

studies assessed psychological (respectively,  $n=24/32$ , 75%;  $12/21$ , 57%) and physical ( $n=21/32$ , 66%;  $11/21$ , 52%) symptom burden and patient quality-of-life ( $n=20/32$ , 63%;  $10/21$ ; 48%) outcomes, of which most favored the intervention arm.

**Conclusions and Implications.** There were notable differences in intervention content and delivery between SPC and PPC interventions. Both were associated with improvements in outcomes of seriously-ill patients. PPC interventions with different content and delivery mechanisms may be effective to meet some, but not all, palliative care needs of seriously-ill patients and their families.

### *Evaluating the Impact and Costs of Home-Based Palliative Care at the System Level (FR420C)*



Sarina Isenberg, PhD MA, Sinai Health System, Toronto, Canada. Amy Hsu, PhD, Ottawa Hospital Research Institute, Ottawa, Canada. Sarah Spruin, MSC, Institute for Clinical Evaluative Science, Ottawa, Canada. Suman Budhwani, MA PhD(C), University of Toronto, Toronto, Canada. Ashlinder Gill, PhD (c), University of Toronto, Toronto, Canada. Russell Goldman, MD, Temmy Latner Centre, Toronto, Canada. Peter Tanuseputro, MD MHS CCFP FRCPC, University of Ottawa, Ottawa, Canada.

#### *Objectives*

- Appreciate home-based palliative care's potential impact on patients at the end of life.
- Recognize utilization and cost benefits of home-based palliative care and apply economic evaluation to assess the value-for-money of palliative home care.

**Original Research Background.** While there has been increased investment in palliative care in Ontario, Canada, the evidence remains inconclusive regarding the cost-effectiveness and impact of home-based palliative care at a system level.

**Research Objectives.** To describe and understand the impact of home-based palliative care on place of death and healthcare cost in the last 3 months of life.

**Methods.** We conducted a population-based retrospective cohort study using health administrative data from Ontario's publicly funded home care program. We included adult decedents who died between April 2011 and March 2015. Regression analyses examined the relationship between receipt of home care (including service type, such as nursing), place of death (acute vs. non-acute) and healthcare cost. We calculated the incremental cost-effectiveness ratio (ICER) of palliative care, which is a measure of the added cost per unit of benefit (in this case, death diverted from an acute care facility).

**Results.** Decedents who received home-based palliative care in the last 3 months of life were less likely to die in acute care (OR = 0.248,  $p<0.001$ ) and had lower estimated total healthcare cost (OR = 0.935,  $p<0.001$ ) than those who did not receive home care services. Palliative visits by nurse practitioners demonstrated the largest effect on reducing the risk of acute care deaths (OR=0.948,  $p<0.001$ ) and healthcare cost (OR= 0.982,  $p<0.001$ ). Considering costs and benefits together, the ICER indicated that for every \$0.25 invested in home-based palliative care, one hospital death is avoided.

**Conclusion.** Decedents who received home care, specifically care from palliative care nurse practitioners, were less likely to die in acute care and had lower healthcare cost.

**Implications for Research, Policy, or Practice.** One's dying experience could be improved by the receipt of home-based palliative supports, which require relatively minimal financial support, given the costs they offset and benefits they provide.

### *Same or Different? Comparing Cancer and Non-Cancer Patients Referred to Outpatient Palliative Care (FR420D)*



Kara Bischoff, MD, University of California, San Francisco, San Francisco, CA. David O'Riordan, PhD MPH, University of California, San Francisco, San Francisco, CA. Angela Marks, MSED, University of California, San Francisco, San Francisco, CA. Michael Rabow, MD FAAHPM, University of California, San Francisco, San Francisco, CA. Steven Pantilat, MD FACP FAAHPM, University of California, San Francisco, San Francisco, CA.

#### *Objectives*

- Describe key differences between cancer and non-cancer patients referred to clinic-based outpatient palliative care.
- Describe how the outpatient palliative care provided to cancer patients differs from that provided to non-cancer patients.

**Original Research Background.** While outpatient palliative care (PC) began primarily in cancer centers, outpatient PC increasingly serves patients with a wide range of diagnoses.

**Research Objectives.** Compare characteristics of patients with cancer and non-cancer diagnoses referred to clinic-based PC, and the care they receive.

**Methods.** Data were extracted from the Palliative Care Quality Network database regarding 3,569 patients seen by 27 clinic-based PC teams between 01/15/2016 and 07/17/2018.

**Results.** Overall 79.3% ( $n=2,766$ ) of all patients referred to outpatient PC had cancer. Compared to patients with non-cancer diagnoses, patients with

cancer were younger (63.9 v 67.9 years;  $p < 0.0001$ ) and had higher Palliative Performance Scale scores (70.9 v. 62.7;  $p < 0.0001$ ).

