

# findings brief

## key findings

- After controlling for other factors that could explain patient functioning, the researchers found that each additional palliative care visit during the first month of follow-up increases patient functioning.
- Patient functioning, as measured at the initial visit, is a far stronger predictor of subsequent functioning than are additional palliative care visits.
- While palliative care may increase patient functioning, initial patient functioning likely limits what may be achieved in an absolute sense.

## The Impact of the Early Introduction of Palliative Care on Patient's Functioning

### Overview

Palliative care is typically associated with services provided to terminally ill cancer patients. Increasingly, however, palliative care is considered a treatment option for other life-limiting illnesses and for easing chronic pain. Even though palliative care encompasses hospice care toward the end of life, the introduction of palliative care treatments earlier in a patient's disease course can benefit the patient. All hospice care is palliative, but all palliative care is not hospice care. Interest is growing in initiating palliative care earlier in a patient's disease trajectory.

In a HCFO-funded study, Donald H. Taylor, Jr., Ph.D., Duke University, and colleagues examined whether the introduction of palliative care earlier in the disease course can improve patient functioning, leading to an improvement in the patient's quality of life.<sup>1</sup> To test their hypothesis, the researchers used a community-based sample of patients from the Carolinas Palliative Care Database Consortium. The sample included diverse patients whose experiences across a variety of

clinical settings were likely similar to the experiences of patients receiving palliative care across the country.

### Sample and Methods

The researchers used the Carolinas Palliative Care Database Consortium as their main data source. The consortium is a community/academic partnership between Duke University and three community-based palliative care programs in North Carolina.<sup>2</sup> The consortium has been collecting quality improvement data on patient needs since 2008. The program sites account for a diversity of practice locations, patient demographics, medical cultures, and palliative care practice models.

Palliative care clinicians collect quality improvement data at the point of care through the Quality Data Collection Tool (QDACT) Version 1.0, which is a needs assessment tool developed by the consortium.<sup>3</sup> They also track demographic data, including patient age, gender, and race. Clinicians enter the primary medical condition into the QDACT and use the McCorkle Symptom Distress Scale to assess patient symp-



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toms.<sup>4</sup> Patients describe symptom severity by using a 4-point Likert scale that ranges from “not a problem” to “severe problem.” In evaluating patient responses, the researchers characterized any answer choice of “moderate” to “severe” as clinically significant and, in most cases, combined “moderate” to “severe.”<sup>56</sup> Clinicians use the Palliative Performance Scale Version 2.0 (PPS) tool to document performance status and aid in prognostication. They also record pharmacologic and nonpharmacologic interventions to address symptoms.

The researchers extracted a set of de-identified, aggregated data from the Carolinas Consortium Palliative Care Database as well as data from patient encounters that occurred between June 1, 2008, and December 31, 2011. PPS data, reflecting changes within the context of a patient’s day-to-day functioning, served as the researchers’ outcome variable. Physicians noted that measures of functioning are an important aspect of patient quality of life that is not based on a patient’s subjective views.

Using an area under the curve (AUC) methodology, the researchers tested the hypothesis that palliative care visits during the first 30 days following referral to palliative care are associated with improved functioning when assessed over the long term.

## Results

After controlling for a series of explanatory variables believed to be linked to patient functioning, the researchers observed that the number of palliative care visits was positively related to higher functioning at a statistically significant level. The researchers found that the key variable in explaining patient functioning was the level of functioning at the initial palliative care visit, as measured by the PPS score.

## Limitations

The researchers acknowledged an important limitation of their study. They were unable to account for patient differences that could confound any relationship between palliative care and quality of life. In particular, the researchers were unable to account for information that could signify some patients as being better able to benefit from palliative care. For example, a patient experiencing more chronic pain may seek out more palliative care in the first place. The researchers also noted that, while the results were statistically significant, they may not be clinically meaningful.

## Discussion and Policy Implications

The researchers concluded that increased use of palliative care is associated with increased functioning and can ultimately increase a patient’s quality of life. However, they also determined that a patient’s initial level of functioning was by far the most important factor in predicting improvements in functioning gained through palliative care. The researchers caution that patient characteristics may limit the benefits of increased palliative care in an absolute sense.

The researchers attempted to address patient heterogeneity by controlling for observed characteristics believed to be linked to functioning and quality of life, but they cautioned that their findings are preliminary and need to undergo further testing, perhaps in clinical trials or in other settings with richer covariates.

Although patient heterogeneity complicated the identification of the precise impacts of palliative care, the study was representative in its focus on palliative care delivered to patients suffering from a variety of illnesses in several types of settings.

## Conclusion

The researchers concluded that, given the importance of quality of life for individuals facing a life-limiting illness, more work is needed to understand fully the array of complex factors associated with palliative care. Among the factors are the cost and quality components that comprise the value of palliative care as well as the many subjective preferences that define each individual. The investigators are currently working on new work assessing the quality of life impact of earlier palliative care.

## For More Information

Contact Donald Taylor, Ph.D., at [don.taylor@duke.edu](mailto:don.taylor@duke.edu).

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## Endnotes

1. For complete findings, see Taylor, D. H. et al. (2013). The effect of palliative care on patient functioning. *Journal of Palliative Medicine*, 16, 1227-1231.
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