

Presenting Author Name

Màiri MacAulay

Phonetic spelling of your (full) name

MAH-ree (rhymes with starry)

Presenting Author Category

Undergraduate Student

Supervisor Name

Hadeel Hassan

GBD Audio File

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Headshot

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Short Bio (100 words)

Màiri MacAulay is a second-year medical student at the University of Manitoba. She holds a B.Sc. in Microbiology & Immunology from the University of British Columbia. Her current research focuses on the utilization and impact of large language models among patients and families in pediatric and adolescent and young adult oncology.

Research Category

Clinical

Abstract Title

Use of Large Language Models by Adolescents and Young Adults with Cancer and by Caregivers of Children with Cancer: A Cross-sectional Survey

Authors

Name	Role	Profession
Màiri MacAulay	Presenting Author	Medical Student
Megan Ridler	Co Author	Clinical Research Professional
Mackenzie Jansen	Co Author	AYA Clinical Nurse Specialist
Ian Scott	Co Author	AYA Psychosocial Oncology Clinician

Kathleen Decker	Co Author	Associate Professor
Marshall Pitz	Co Author	Associate Professor
Magimairajan Vanan	Co Author	Associate Professor
Sapna Oberoi	Co Author	Associate Professor
Hadeel Hassan	Co Author	Associate Professor

Will they participate in the poster presentation at CHRD?

No

Background

Patients and caregivers increasingly use large language models (LLMs) for health information. However, knowledge regarding LLM utilization and experiences among adolescents and young adults (AYAs) with cancer and caregivers of children with cancer remains limited.

Objective

This study aimed to characterize perceptions, patterns, and outcomes of LLM use among AYA patients with cancer and caregivers of children with cancer.

Methods

An exploratory cross-sectional survey using REDCap was conducted at CancerCare Manitoba using posters and in-person recruitment. Participants included AYAs with cancer (14-39 years) and caregivers (parents/guardians) of children (0-18 years) with cancer. The survey assessed LLM use, topics queried, perceived accuracy and trust of LLMs, and discrepancies between LLM responses and clinical advice. Data were analyzed using descriptive statistics.

Results

Results included 100 respondents (32 AYA; 68 caregivers). The most common diagnoses were leukemia/lymphoma (n=43,43%) and brain tumors (n=26,26%). Fifty-seven respondents (57%) were receiving treatment and 42 (42%) were off therapy. Overall, 51 (51%) used LLMs for cancer-related information: 17/32 AYA patients (53%) and 34/68 caregivers (50%). Among LLM users, 49/51 (96%) considered information to be at least 'somewhat accurate'. Thirty-five of 51 (69%) recommended cautious use, with 11 (22%) emphasizing clinical verification. Eight of 51 users (16%) reported discrepancies; of which six (12%) sought clinical clarification. AYA and caregivers exhibited similar patterns of LLM use and perceptions; however, AYA used LLMs less frequently (monthly or less) (AYA: n=12/17,71%; caregivers: n=21/34,62%), consulted different topics, and a greater proportion recognized discrepancies (AYA: n=4/17,24%; caregivers: n=4/34,12%).

Conclusion

Nearly half of AYAs with cancer and caregivers of children with cancer used LLMs for cancer-related information, with similar patterns of use and perceptions across groups. Although nearly all users considered outputs at least somewhat accurate, respondents emphasized caution and clinical verification. These findings support the need for further research and targeted education of patients to promote safe, informed use.