A Comparison of a Veterans Directed Health Care Program vs. Community Nursing Home Placement

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Abstract

The purpose of this study is to compare the cost effectiveness and patient satisfaction of a Veterans directed health care program (VDHC) with traditional community nursing home (CNH) care. VDHC enables qualified Veterans to select their own caregivers, who are reimbursed for their services, to assist them in functioning at home, rather than place such Veterans into a CNH.

This study retrospectively compared the costs of care and patient satisfaction ratings of 23 patients in the VDHC program with a sample of 31 controls who are receiving care via the VA CNH program. Results showed significant cost savings with VDHC compared to CNH care. While there were statistically significant differences between the two groups in terms of age, gender, ethnicity, and diagnoses, both groups appeared to have similar medical and/or psychiatric conditions that would typically require CNH or similar level of care, suggesting that VDHC programs would be cost effective for a portion of those patients who require continuous, supportive care.

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Introduction

As the average age of Americans increases, particularly with the aging of the "baby boomer" generation, the need for greater services for age-related illness will likely expand. Many age-related illnesses require support and/or assistance from others in order for the afflicted individual to adequately function[1]. While nursing home services are necessary for the more severely affected individuals who need the assistance of trained staff, many simply need an able-bodied person to provide continuous supervision and support to prevent injury and ensure safety.

To assist such individuals who simply need an able-bodied caregiver in order to remain in their homes, the U.S. Center for Medicare/Medicaid Services (CMS) initiated a project in 2003 that involved giving such individuals funds to "hire" a person of their choice to assist them[1, 2, 3]. This "consumer directed" model, in which the consumer has the power to choose a person to provide long term, supportive services in their home (versus a health insurer or similar group choosing an agency for them), was initially trialed in several states. Consumer directed care was shown to be popular with users, with reports of greater satisfaction and feelings of safety with the consumer directed care compared to more typical, "agency directed" home care services.[3,4, 5] In addition, public policy makers felt that consumer directed home programs would be less costly. Early indications and studies appear to support this assertion, but more research on the issue of cost savings needs to be done.[6]

The Department of Veterans Affairs (VA) has initiated a consumer directed program for Veterans. The VA began a movement towards community based care in the 1990's and continues to expand and improve both the quality and scope of its community based programs.

The VA currently offers a variety of community based programs. Home Based Primary Care programs provide primary care services in the home for Veterans unable to commute in to a clinic. Adult Day Health Care programs provide care during working hours for cognitively impaired Veterans, enabling their caregivers to work or perform other functions, as well as monitoring Veteran health and providing some basic care. The Homemaker/Home Health Aide program enables Veterans to remain in their own homes by arranging a local agency to come in to do basic household chores and cleaning for Veterans unable to do so. A relatively new program, Home Telehealth places computerized devices in Veteran's homes to aid in treatment effectiveness and compliance.[7]

As part of this expansion of community based programs, the Veterans Directed Home Care (VDHC) program was initiated to provide funds to local and state agencies to administer a consumer directed home care program for Veterans. The funds come from VA, are administered by the local agency, and are directed to a caregiver by the Veteran (or their representative). The local agency is responsible for evaluating the potential user (the Veteran), as well as the potential caregiver, to ensure that both are eligible, that the service is needed, and that the caregiver has the capability of providing the Veteran with the needed services in the Veteran's home. In addition, the local agency monitors the Veteran and the caregiver to ensure that the care provided is appropriate and adequate, and that there is no abuse or neglect of the Veteran. The VA also pays an administrative oversight fee to the agency for their part of administrating the program, based on the county of residence of the veteran. The agency provides monitoring that the veteran is receiving the services according to the care plan (through a series of home visits and follow up by phone), training for the veteran in terms of learning how to hire, interview and manage the care provider, and provides the initial assessment and care plan establishment. The

VA program, unlike many state run consumer directed programs, however, does not provide financial management services. It should also be mentioned that participation in the VDHC program precludes the provision of other VA community based program services - a Veteran cannot be enrolled in the VDHC program and receive other community based services concurrently. Currently, 41 VA Medical Centers offer VDHC services, but the expectation is that the program will eventually be offered at all VAMCs.

For the VA, this program not only assists older Veterans dealing with chronic medical conditions that arise from aging, but also can assist younger Veterans with chronic issues related to combat injuries and other conditions connected with their military service. Such younger individuals often resist nursing home and other traditional long-term care services, as they lack peers in most traditional long-term care institutions, and such services are viewed as being for "older individuals." The VDHC program can thus assist younger Veterans with serious, persistent combat injuries so they may remain in their home environments and are able to better associate with their peer groups.

The purpose of this study is to compare the cost effectiveness and patient satisfaction of a Veterans directed health care program (VDHC) with traditional community nursing home care. VDHC enables qualified Veterans to select their own caregivers, who provide continuous care up to24 hours a day, 7 days per week, and are reimbursed for their services, and enabling the Veteran to function at home rather than being placed into a community nursing home.

