

participants (2023: -20; 2024: -5; 2025: 0) versus non-participants (2023: -53; 2024: -49; 2025: -45). Across three years, respondents have indicated that “analyze data” is the number one greatest unmet research need, though needs and pain points vary by site over time. DISCUSSION/SIGNIFICANCE OF IMPACT: NPS findings suggest that greater engagement with ITM resources is associated with higher satisfaction and likelihood of referral. Most participants report positive experiences, demonstrating program value. Challenges remain in reaching unfamiliar researchers, highlighting opportunities to expand awareness and address unmet research needs.

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Content and bibliometric publication analysis to assess academic impact of CTSA Programming

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OBJECTIVES/GOALS: Relevant publications serve as a comprehensive longitudinal data source that reflects the priorities, partnerships, and training a CTSA program supports. A content analysis of the publications was conducted to identify the specific areas where our CTSA program has the most impact and provides the most support. METHODS/STUDY POPULATION: A content and bibliometric analysis was conducted for the Frontiers CTSA. Articles were identified by searching for all current and previous grant numbers in Google Scholar and PubMed and identifying relevant publications through ERACommons. We utilized Covidence to facilitate the screening and coding process. Articles were included if they were published after the grant initiation (2011), attributed support to the grant, and were peer reviewed. Articles were then double coded for variables such as member institutions, CTSA collaboration, awardee type, disease area, and study type, etc. Bibliometric outcomes were retrieved from NIH iCite and Web of Science. Descriptives, t-test, and linear models were used to assess associations. RESULTS/ANTICIPATED RESULTS: A total of 941 publications from 2011 to April 2024 were included for analysis. When examining collaboration between Frontiers and other CTSA hubs, 40% of publications had authorship representing multiple hubs, with 95% of the CTSA hubs represented. Most publications were directly supported by Frontiers: 44% from TL1 & KL2 scholars and 56% from past pilot awardees. The primary disease area supported was neurology, with 60% of publications describing T2: clinical research studies. The main output of interest, the NIH's relative citation ratio (RCR), has an average of 1.64 over 13 years. Publications with collaborations between Frontiers and another CTSA hub were associated with higher RCRs. DISCUSSION/SIGNIFICANCE OF IMPACT: This analysis provides us with a snapshot of frontiers CTSA's activities and impact while also highlighting areas where our support can be strengthened. Next, we plan to incorporate altmetric data to create a more holistic view of our CTSA's impact and collaborations.

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Bridging the gap: Aligning community and state public health goals with CTSA hub activities through indicator mapping

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OBJECTIVES/GOALS: To assess the feasibility and utility of using the community-informed Healthy North Carolina 2030 (HNC 2030) goals as a framework to evaluate CTSA-supported research; identify where NC CTSAs align with state health priorities; and enhance evaluation, planning, and communication of impact. METHODS/STUDY POPULATION: Three North Carolina CTSA hubs (UNC-Chapel Hill, Duke University, and Wake Forest University) collaboratively examined how the HNC 2030 indicators could be applied as an impact evaluation framework. Each hub independently identified projects with demonstrated or potential alignment to one or more HNC 2030 goals using institutional databases, project records, and stakeholder input. The feasibility and utility of this approach were assessed through structured reflections on practicality, appropriateness, and usefulness. Representative cases illustrate how alignment decisions were applied across clinical and public health domains. RESULTS/ANTICIPATED RESULTS: Findings indicate that mapping CTSA activities to state health priorities is feasible, minimally burdensome, and adaptable across institutional contexts. The process identified both areas of strong engagement (e.g., maternal health, adolescent reproductive care) and opportunities for further investment (e.g., social determinants of health). Challenges included defining alignment boundaries, addressing cross-cutting indicators, and distinguishing between demonstrated and potential impact. This approach could strengthen communication of translational impact and inform strategic planning, helping CTSA hubs demonstrate the relevance of their work to statewide health goals. DISCUSSION/SIGNIFICANCE OF IMPACT: Using community-driven state public health goals as an organizing framework enhances the relevance, transparency, and accountability of translational research. This exploratory mapping approach offers a scalable model for other CTSAs seeking to evaluate and communicate population-level impact.

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An AI-driven, Translational Science Benefits Model (TSBM) approach to assess the real-world impacts of NCATS' CTSA Collaborative and Innovative Acceleration Award Initiative

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OBJECTIVES/GOALS: The goal of the NCATS CTSA Collaborative and Innovative Acceleration (CCIA) Award Initiative is to advance