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POSTER ABSTRACT PRESENTATIONS

#1 Head circumference values among Inuit children in Nunavut, Canada: larger than WHO references

Kristina Joyal, Sorcha Collins, Amber Miners, Nick Barrowman, Ewa Sucha, Jean Allen, Sharon Edmunds, Amy Caughey, Michelle Doucette, Selina Khatun, Gwen Healey Akearok, Laura Arbour, Sunita Venkateswaran*

Purpose: Inuit children from Nunavut have been observed to have high rates of macrocephaly, sometimes leading to burdensome travel for medical evaluation, but pathology is often not identified upon assessment. Given reports that World Health Organization (WHO) growth charts may not reflect all populations, we sought to compare head circumference measurements in a cohort of Inuit children with the WHO charts.
Methods: We extracted head circumference data from a previous retrospective cohort study where, with Inuit partnership, we reviewed medical records of Inuit children (from birth to age 5 yr) born from Jan. 1, 2010, to Dec. 31, 2013, and residing in Nunavut. To create a cohort of Inuit children similar to the cohorts used in the development of the WHO growth charts, we excluded children with preterm birth, documented neurologic or genetic disease, and most congenital anomalies. We compared head circumference values with the 2007 WHO charts using centiles estimated with a generalized additive model
Results: We analyzed records of 1960 Inuit children (8866 data points), of whom 993 (50.8%) were female. Most data were from ages 0 to 36 months. At all age points, we found that the study cohort had statistically significantly larger head circumferences than WHO medians, with most z scores for head circumference measurements among Inuit children falling 0.5–1 standard deviations above the WHO reference ($p < 0.001$). At age 12 months, median head circumferences were 1.3 cm and 1.5 cm larger for male and female Inuit children, respectively. Using WHO growth curves, macrocephaly was significantly overdiagnosed and microcephaly was underdiagnosed ($p < 0.001$).
Conclusions: Our results support the observation that Inuit children from Nunavut have larger head circumferences than other populations, and use of the WHO charts may thus lead to overdiagnosis of macrocephaly and underdiagnosis of microcephaly. Population-specific growth curves for Inuit children should be considered to provide timely and appropriate diagnoses of microcephaly and avoid over-investigation of macrocephaly.

#2 Co-developing the wâhkohtowin research method for respectfully and meaningfully implementing an intervention cohort with the Nêhiyawak (Cree) communities of Maskwacîs

Juliette Bedard, Patrick Lightning Jr, Denise Young, Luwana Listener, Marisa Saddleback, Rhonda Bell, Richard T. Oster*

Purpose: Building on a relational partnership that has evolved over the last decade, the Wâhkohtowin Research Group seeks to serve the Nêhiyawak (Cree) communities of Maskwacîs by promoting healthy family systems through community-led research. Through the Indigenous Healthy Life Trajectories Initiative, our group is implementing an intervention cohort study to evaluate the effectiveness of community-developed programs in promoting maternal and family wellbeing and children's health and development through revitalizing strong connections to culture, language, and ceremony.
Methods: We are working collaboratively to co-develop an overarching research method that unifies the different pieces of our cohort and lays the groundwork for respectful and meaningful research. In particular, we sought to develop a method that is informed by our previous qualitative and quantitative research experience with the community, years of community engagement, Maskwacîs ways of knowing and culture, Elders teachings, and our

group's guiding principles (including trusting relationships, humility, ceremony, balance, and research that is by community and for community).
Results: The "wâhkohtowin research method" is based on the Nêhiyaw natural law of wâhkohtowin: we are all related, no one individual in is worth more than another, interconnectedness of all things, and an obligation to have good relationships. Key components of our cohort method include: 1) recruitment that is free of inclusion criteria and rather open to all community members; 2) developing trusting relationships with participants as a foundation for safe and respectful data generation; 3) capturing positive and strengths-based outcomes through stories using longitudinal qualitative methods; 4) offering a menu of options for providing data in ways that are appropriate and meaningful for each participant; and 5) interpreting all data through a relational lens.
Conclusions: Challenging and overcoming longstanding western academic approaches to intervention cohorts, focusing more on community ways of knowing, relationality, and community leadership, is crucial to developing of an innovative research method that aims to "do right" by the community.