Patients with cancer were more commonly referred for pain and other symptom management, compared to patients with other diagnoses (83.3% v. 63.9%;  $p < 0.0001$ ). Patients without cancer were more commonly referred for advance care planning (47.1% v. 32.2%;  $p < 0.0001$ ) and support for patient/family (31.3% v. 23.0%;  $p < 0.0001$ ).

Using a 10-point scale (0='none' to 10='worst possible'), patients with cancer reported more pain (4.3 v. 3.7;  $p = 0.003$ ) and less depression (2.4 v. 2.9;  $p < 0.001$ ), anxiety (2.7 v. 3.1;  $p < 0.05$ ), and dyspnea (2.2 v. 3.1;  $p < 0.0001$ ).

Patients with cancer identified a surrogate less frequently than non-cancer patients (58.5% v. 69.6%;  $p < 0.0001$ ). Fewer cancer patients had a code status of DNR/DNI (35.7% v. 51.9%;  $p < 0.0001$ ) and POLST forms were less commonly completed (19.1% v. 34.6%;  $p < 0.0001$ ).

**Conclusion.** Outpatients with cancer, compared to those with other diagnoses, differ in demographics, reasons for referral, and symptoms. They receive somewhat different care, especially around advance care planning.

**Implications for Research, Policy, or Practice.** As outpatient PC services grow, it will be important to consider the distinct needs of patients with cancer and other diagnoses in order to design and target services optimally.

### *The Evaluation of Health Literacy, Spiritual Coping, and Advance Care Planning Following a Culturally Sensitive Intervention for African American Cancer Patients (FR421A)*



Ramona Rhodes, MD, UT Southwestern Medical Center, Dallas, TX. Tori Knox-Rice, PHD, UT Southwestern Medical Center, Dallas, TX.

#### *Objectives*

- Present results of a pilot-intervention designed to increase advance care planning (ACP) engagement within an African American cancer population.
- Describe an investigation into health literacy and religious coping in the context of ACP, with the intention of assessing barriers that impact the completion of advance directives.

**Original Research Background.** Prior investigations into disparities in advance care planning (ACP) among African Americans (AAs) suggest that there is a need to develop interventions to increase engagement in the ACP process.

**Research Objectives.** To test an intervention designed to increase awareness of and intention to

complete advance directives (AD) and medical power of attorney (MPOA) among a cohort of AA cancer patients.

**Methods.** AA breast, lung, colon, and prostate cancer patients (Stage II, III, or IV) were randomized to an intervention versus a usual care control group. Intervention participants met with an AA lay health advisor (LHA) who facilitated viewing of a video that addressed barriers to completion of ACP and subsequent discussion. Change in stage of intent to complete AD/MPOA was measured by Transtheoretical Stages of Change Model. Linear regression was conducted to evaluate whether the intervention was associated with a change in stage of intent to complete ACP from baseline to 1-month assessment. Cancer health literacy and religious coping were analyzed as potential moderators.

**Results.** Fifty-six patients were enrolled (28 intervention group, 28 control group). The majority of patients (71%) were found to have high cancer-related health literacy and high religious coping (53%). The intervention was associated with a progression in stage of intent to complete ADs at one month ( $B = -0.83$ ,  $t(47) = -2.79$ ,  $p = 0.007$ ) versus controls. Increased intent to appoint an MPOA at 1 month was not statistically significant. Health literacy and religious coping were not associated with change in intention.

**Conclusion.** This culturally sensitive intervention was associated with progression in stage of intent to complete ADs at 1-month follow-up assessment. Health literacy and religious coping were not considered moderators.

**Implications for Research, Policy, or Practice.** This work highlights the possible utility of a culturally sensitive intervention designed to improve engagement in ACP among African Americans. Future research should continue to address barriers in this area.

### *Exploring the Role of Religion and Spirituality in Provider-Patient Communication Among African-Americans with Advanced Heart Failure and Their Family Caregivers (FR421B)*



Deborah Ejem, PhD, University of Alabama at Birmingham, Birmingham, AL. Karen Steinhauer, PhD, Duke and VA Medical Center, Durham, NC. James Dionne-Odom, PhD RN ACHPN, University of Alabama at Birmingham, Birmingham, AL. Rachel Wells, MSN RN CNL, University of Alabama at Birmingham, Birmingham, AL. Raegan Durant, MD, University of Alabama at Birmingham, Birmingham, AL. Olivio Clay, PhD, University of Alabama at Birmingham, Birmingham, AL. Yasemin Turkman, PhD MPH CRNP, University of Alabama at Birmingham, Homewood, AL. Marie Bakitas, DNSc NP-C FAAN, University of