TELECOMMUTING
A NEW INITIATIVE FOR COMMUNITY LONG TERM CARE

By

Pamela S. Jones
Department of Health and Human Services
Division of Community Long Term Care

March 7, 2002
INTRODUCTION

According to The Academy of Management Executive, “the virtual workplace, in which employees operate remotely from each other and from managers, is a reality for many employers now, and all indications are that it will become even more prevalent in the future.” (Cascio, Managing a Virtual Workplace, p81)

Telecommuting can be defined as the act of working from home rather than physically traveling to a regular workplace. It has benefits to the employees, employers, and to the community. The Department of Health and Human Services (DHHS) recognized potential benefits of telecommuting and formed a telecommuting committee in February 2001 to examine the feasibility of offering this alternative work option to DHHS employees. When the telecommuting committee began meeting, the out-stationed Community Long Term Care (CLTC) offices were not being considered as forerunners of telecommuting. However, in June 2001, due to lease disagreement, the Charleston CLTC office was asked by their landlord to vacate their office space by the end of July 2001. With Charleston CLTC office having to relocate, DHHS recognized this as an opportunity to begin telecommuting within the agency.

Since reduction in cost and workspace are primary factors to support telecommuting, Charleston CLTC office space allowance was reduced. DHHS also had to speed up technology changes that were needed for telecommuting implementation. Technology changes continue to take place. On August 1st, 2001, Charleston CLTC office began
telecommuting and plans are to implement telecommuting in the other 13 CLTC offices throughout the state by end of 2003.

The objective of this research was to study the work product of telecommuting and explore any differences in the work product of telecommuting versus non-telecommuting. I hypothesize telecommuting is as effective, if not more effective, work alternative as non-telecommuting. For this study, a series of research methods was tested in the Charleston CLTC office.

**METHODOLOGY**

Data was collected from the Charleston CLTC office by using Analytical and Descriptive Survey Methodologies. Stakeholder involvement, including Charleston CLTC employees, clients, and service providers, was needed to test the above-mentioned hypothesis that telecommuting is as effective, if not more effective, work alternative as non-telecommuting.

A. The Analytical Survey was used in examining Charleston CLTC Nurse Consultant and Case Manager Supervisory Quality Assurance (QA) Reviews forms. These QA forms, completed by supervisors on all nurse consultant and case management staff on a monthly basis, were examined six months prior to telecommuting (February 2001 thru July 2001) and six months after telecommuting (August 2001 thru January 2002). Comparisons were made using a z score analysis.
B. The Descriptive Survey included using Charleston CLTC staff in focus group surveys, Charleston CLTC clients in a telephone survey, and Charleston CLTC providers in an open-ended questionnaire survey.

I. Focus group surveys were conducted with employees of Charleston CLTC. The focus groups included Nurse Consultants, Case Managers, Support Staff, and Management Staff (Area Administrator and supervisors). Staff was asked to identify their observations on the benefits and deterrents of telecommuting. (Appendix A)

II. A telephone survey was attempted with 225 Elderly/Disabled clients in the Charleston area randomly selected from CLTC case management system (CMS). At the time of the survey, Charleston CLTC had 660 Elderly/Disabled clients entered on their program. Clients/caregivers were asked to respond to six questions. These responses were used in comparison to a similar study that was conducted by The Partnership for Community and Organizational Services in 1999. (Appendix B)

III. Charleston CLTC providers were surveyed using an open-ended questionnaire with responses being anonymous. At the time of the survey, there were 87 CLTC providers listed in the Charleston area. Of the 87 providers receiving the surveys, 30 responded and 2 were returned as unable to be delivered. This gave a 35% return rate. The following is a compilation of the questions that were stated in the survey: (Appendix C)
1. Have you experienced any problems with Charleston CL TC since the implementation of telecommuting on August 1, 2001?
2. If so, please describe any problems you are experiencing with Charleston CL TC since the implementation of telecommuting on August 1, 2001.

FINDINGS

A. An analysis of the differences in error rates recorded by Nurse Consultants and Case Managers before and after Supervisory Quality Assurance (Q.A.) Reviews was completed.

