

BIBLIOGRAPHY

Foundation Paper

1. Co-Creation With TickiT: Designing and Evaluating a Clinical eHealth Platform for Youth.

Whitehouse SR, Lam PY, Balka E, McLellan S, Deevska M, Penn D, Issenman R, Paone M. JMIR Res Protoc. 2013 Oct 18;2(2):e42. doi:10.2196/resprot.2865.362 Clinical/Translational – Inflammatory Bowel Disease North American Society of Pediatric Gastroenterology, Hepatology and Nutrition, Atlanta, 2014 **Description:** A review of the initial design and co-creation methodology used to create the platform, and the first pilot study in a two children's hospitals. https://www.ncbi.nlm.nih.gov/pubmed/24140595

Platform design and validation

1. Adolescent Reactions to Icon-Driven Response Modes in a Tablet-Based Health Screening Tool.

E Blander, EM Saewyc.

CIN: Computers, Informatics, Nursing & Vol. 33, No. 5, 181–188. Jan 2015 **Description:** Validation study of the icon format of the TickiT platform across age (12-18 years), gender and ethnicity. http://dx.doi.org/10.1097/CIN.000000000000145

2. An In-depth Case Study of Adapting Patient Experience Data Collection for Lower Literacy Patient Populations Using Tablets in Clinic.

PI: C Lyles.

L Tieu, A Hobbs, E Curtis, U Sarkar.

CTSI-Strategic Opportunities Support (SOS) Program, San Francisco July 1, 2015 – June 30, 2016.

Panel discussion: Leveraging Technology to Support Vulnerable and Disadvantaged People with Chronic Illness: A Review, Examples, and Recommendations Society for Behavioral Medicine conference in San Diego, March 31st, 2017. Funded by the CCI Centre for Care Innovation, UCSF.



3. Adolescents' Perspectives on Personalized E-Feedback in the Context of Health Risk Behavior Screening for Primary Care: Qualitative Study

GG Zieve; LP Richardson; K Katzman; H Spielvogle; S Whitehouse; CA McCarty. Journal Adolescent Health and Medicine: J Med Internet Res 2017; 19(7): e261) doi:10.2196/jmir.7474

Description: Qualitative study with human factor designers to evaluate and make recommendations on usability, accessibility and features of Tickit Platform. https://www.ncbi.nlm.nih.gov/pubmed/28729236

Quality Improvement: Patient and provider engagement

Using mixed methods, the following 3 poster presentations evaluate the patient engagement, usability and acceptance of Tickit by patients and staff, for intake and PREM in downtown youth mental health clinic (see www.tickithealth.com/research).

1.Implementation evaluation of a tablet-based waiting room survey of patient reported outcomes in an integrated youth health clinic.

CG Richardson, S Barbic, Steve Mathias.

Poster presentation Canadian Mental Health Conference, Calgary Nov 2015. https://www.researchgate.net/publication/296095454_Implementation_evaluation_of_a_tablet-based_waiting_room_survey_of_patient_reported_outcomes_in_an_integrated_youth_heal_th_clinic

2. Implementation evaluation of a tablet-based waiting room survey of patient reported outcomes in an integrated youth health clinic.

Richardson CG, Barbic S, Mathias S.

The International Society for Quality of Life Research 22nd Annual Conference in Vancouver, BC, Canada. October 21 – 24, 2017

3. Incorporating the GAIN-SS into a tablet-based self-reported assessment for use in an integrated youth health centre.

GC Chartier, J Pumarino, S Mathias, CG Richardson.

22nd International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP). September 18-22, 2016 Calgary, Alberta, Canada.



4. Transition, It's More Than Just a Phase: A New Model of Care in Australia.

M Bridgett, J Ho, L Brodie, S Towns, Kate Steinbeck.

Description: Presents the utility of the TickiT data for overall patient management, monitoring care.

http://www.jahonline.org/article/S1054-139X(14)00653-3/abstract

5. Improve survey response rates, data quality and workflow with an electronic HEEADSSS assessment using Tickit®

Jane Ho^a, Cameron K. Fong^{a, b}, Susan Towns^{a, b}, Katharine Steinbeck^{a, b}.

^a Department of Adolescent Medicine, Sydney Children's Hospital Network, Australia

^b Discipline of Child and Adolescent Health, The University of Sydney Presented: ANZMH Mental Health Conference Gold Coast, Australia Aug 12th 2018 (Available at https://tickithealth.com/trapezeheeadsss)

Clinical Trials

1. Prompting Discussions of Youth Violence Using Electronic Pre Visit Questionnaires in Primary Care: A Cluster Randomized Trial.