Method

This study retrospectively compared the costs of care and patient satisfaction ratings of 23 patients in the VDHC program with a sample of 31 controls receiving care via the VA community nursing home (CNH) program. Both programs studied are at one large VA Medical

Center in the Midwest. The VA CNH program places Veterans in non-VA nursing homes in the community that are under contract with the VA. The cost data for both programs (CNH and VDHC) are available and collected as part of standard cost accounting and patient satisfaction surveying that is ongoing in the majority of VA programs. Basic demographic and diagnostic data were also retrospectively collected via the VA's electronic record system. Demographic data included age, gender and ethnicity. Diagnostic data were quantified via examination of electronic progress note problem lists. Due to considerable variation in diagnoses, most of which were not essential to the need for CNH or VDHC level of care, five diagnoses were recorded: dementia, hypertension, diabetes, congestive heart failure (CHF), and major mental illness (defined as a non-dementia Axis I diagnosis per the Diagnostic and Statistical Manual of Mental Disorders-IV[8]). In addition, an "other" category was created for other major diagnoses that would necessitate CNH or VDHC level of care, such as cardiovascular accidents (CVAs), multiple sclerosis (MS), and head trauma (TBI, anoxic brain injury, etc.).

Satisfaction data collected in both programs were reviewed. Participants in the VDHC program are surveyed approximately every six months to rate their satisfaction with the services being provided. CNH residents are also asked for information regarding satisfaction with their living arrangements and services in their nursing home on at least a quarterly basis. Satisfaction surveys were developed separately and locally for each program. As this study was retrospective in nature, it was not possible to utilize a standardized, uniform survey that both programs utilized. This study was reviewed by the local IRB review board and was approved.

Results

The average costs of care for the two programs are illustrated in Table 1. The average cost of care for the VDHC program was less than half that of CNH placement. Cost savings for

25 Veterans would amount to $876,600 dollars per year. (Note that the data do not include medical or specialist care costs that might be incurred.)

There were differences between the VDHC and CNH groups in terms of demographics. T-tests between the groups showed that the VDHC group had more female Veterans ($p < .001$) and ethnic minority Veterans ($p < .05$) than the CNH group to a statistically significant degree. The CNH group was, on average, about 9 years older than the VDHC group ($p < .001$).

There were also some differences in the diagnoses of the Veterans in each group, as shown in Table 2. The most common diagnoses are listed, as well as those diagnoses that were directly related to the need for CNH or VDHC care. The most common diagnoses were hypertension, mental illness, and diabetes. Of note, both groups had approximately the same number of Veterans with significant (Axis I) mental illness (note the exception that dementia was given its own, separate category), although the smaller number of individuals in the VDHC group led to a higher percentage of mentally ill Veterans in that group. The VDHC group had fewer individuals with dementia than the CNH group. Both groups showed a high level of co-morbidity between physical and mental illness. In addition, several Veterans in both groups had multiple serious medical and/or psychiatric conditions that, individually, would have necessitated continuous supervision, assistance and care.

Table 3 shows the frequency of the number of major diagnoses per Veteran in each group, as well as the percentage of Veterans in that group that had that diagnoses, illustrating virtually no difference in terms of quantity (number) of major diagnoses of each group. In addition, both groups of Veterans were service connected at a level of 70% to 100%, which is considered fully disabled, indicating that both groups consisted of Veterans with severely disabling conditions.

As shown in Table 4, Veterans participating in the VDHC program generally reported satisfaction with the services offered. All VDHC participants endorsed either "strongly agree" (93%) or "agree" (7%) to the statement "I am satisfied with the quality of my care." Veteran satisfaction scores related to the ability to make choices regarding their cares were consistently rated high between 82-89%. Direct choices regarding how and by whom care is provided, authority to dismiss a worker, and ability to determine how to spend the budgeted money were all important aspects contributing to the satisfaction of VDHC participants. Providing this type of autonomy and authority in the home environment not only increases Veteran satisfaction and sense of security but it also increases the level of accountability to which workers are held because they report directly to the Veteran. This was supported by satisfaction scores of 93% for workers showing up on time and a 93% confidence rating for Veterans to solve problems with caregivers. The only item that was not heavily endorsed was "I would like to have more people to do things with" (39% in strong agreement), suggesting that some individuals in the VDHC may have some unmet social needs. It should be noted that responses to some items were influenced by other factors beyond VDHC care, such as the health of the respondent (e.g., "I am living my life the way I want to.") and the location of their residence ("I live where I want to live."). Follow up questions with the Veterans who responded to these statements with dissatisfaction verified that their issues were not reflective of VDHC care, but rather of their physical health status or the location of their residence. One additional question was asked of VDHC Veterans regarding the degree of helpfulness of the services provided. All of the Veterans endorsed that the VDHC program "helped a lot."