A z score analysis of the difference between means was used to test for significant differences between the means of the two sets of error observations recorded by case managers (measured before and after Q.A. reviews), measured at the .05 level. This test found that there were no significant differences. In other words, the fact of quality assurance reviews did not make a significant difference in the number of errors recorded by the case managers.

Similarly, no significant differences were found between the error rates recorded by the nurse consultants before and after Q.A. reviews were done.

B. 1. Focus Groups included two staff groups telecommuting and two staff groups not telecommuting, which gave subjective perceptions. Most comments focused on productivity and technology issues with minimal comments on work environment (home & office) and social issues. Some inferences from this data include
telecommuting was implemented without sound analysis of technology needs, office space needs, and staff scheduling for telecommuting. There was lack of quality training prior to telecommuting implementation. Equipment investment (i.e. laptop battery pack, cell phone) was on the low end for telecommuting, resulting in staff sacrificing the intent realization of telecommuting. Further frustrations from providers and CLTC staff were noted. Premature implementation responded to lease situation rather than a well thought out plan following telecommuting committee’s envisioned process. Office space needs and, especially, workspace environment needs at home were not well analyzed and planned. There is a need for more input, including technology, from Central Office staff in terms of the problems they see and issues noted by Charleston CLTC staff.

Overall positive impressions by staff recognized telecommuting as a work still in progress, while pleased with the ability to be adaptive, flexible, and more productive. Good input and problems surfacing should guide future replication with lessons to be learned. Providers, clients, and community by and large were not adversely impacted. While staff has more independence and control, heightened individual responsibilities and accountability for results must follow. One Central Office employee summarized the benefits and drawbacks in this way, “One of the things that I have always thought was a strength of CLTC compared to other states is the connectedness of our system. Some states have different agencies doing case management in different areas and no real communication across and up and down. Having nurses and social workers working together
makes it more possible to share ideas, mentor staff, and get help as needed. I know that doesn’t always happen, but the structure makes it possible to do a lot of peer to peer interaction. Also telecommuting is not optional. Not everyone wants to work at home and not everyone can stay focused without interaction. This should be an option for people, not something mandated.” “As state employees, we never will make a lot of money, so other types of rewards become very important. The ability to manage your own time and be trusted to get your work done is a very good reward for people. So, the primary benefits would include accommodating special circumstances better, reduced commuting costs and agency savings in office space, etc.”

2. Telephone survey with clients showed the only recorded negative change from the 1999 study to the 2002 study was 10% change in number of clients who did not know who their case manager was. Note: there were twice as many “no responses” in 2002 as compared to 1999. All other changes were much more positive from the 1999 study to the 2002 study. Pool volume between the two years is so large that it is hard to infer anything, as the 1999 study only needed a couple of different responses to significantly impact the results, unlike the 2002 study where there would need to be three times the amount to produce some impact.

Comments from clients/caregivers regarding their case manager and CLTC services included: “She’s an angel”, “If everybody was as good and kind as she is”, “Y’all have really helped us”, and “Thank God for your services”.
3. CLTC provider survey showed the principal problem to be contact (either thru voice mail or cell phone) with case managers with a subset of providers, including Personal Care I, Personal Care II, Home-Delivered Meals, & Private Duty Nursing providers. Since this was not a problem for 90% of providers who responded, there might be a need to explain CLTC technology, case managers’ use of technology, or office procedures on response priorities to subset providers. Problem could also be defined as an adjustment syndrome to change. Follow-up is needed to see if results change in another six months.

CONCLUSIONS

This research was designed to study the work product of telecommuting and explore any differences in work product of telecommuting versus non-telecommuting. By using the Analytical and Descriptive Survey Methodologies, data was collected to support the hypothesis that telecommuting is as effective, if not more effective, work alternative as non-telecommuting.

The z score analysis confirmed there were no significant differences found before telecommuting and after telecommuting in the quality assurance reviews completed by the Case Managers and Nurse Consultants.

Focus group participants offered a variety of opinions regarding telecommuting. The common benefit theme centered on productivity. Descriptive statements include: “less interruptions for staff working from home so able to get work completed”, “increased
productivity because of less distractions and able to work within biological clock”, “flexibility”, and “no guilt if work is finished early”. The common drawback theme centered on coping with technology. Descriptive statements include: “good amount of work still must be completed at office (better if worker had capability to print/fax from home)”, “no Internet at home then unable to read e-mails from home”, and “not enough functions on computer for supervisors to telecommute”.