A Riese, M J. Mello, J Baird, DW. Steele, ML. Ranney.

Academic Pediatrics 2015. Vol; 15:345–352

Description: Using a modified HEADDSS screen to focus on violence exposure and prevention in a primary care clinic.

http://journals.sagepub.com/doi/pdf/10.1177/0009922816652228

The following two abstracts investigated the TickiT platform for acceptability, usability and results from a HEADSS assessment in an IBD clinic. With 54 patients, there was 100% uptake and completion of up to 90 questions, and excellent feedback on usage. The results demonstrated risk and protective factors. The latter were very helpful in gaining rapport with patients and encouraging adherence. Significant risk factors were identified.

2. TICKIT® - An iPad Enabled HEADSS Adolescent Risk and Resilience Assessment – Use in a Pediatric IBD Clinic.

R Issenman, S Odeh, PY Lam, M Deevska, S Whitehouse.



2. TICKIT® - iPad enabled questionnaire helping clinicians understand the interplay between lifestyle and inflammatory bowel disease.

R Issenman, S Odeh, S Rosinski, S Whitehouse.

361 Clinical/Translational – Inflammatory Bowel Disease North American Society of Pediatric Gastroenterology, Hepatology and Nutrition, Atlanta, 2014 http://journals.lww.com/jpgn/Documents/NASPGHAN%202014%20abstracts.pdf (Pg. 143)

3.Can the Mindful Awareness and Resilience Skills for Adolescents (MARS-A) Program Be Provided Online? Voices from the Youth.

Chadi N, Weisbaum E, Malboeuf-Hurtubise C, Kohut SA, Viner C, Kaufman M, Locke J. Vo DX Children. 2018; 5(115)

Indigenous Health

Maari Ma Health commissioned this evaluation in partnership with the NSW Ministry of Health. Maari Ma Health has provided support and approval for the results of this evaluation to be made public at the Australian Public Health Conference 2018 (www.tickithealth.com/research).

1. Evaluation of an eHealth psychosocial assessment tool among Aboriginal young people.

Jessica Hehir¹, Tarissa Staker², Garth Alperstein², Bob Davis², Kendall Jackman², Aung Si Thu², Nan Htun², Sally Gibson³.

Past Grants

1. Delivering Patient-Centered Adolescent Preventive Care with Training and Technology.

Pl's: C. McCarty & L. Richardson.

Patient-Centered Outcomes Research Institute (PCORI) SC14-1402-10592, \$1.5 Million. **Description:** Together with patients, caregivers, and PCPs, we will develop a PCP training module to help providers learn to reinforce healthy behavior choices and to address risk behaviors in a meaningful way with their adolescent patients. We will test

¹Public Health Training Program, NSW Ministry of Health

²Maari Ma Health Aboriginal Corporation, Broken Hill, NSW

³Health and Social Policy Branch, NSW Ministry of Health



this training in combination with our Check Yourself screening app in improving primary care for teens and health outcomes over 1 year using a stepped-wedge design. http://www.pcori.org/research-results/2014/delivering-patient-centered-adolescent-pre-ventive-care-training-and-technology

2. Promoting Adolescent Health through Personalized Feedback (R40MC26817).

L. Richardson & C. McCarty 4/1/14-3/31/17.

Description: Health risk screenings for adolescents are infrequently performed and results are rarely followed by targeted risk reduction interventions. To address this gap in preventive care, this study proposes to test personalized feedback as a strategy to impact adolescent risk and improve clinical care.

https://mchb.hrsa.gov/research/project_info.asp?ID=230

3. Web-Supported Adolescent Motivational Enhancement to Reduce Alcohol Use.

PI: C. McCarty 3/10/15-2/29/16.

National Institute on Alcohol Abuse and Alcoholism R21AA023050, \$182,949.00. **Description:** This study tests the effectiveness of an eHealth app (Check Yourself) designed to promote systematic screening and indicated intervention strategies to reduce adolescent alcohol use among moderate to high risk drinkers recruited from school-based health clinics. https://clinicaltrials.gov/ct2/show/NCT02584621

4. Mind and Life Foundation and University of Toronto.

PI: Dr N Chadi.

SickKids Toronto Jan – June 2017.

A Randomized-Control Trial of an in-Person vs e-Health Mindfulness-Based Intervention for Adolescents with Chronic Illness.

