

## Original Research

# Risk Assessment-Focused Interdisciplinary Outpatient Palliative Care Consultation for Elderly Veterans

James S. Powers, MD\*

Tennessee Valley Healthcare System, Geriatric Research Education and Clinical Center Nashville, Tennessee; Vanderbilt University School of Medicine Nashville, Tennessee, USA

\*Corresponding author

James S. Powers, MD

Clinical Associate Director, Tennessee Valley Geriatric Research, Education, and Clinical Center; Center for Quality Aging, 2525 West End Avenue, Suite 350, Nashville TN 37203, USA; Tel. 615-343-6726; Fax. 615-322-1754; E-mail: [James.powers@vanderbilt.edu](mailto:James.powers@vanderbilt.edu)

### Article information

Received: April 15<sup>th</sup>, 2019; Received: April 22<sup>nd</sup>, 2019; Accepted: April 23<sup>rd</sup>, 2019; Published: May 15<sup>th</sup>, 2019

### Cite this article

Powers JS. Risk assessment-focused interdisciplinary outpatient palliative care consultation for elderly veterans. *Palliat Med Hosp Care Open J*. 2019; 5(1): 1-3. doi: [10.17140/PMHCOJ-5-130](https://doi.org/10.17140/PMHCOJ-5-130)

## ABSTRACT

### Context

The Centers for Medicare and Medicaid Services (CMS) and the Veterans Administration quality improvement objectives encourage completion of advance directives and palliative care consultation to enhance patient-centered care and to promote patient autonomy. The prevalence of advance care planning documents in the electronic health record (EHR) and outpatient palliative care consultation is low and strategies to improve outpatient advance care planning are needed. The aim of this feasibility project was to risk stratify the older Tennessee Valley Healthcare System (TVHS) population, utilizing operations data, to target primary palliative care consultation and completion of advance care planning documents.

### Methods

We compared immediate outpatient palliative care consultation outcomes in two populations: Group 1: high-risk patients identified using a clinical risk calculator, the clinical assessment of need (CAN) compared to Group 2: consecutive patients presenting to a geriatric clinic.

### Results

The patient population identified systematically by high-risk CAN score for advance care planning (Group 1), N=52, increased palliative care consultation prevalence to 35%. The prevalence of advance care planning documents in the EHR remained 30% for this population. High-risk patients were more often referred for community-based services (29% versus 12%) and received more hospice referrals (8% versus 4%) compared to a sample of consecutive patients presenting to a geriatric clinic (Group 2), N=26.

### Conclusion

A systematic approach to identifying high-risk patients appears to target a population with more needs compared to a sample of consecutive elderly outpatients presenting in the outpatient department. A clinically derived risk calculator can help identify high-risk patients appropriate for focused care services, such as geriatric specialty care, home and community based services, and advance care planning.

### Keywords

Risk stratification; Geriatric care; Outpatient palliative care consultation.

## BACKGROUND

The goals of clinical risk management are 1) to support patient-centered care and enhance health, well-being and choice, and 2) to streamline services and set priorities so that all patients receive the right care at the right time at the right site.

The Centers for Medicare and Medicaid Services (CMS) have promoted quality improvement outcomes in the merit-based incentive payment system (MIPS)-advance care plan: percentage of patients aged 65-years and older who have an advance care plan or surrogate-decision-maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a

surrogate decision-maker or provide an advance care plan.<sup>1</sup> Similarly, the Veterans Administration promotes documentation of a palliative care consult for all clinically high-risk veterans. Currently approximately 36.7% of older adults have advance care plans,<sup>2</sup> and 14% of veterans have documented palliative care consultation. The aim of this feasibility project was to risk stratify the older Tennessee Valley Healthcare System (TVHS) population, utilizing operations data, to target palliative care consultation and completion of advance care planning documents.