#3 Promoting Parent-Involved Storytelling to Enhance Cherokee Children's Mental Health: A Culturally Based Approach

Grace Walker, Ashleigh Coser, Fiona Grubin, Victoria M. O'Keefe*

Purpose: Culturally informed mental health interventions for Indigenous communities often adapt Western Evidence-Based Practices (EBPs), raising concerns about their fit for these populations. In collaboration with Cherokee community members and clinicians, we are developing a culturally grounded intervention rooted in Cherokee traditions and values, using storytelling as a central tool. This initiative is guided by the Cherokee principle ᏂᏕᏍᎢᏖ ᏕᏚᎩ ᏂᏰᎮᏍᏗ (ditsadasdelisgi itsehesdiin), meaning "always have the thought of working together," and aims to promote mental well-being in Cherokee children through the creation of a storybook tailored to their cultural needs.
Methods: Our project employs a Community-Based Participatory Research (CBPR) approach, alongside Indigenous Storywork methodology. We collaborated with Cherokee Nation Elders, cultural keepers, mental health providers, and community members to identify mental health concerns among Cherokee children and create culturally grounded psychoeducational tools. The intervention features a culturally relevant storybook designed for Cherokee children accessing Cherokee Nation Health Services. The storybook uses Dialogic Reading to engage primary caregivers in interactive conversations that promote emotional regulation and strengthen child-parent relationships, integrating cultural teachings to address common emotional and behavioral challenges.
Results: Although data collection is forthcoming, our collaborative process has led to the successful development of a culturally tailored storybook that addresses identified mental health needs in Cherokee children. The storybook content includes strategies for emotional regulation, grounded in Cherokee cultural teachings, with an interactive format that engages both children and their caregivers. This initiative strengthens child-parent relationships and reinforces the family's role in promoting mental health. Our anticipated outcomes include enhanced mental well-being, improved emotional regulation, and stronger family bonds within the Cherokee community, with long-term goals of scaling the intervention across similar settings.
Conclusions: Our storybook-based intervention demonstrates the power of storytelling as a culturally congruent public health tool for promoting mental well-being in Cherokee children. The engagement of primary caregivers through Dialogic Reading further strengthens the family's role in mental health promotion. This project underscores the importance of culturally grounded interventions in Indigenous communities and highlights the value of partnerships with tribal members in co-developing such tools. Future directions involve evaluating the storybook's impact on emotional health outcomes and exploring its scalability for broader Indigenous and clinical health settings.

#4 ~~Impact of in community Programming through Jordan's Principle~~ WITHDRAWN

Jenn Barton

Purpose: The following is a poster showing the impact of growing from non existent child development and pediatric programming in an indigenous community with low access to fulsome wrap around support.
Methods: Allied health contracts, hiring local, implementation of meaningful services to build trust and relationships, child focused and the power of showing up.
Results: Trust is built, attendance has grown from 1% to 85% in less than 12 months. Parents and Children are seeking out supports to thrive and be well.
Conclusions: Results will be discussed

#5 Improving Developmental Pediatric Care for Equity-Deserving Patients: Using a quality improvement approach to develop a care pathway between a Complex Developmental Conditions diagnostic clinic and Social Pediatrics initiative

Alexa Tymkiw, Denise Hanson, Denise Somuah-Asamoa, Ashifa Dhanji, Gurpreet K Salh*

Purpose: It is known that Indigenous patients in Canada face structural racism in healthcare. The Excluded report, from British Columbia's Representative for Child and Youth (2021), urges review of referral pathways for FASD diagnosis, addressing systemic bias and enhancing family support. The Complex Development and Behavioural Conditions (CDBC) Program diagnoses complex developmental concerns, including FASD, and receives referrals from the RICHER (Responsive, Intersectoral, Child and Community Health, Education, and Research) social pediatrics initiative, serving equity-deserving communities, including Indigenous families, in Vancouver's Downtown Eastside. In response to report recommendations, this project aims to ensure families feel understood and well-supported during developmental assessments.
Methods: Interviews with 8 RICHER and CDBC clinicians identified improvement themes. 5 Indigenous families with assessment experience completed online surveys addressing these themes. A Social Support Form was created based on feedback. We attached this form to 5 RICHER-to-CDBC referrals to initiate PDSA cycles, utilizing pre- and post-test feedback from families and clinicians to implement program improvements. Outcome measures include percentage of families feeling supported, and their needs understood. Process measures include percentage of families offered support by Indigenous Health Team, support with transportation, and number of patient complaints. Balancing measures include extra care provider time spent, and appointment booking delays.
Results: Initial findings of this initiative show that physician and clinician stakeholders have expansive ideas for improvement of the care experience of families referred to CDBC. Further, exploring family assessment experiences finds actionable areas for program improvement. A RICHER-CDBC Social Support Form was created in response to feedback from stakeholders and families, and will expand the referral package to include important information regarding family supports. We predict PDSA cycles for implementation of this referral addendum will result in families feeling more supported and will inform assessment recommendations.
Conclusions: The Excluded (2021) report identifies that structural racism influences the assessment and experience of British Columbian children and families referred to the CDBC program. This project highlights that community and tertiary care programs must work together to improve care for equity-deserving families, and that family voices must be forefront in the improvement of pediatric provincial healthcare programming. We predict that implementation of our Social Support Form will allow for improved support of families with attention to community, family, school, and cultural connections, and consideration of transportation and healthcare needs throughout the CDBC assessment process and informed recommendations resulting from assessment.

