

Financial Toxicity in Children, Adolescent, and Young Adult Cancer Patients and Their Families: A Large National Registry Analysis from the Family Reach Foundation

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Background

Although financial toxicity is an increasingly recognized side effect of a cancer diagnosis and treatment, little is known about the characteristics of children, adolescent, and young adult (AYA) cancer patients and caregivers who seek financial assistance. We sought to describe patient demographics and causes of financial burden in a large national sample of children and AYA patients and families who applied for financial support.

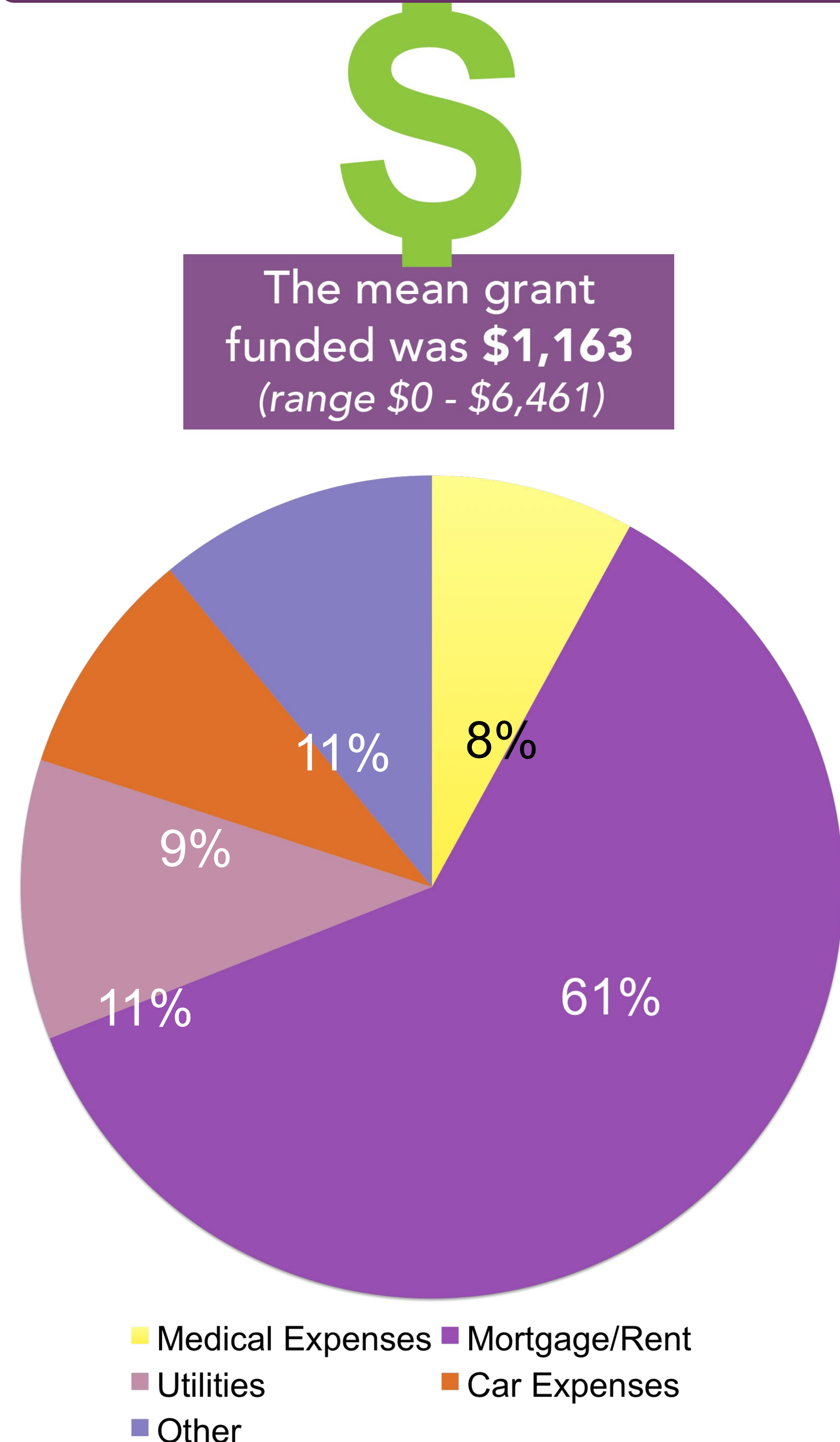
Methods

Cancer patients aged <1 to 39 years who were receiving active cancer treatment and had applied for a financial grant to the Family Reach Foundation between 2010-2015 were included in the analysis. The Family Reach Foundation is a 501(c)(3) organization that provides assistance to families with a child or parent afflicted with cancer. Family Reach grants help cover costs for uncovered medical expenses, mortgage or rent, transportation, utilities, and everyday expenses such as groceries. Descriptive statistics characterized the study population; chi2 test was used to evaluate differences between groups.

Patient and Family Characteristics

	N	%
Total	2198	100
Patient Age , years		
<1-14.99	1519	69
15-24.99	524	24
25-39	155	7
Patient Race/Ethnicity		
White, Non-Hispanic	659	30
White, Hispanic	618	28
African American	287	13
Asian	77	4
Other	557	25
Primary Cancer Type		
leukemia	909	41
lymphoma	180	8
CNS	438	20
Sarcoma	283	13
Other	388	18
Family Income		
<\$25,000	966	44
\$25,000-\$50,000	580	26
\$50,000-\$100,000	273	12
>\$100,000	18	1
Unknown	361	16
No. People in Household		
<3	142	9
3-4	879	40
5-6	616	28
>6	104	5
Unknown	457	21
Single Parent Household		
Yes	634	29
No	1182	54
Unknown	382	17

Grant Purpose



Results Summary

- 2198 children, adolescents, and young adults (69% <15 years; 24% 15-24 years; 7% 25-40 years) from 48 U.S. states are included.
- 28%, 13%, 11%, and 30% were Hispanic, African American, Multiracial, and Caucasian non-Hispanic, respectively.
- Family income was <\$24,250 in 44%, and 29% were living in a single parent household.
- Cancer diagnoses included those common to children and AYAs: acute leukemia (36%), sarcoma (13%), brain (14%), lymphoma (9%). The mean grant funded was \$1163 (range \$0-\$6461).
- Causes of financial need were characterized as non-medical costs (e.g. rent, mortgage, food, auto payments) or medical costs (e.g. uncovered medical expenses, health insurance premiums/copays, travel to hospital, lodging).
- The majority (92%) of financial burden was non-medical costs, with rent/mortgage accounting for 62%. Medical costs accounted for a greater proportion of financial burden in patients and families of AYA cancer patients (12%) as compared to families of childhood cancer patients (6%); p < 0.001.

Conclusion

In this large national sample of pediatric and AYA cancer patients seeking financial support, the costs of daily living predominate as important drivers of financial toxicity. Future research should focus on interventions to relieve the varied causes of financial distress associated with childhood and AYA cancer.