



Insights from the Centre of Social Data Analytics – October 2019

CSDA's research and analytics tools are used by local and international agencies to support smart policy and sound decision-making in areas including health and social welfare. This issue: a new Deputy Director for CSDA; CSDA homelessness work almost ready for implementation; our paper on ethnic disparities in childhood prevalence of maltreatment in the *American Journal of Public Health*; Rhema delivers the John Western Public Lecture 2019 in Brisbane.

CSDA Team News

News and Appointments:

In June Larissa Lorimer began a secondment to the <u>Institute for Social Science Research</u> (ISSR) at the University of Queensland. Larissa will spend a year at ISSR, where she will assist Rhema Vaithianathan to establish a CSDA node (CSDA at ISSR) and build new research projects.

We farewelled Research Fellow **Katerina Taskova** in July – to take up a new role as lecturer in data science at the University of Auckland. Also in July, **Professor Tim Maloney** stepped down as co-Director of CSDA after taking on a new role as Head of the School of Social Sciences and Public Policy.

Our CSDA Research Fellows **Chamari Kithulgoda** and **Diana Benavides-Prado** celebrated great PhD news in August: Chamari graduated with her PhD and Diana passed her PhD oral. Congratulations Chamari and Diana!

In October we welcomed back **Nina Anchugina** as Deputy Director and Senior Research Fellow-Data Scientist. Nina is looking forward to leading predictive risk modelling research projects as well as contributing to strategy and leadership at the Centre.

Meet Larissa Lorimer, Executive Coordinator (Research) at ISSR

Larissa has played an integral role in developing CSDA's Auckland hub since the start in 2016. Now, she is working at the Institute for Social Science Research (ISSR) at the University of Queensland as an executive coordinator (research), applying those same skills to build CSDA's Australian node.

She is currently identifying opportunities to use linked administrative data in the health and human services sector in Australia. Getting these projects going means first building connections between government agencies and researchers, a challenge Larissa enjoys.



Read the full profile on the CSDA website

Research Insights

Allegheny Homeless PRM close to implementation

CSDA has assisted the Allegheny County Department of Human Services to leverage its integrated data, in an effort to replace its existing actuarial tool for homelessness services with a predictive risk model (PRM).

Implementation of the PRM tool will provide better targeting of restricted homelessness services to those who are most likely to be subject to future harms. It will also reduce the amount of time that frontline staff spend assessing clients. The PRM tool is expected to be deployed by early 2020.

Rhema Vaithianathan and CSDA research fellow Chamari Kithulgoda attended the Bloomberg Data for Good Exchange (D4GX) in New York in September and presented a poster about the research.

Allegheny County makes new use of PRM for high need families

From January 2020 the Allegheny County Department of Human Services will implement an engagement and case management service called *Hello Baby*, a countywide strategy to support all parents of newborns. The service will offer specific support to high-need families.

To focus support and services on families who could most benefit from them, *Hello Baby* will primarily rely upon a predictive risk model (PRM) developed by researchers from CSDA, led by Rhema Vaithianathan.

That PRM will identify families who are at risk of adverse outcomes, such as placement, in order to:

- Reach more families who can benefit from support
- Better match at risk families to the right services
- Ensure that the most vulnerable families have access to the most intensive support

Allegheny County is in the process of selecting a partner organisation to design and implement the case management approach. The County expects to launch *Hello Baby* in some areas in January 2020.

Collaboration with Mathematica

We are excited to be exploring a partnership with <u>Mathematica</u>, to scale our child welfare predictive risk modelling work in the United States. Mathematica is a well-established policy research and data analytics organisation working across the US with clients including federal, state and local governments.

Recent Publications

Rouland, R., Vaithianathan, R., Wilson, D., & Putnam-Hornstein, E. (2019). <u>Ethnic Disparities in Childhood Prevalence of Maltreatment: Evidence from a New Zealand Birth Cohort</u>. *American Journal of Public Health,* 109(9), 1255-1257.

This study is New Zealand's first cumulative count of child protection encounters by ethnicity, following the child protection interactions of almost 60,000 children from birth until the age of 18.

The authors identify and explore significant ethnic disparities in child maltreatment and child protection practices. Māori children are far more likely than European children to experience notification (being reported as an alleged victim of abuse or neglect), substantiation (determination that maltreatment has occurred), and placement (out of home placement via parental agreement or involuntary court order).