#6 A multi-methods analysis of the burden of head lice on children and communities in the remote Kimberley region of Western Australia

Tina Barrow, Stephanie L. Enkel, Hannah M.M. Thomas, Tracy McRae, Ingrid Amgarth-Duff, Julie Marsh, Rachel Burgess, Vicki O'Donnell, Lorraine Anderson, Asha C. Bowen*

Purpose: Head louse is an ectoparasitic skin infection commonly seen in school-aged children. In remote Australia, where rates of other skin infections and rheumatic heart disease are endemic, the rate of head lice infection are unknown. In this multi-methods study, we aimed to describe the burden of head lice for remote-residing Australian Aboriginal children. We sought to gain deeper understanding of this burden through exploring the perspectives and priorities of community members on head lice and ideas for solutions.

Methods: This sub-study was embedded within the See, Treat and Prevent (SToP) Skin Sores and Scabies Trial occurring between May 2019 to December 2022 in nine communities of the Kimberley, Western Australia. Qualitative and quantitative data collected by SToP Trial at ten visits were analyzed for tinea rates and community perspective. Quantitative analyses were conducted using a combination of R Studio, GraphPad Prism Version 10, and Microsoft Excel and qualitative data were thematically analysed using NVIVO.

Results: Of 915 children (>95% Aboriginal), 84·9% (777/915) had at least one skin check. Mean head lice prevalence was 48·4% with a moderately negative non-significant correlation across time (R=-0·62, p-value 0·0556). Lice was repeatedly detected in the same children at a rate of 66·8% (370/554). Amongst cases of headlice, concurrent infections with impetigo, scabies, tinea, and boils were common. 152 community members participated in yarning activities. Community voice reflected that louse physically and psychologically harm children. There was a focus on hand hygiene to prevent bacterial infections and improving the health of the environment to reduce rates.

Conclusions: Remote-living Western Australian Aboriginal children experience a very high burden of head lice. Louse infections impact their physical and psychological wellbeing, and they are often dealing with high rates of other skin infections such as impetigo, tinea, scabies, as well. This was reflected in the strong community voice and the importance of preventing secondary bacterial infections and improving the health of the environmental was emphasized by community members.

#7 A multi-methods analysis of the burden of tinea on children and communities in the remote Kimberley region of Western Australia

Tina Barrow, Stephanie L. Enkel, Hannah M.M. Thomas, Tracy McRae, Julie Marsh, Rachel Burgess, Vicki O'Donnell, Lorraine Anderson, Asha C. Bowen*

Purpose: Tinea is an itchy fungal skin infection commonly seen in children that affects physical and psychological wellbeing. Left untreated, tinea infections can become co-infected with bacteria such as Group A Streptococcus (Strep A). In remote Australia, rates of impetigo, scabies and Strep A-related sequalae such as acute rheumatic fever and rheumatic heart disease are known to be endemic. In the same context, the burden of tinea has not been described. We aimed to describe the impacts and burden of tinea on remote-residing Australian Aboriginal children, and to contextualize statistics with community perspective to gain a deeper understanding of the issue.

Methods: This multi-methods study was embedded within the See, Treat and Prevent (SToP) Skin Sores and Scabies Trial occurring between May 2019 to December 2022 in nine communities of the Kimberley, Western Australia. Local health workers were paired with experienced clinicians and/or trained study staff to examine all eligible and consented children at each school-based surveillance visit and document the prevalence of impetigo, scabies, tinea, and head lice per child and body site. Experienced researchers also conducted face-to-face semi-structured interviews or yarning sessions with community members who were recruited via convenience sampling methods, and results were analysed thematically using NVIVO.