Through observations of comparing 2002 Client Satisfaction Survey to the 1999 Client Satisfaction Survey findings, there appears to be no significant differences in the responses given by client/caregiver. Telephone survey showed the only recorded negative change from the 1999 study to the 2002 study was 10% change in number of clients who did not know who their case manager was. It is important to note there were twice as many “no responses” in 2002 as compared to 1999.

CLTC Provider Survey results showed 90% of the providers responding indicated no problem with Charleston CLTC since telecommuting began in August 2001.

The virtual workplace is now a reality for DHHS. The research and data of this study supports the aforementioned hypothesis that the remote practice of telecommuting will not negatively affect the work product of service provision.

Future studies of telecommuting should include measuring criteria to track cost benefits, a tracking mechanism to determine retention of employees, evaluation of differences in training needs, and linear scale findings of provider/client satisfaction. More input should be gathered in regard to problems found by Central Office staff, as well as, issues noted by area office staff members.
APPENDIX
Appendix A

WHAT ARE THE BENEFITS OF TELECOMMUTING?
Responses: Nurse Consultants

• Able to type at home without wearing a bra
• NC lives in assigned area which is good distance from office so able to stay in
  assigned area to complete work
• Flexibility of time – want to make phone calls, etc. after hours, then able to do
  this
• Increased productivity because of less distractions and able to work within your
  biological clock
• Less stress at home (no office cut-ups visiting you)
• Better able to cater to client’s needs/able to speak to more RP’s in the home since
  calling after they get home from work
• Cell phones
• Mileage cut down (making more visits/longer days for remote areas)
• Individual laptops
• Conveniences at home
• New office has better amenities
• Added challenges
• During bad weather (snow) still able to work
• More control/Feeling of working independently
WHAT ARE THE DRAWBACKS OF TELECOMMUTING?
Responses: Nurse Consultants

• Still work in progress-Bugs need to be worked out
• Computers slow
• "Wireless: not working well-very slow (any task)
• Slow printers (transmission)
• Need for back-up battery pack
• Loss of time with present network card causing much frustration & anger
• People who need to really focus of work has difficult time when sharing office
  (other workers talking on phone makes focusing on work difficult)
• Closeness is good but lack of office space makes workers too close
• Good amount of work still must be completed at office (better if worker had
  capability to print/fax from home
• It’s assumed all workers have computers at home which is not the case-several
  have no internet access at home. CO should never assume all workers are equal.
• Need to provide internet access at home if expected to read e-mails
• Loss of camaraderie/Miss each other/No connection with case managers
• When in office, workers focus on what they need to do & then leave/no team
  building
• There is no quick in/out of office like staff were lead to believe would happen
• Feedback given to CO but staff not informed re: what happened to
  feedback/Does CO understand office problems/Need more feedback from
  CO/Staff unsure if they are being heard
• Not enough equipment at home
• Better resources needed at home
• Not enough office space at home
• Need printer/fax scanner at home
• CO using money to buy equipment that is not working
• Open up to more errors when ½ work completed at home and must wait to
  complete other ½ at work
• Some office resources available at work (rolodex, etc) & not at home
• Need on-line info at home
• Need capability to fax from home
• Have to complete each case twice (home/work)
• Warmer in the office
• Presently only has open cases on laptops but if receive call at home on old
  (closed) case, then must come to office to retrieve needed info
WHAT ARE THE BENEFITS OF TELECOMMUTING?
Responses: Case Managers

- Flexibility/No guilt if finish work early
- Work anytime of day (If I don’t want to get up early, don’t have to)
- Cell phones – Can make phone calls in-between visits, call providers quicker, and have RP call back after hours on cell phone
- Narrative on laptop
- Save on gas and wear & tear on car
- Family time availability (phone still on)
- More productive at home
- Staff more available to clients and providers
- Less unnecessary client calls
- Less errors-more focused at home
- Less office space worked ok
- More cases allowed out of office (20 cases at a time)
- Not in office any specific length of time
- Group wise at home if internet available
- Access to Word on laptop
- Support of Central Office-particularly Programmer
- Log developed by Central Office allows staff to confirm what has been transferred-Check & Balance
WHAT ARE THE DRAWBACKS TO TELECOMMUTING?
Responses: Case Managers