Spreading the word on data analytics

Our team is committed to increasing awareness and understanding of data analytics. Here are some recent links featuring our experts and their work:

'Systemic inequality' in Māori involvement in child protection, Radio NZ, July 2019

AUT Professor Denise Wilson on Paakiwaha, Waatea News, July 2019

Māori mothers fear and mistrust 'systemically racist' authorities, Stuff, July 2019

<u>Can Predictive Analytics Root Out the Social Workers Most Likely to Break up Black Families? The Chronicle of Social Change, June 2019</u>

Events and outreach

To help advance the understanding and effectiveness of social data analytics, our researchers continue to share and exchange knowledge with local and international colleagues and agencies:

June

Senior Research Fellow Matt Walsh was a keynote speaker at the **Celebrating 20 years of Family Start Conference 2019** in Auckland, where he presented CSDA's research on "What protects high risk children from Adverse Childhood Experiences". This was a great opportunity to share our research using data from the Growing Up in New Zealand longitudinal study, with the Family Start workforce.



Rhema Vaithianathan and Emily Putnam-Hornstein (University of Southern California) led the plenary session "Prediction as Prevention" at the National Children's Alliance Leadership Conference in Washington DC, also running a complementary workshop.

Rhema and Emily Putnam-Hornstein were also invited to present their research on the use of predictive risk modelling for child protection at an AEI event in Washington, DC. <u>Big data, little kids: How technology is changing child welfare</u> was moderated by journalist and AEI resident fellow Naomi Schaefer Riley. <u>Watch the livestream recording</u>.

Rhema and Emily Putnam-Hornstein were on a plenary panel "<u>Predictive Analytics in Child Protective Services</u>" at **One Child, Many Hands: A Multidisciplinary Conference on Child Welfare** hosted by the **Field Center for Children's Policy, Practice and Research**, Pennsylvania.

Rhema presented child maltreatment predictive risk modelling research in a <u>panel discussion</u> hosted by the **Global Partnership to End Violence Against Children** in New York City.

Later in the month Research Fellow Diana Benavides-Prado was in New York attending the <u>Al100 workshop</u> on <u>Prediction in Practice</u> at the **Cornell Tech**, New York City.

July

Diana Benavides-Prado and Rhema Vaithianathan presented the results of the **Alerta Niñez** research at a workshop for government agencies in Santiago, Chile.

<u>August</u>

Matt Walsh presented a seminar <u>Exploring Adverse Childhood Experiences using the Growing Up in New Zealand Study</u> as part of the Department of Economics seminar series at **Otago University**.

Rhema Vaithianathan presented CSDA's <u>impact evaluation of New Zealand's Teen Parent Units programme</u> at the **AGM of the Association of Teen Parent Educators NZ** in Wellington.

September

Rhema Vaithianathan presented the **2019 John Western Public Lecture**: *Data analytics in the public sector* – *the tortoise or the hare?* in Brisbane. She used insights from the Allegheny Family Screening Tool project to illustrate how predictive risk modelling might be effectively used in many public contexts. Rhema's presentation and a video of the talk are available here.

Rhema, Chamari Kithulgoda and colleagues from the Allegheny County Department of Human Services presented a poster on the Allegheny Homelessness Predictive Risk Model at the <u>Data for Good Exchange</u> at **Bloomberg, New York**.

Rhema and Chamari also attended an invitation only **Homelessness Convening** hosted by **Bloomberg Philanthropy**, **New York**, to discuss and review the Allegheny Homelessness Predictive Risk Model.

Rhema had a productive visit with the <u>Actionable Intelligence for Social Policy</u> (AISP) network at the University of Pennsylvania to continue discussions on the use of PRM for homelessness work.

Rhema also visited several US states and counties interested in using predictive risk modelling to support child welfare decision making.

Rhema was in Denmark for meetings of the Predictive Analytics Advisory Board for VIA University College and TrygFondens Centre for Child Research.

Rhema presented a seminar at the <u>Rockwool Foundation</u>, Copenhagen (Denmark) on 25 September: Prediction as Prevention: How Risk Modelling Can Help Support Child Welfare Practice.

Coming Up

<u>October</u>

CSDA Deputy Director Nina Anchugina will participate in a panel discussion focussing on the use of predictive risk modelling in child protective systems at the **Xion'An International Health Forum**, Heibei Province, China on 17-18 October.

<u>November</u>

Rhema will present at the Children's Health Queensland - Health Services Research Workshop in Brisbane on 22 November.

<u>December</u>

Matt Walsh will present research on "What protects high risk children from Adverse Childhood Experiences" at the **Oranga Tamariki Evidence Centre**, Wellington, on 6 December.

We have sent you CSDA eNews because you have previously shown interest in our work. If you would prefer not to receive this newsletter, please let us know.