Results: Eighty-five percent of children (777/915) had at least one skin check of whom >95% were Aboriginal, and The mean tinea prevalence was 10·8% (SD 5·4) with no correlation (R 0·039, p-value 0·915) with time. Of cases, 27·6% (59/214) were in the same children and most tinea infections involved one body area (69·7%, 216/310. Coinfection with other skin infections (i.e., headlice, impetigo, scabies) 152 community members participated in yarns. Community voice reflected tinea was common, and physically and psychologically impacted children. Improving environmental health, including addressing contact with animals, was a focus of the yarns.

*presenting author

Conclusions: Remote-residing West Australian Aboriginal children experience a high burden of tinea that affects their physical and psychological wellbeing. Children with tinea are also often coping with skin infections such as impetigo, head lice, or scabies as well. Community voice reflected this and taught us that improving the health of the environment, including animals, with extensive community consultation is among the necessary next steps in reducing the burden of tinea.

#8 'Beyond core business': a qualitative review of activities supporting environmental health within remote Western Australian schools

Stephanie Enkel, Hannah M.M. Thomas, Rebecca Famlonga, Ray Christophers, Chicky Clements, Christine Hoy, Juli Coffin, Jenny Bedford, Vicki O'Donnell, Asha C. Bowen*

Purpose: Remote Kimberley schools in Western Australia often serve as a 'hub' for the community and may frequently provide additional services including reliable and accessible nutrition (i.e., breakfast and lunch for students). Children in these regions are also contending with higher rates of skin infections that can be prevented with a number of small hygiene changes; however, this may be complicated if household housing and infrastructure is inadequate. As part of this study, we aimed to understand the opportunities in the school setting to identify skin health challenges and enact prevention activities.
Methods: In 2019 the See, Treat and Prevent skin sores and scabies (the SToP Trial) commenced in nine remote Kimberley communities with an aim to reduce the incidence of skin infections by 50% in children aged 5-9 years of age. As a component, we completed yarning activities to understand community perspectives on an array of issues including the provision of health and hygiene services in the school. -Interviews were transcribed verbatim and analysed thematically via NVIVO.
Results: The final dataset comprised of 35 yarns with 41 individuals. Strategies to support environmental health of students in schools included health education (including highlighting the link between the environment, behaviour and health); having access to handwashing infrastructure (and associated programs); having showers available at school, and teachers washing student clothes or uniforms, aligned with Healthy Living Practices 1 and 2. Limited time and resources, reduced access to appropriate health sustaining infrastructure and challenges between balancing 'learning' and 'health' were noted barriers to supporting student wellbeing within school.
Conclusions: Educators working in remote Kimberley Aboriginal communities devote substantial time and resources to practices that encompass environmental health provision to their students, particularly personal hygiene and clothes washing. This inevitably compromises their ability to focus on core education provision but is a result of the educators recognising the critical health needs of the students which facilitate better education. Strategies such as funding, resourcing and embedding full time school health nurses and Aboriginal health practitioners at schools within each community may better support this scope of work.

#9 Indigenous Adverse Childhood Experiences (IACES)/Indigenous Protective Childhood Experiences (IPCES)

Sheila Peters

Purpose: Most ACES evidence thus far don't include Indigenous children. Focusing on preventing and treating ACES in Indigenous ways of being will have significant healing for our "babies" and thus our Nations. Creating opportunities to gather expertise to develop potential additional components to the traditional ACES that are specific to Indigenous pediatric patients could help guide more specific preventions, interventions, and potentially mitigating PCES. Considering the strengths of Indigenous ways of being, can highlight specific protective factors. "The health of the self ripples outward and becomes the health of the people" - The Seven Circles, by Chelsey Luger & Thosh Collins.
Methods: A review of the literature will be presented, a program created specifically for IACES and IPCES for Bernard Constant Community School, James Smith First Nation will be shared. The hope is to create working groups within the following: province of Manitoba, Canada and internationally, to gather collective wisdoms and expertise in this space. Knowledge translation will be offered through lived experience, a case presentation, evidence based literature and storytelling.
Results: The hope of this presentation is the following objectives:

1. To offer opportunity to collaborate provincially, nationally, and internationally for knowledge translation of IACES and IPCES.
2. To review the literature specifically on ACES and PCES for Indigenous children.
3. To celebrate the strengths of Indigenous ways of being as protective factors despite IACES.
4. To explore the potential benefits and implications of developing IACES

Conclusions: Acknowledging the causes of IACES is colonialism and racism. It is central to acknowledge that IACES are preventable and treatable. Considering that they are healed with one consistent loving adult is powerful medicine. We have the power to heal within us. Love is medicine. Music is medicine. Culture is medicine. Creating is medicine. Food is medicine. We are the medicine. All levels of government within the justice, social service, educational in health care systems are important components to the healing. I look forward to sharing the little I know in a good way consistent with our Seven Sacred Teachings.

#10 Moorditj (Strong) Skin Means Moorditj Health: Community-led Research and Translation in Western Australia Strengthening Aboriginal Children's Skin Health

Asha Bowen, Bernadette Ricciardo, Jacinta Walton, Heather-Lynn Kessaris, Noel Nannup, Dale Tilbrook, Brad Farrant, Carol Michie, Richelle Douglas, Nadia Rind, Jodie Ingrey, Brenda Warner, Ingrid Amgarth-Duff, Hannah Thomas, Prasad Kumarasinghe*

Purpose: Skin health is essential for overall health and wellbeing. Bacterial skin infections (impetigo, skin sores) can lead to serious complications including sepsis, kidney disease and rheumatic heart disease (RHD). In Australia, >90% of those living with RHD are Aboriginal and Torres Strait Islander, yet little is known about the skin health of urban-living Australian Aboriginal* children – important knowledge for RHD prevention. The Koolungar (children) Moorditj (strong) Healthy Skin (KMHS) project is a co-designed research-service Australian study to describe skin health and disease in urban-living Western Australian (WA) Aboriginal children to inform service provision, skin health resources, and treatment recommendations.

Methods: The KMHS project was co-designed through extensive consultation and cultural guidance from Noongar (Traditional Custodians of the south-west of WA) Elder researchers. In partnership with urban Aboriginal Community Controlled Health Organisations (ACCHO), Derbarl Yerrigan Health Service (Derbarl) and South West Aboriginal Medical Service (SWAMS), monthly paediatric dermatology clinics commenced and week-long community skin screening events conducted with Aboriginal Health Practitioners (AHPs). Community Advisory Groups (CAGs) were established to provide local leadership, direction and cultural guidance. A pre-vocational Aboriginal doctor completed a dermatology observership and co-created culturally appropriate clinical factsheets on childhood skin conditions that were reviewed and edited by CAGs.

Results: Community skin screening weeks facilitated skin checks for nearly 250 children, with 30% receiving opportunistic same-day treatment. Specialist paediatric dermatology care was made accessible within ACCHOs through monthly paediatric dermatology clinics, coordinated by and involving AHPs. CAG review and modification of clinical factsheets optimised readability, usability, and acceptability for families. From project results, the CAGs led development of health promotion resources (insert link). Results of this project have led to a greater understanding of the skin health priorities for urban-living Aboriginal children, improved dermatology service provision, educational and health promotion resources, and treatment recommendations.

Conclusions: Prioritising the voices of Aboriginal people is integral to seeking solutions to achieve improved skin health outcomes. Aboriginal Elder and community leadership, and an Aboriginal workforce of clinicians and researchers were critical for the successes of the KMHS project. By employing Aboriginal research methodologies, an integrated approach and prioritising co-design, the KMHS team including Aboriginal Elders and community members continue to work together to address community-identified skin health priorities including sun safety, tertiary hospital AHP-led inpatient skin health programs, and evaluating community-created health promotion resources to inform further resources for community.

#11 Community Engagement to Inform Syphilis and Congenital Syphilis Prevention Among American Indian Populations in Northern Minnesota

Alice Lehman, Tyler Moose, Kayla Rigdon, Michaela Sanger, ZhaaZhaa Greensky, Nehemiah Olson, Mary Owen*

Purpose: Syphilis and congenital syphilis cases in Minnesota increased >500% over the past decade, with disproportionate increases among women and men who have sex with women. Rates of syphilis among American Indian (AI) persons in Minnesota is 16.5 times higher than non-Hispanic white persons. National data suggest that up to 50% of women with syphilis in the Midwest use drugs (injectable or smoking) and have sex while intoxicated or high. Prevention of congenital syphilis relies on timely detection and treatment in pregnant persons and reducing AI community rates of syphilis. This community engagement study sought to understand the facilitators and barriers to syphilis prevention among AI populations in northern Minnesota.

