VNS/hospital partnership for in home palliative care

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Introduction

There is a growing need for palliative care services, especially for seriously ill individuals who want to avoid hospitalizations and remain with their regular outside care providers. These services need to be introduced earlier on and not be solely administered in hospital settings. [1] Patients treated in a home setting have been shown to have better quality of life compared to those treated in a hospital.[2] In New York's Capital District, the Visiting Nurse Services of Northeastern New York partnered with Ellis Medicine, a community health system, to launch a new in-home palliative care program called *Care Choices*. Approximately 75% of the total expense budget is covered by existing reimbursement mechanisms for Certified Home Health Agency (CHHA) reimbursement with the remaining being covered by grants and private fundraisers, and about half of patients are covered by commercial insurance companies, including Medicare and Medicaid.

In addition to skilled nursing, *Care Choices* home visits offer education about pain and symptom management, psychosocial and spiritual support, anticipatory guidance for problem solving to avoid unnecessary hospitalizations, management of medications, communication among caregivers and providers, and facilitation of conversations related to serious illness, goals of care, and advance directive planning. Enrollees are not required to give up their outside care providers and remain under the care of their primary care physicians. When a patient becomes medically appropriate for hospice, they are counseled regarding transfer to a certified Hospice program.

Objective/Design

Objective/Design: To evaluate the effectiveness of *Care Choices*, a new in-home palliative care. This prospective cohort study tracked patient outcomes (satisfaction, symptoms, hospitalizations) over the course of one year.

Subjects

Subjects and setting: Calls were made to all patients in the *Care Choices* program who were first time enrollees between March 1st 2014, and March 7th 2015. Of the 235 patients, we were able to acquire data via telephonic surveys from 123 patients (49 men, 74 women) with the following diagnoses:

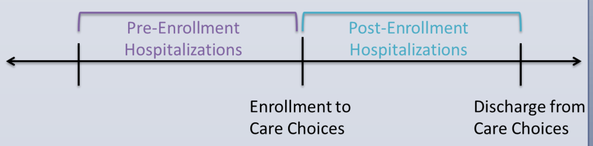
Primary Diagnosis	Frequency (N)	Percentage
Circulatory System	34	27.6%
Cancer and All Neoplasms	29	23.6%
Respiratory System	21	17.1%
Nervous System and Sense Organs	8	6.5%
Endocrine, Metabolic and Blood Forming Organs	7	5.7%
Surgical	6	4.9%
Skin, Subcutaneous, Musculoskeletal System and Connective Tissues	5	4.1%
Genitourinary System	4	3.3%
Digestive System	3	2.4%
Other Ill Defined Conditions	3	2.4%
Infectious and Parasitic Disease	1	0.8%
Injuries and Poisonings	1	0.8%
Mental Disorders	1	0.8%
Total	**120**	**100%**

Measures/Procedures

Satisfaction with care was measured using the Reid-Gundlach Satisfaction Survey after one (T1) and three months (T2) on service. Sample items included "Overall I think the services provided by the *Care Choices* program are…" and "the staff treats me like I am an individual with unique needs and concerns" and "The information I have received in the program has generally been…" Possible responses ranged from "poor" to "excellent" or from "easy to understand" to "difficult to understand."

Quality of life was assessed at baseline (T1) and after one month on service (T2) using the Edmonton Symptom Assessment Survey (ESAS), which asked patients to rate their symptoms (i.e. pain, dyspnea, nausea, anxiety etc…) on a scale from 0 (low) to 10 (high).

Hospitalization data was obtained through Ellis Medicine using patient identification codes to determine the number of inpatient, as well as emergency admissions pre-and post-enrollment in Care Choices. Time on service was used to establish comparison windows when calculating total hospitalizations pre-and post-enrollment in the program. For example, if a patient had been enrolled in the program for 2 months, then hospitalization records over a two month time period prior to enrollment was used for comparison, allowing patients to serve as their own controls regardless of when, or for how long, patients were enrolled in the program:



Results

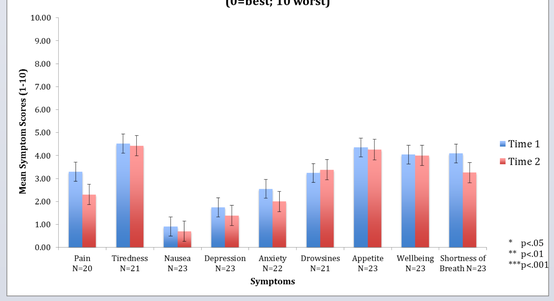
Patients were highly satisfied with their initial care and reported greater satisfaction ($p<.05$) over time (Table 1).