Residents in the CNH program reported satisfaction with almost all the elements asked, although direct comparison to responses from Veterans in the VDHC program is not possible

given that different surveys are administered to each group by the VA. Results of the CNH program satisfaction survey are given in Table 5. Only about 10% of the residents reported issues or concerns regarding their satisfaction with the nursing home services provided. The concerns that were expressed tended to relate to the institutional nature of the nursing home environment and limitations on movement and independence, such as a desire to go outside of the facility more often and to live at home.

Discussion

The results support that VDHC is less expensive than CNH care. As shown in Table 1, the average cost of care for VDHC is approximately half that of CNH care. This cost difference makes sense when one considers the additional expenses inherent in nursing home care, such as food, 24/7 nursing care, maintenance of the nursing home environment, medications, etc. On the other hand, the Veterans in the VDHC group obviously can function without these additional aspects and services that a nursing home provides. In a sense, the costs saved by the VDHC program consist of money for CNH services that are not really needed or necessary, since the Veteran in VDHC is able to live at home without them (i.e., the Veterans in the VDHC program may not require the 24/7 services a CNH provides for skilled nursing care, ADL support, meals, medications and environmental safety, etc.).

Some differences appear to exist between the two groups of Veterans that each program serves. The VDHC group is, on average, younger by almost a decade. In addition, the VDHC group had fewer Veterans with dementia than the CNH group. This makes some sense, in that older adults with dementia tend to not only need a dedicated caregiver, but also environmental interventions and restrictions, such as those found on a CNH dementia unit, to ensure adequate

safety. Beyond a greater number of dementia diagnoses in the CNH group, however, the two groups were very similar in terms of major health diagnoses, with a large number of Veterans in both groups exhibiting both physical and mental health problems.

Satisfaction ratings for VDHC appear to support that its users are pleased with the quality of care that they receive. However, a little less than half of VDHC Veterans reported that they would "like to have more people to do things with." This raises the question of whether certain Veterans would have improved opportunities for socialization in a CNH or similar community setting, where they would be around others. However, even in a CNH environment, loneliness is quite prevalent, leading to high rates of depression amongst nursing home residents.[9] In addition, the VDHC group is younger than the CNH group. Placing such younger Veterans with a predominantly older cohort may worsen, rather than improve, the issue of socialization. Loneliness in older adults has been found to be highly correlated to physical health, and given that VDHC Veterans have significant physical health issues, loneliness or lack of socialization is likely at least partly due to their physical health limitations[10]. A meta-analysis of studies concerning loneliness in older adults by Cattan, White, Bond, and Learmouth suggests that educational and/or supportive group activities were most effective at reducing loneliness[11]. Encouraging participation in such groups by VDHC users, perhaps targeting ways to cope with their physical issues and limitations, may help to reduce loneliness. By contrast, some (albeit a minority) of CNH residents were dissatisfied with not being able to leave the facility often, to go outside, and to live in their own homes. These complaints about nursing home care (lack of independence and a feeling of home) are rather commonplace. For Veterans who are able, the VDHC program offers the opportunity to live at home with greater independence, thereby reducing feelings of homesickness and dependency. One notable weakness of the present study

is that two different surveys were used to assess the satisfaction of the two groups, as we were unable, in a retrospective study, to make both surveys identical. It is possible that if identical satisfaction surveys were utilized that more differences between the two groups could have become apparent.

Nursing homes and related long-term care settings will always be a necessary component of the continuum of long-term care, especially for those who need environmental interventions/restrictions (e.g. those with certain behavioral symptoms of dementia), need the assistance of more than one caregiver, or need frequent or daily monitoring by nursing or other clinical staff. However, considering the high cost of nursing home care, programs such as VDHC can reduce costs for those Veterans whose conditions can be adequately managed through the care and attention of a sole, "non clinical" caregiver. In addition, providing care in the Veteran's home is more satisfying for the Veteran. Socialization and self image aspects, especially for younger Veterans, are likely to be better at home under VDHC style care than in a nursing home facility, where the difference in age, cohort, and patterns of socialization can often lead to depression and other poor outcomes[12]. In our study, the finding that VDHC users were significantly younger than Veterans in CNHs is somewhat supportive of the notion that younger disabled Veterans prefer not to live in institutional settings with an older cohort.

VDHC and similar programs have the potential to save considerable amounts of money by providing an alternative to more expensive, more intensive, nursing home level of care for those who only need an untrained individual to provide constant assistance and/or supervision. Considering the high costs of nursing home care, even having a relatively small percentage of patients able to utilize VDHC style programs vs. CNH admission could save significant healthcare costs.