### Context and Development of Clinical Risk Stratification

TVHS is an integrated healthcare system in middle Tennessee comprised of 2 medical centers located 40 miles apart, and 12 community-based outpatient clinics. TVHS provides ambulatory care, primary care, a full range of specialized medical services in acute medicine and surgery, as well as a full range of extended care and mental health services. The patient population includes over 101,000 individuals of which approximately 97% are paneled in primary care. In 2011, TVHS developed a geriatric patient-centered medical home model for geriatric primary care—the geriatric patient-aligned care team (Ger iPACT). Ger iPACT is a special population PACT within primary care for complex geriatric and other high-risk vulnerable veterans providing integrated, interdisciplinary assessment and longitudinal management, and coordination of both VA sponsored and non-VA sponsored (Medicare and Medicaid) services for patients and caregivers.<sup>3</sup>

Risk stratification of the TVHS population utilizes operations data to inform appropriate interventions with available resources. The innovative Care assessment of need (CAN) is a highly reliable clinical, non-claims-based predictor of future hospitalization and death developed for VA primary care populations utilizing the Primary Care Management Module in the Veterans Health Administration's Corporate Data Warehouse.<sup>4-6</sup> The CAN scoring prediction model (0=lowest risk, 99=highest risk) uses electronic clinical data to accurately identify patients with elevated risk for hospitalization or death.

We previously characterized the Tennessee Valley healthcare system patient population CAN 99 (12-month probability of hospitalization or death 44.8%). This population demonstrated a 63.6% completion of advance directives in the electronic health record (EHR) and 13.8% had palliative care consults, of which 77% were performed while inpatients. Patients enrolled in Ger iPACT were more likely to receive palliative care consults (33%) and have advance care plans in the EMR (80%) compared to primary care patients (12%, 58% respectively).<sup>7</sup>

### METHODS

Advance practice nurses were trained to screen the EHR for presence of advance care planning documents or history of palliative care consultation and to deliver face-to-face and telehealth primary palliative care consults. EHR templates were developed to standardize the consultation process and to facilitate documentation capture.

**Group 1:** Current Ger iPACT patients with CAN 95-99 (N=158) were screened for presence of advance care planning documents and history of palliative care consultation. Over a 2-week period, the first 52 (33%) consecutive Ger iPACT patients without documentation of a palliative care consult were contacted by phone and offered telehealth palliative care consultation. Those who wished clinic appointments were scheduled for these services. During the phone contact, patient and caregiver requests for other services were documented and arranged. All patients were sent advance care planning documents for review and instructed to return these at their next clinic visit for further discussion.

**Group 2:** PCPs requested face-to-face consultations for scheduled Ger iPACT patients presenting for appointments. Over a 2-week period the first 26 consecutive patients received a palliative care consultation and those without advance care planning documents were provided documents for review and instructed to return these at their next clinic visit for further discussion.

Our overall study was designed to meet standards for quality improvement reporting excellence (SQUIRE) criteria,<sup>8</sup> and this report meets the quality improvement minimum quality criteria set domains for reporting quality improvement work.<sup>9</sup> The Tennessee Valley Healthcare System Institutional Review Board has determined this study as a quality improvement initiative.

### RESULTS

The Ger iPACT population was stratified according to CAN scoring: CAN 99 (N= 45), CAN 95-99 (N= 158), and CAN 90-99 (N= 249) compared to the Primary Care PACT population CAN 99 (N= 425), CAN 95-99 (N= 1966), and CAN 90-99 (N= 3563).

Over a two-week period, an EHR review of 115 (73%) consecutive CAN 95-99 Ger iPACT patients identified 73 (63%) where code status was discussed, 35 (30%) with EHR documentation of advance care planning, and 4 (3.4%) patients with a documented palliative care consult. The first 52 (33%) consecutive CAN 95-99 Ger iPACT patients without history of a palliative care consult (Group 1) received a teleHealth palliative care consultation, increasing the outpatient palliative care consultation prevalence in this population to 35%. Nine (17%) patients asked to be scheduled

**Table 1.** TVHS Ger iPACT Population Palliative Care Intervention

	Tele Health Contact Group 1	Face to Face Visit Group 2
N	52	26
Scheduled Future F2F	9 (17%)	
Need HCBS	15 (29%)	3 (12%)
Hospice Referral	4 (8%)	1 (4%)
CAN Score range	95-99	45-99, mean 75

*Group 1: Patients identified systematically by high-risk CAN score for advance care planning*  
*Group 2: Consecutive patients presenting to a geriatric clinic*  
*F2F - Face-to-face evaluation*  
*HCBS - Home and community-based services*  
*CAN - Clinical assessment of need risk assessment*

for future face-to-face consultation, 15 (29%) required additional home and community-based services (HCBS) such as homemaker, home health aide, and skilled nursing services, and 4 (8%) were referred to hospice care. All 26 consecutive patients presenting to GeriPACT over a 2 week period (Group 2) received face-to-face palliative care consults, 3 (12%) required additional home and community-based services, 1 (4%) required hospice referral. The mean CAN score for Group 2 was 75 (range 45-99) with 8 (31%) having CAN scores 90-99. Group 1 patients appear to have higher risk and greater need for HCBS and hospice care (Table 1).