Table 1. Average ratings of satisfaction from Reid-Gundlach Satisfaction Survey at time 1 and time 2 (0=unsatisfied; 5=satisfied)

Question	Time 1 M(SD)	Time 2 M(SD)	t	df	p
1. The people that I have been involved with answer my questions.	4.48(0.59)	4.84(0.47)	-2.22	24	0.036*
2. The people I have come in contact with have been very helpful in explaining the services I need.	4.17(0.92)	4.96(0.20)	-4.39	23	0.000***
3. The staff treats me like I am an individual with unique needs and concerns.	4.52(0.59)	4.87(0.34)	-2.34	22	0.029*
4. The staff is available to help me when I have questions.	4.54(0.66)	4.96(0.20)	-2.85	23	0.009**
5. The staff understands the service needs of patients with serious illness.	4.54(0.66)	4.96(0.20)	-2.85	23	0.009**
6. I have asked people in the program for information and have received it.	3.61(1.56)	4.87(0.34)	-3.994	22	0.001**
7. Would you tell your friends that they should use these services if they had needs like yours?	4.54(0.58)	4.92(0.27)	-3.994	25	0.002**
8. Overall I think the services provided by the Care Choices program are…	4.33(0.78)	4.63(0.57)	-1.55	26	0.133
9. The information I have received has been (helpful).	4.00(0.91)	4.48(0.51)	-2.21	22	0.038*
10. The information I have received in the program has generally been (1=easy to understand;5=difficult).	1.59(0.85)	1.68(1.36	-0.271	21	0.79
		* p<.05 ** p<.01 *** p<.001			

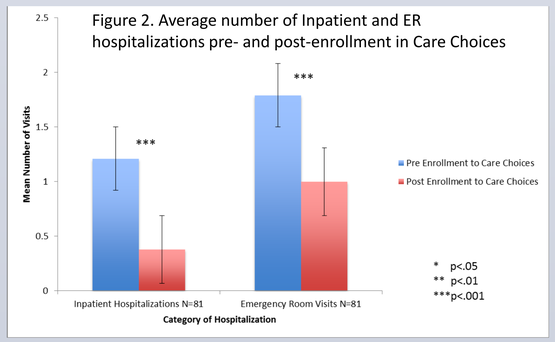
Symptom reports indicated good symptom control at both time 1 and time 1, suggestion stable symptom management over time. (Figure 1)

Figure 1. **Quality of Life (Edmonton Symptom Assessment Survey) at T1 and T2 (0=best; 10 worst)**



Fewer emergency room ($p<.001$) and inpatient hospital admissions ($p<.001$) occurred among enrollees while on the palliative care service (Figure 2).

Figure 2. Average number of Inpatient and ER hospitalizations pre- and post-enrollment in Care Choices



Conclusion/Limitations

Limitations: Our results are observational in nature. No attempt was made to randomize patients to one form of care compared to another. Patients were not always willing or able to complete both satisfaction and symptom surveys, and only patients with both T1 and T2 data could be included in analyses tracking change. Furthermore, we had to rely on assessments of caregivers about one-third of the time because patients were not always able to respond to the telephone survey on their own.

Conclusions: The data provide evidence of a successful collaboration between a community hospital and visiting nurse service that was able to offer the full spectrum of palliative care services in patients' home thereby satisfying their desire to remain at home, manage their symptoms, remain with their regular outside care providers, and reduce unnecessary hospitalizations. The significant decrease in emergency room visits and inpatient stays, while a quality of life and satisfaction issue for patients, is also a proxy for cost savings. A comparison of cost per day indicates the cost savings. For the first quarter of 2014, the Care Choices direct cost per day was $52.76 while the average inpatient stay for Ellis Hospital was $1,042.63. Hopefully, the many CMS Innovation projects currently underway, as well as the Hospice concurrent care project, will result in Medicare establishing payment models for palliative home care.

References

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Acknowledgements/Contact Information

An article summarizing this research was recently accepted to the American Journal of Hospice and Palliative Care. For information on the program or further details about the study, contact Program Director Phil DiSorbo at disorbop@vnshomecare.org *Care Choices* 108 Erie Blvd, Schenectady, NY 12305

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