Beyond cost savings, however, VDHC and similar programs enable persons to remain in their home environment, where they are generally happier and more satisfied. While long-term care has made great strides in attempting to "de-institutionalize" nursing homes and make them more "home like" via cultural transformation and other methods, the fact remains that the vast majority of persons prefer to remain in their homes, and moving people from their homes into nursing homes often results in depression and related issues (which do, in fact, add further to the costs of nursing home care). While saving real costs, VDHC style programs can give some individuals who would have gone into nursing homes in the past the one thing that they would very likely deem priceless - the ability to remain in their homes.

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Table 1. Average Cost Comparison and Cost Savings – VDHC vs. CNH

	VDHC	CNH (room/board only)
Average cost per Veteran per Month	$2,618.39	$5,540.39
For 25 Veterans (per Month)	$65,459.75	$138,509.75
savings/month (VDHC vs. CNH)	$73,050	
savings/year (VDHC vs. CNH)	$876,600	

Table 2. Diagnostic Comparison Between Veterans in VDHC and CNH Groups

	VDHC count	CNH count	VDHC%	CNH%	%Difference
Dementia	4	9	0.173913	0.290323	-0.11641
Hypertension	14	17	0.608696	0.548387	0.060309
Diabetes	6	14	0.26087	0.451613	-0.19074
CHF	3	2	0.130435	0.064516	0.065919
Mental Illness	13	13	0.565217	-0.41935	0.984572
Other*	9	16	0.391304	0.516129	-0.12482
ALS	2	0	0.08695	0.0	0.08695
CVA	2	3	0.086957	0.096774	-0.00982
MS	1	3	0.043478	0.096774	-0.0533

Note: VDHC=Veterans Directed Health Care, CNH=Community Nursing Home, CHF=Congestive Heart Failure, ALS=Amyotrophic Lateral Sclerosis, CVA=Cerebrovascular Accident, MS=Multiple Sclerosis

Table 3. Frequency Counts of the Number of Major Diagnoses Per Group and Percentages

# of Major Diagnoses	# with this Many Diagnoses -VDHC Group	# with this Many Diagnoses - CNH Group	VDHC%	CNH%	%Difference
1	8	7	0.347826	0.225806	0.12202
2	6	11	0.26087	0.354839	-0.09397
3	7	10	0.304348	0.322581	-0.01823
4	2	2	0.086957	0.064516	0.02244
5	0	1	0	0.032258	0.032258
	23	31			

Table 4. Reported satisfaction with VDHC services

Statement	SA	A	D	SD	DK?	%SA
I get all the care I think I need	23	2	2	1		0.82
I get to choose when my care is provided	23	4	1			0.82
I am satisfied with the quality of my care	26	2				0.93
I get everything that is in my care plan	25	3				0.89
My care coordinator is helpful to me	26	2				0.93
I can choose who provides my care	25	3				0.89
My caregivers do things the way I want them done	25	3				0.89
My caregivers treat me with respect	26	2				0.93
My caregivers show up for work when they are supposed to	26	2				0.93
I am confident that I could solve problems I may have with my caregivers	26	2				0.93
I can dismiss a worker if I want to	25	3				0.89
I decide how I spend my free time	21	5	1	1		0.75
I can do the activities that are important to me	18	5	3		2	0.64
There are things I would like to do outside the home that I don't do now	16	9	1	2		0.57
I have the assistance I need to go the place I want to go	19	6	1		2	0.68
I can get out and about when I want to	14	10	3	1		0.5
I would like opportunities to do new things	18	6	1	3		0.64
I have friends or family I can count on when I need them	18	8	1	1		0.64
I am happy with the amount of contact I have with family and friends	19	4	4	1		0.68
I would like to have more people to do things with	11	5	8	2	2	0.39
I live where I want to live	22	1	5			0.79
I feel safe in my current situation	19	1	5	3		0.68
I have enough privacy	20	7	1			0.71
I control how the money in my VDHC budget is spent	23	4			1	0.82
I have enough choices about the services and products I use	20	7	1			0.71
I am living my life the way I want to	14	9	2	2	1	0.5
I am more independent now than I was before the VDHC program	18	7		2	1	0.64
Totals	**21**	**4.5**	**3**	**2**	**1.5**	**0.75**

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, DK? = Don't know/Unknown/No response

% SA = Percentage who endorsed "Strongly Agree"

Table 5. Reported satisfaction with CNH services

Question	Yes	No	N/A	Comments
Resident satisfied with care he/she receives at the CNH	30	0		
CNH staff is courteous & treats Resident with dignity	29	1		
Does the Resident like the food?	27	0	3	Some respondents on tube feedings
Resident is able to eat in the dining room	27	0	3	Some respondents on tube feedings
Daily activities are offered for the Resident	30	0		One resident reported wanting to go outside more often
Spiritual services are offered	30	0		
Resident has adjusted to the placement	29	2		Several expressed desire to want to live independently at home