Adam DeLong Pediatrics, PGY-2

Mentor: Max Lindeman

7/21/2021

Title: Expansion of palliative care availability: a retrospective assessment of inpatient impact and outpatient needs assessment

Background:

Palliative care is a growing field that deals with the mitigation of suffering and focuses on improvement in quality of life for patients and their families. This goal is met through care directed towards symptom management and patient-defined goals of care. In addition to these well-established aims, a growing body of evidence has shown palliative care to also reduce acuity of care. Overall, the effect of palliative care on hospital length of stay remains to be defined¹. It has, however, been shown to decrease overall length of stay in certain adult patient populations such as post-surgical patients.² Similar trends appear to exist in pediatric populations. The availability of inpatient palliative care consult services correlates with a reduction in length of ICU stays, future hospitalizations, and emergency department visits for these patients.^{3,4}

However, at least in the case of pediatric patients, most of this care is delivered in inpatient settings. This presents a problem for pediatric patients with chronic or life limiting illnesses who receive much of their treatment as outpatients.⁵ Similar to inpatient, models of outpatient pediatric palliative care have shown the ability to decrease overall costs of care and increase patients' time at home.

Considering the above, we intend to investigate the effects of the recent expansion of the Morgan Stanley Children's Hospital (MSCHONY) palliative care team on the outcomes of patients on whom the team has been consulted. Likewise, we intend to assess the need for further expansion of the MSCHONY palliative care team to provide outpatient support and resources to this patient population.

Aims:

To analyze the changes in patient care delivery and outcomes that have been manifested by expansion of the inpatient palliative care team at MSCHONY and assess need of further expansion to the outpatient setting.

Methodology:

Via retrospective chart review, we will identify patients admitted to the hematology/oncology services and consulted to palliative care at MSCHONY after expansion of the pediatric palliative care team. Likewise, we will review patients admitted to these services prior to expansion of

the team. These cases will be reviewed by relevant providers to expertly assess whether a palliative consult would have been placed had a similar consult been available. Data collected will include length of stay, acuity of admission (i.e. days in ICU vs. general floor, rapid responses/codes called), documentation of advance directives/goals of care, and trends in palliative medication use (including morphine equivalents, antiemetics).

Likewise, admissions will be reviewed for criteria that would allow for outpatient management (resolution of non-symptomatic management requiring hospitalization, no need for IV medication unless in patient with long-term venous access, adequate control of symptoms on outpatient suitable medications) on a qualitative basis. This assessment will be used in attempt to estimate the need for outpatient palliative care resources in this population.

Analysis:

For our analysis of changes following the expansion of inpatient palliative care, we will report data as outlined above in the Methodology section and compare these outcomes between patients who were admitted before and after expansion of the palliative care team.

Furthermore, we will attempt to analyze the number of cases in which symptomatic care could be completed on an outpatient basis earlier or in which admission could be avoided altogether. In doing so, we will attempt to quantify the reduction of healthcare burden that could be relieved by the availability of an outpatient palliative care team.

For all statistical testing, power analyses will be conducted, and p value <0.05 will be assumed.

Study Drugs: Not Applicable

Medical Devices: Not Applicable

Study Questionnaires: Not Applicable

Study Subjects: Pediatric hematology/oncology patients admitted to MSCHONY.

Recruitment: Not Applicable

Confidentiality of Data: All chart review and data storage/analysis will be performed on password protected devices. Patient information will be deidentified at collection. All data collected will only be accessible to study personnel.

Potential Conflict of Interest: Members of palliative care team will be involved in research which could have potential to impact future palliative care funding.

Location of Study: Morgan Stanley Children's Hospital (MSCHONY)

Potential Risks: None that have been identified.

Potential Benefits: Data collected and study analyses could lead to increased awareness of the needs for inpatient and outpatient pediatric palliative care at MSCHONY.

References

- 1. Cassel JB, Kerr K, Pantilat S, Smith TJ. Palliative care consultation and hospital length of stay. J Palliat Med. 2010 Jun;13(6):761-7. doi: 10.1089/jpm.2009.0379. PMID: 20597710.
- Chatterjee K, Harrington S, Sexton K, Goyal A, Robertson RD, Corwin HL. Impact of Palliative Care Utilization for Surgical Patients Receiving Prolonged Mechanical Ventilation: National Trends (2009-2013). Jt Comm J Qual Patient Saf. 2020 Sep;46(9):493-500. doi: 10.1016/j.jcjq.2020.03.011. Epub 2020 Apr 19. PMID: 32414575.
- 3. Ananth P, Melvin P, Berry JG, Wolfe J. Trends in Hospital Utilization and Costs among Pediatric Palliative Care Recipients. J Palliat Med. 2017 Sep;20(9):946-953. doi: 10.1089/jpm.2016.0496. Epub 2017 Apr 28. PMID: 28453361.
- 4. Rossfeld ZM, Miller R, Tumin D, Tobias JD, Humphrey LM. Implications of Pediatric Palliative Consultation for Intensive Care Unit Stay. J Palliat Med. 2019 Jul;22(7):790-796. doi: 10.1089/jpm.2018.0292. Epub 2019 Mar 4. PMID: 30835155.
- 5. Weaver MS, Rosenberg AR, Tager J, Wichman CS, Wiener L (2017) A summary of pediatric palliative care team structure and services as reported by centers caring for children with cancer. J Palliat Med 21:452–462. https://doi.org/10.1089/jpm.2017.0405
- Brock, K.E., Allen, K.E., Falk, E. et al. Association of a pediatric palliative oncology clinic on palliative care access, timing and location of care for children with cancer. Support Care Cancer 29, 1849–1857 (2021). https://doi.org/10.1007/s00520-020-05671-y
- 7. Gans D, Hadler MW, Chen X, Wu S-H, Dimand R, Abramson JM, et al. Cost analysis and policy implications of a pediatric palliative care program. J Pain Symptom Manag. 2016;52(3):329–35. https://doi.org/10.1016/j.jpainsymman.2016.02.020.