
NO 2
YES, BUT ONLY IF SCHEDULED TO WORK 3

31. Do you offer a transportation benefit to [WORKERS], such as a van service or a mileage reimbursement?

YES..... 1
NO 2

32. Does your organization offer any other benefits to [WORKERS] besides the ones we already talked about?

EXAMPLES: CHILDCARE, RETIREMENT BENEFITS, EDUCATION BENEFITS.

YES..... 1
NO 2 (Q33)

32a. What other benefits do you offer?

_____

_____

_____

_____

_____

33. Are any of the [WORKERS] at the [PROVIDER] represented by a labor union?

YES..... 1
NO 2

IV. RECRUITMENT AND RETENTION PROBLEMS

Now, I would like to ask you about recruitment and retention problems that you may have encountered.

34. First, how serious a problem is the recruitment of [WORKERS] for your [PROVIDER] currently? Would you say that it is:

A very serious problem 1
Somewhat of a problem 2
A minor problem, or..... 3
Not a problem at all? 4 (Q35)

34a. Compared with 2 years ago, has the recruitment problem at this [PROVIDER]:

Increased, ... 1
Decreased, or 2
Remained about the same? 3

NOT APPLICABLE –
PROVIDER NOT IN SERVICE THEN..... 6

NOTE: IF RESPONDENT SAYS HE/SHE WAS NOT AROUND 2 YRS AGO, ASK THEM TO ANSWER BASED ON INFORMATION AVAILABLE OR GENERAL IMPRESSIONS.

34b. In your opinion, what is the single largest reason for your recruitment problems?

_____

_____

_____

_____

_____

35. Now let me ask you about retention. How serious a problem is the retention of [WORKERS] for your [PROVIDER] currently? Would you say that it is:

A very serious problem 1
Somewhat of a problem 2
A minor problem, or..... 3
Not a problem at all? 4 (Q36)

35a. Compared with 2 years ago, have the retention difficulties at this [PROVIDER]:

Increased, ... 1
Decreased, or 2
Remained about the same? 3

NOT APPLICABLE –
PROVIDER NOT IN SERVICE THEN..... 6

35b. What do you think is the single largest reason for the retention problems?

_____

_____

_____

_____

_____

36. Compared with 2 years ago, do you feel that the work performance of new [WORKERS] has:

Improved,..... 1
Gotten worse, or 2
Remained about the same? 3

37. With regard to [WORKERS], would you characterize the [PROVIDER] as having:

No staff shortage, ... 1
Some staff shortage, or 2
A severe staff shortage? 3

V. STRATEGIES FOR DEALING WITH RECRUITMENT AND RETENTION

I would also like to ask you about strategies for dealing with recruitment and retention problems. Let me first ask you about wage increases.

38. When was the last time that the [PROVIDER] increased the entry-level wage for [WORKERS]?

_____/ _____ **OR** _____
MONTH *YEAR* *# YEARS AGO*

38a. How big was the salary increase?

$ _____ ***OR*** _____ *%*
PER HOUR

38b. Did the increase in the starting wage make it easier to recruit?

YES..... 1
NO 2

TOO EARLY TO TELL..... 3 (Q39)
DON'T KNOW..... 8 (Q39)

38c. What has happened at your [PROVIDER] that makes you think that this (was/was not) effective?

PROBE: Why do you think this (was/was not) effective? Can you elaborate on this?

_____

_____

_____

_____

_____

39. When was the last time that your organization increased pay rates for all [WORKERS] in the form of an across-the-board wage increase?

_____/ _____ **OR** _____
MONTH *YEAR* *# YEARS AGO*

39a. How big was the salary increase?

$ _____ ***OR*** _____ *%*
INCREASE PER HOUR

39b. Did the wage increase have a positive effect on retention?

YES..... 1
NO 2

TOO EARLY TO TELL..... 3 (Q40)
DON'T KNOW..... 8 (Q40)

39c. What has happened at your [PROVIDER] that makes you think that this (was/was not) effective?

PROBE: Why do you think this (was/was not) effective? Can you elaborate on this?

_____

_____

_____

_____

_____

40. Have you changed your benefits package for [WORKERS] in the last 2 years for recruitment or retention reasons?

YES..... 1
NO 2 (Q41)

NOT APPLICABLE –
PROVIDER NOT IN SERVICE THEN..... 6 (Q41)

40a. How have you changed it?

_____

_____

_____

_____

_____

41. Do you have any worker development programs, other than the training required by the state?

YES..... 1
NO 2 (Q42)

41a. What types of worker development programs do you have?

_____

_____

_____

_____

_____

42. Is there a special training program for supervisors?

YES..... 1
NO 2

BOX 1 CHECK Q37 ON PAGE 10 IF Q37 = 1 (NO STAFF SHORTAGE) SKIP TO Q48; OTHERWISE CONTINUE

43. The next items are about the effects of the [WORKER] shortage. Because of this shortage, has your [PROVIDER]:

		YES	NO
	Increased the use of independent contractors or agency temps?	1	2
44.	Had to limit the number of persons that the [PROVIDER] serves?	1	2
45.	Changed schedule or flextime options?	1	2
46.	Increased the use of overtime labor?	1	2

47. (In addition to the things we just talked about), have you instituted any (other) organizational changes in response to the [WORKER] shortage?

_____

_____

_____

48. Now I would like to ask you a few questions about the role of [WORKERS] at your [PROVIDER]? First, how involved are [WORKERS] in care planning? Would you say:

Highly involved 1
Somewhat involved, or 2
Not very involved?..... 3

49. How much influence do [WORKERS] have over work scheduling? Would you say: :

A lot of influence..... 1
Some influence, or 2
No influence? 3

50. Have you done anything else within the [PROVIDER] to change the nature of the [WORKER'S] job?

YES..... 1
NO ..... 2 (GO TO Q51)

50a. Can you tell us about that?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

51. I just have a few final questions. Can you tell us about any strategies besides what we have talked about that you have used to deal with recruitment problems for [WORKERS]?

52. And how about strategies that you have used for handling retention problems for [WORKERS]?

53. If you could make one suggestion to the state government to help with the recruitment and the retention of [WORKERS] at [PROVIDERS] like yours, what would it be?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

54. Those are all the questions I have. Thank you for taking part in this interview.

55. INTERVIEWER: WAS THE RESPONDENT THE SAME INDIVIDUAL PRE-PRINTED ON THE LABEL?

YES..... 1 (END)
NO 2

55a. IF NO: NAME OF RESPONDENT: _____

TITLE: _____

ENTER TIME ENDED: _____