- No printers – can’t complete anything – more time consuming to pick up charts twice
- Inability to fax from home
- Work area at home looks messy due to lots of charts, papers, etc/Not good is work area is a family area or don’t have regular office at home
- Lack of work area at home
- Difficult to complete work with kids at home (kids wanting to play on laptop) Also animals even distracting and wanting to go out when working at home
- Difficult to complete phone calls at home if kids are loud or animals are barking/unprofessional
- Office work area is limited. Two share one desk & three desk per office. If other staff on phone, then very difficult to hear
- Lifting all the cases & laptops back & forth between work & office is very heavy
- No internet at home then unable to read e-mails
- No initial training with laptops/cell phones
- CMII not initially trained with telecommuting
- Not being able to complete Form 171, prior approval request form, etc from home
- Cell phone does not give date, time, etc when calls are made. Some calls are lost on cell phone
- Can’t access MMIS/Must come to office to verify Medicaid eligibility
- More division with staff-doesn’t see co-workers as much
- Not enough office work space (especially when all staff are in)
- Batteries on laptops are suppose to last 4 hrs but only last 2 hrs/Central Office wants wireless but no capacity
- Cheap cell phones-Clarity of phones bad (echo, speech delayed, static, cuts off) Happens often
- Decrease of office phone lines so when numerous staff are in must wait for phone
WHAT ARE THE BENEFITS OF TELECOMMUTING?
Responses: Support Staff

- Phone rings less
- With staff not in office, less interruptions/less one-on-one
- If Support Staff could telecommute, it would save on wear & tear of car, especially for those that live a distance from the office
WHAT ARE THE DRAWBACKS TO TELECOMMUTING?
Responses: Support Staff

• Need to find a way for clerical to take advantage of telecommuting
• Laptops only have case management functions that can be used by nurse consultants and case managers for telecommuting. Central Office needs to consider adding functions that can be used by support staff
• Office does not have close-knit group, as it used to
• Gets lonesome
• Too quiet in the office
WHAT ARE THE BENEFITS OF TELECOMMUTING?
Responses: Management Staff

- More convenient for our clients and staff
- Workers able to reach client's responsibility party after-hours
- Staff flexibility with their time. Telecommuting fits better into staff's family/home life & doesn't interfere with getting the work done
- Less interruptions for staff working from home so able to get work completed
- Less wasted time for staff
- Workers appear to be more focused. They come into the office, get what needs to be done completed, then leaves.
- Cell phones, which means immediate access to the worker
- Case Management System Narrative, which means supervisor has immediate access to client's chart and narrative
- Less stress on staff. Staff appears happier and more content
- Staff glad to see each other when they run into each other in office
- Telecommuting is built on trust
- Less calls from providers needing follow-thru since they have immediate access to the worker through the cell phone
WHAT ARE THE DRAWBACKS OF TELECOMMUTING?
Responses: Management Staff

- Central Office didn’t give laptops out ahead of time so workers could get used to them
- Staff need instructions when new equipment is given to staff (cell phone, laptops, etc.)
- Camaraderie that had been established, now must be worked at
- New staff will need close, intensive monitoring at first
- Inability of staff to complete a task. Too many things require workers to come into office to finalize
- Not enough functions on laptops for supervisors to telecommute
- There are too many points of contact for messages/information (i.e. voice mail, group wise, cell phones)
## Appendix B

