Evaluation of a technology assisted intervention for tailoring oncofertility care in female cancer survivors: a pilot cluster randomized controlled trial

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Scientific Abstract:

Female pediatric, adolescent and young adult (AYA) cancer survivors experience overall increases in infertility and ovarian insufficiency, which are devastating but preventable. Oncofertility care is the evidence-based practice of informing newly diagnosed cancer patients about their reproductive risks and shared decision-making on medically effective fertility preservation services. Despite longstanding clinical guidelines, oncofertility care across pediatric and adult oncology settings continues to be limited due to multi-level barriers and lack of scalable interventions. Following systematic environmental scans of three health systems’ barriers to oncofertility care, our trans-disciplinary team developed, conducted usability testing, pilot-tested and tailored a multi-component intervention leveraging telehealth and electronic health record (EHR) tools. Intervention components are: 1) EHR-based oncofertility needs screen and referral pathway to a virtual oncofertility hub; 2) telehealth oncofertility counseling through the hub; and 3) telehealth oncofertility financial navigation through the hub. We propose a pilot cluster randomized trial of 6 pediatric and adult oncology clinics at UCSD, RCHSD, and City of Hope to test the hypotheses that the intervention condition will be associated with increased proportions of patients who engage in oncofertility care (Aim 1) and improved patient-reported outcomes (Aim 2), compared to usual care. Aligned with NCI’s recent focus on pediatric and AYA cancer survivors and telehealth in cancer care, the proposal will yield rigorous preliminary data to inform a future R01 proposal on novel, scalable telehealth interventions to preserve the reproductive futures of cancer survivors, expand remote delivery of quality oncology care, and bridge silos to provide equitable multi-disciplinary oncofertility care.

Lay Abstract:

After cancer treatment, female pediatric, adolescent and young adult (AYA) cancer survivors experience more infertility and ovarian failure, which are devastating but preventable outcomes. Young cancer survivors want to know about their reproductive risks and engage in services that reduce risk. Recommended in major clinical guidelines for more than a decade, oncofertility care to discuss individualized reproductive risks and support decision-making about whether to undergo medically effective fertility preservation services remains limited and variable across pediatric and adult cancer care settings. In response to this gap in care, our trans-disciplinary team conducted extensive preliminary work to develop and pilot-test a novel multi-component intervention for oncofertility care that leverages telehealth tools for future scaling up. Intervention components are: 1) electronic health record-based oncofertility needs screen and referral pathway to a virtual oncofertility hub; 2) telehealth oncofertility counseling through the hub; and 3) telehealth oncofertility financial navigation through the hub. The objective of this study is to conduct a pilot trial that will randomize 3 pediatric and 3 adult oncology clinics at UCSD, RCHSD, and City of Hope to intervention or control conditions in order to assess if the intervention increases proportions of newly diagnosed patients who engage in oncofertility
care (Aim 1) and improves patient-reported outcomes (Aim 2). This study will yield rigorous pilot data on innovative, scalable telehealth interventions to preserve the reproductive futures of young cancer patients, expand remote delivery of quality oncology care, and bridge silos to provide equitable multi-disciplinary care of oncology patients.