Description: Using Tickit to collect PRMs to monitor progress during intervention.

5. Introducing an mHealth Platform to Improve Patient Engagement.

Kaufman M., Whitehouse S.

Ontario Centers of Excellence, \$350,0000 CAD. March 2015-Feb 2017.

Description: Implementation of Tickit in Emergency Dept, Rehabilitation, Plastic Surgery, ICU, Cardiology, Staff Daily Continuous Improvement

https://www.sickkids.ca/pdfs/Paediatrics/66896-Annual%20Report%202014-15.pdf

Award: Winner of innovation prize 2016



Current Studies and Academic Projects

Patient Education

Mount Sinai Hospital's Marvelle Koffler breast centre proposal to Under Armour to develop lifestyle intervention program for women concerned about breast cancer risk. 2017 - 2018.

Description: 6 module interactive website for women to learn about breast health, breast cancer prevention, with personalized pathways and links to resources based upon their situation and location. The goal of this project will be the development and roll out of a lifestyle intervention targeting women (tailored to women living in Canada) concerned about their breast cancer risk; the program will target physical activity, diet and weight management and will be based on the best available evidence regarding the potential role of these lifestyle attributes in the development of breast cancer. The goal of the intervention will be to help women understand their breast cancer risk, and to make lifestyle changes that may be associated with lower breast cancer risk.

Indigenous Health Follow up study

Where are they now? Longitudinal study of remote Indigenous children: the Bigiswun Kid Project.*

PI's: Professor Elizabeth Elliott, Doctor Tracey Tsang.

Caroline Bower, Emily Carter, Sandra Whitehouse, Marmingee Hand, Natasha Nassar Susan Thomas Sue Cherel.

Australian Government National Health and Medical Research Council.

Description: The overarching aim is to determine outcomes in the teenage years in a well-characterized cohort of Aboriginal children living in very remote communities.

*'Bigiswun Kid' means 'Big One Kid or Adolescent' in the Kimberley Kriol language.



National Canadian Mental Health CIHR grant: Online mental health referral

PRISM-ACCESS Open Minds: Pathway for Rapid, Internet-based, Self-referral to Mental health services for youth.

PI: Dr. Shalini Lal.

Canadian Institutes of Health Research (CIHR) through the eHealth Innovations Partnership Program (eHIPP).

The project also received additional funding from the Graham Boeckh Foundation. Key partners include: ACCESS Open Minds, Strata Health Solutions, Youth and Family representatives, Tickit Health, Kids Help Phone, Wisdom2Action, and mindyourmind.

Description: PRISM-AOM aims to develop, implement, and evaluate the use of an online self-referral pathway to facilitate rapid and direct access to mental health services for youth. The pathway consists of an online self-referral tool, a referral management system, and a secure communications platform.

Through this pathway, youth with mental health concerns will be able to connect with, and refer themselves directly to, a local team specializing in youth mental health care without a referral from their doctor, at a time that is convenient for them, from any place there is an Internet connection, using their phone, computer or tablet. Parents and counsellors will also be able to use the PRISM-AOM referral tool to refer a young person to mental health services.

PRISM-AOM will be customized, launched and tested in 5 Canadian healthcare settings participating in ACCESS Open Minds: Dorval-Lachine-LaSalle (Quebec), Parc-Extension (Quebec), Chatham-Kent (Ontario), Mistissini (Quebec)Eskasoni First Nation (Nova Scotia) http://www.ymhtech.com/prism/



Hilton Grant in partnership with Seattle Children's Hospital

Clinical Trial: Improving Teen Care with HIT.

PI: Cari McCarty.

Agency for Healthcare Research and Quality R01HS23383, 9/30/14-9/29/19 **Project Objective:** Substance Use Prevention; to conduct additional research regarding the usability and effectiveness of a web-based screening application to implement Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Description: This study aims to further develop and test a web-based interactive Health Assessment (Check Yourself) for use in primary care.

<u>Year 1</u> - Usability testing with adolescents and primary care providers to optimize design/ content.

<u>Years 2-5</u> - Randomized, controlled trial to examine the efficacy of Check on increasing the provision of prevention and risk reduction counseling during the healthcare visit, and on reducing a variety of adolescent health risk behaviors at 1 and 6 month follow ups, relative to usual care.

https://www.hiltonfoundation.org/news/223-conrad-n-hilton-foundation-awards-26-million-in-grants-in-the-third-quarter-of-2017