Big Splashes & Ripple Effects: The Short- and Long-term Impact of Georgia CTSA-supported Pediatric Publications

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INTRODUCTION

Georgia CTSA Pediatrics Publications

EVALUATING IMPACT & TRANSLATION

How are Pediatrics publications making waves?

• Bibliometrics, the study of supported publications, is used to evaluate the scope and impact of research programs.
• Past research had limited ability to connect support provided to research outputs and to contextualize types of impact over time.
• We evaluated Georgia CTSA support provided to investigators conducting pediatric research, a field that spans diverse research fields and is of strong interest to the broader community, and the publications that resulted from this support.

PROCESS

• Records of Georgia CTSA support (e.g., clinical/expert support, pilot/training grants) and acknowledgement of grant support identified a portfolio of pediatric articles published over the past 11 years.
• To assess short-term impact or ‘splash’ made by articles we collected Altmetric Attention Scores from Dimensions, incl.
  • Media/community attention
  • Early peer evaluation
  • Early academic readership
• To assess long-term impact or ‘ripple effects’ of articles we collected citation data from iCite and Dimensions, incl.
  • Accumulated citations and impact factor
  • Use in subsequent products and public documents
  • Translation to clinical use

250+ Supported Publications from 2007 – 2020

9,500+ academic citations
700 of which are clinical studies
3x the expected rate of citation impact

EVALUATION RESULTS

15,000+ citations in media, community, & public documents, used in:

343 News Stories
8 Patents
25 Policy Documents

3,441 Tweets
72 Blog Posts

Big Splashes with Immediate Impact

Acetaminophen versus Ibuprofen in Young Children with Mild Persistent Asthma

Published in The New England Journal of Medicine, in 2010. Proven the relative benefit and effectiveness between acetaminophen and ibuprofen for the treatment of pain.

Choi et al in an International policy document

 Spread the Word

3,441 Tweets
72 Blog Posts

1,200,000 readers across the globe

Ripple Effects with Broad Influence

Mononuclear outcomes of extremely preterm infants from the NICHD Neonatal Research Network

Published in Pediatrics in 2011. A study that generated a body of evidence, guidelines, and practice standards for clinical care that benefited neonatal outcomes.

1000+ academic citations
51x the expected citation rate for comparable papers

Spreading the Word

Published in Pediatrics

Outcomes & Implications

• Altmetrics results paint an early picture of the considerable interest shown to supported pediatric publications and provide a preliminary indicator of the eventual impact of ‘big splash’ papers.
• Results of cumulative Citations in academic and public forums show the above-average downstream influence, or ‘ripple effects’ of supported articles over time.
• Both show how papers have resulted in significant advances along the translational spectrum.
• This research informs our understanding of the aggregate impact of Georgia-CTSA supported pediatric research and identifies specific research areas with the most notable short- and long-term impact.

OUTCOMES & IMPLICATIONS

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