trials, are needed to determine the impact of ACP on nursing home resident outcomes.

Intensity in End-of-Life Care and Hospice Utilization for Patients Dying with Heart Failure (S832)

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Objectives

1. Describe results from this analysis which found that patients dying with advanced heart failure had high rates of healthcare utilization.
2. Recognize patient characteristics that are associated with receipt of more aggressive care for patients dying with heart failure.

Original Research Background. Little is known about end-of-life (EOL) care received for patients dying with congestive heart failure (CHF). One prior Medicare analysis found CHF patients received aggressive care at EOL and had low rates of hospice utilization.

Research Objectives. We used claims data to understand EOL healthcare utilization for patients dying with CHF.

Methods. We analyzed a multi-payer database to identify 11,685 patients 35 or older who died with CHF in Maine between 2013 and 2016. The primary outcome was healthcare utilization during EOL, defined as 180 days prior to death, including emergency department (ED) visits, hospitalizations, ICU admissions and hospice utilization. Patient characteristics analyzed included age, gender, medical comorbidities, area deprivation index (ADI) and rurality.

Results. Among 11,685 patients, 49% had ≥ 2 hospitalizations, 73% had ≥ 2 ED visits, and 30% had an ICU stay during EOL; 62% were admitted to hospice. Younger patients, men and patients with ≥ 2 other comorbidities (compared with none) were more likely to receive aggressive care on all measures and less likely to utilize hospice. Rural patients were more likely to have an ICU admission (34% in most rural vs 24% in urban, $p<0.0001$) but less likely to have ≥ 2 ED visits or receive hospice. Patients residing in areas with higher ADI were less likely to enroll in hospice (54% of those from the most deprived vs 69% in the least, p-value <0.0001) and more likely to have an ICU stay (33% in most deprived vs 27% in least deprived, p-value <0.0001).

Conclusion. Healthcare utilization is high for patients dying with advanced CHF, and we observed variation across patient groups and according to rurality and ADI.

Implications for Research, Policy, or Practice. Decreasing undue aggressiveness at EOL for patients with advanced CHF may require better recognition of EOL, education of providers, patients and families, and increased access to palliative care, especially in rural and socioeconomically deprived areas.

Predictors of Depression and Anxiety in Family Members Three Months After Child Admission to a Pediatric ICUs (S833)

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Objectives

1. Describe the difficulties family members' experience when their child is in the ICU.
2. Describe factors that are associated with family members' depression and anxiety.

Original Research Background. Critically ill and injured children and infants are admitted to children's intensive care units (ICUs). Children's family members are known to suffer from severe stress and to be a high-risk population for acute and chronic psychological problems. Depression, anxiety, and acute and post-traumatic stress among family members during and after a child's admission affect not only well-being but also social functioning and productivity.

Research Objectives. We aimed to identify associations between demographic and psychosocial variables at early stages of a child's ICU admission and depression and anxiety in family members at approximately 3 months after admission. We also explored predictive models for depression and anxiety at 3 months after hospitalization.

Methods. 380 family members of 220 children reported demographic and psychosocial status at approximately 1 week after ICU admission (baseline), at discharge from the ICU, and at 3 months after the child's ICU admission. Clinical data were extracted from the children's medical records. We used linear regression models and stepwise linear regression for analyses.

Results. We found gender (female) and child mortality were strongly associated with family members' depression and anxiety at 3 months. Worse psychological health status at baseline, represented by reported depression, anxiety, and acute stress symptoms, was associated with more severe depression and anxiety at 3 months. Also, better social support at baseline was associated with better psychological status (e.g., lower depression and anxiety) at 3 months.

Conclusion. We suggest a need to screen family members with validated scales and intervening with those at high risk of depression and anxiety at 3 months.

Implications for Research, Policy, or Practice. Our findings suggest that a family's own functioning and ability to cope with stress may have a stronger impact on family members' psychological health, we also suggest that health care providers empower family members to maintain and improve their own family's well-being or resilience.

Cancer Patients' and Healthcare Providers' Perceptions About Supportive and Integrative Oncology Services (S834)

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Objectives

1. Describe cancer patients' and healthcare providers' perceptions of supportive and integrative oncology services.
2. Compare cancer patients' and healthcare providers' perceptions of supportive and integrative oncology services.

Original Research Background. Supportive and integrative oncology services improve quality of life for cancer patients and are increasingly popular.

Research Objectives. To characterize and compare the perceptions of supportive and integrative oncology services among cancer patients and healthcare providers.

Methods. A cross-sectional survey was administered at Seidman Cancer Center (SCC), an NCI designated Comprehensive Cancer Center, to providers and patients in the spring of 2018. We inquired about familiarity, perceived importance, and frequency of use, accessibility and barriers of 19 supportive and integrative oncology services. Data analysis included the Chi-square test and Spearman's rank correlation (ρ).

Results. A total of 585 surveys were obtained (421 patients and 164 healthcare providers). Patients were generally over 60 (58.2%), female (57.4%), Caucasian (64.2%) with most at >1 year from starting treatment (59.9%). Healthcare providers were physicians (38.7%), RN partners (38.1%), and advanced practice providers (APPs) (23.2%). Most were female (74.3%), Caucasian (80%) and worked at SCC for >5 years (56.4%). Providers were more familiar with palliative care (71.7%) and felt it was more important (92%) than patients did (25.2% and 43.6%, $p<0.001$). Patients who were in treatment for a longer length of time were more familiar with social work, palliative care and psychiatry ($\rho= 0.17, 0.14, 0.20$; $p<0.01$). Most providers (>85%) of all types regarded palliative care, social work and diet & nutrition services as important. The most common barrier for both patients and providers was being unaware of the services (41.6% and 67.1%).

Conclusion. Overall, healthcare providers were more familiar and considered most services to be more important than patients with many supportive and integrative oncology services. Being unaware of the services was a common barrier.

Implications for Research, Policy, or Practice. Interventions are needed to improve the patients' and providers' awareness of supportive and integrative oncology services and communication of the importance of these services.

Acute Care Utilization at End-of-Life in Sickle Cell Disease: Highlighting the Need for a Palliative Approach to Sickle Cell Disease (S835)

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Objectives

1. Describe the acute nature and young age of deaths of patients with Sickle Cell Disease.
2. Consider what a palliative approach to care of patients with Sickle Cell Disease entails.

Original Research Background. Despite recent advances, people with sickle cell disease (SCD) continue to have a life expectancy <50y. Therefore, understanding end-of-life care in SCD is critically important, but remains understudied.