by pediatric death is sparse. Existing literature raises concerns that certain services might be unavailable to some populations. More research is needed to understand why bereavement support services are not uniformly available and to develop programs for underserved populations.

Embedded Specialty Palliative Care Is Feasible, Acceptable, and Perceived to Be Effective in Cystic Fibrosis: Results of a Pilot Randomized Clinical Trial (TH371A)

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Objectives

- Appraise the challenges in conducting palliative care interventions among individuals with genetic disorders, such as cystic fibrosis (CF).
- Interpret the results of a pilot feasibility trial of an embedded specialty palliative care intervention in cystic fibrosis.

Original Research Background. People with CF experience myriad physical and emotional burdens, all of which degrade quality of life (QoL). Although specialty palliative care (PC) reduces suffering for individuals with serious illness, no evidence exists for its impact in CF.

Research Objectives. Conduct the first randomized pilot trial to evaluate the feasibility, acceptability, and perceived effectiveness of embedded specialty PC for patients with CF.

Methods. Following a needs assessment, we developed a protocolized, patient-centered PC intervention embedding a PC clinician within an adult CF center. Patients receive >4 in-person visits (and follow-up calls as needed) with a PC nurse practitioner, addressing: symptom management, emotional support, advance care planning, and coping. We measured feasibility via enrollment and assessment rates. We conducted semi-structured interviews evaluating acceptability and perceived effectiveness.

Results. We randomized 50 adults to intervention plus usual care, or usual care alone (approach-to-randomize rate, 79%). Fifty-six percent of our sample was male, with a median age of 32 (range: 18-67), and median FEV1 of 41% predicted (range: 20-82% predicted) at enrollment. Of 50 randomized, two died and one was lost to follow-up. Sixty-seven percent of participants reported the intervention was not burdensome and 100% agreed/strongly agreed that they were satisfied with the PC clinician's care. Sixty-seven percent of participants agreed/strongly agreed that the intervention improved their physical symptoms, 62% their QoL, and 100% felt that all patients with CF should receive specialty PC. Interview themes include: 1) appreciation that PC focuses on more than physical symptoms; 2) appreciation that PC was seamlessly integrated within usual CF care, longer clinic appointments notwithstanding; and 3) a desire to have been exposed to specialty PC earlier in their disease.

Conclusion. Embedded specialty PC is feasible, acceptable, and perceived to be effective among individuals living with CF.

Implications for Research, Policy, or Practice. Given these promising findings, further clinical trials are warranted to establish the efficacy of PC in CF.

Early Palliative Care Consultation in the Medical Intensive Care Unit—A Clustered Randomized Crossover Trial (TH371B)

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Objectives

- Describe patient outcomes with early palliative care consultation in the medical ICU for patients with advanced disease.
- Describe impact of PC utilization on ICU and hospital resource utilization.

Original Research Background. Patients with advanced disease present to intensive care units (ICUs) for management; however, palliative care (PC) consultation is often delayed or not utilized.

Research Objectives. To study the impact of early PC consultation in the medical ICU on patients with advanced disease.

Methods. A PC screening tool was used to identify patients at risk for poor outcomes due to the

presence of chronic organ dysfunction or malignancy admitted to two medical ICUs (MICU) in a single center from August 2017 to May 2018. One MICU had PC consultation within 48 hours of ICU admission and the other had standard of care. The units were crossed over after 100 patients were enrolled. Multivariate logistic regression analysis was utilized.

Results. A total of 199 patients were enrolled, 97 in the intervention arm and 102 in the control arm; 49.3% were Caucasian and 52.3% were male, with mean age 64. The average APACHE II scores were 17.0 ± 5.2 and 17.0 ± 6.4 for the intervention and control arms respectively. There was no significant difference between MICU and hospital length of stay. Patients in the intervention arm were significantly more likely to transition to do-not-resuscitate and do-not-intubate (50.5% vs 23.5%, OR 3.32, $p<0.01$) and discharge to hospice (18.6% vs 4.9%, OR 4.42, $p<0.01$). Patients in the intervention arm also had significantly fewer ventilator days, tracheostomies performed, and post-discharge emergency room visits and readmissions ($p < 0.05$). There was no significant difference in death in hospital and death within 30 days of discharge.

Conclusion. There is a benefit in early PC consultation for qualifying patients in the medical ICU reflected by change in resuscitation preferences and hospice utilization.

Implications for Research, Policy, or Practice. Early palliative care involvement in the ICU may encourage increased goals-of-care discussion in patients with advanced disease and improve ICU and post-discharge care utilization.

Provider Perspectives on Palliative Care in End-Stage Liver Disease: A Qualitative Study (TH371C)

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Objectives

- Identify specific challenges, needs, barriers, and facilitators to implementing palliative care in end-stage liver disease from the perspectives of clinicians.
- Identify future implications for the integration of palliative care into end-stage liver disease.

Original Research Background. End-stage liver disease (ESLD) patients with high symptom burden and mortality may benefit from palliative care (PC). However, PC is underutilized in ESLD patients. Few studies explore clinicians' perspectives on the role of PC in ESLD management.

Research Objectives. To identify clinicians' perspectives on patient challenges, needs, barriers, and facilitators for PC referral in ESLD.

Methods. Semi-structured, one-on-one interviews were conducted with 13 purposively sampled hepatology and PC clinicians at an academic medical center. Clinicians were asked about: 1) challenges in caring for persons with ESLD and their family caregivers, 2) their perceptions of PC and hospice, and 3) PC referral and access barriers and facilitators. Interviews were audio recorded, transcribed, and analyzed using thematic analysis in NVivo software.

Results. Clinicians (n=13) were majority female (n=8) and from hepatology/gastrointestinal disciplines (n=9). Physicians (n=6) and nurses practitioners/coordinators (n=7) were equally represented. ESLD challenges included: non-adherence to treatment, substance abuse, communicating serious news, and patient medical complexity. Needs included addressing psychological symptoms and social needs, advanced care planning, and interdisciplinary care. Most clinicians experienced PC late in disease course and were open to early integration of PC. PC Barriers included a lack of understanding of PC, difficulty introducing PC to patients with concern of "giving up", and patient/family refusal. PC facilitators included its convenience for patients (location, same day visit), availability of interdisciplinary services, and hepatology provider education regarding PC.

Conclusion. Findings suggest that ESLD patient needs are potentially amendable to PC from clinician perspectives with facilitators for early integration being convenience for patients, utilizing interdisciplinary services, and education of Hepatology clinicians regarding PC.

Implications for Research, Policy, or Practice. Future research is needed to develop an early PC intervention that addresses the most appropriate PC referral timing, patient population, and mode of delivery based on identified needs and barriers/facilitators.