Creating a Financing Analysis Model for Pediatric Concurrent Care: A Pilot Study

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Background:

Concurrent Care for Children (CCC) enables seriously-ill children to continue curative treatments along with hospice services. Medicaid issued no regulations, nor were hospice per diems modified to account for the significant changes in services provided. It remains unclear what the hospice financial structure for CCC is and how that might differ from standard pediatric hospice care.

Objective: To establish baseline hospice financial information on children receiving CCC.

1) describe the costs of children in hospice care,
2) compare costs between CCC and standard care,
3) develop a standardized analysis template.

Methods: The 2018 financial data from a large, regional east coast hospice organization was used. The sample included 44 children under 19 years enrolled in hospice care. Measures were created for demographics, personnel costs, supply and equipment costs, other costs, and financials. Descriptive statistics were calculated.

References
Knapp CA et al. Am J Hosp Pall Med. 2009; 26:40-46
Widger K et al. Pediatrics. 2017;139:e20162956
Chong PH et al. BMC Palliative Care 2018 Jan 3;17(1):11

Results:

Patient	Characteristics (n=44)	
Age (avg)	6 years	
Gender	Female - 56%	
Race☆	Caucasian – 23%	Latino – 9%
	Asian – 7%	Black – 9%
	Native Am – 2%	Unknown – 43%
Medicaid	30%	
Diagnosis	Cancer – 27% Cardio/Pulm – 11%	Neuro/Musc – 30% Gene/Metab – 30%
Days in hospice (all pts)	125 (avg) / 82 (median)	

☆ many families decline to answer question about race/ethnicity

	CCC	Standard Hospice
Enrollment days (avg LOS)	144	76
Personnel visit costs/day	$67.46	$79.13
Medical Direction costs/day	$18.26	$26.61
Total supply-equipment/day	$50.00	$22.09
General supplies/day	$4.66	$2.36
DME (avg/pt-day)	$31.49	$6.66
Care coordination/day	$7.80	$12.86
In-patient care/day	$0.14	$76.48
Rx costs/day/pt	$13.81	$11.72
Average loss/day	**$13.00**	**$96.00**

Discussion:

- This study is the first known detailed analysis in the United States of the cost of providing CCC
- It represents an innovative model which can be replicated in other settings
- Major findings are:
  - Personnel costs are the greatest expenditure
  - Personnel costs slightly lower in CCC
  - Longer enrollment for CCC
  - DME/Supply costs are higher in CCC
  - Medical direction/coordination lower for CCC
  - Slightly greater medication costs for CCC
  - Lower inpatient care costs for CCC
  - Significantly lower loss for CCC

Conclusions:

- Concurrent Care for Children (CCC) has been a boon for patients and a vexing economic challenge for providers. This analysis scheme is suitable for other settings and comparisons between different regions
- We anticipated finding greater costs costs for CCC patients but observed the opposite
- We believe that CCC reduced the number of hospitalizations, which represents a further saving.