

Enhancing Adolescent Assent in Pediatric Oncology Clinical Trials Through Tailored Creative Visuals

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1. Background

Clinical trials have been critical to progress in childhood cancer treatment, with approximately 75 percent of newly diagnosed children now becoming long-term survivors – a success attributable to patients' participation in available trials (Pritchard-Jones et al., 2008). This high engagement relies on the therapeutic alliance formed at diagnosis between families and physicians when presented with trial enrollment options. However, more research is needed to optimize the introduction of clinical trials during this worrying time. Prior research has shown that visual aids can be an effective way to communicate health information to various audiences, but the value of visual aids specifically for informing and educating adolescents about clinical trials is unknown (Moe-Byrne et al., 2022). Teenage comprehension presents another barrier, as complex trial terminology and concepts overwhelm patients, hindering recruitment. Our project aimed to address these challenges by optimizing accessibility through simplified language, animated visuals, and relatable narratives.

2. Goals

Our primary goal was to significantly increase clinical trial recruitment among adolescent oncology patients. Specifically, we aimed to:

- Alleviate common fears and misconceptions about clinical trials through accessible education.
- Clearly convey potential risks, such as side effects, as well as benefits, such as potential therapeutic effects
- Simplify complex medical terminology into understandable language appropriate for teens.
- Prioritize child comprehension of the entire clinical trial process.

3. Solutions and Methods

One strategy implemented to meet our objectives included an engaging video with supplemental visuals targeting adolescent learning styles and preferences. The visuals featured:

- A section-by-section breakdown of the assent form using simplified terminology and definitions of key medical jargon. (e.g., highlighting key vocabulary)
- Dynamic visuals depicting cancer pathology and clinical trial procedures. (e.g., chemotherapy and radiation therapy depictions)
- A narrative from a pediatric cancer survivor sharing their experiences.
- Detailed visuals leveraging color, graphics, relatable characters, and tailored stories. (e.g., popular emoticons, real-world analogies, teenage participants)
- Animations and text clearly conveying potential risks and benefits.

The video and its supplements were developed through an iterative process of expert and teen feedback to ensure appropriate content, tone, and accessibility.

4. Outcomes

Initial feedback from pediatric oncology clinical trial experts at our institution has been positive, reporting the potential for increased engagement and comprehension among adolescents exposed to

the video intervention. We will collect personal feedback from adolescent patients and cancer survivors to help refine the video's content and accessibility. Most importantly, we will gather statistics on comprehension rates and clinical trial enrollment changes to quantify the materials' impact on recruitment.

5. Lessons Learned and Future Directions

Ensuring accessibility is crucial for pediatric oncology trial participation as it significantly impacts appeal, emphasizing the importance of engaging not only parents but also the children themselves. Future strategies may involve integrating visuals in medical facilities and creating tailored informational pamphlets for adolescents. To evaluate the efficacy of these products, we plan to conduct an experiment exposing the visuals to adolescents and recording their thoughts and feedback through surveys and other measures. These innovative approaches will enhance comprehension and promote active involvement in clinical trials, ensuring greater participation in adolescent clinical research.

References

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