### CLIENT SATISFACTION SURVEY - 2002

Do you know who your Community long Term Care case manager is?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>7</td>
<td>47</td>
<td>225</td>
</tr>
<tr>
<td>76%</td>
<td>3.1%</td>
<td>20.9%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Does your case manager call or visit you at least once a month?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>163</td>
<td>6</td>
<td>2</td>
<td>171</td>
</tr>
<tr>
<td>95.3%</td>
<td>3.5%</td>
<td>1.2%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Does your case manager visit you at least once every three months?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don't Remember</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>166</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>171</td>
</tr>
<tr>
<td>97.1%</td>
<td>2.3%</td>
<td>0.6%</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Do you know what your case manager is supposed to do for you?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>159</td>
<td>12</td>
<td>7</td>
<td>171</td>
</tr>
<tr>
<td>92.9%</td>
<td></td>
<td>7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Are you satisfied with the services arranged by your case manager?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don't know what cm arranged</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>169</td>
<td>2</td>
<td>1.2%</td>
<td></td>
<td>171</td>
</tr>
<tr>
<td>98.8%</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Do you feel comfortable talking with your case manager?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Sometimes</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>170</td>
<td></td>
<td>1</td>
<td>0.6%</td>
<td>171</td>
</tr>
<tr>
<td>99.4%</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
Do you know who your Community long Term Care case manager is?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>86.0%</td>
<td>2</td>
<td>4</td>
<td>43</td>
</tr>
<tr>
<td>32</td>
<td>86.5%</td>
<td>5</td>
<td>10.8%</td>
<td>37</td>
</tr>
</tbody>
</table>

Does your case manager call or visit you at least once a month?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don't Remember</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>89.2%</td>
<td>4</td>
<td>10.8%</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

Does your case manager visit you at least once every three months?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don't Remember</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>94.6%</td>
<td>1</td>
<td>1</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

Do you know what your case manager is supposed to do for you?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>97.3%</td>
<td>2</td>
<td>2.7%</td>
<td>37</td>
</tr>
</tbody>
</table>

Are you satisfied with the services arranged by your case manager?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don't know what services cm arranged</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>94.6%</td>
<td>1</td>
<td>1</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

Do you feel comfortable talking with your case manager?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Sometimes</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>97.3%</td>
<td>1</td>
<td>2.7%</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

20
### Appendix C

#### CLTC PROVIDER RESPONSES

<table>
<thead>
<tr>
<th># of Providers Responding</th>
<th>Problems Experienced</th>
<th>Description of Problem</th>
<th>Service(s) Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>none</td>
<td>N/A</td>
<td>2 PERS, 6 PC, 3 HDM, 3 EM, 3 Respite, 2 PCI, 1 PCI/PCII, 2 ADHC, 1 ADHC-N 1ADHC/PCII</td>
</tr>
<tr>
<td>1</td>
<td>no</td>
<td>We believe will be cost/time effective for Case Mgrs, especially when they may cover areas more distant from Area Office. (We do some services with Charleston office.)</td>
<td>Ceramic heaters, A/C’s, W/C Ramps</td>
</tr>
<tr>
<td>1</td>
<td>no</td>
<td>It has worked fine for us. The case managers are very quick to return any of our calls. Thanks for all your support.</td>
<td>ADHC</td>
</tr>
<tr>
<td>1</td>
<td>yes</td>
<td>There was a problem with the answering service and the case managers did not get their message, but I was told that was cleared up.</td>
<td>PCI, PCII</td>
</tr>
<tr>
<td>1</td>
<td>yes</td>
<td>Unable to reach case managers, they are never in office when providers call. Very difficult to get in touch by cell phone. Seldom even get response back even after leaving a message on the cell phone or at the office. Basic problem is that cannot get in touch with case managers in a timely manner.</td>
<td>Homecare, HDM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>We have had long delays in reaching case managers. Although, the area office has usually been very helpful in urgent situation. Also, they have had some difficulty with the voice mail system. The delays have at time complicated problem-solving, obtaining correct authorizations, and exchanging important information in a timely manner.</td>
<td>PCI, PCII, PDN</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>good</td>
<td>More power to them to be able to work from home. Return calls may be a little slow with some of the workers related to Respite. But always are given cell phone number in emergencies. Betty &amp; Anna are always very helpful for me.</td>
<td>Respite</td>
</tr>
</tbody>
</table>

**KEY:**

- A/C – Air Conditioner
- ADHC – Adult Day Health Care
- ADHC-N – Adult Day Health Care Nursing
- EM – Environmental Modification
- HDM – Home-Delivered Meals
- PC – Pest Control
- PCI – Personal Care I
- PCII – Personal Care II
- PERS – Personal Emergency Response System
- PDN- Private Duty Nursing
- W/C - Wheelchair