## DISCUSSION

Statistical models based on clinical characteristics that identify patients at elevated risk of death or hospitalization may permit focused care on population subsets, such as those who may benefit from primary palliative care planning, goals of care discussions, optimization of resource allocation and care location.

Utilization of interdisciplinary team care and teleHealth, tied to targeting the at-risk population also appears to enhance identification of additional needs including home and community-based services and hospice referrals.

GeriPACT patients have higher average CAN scores. Risk stratification may help define high-risk individuals in the primary care population which may also identify other needs, including anticipated requests to transfer to GeriPACT for ongoing care.

## LIMITATIONS

We measured the immediate outcomes of outpatient primary palliative care consultation. Subsequent long-term outcomes regarding advance care planning document completion and healthcare utilization are unknown. This feasibility study consisting of 33% of the highest-risk GeriPACT patients did not include sufficient numbers for formal statistical evaluation.

## CONCLUSION

A systematic approach to identifying high-risk patients appears to target a population with more needs compared to a sample of consecutive elderly outpatients presenting in the outpatient department. A clinically derived risk calculator can help identify high-risk patients appropriate for focused care services, such as geriatric specialty care, home and community based services, and advance care planning.

## CONFLICT OF INTEREST

James S. Powers reports no conflicts of interest.

## REFERENCES

1. The Centers for Medicare and Medicaid Services merit based incentive payment system (MIPS). 2018 MIPS Measure #047: Care Plan. Web site. [http://healthmonix.com/mips\\_quality\\_measure/2018-mips-quality-measure-047/](http://healthmonix.com/mips_quality_measure/2018-mips-quality-measure-047/). Accessed April 16, 2019.
2. Yadav KN, Gabler NB, Cooney E, et al. Approximately one in three US adults completes any type of advance directive forend-of-life care. *Health Aff (Millwood)*. 2017; 36: 1244-1251. doi: 10.1377/hlthaff.2017.0175
3. Department of Veterans Affairs, Veterans Health Administration. Patient aligned care team (Geri-PACT) Handbook. Web site. [https://www.va.gov/vhapublications/ViewPublication.asp?pub\\_ID=3115](https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3115). Accessed March 7, 2019.
4. Care Assessment Need (CAN) Score and the Patient Care Assessment System (PCAS): Tools for Care Management. Stephan Fihn MD MPH Tami Box PhD Office of Informatics and Analytics Veterans Health Administration. Web site. [https://www.hsrd.research.va.gov/for\\_researchers/cyber\\_seminars/archives/713-notes.pdf](https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/713-notes.pdf). Accessed March 31, 2019.
5. Wong ES, Rosland AM, Fihn SD, Nelson KM. Patient-centered medical home implementation in the veterans health administration and primary care use: Differences by patient comorbidity burden. *J Gen Intern Med*. 2016; 31(12): 1467-1474. doi: 10.1007/s11606-016-3833-9
6. Wang L, Porter B, Maynard C, et al. Predicting risk of hospitalization or death among patients receiving primary care in the Veterans Health Administration. *Med Care*. 2013; 51: 368-373. doi: 10.1097/MLR.0b013e31827da95a
7. Powers JS, Gandelman JA. Use of a clinically derived risk calculator to assess advance care planning for elderly veterans in the outpatient setting. *Palliat Med Hosp Care Open J*. 2018; 4(1): 14-18. doi: 10.17140/PMHCOJ-4-129
8. Ogrinc G, Mooney SE, Estrada C, et al. The SQUIRE (standards for quality improvement reporting excellence) guidelines for quality improvement reporting: Explanation and elaboration. *BMJ Qual Saf*. 2008; 17(Suppl 1): i13-i32. doi: 10.1136/qshc.2008.029058
9. Hempel S, Shekelle PG, Liu JL, et al. Development of the quality improvement minimum quality criteria set (QI-MQCS): A tool for critical appraisal of quality improvement intervention publications. *BMJ Qual Saf*. 2015; 24: 796-804. doi: 10.1136/bmjqs-2014-003151