Methods: We held focus groups in partnership with community organizations in northern Minnesota. Topic guides covered perspectives on sexually transmitted infections(STIs), substance use and access to sexual health and prenatal services. Participants were recruited from community clinics and organizations with fliers and word of mouth with the assistance of community partner organizations. Participants were eligible to participate in the focus groups if aged 18 years or greater and self-identified as AI. Thematic analysis was applied to analyze the data using grounded theory and a framework for social-ecologic health.

Results: We held 3 focus groups in 2 counties in northern Minnesota with high incidence of syphilis (St. Louis County 26/100,000 – Beltrami 43/100,000) and in proximity to reservations (Red Lake, White Earth, Leech Lake, and Fond du Lac) and urban centers (Bemidji, Duluth) where AI persons live. A total of 9 persons participated, with 89% of participants females. Most participants knew the term syphilis, however, 30% knew syphilis could cause congenital syphilis. The data was coded into four primary themes: 1) culture of sexually transmitted infections; 2) access to preventive services; 3) gender roles and 4) community knowledge. Each theme was further divided into barriers, facilitators, and recommendations.

Conclusions: Two participants knew syphilis and congenital syphilis was increasing in their communities. Differences existed between women and men's perceptions of STIs, including on shame, stigma, and openness of conversations. Healthcare providers rarely discussed STIs. Participants only received screening when something was wrong. Persons who use drugs face environmental, structural and racism barriers to accessing sexual and prenatal healthcare. Generational tribal knowledge and lived experience informs strong peer support. Expanding access to syphilis screening will require increasing opportunities to persons who used drugs. Prevention efforts should be led by peers, informed by harm reduction and Indigenous values and in partnership with AI community organizations.

#12 ~~Transforming Preterm Oral Feeding with Innovative Algorithms: Insights from a Quality Improvement Initiative~~ WITHDRAWN

Rena Rosenthal, Jean Chow, Erin Sundseth Ross, Rudaina Banihani, Natalie Antonacci, Karli Gavendo, Elizabeth Asztalos

Purpose: The primary aim was to create a structured, evidence-based approach to oral feeding that is adaptable to both breast and bottle feeding, reduces variability, and ensures consistent practices across all caregivers. This structured approach not only promotes safer and more effective feeding but also supports caregivers, including parents, by providing clear, actionable guidance.

Methods: The COVID-19 pandemic highlighted a pressing need for knowledge transfer in feeding practices, as high staff turnover introduced variability in the NICU. In 2020, the multidisciplinary Sunnybrook Feeding Committee was established, comprising physicians, nurses, nurse practitioners, occupational therapists, and dietitians. Initial staff training used Supporting Oral Feeding in Fragile Infants (SOFFI®) modules to create a consistent understanding of feeding principles. With guidance from the SOFFI® creator (Consultant), our committee adapted these modules to develop two specific, tailored algorithms: the Oral Feeding Readiness Algorithm and the Oral Feeding Challenges Algorithm. Approximately 80 NICU staff members participated in surveys and focus groups, offering qualitative feedback on the algorithms' impact. Data indicated that caregivers experienced a significant reduction in stress due to the clear, consistent framework provided by the algorithms.

Results: The algorithms demonstrated notable improvements in caregiver confidence, communication, and

consistency in feeding practices. Staff surveys revealed that the structured protocols reduced variability clarified feeding readiness, and challenged decision-making. The algorithms ensured a universal language and framework for all care providers, reducing subjective variations and providing clear guidance for safe, supportive feeding practices that align with each infant's cues. These changes reduced stress and anxiety for both staff and parents, creating a more cohesive NICU environment focused on supporting infant well-being.
Conclusions: This initiative represents Phase 1 of a broader effort to transform oral feeding practices in the NICU, establishing a foundation for consistent knowledge transfer and scalable feeding support. The development and integration of these algorithms provided a reliable, evidence-based approach that aligns with infant cues, facilitating a smooth transition from NICU to home. Moving forward, our next phase will focus on refining the algorithms, adapting them for parental use, and developing a comprehensive training program for families to support safe, consistent feeding practices post-discharge.

#13 Rates and Reasons for Hospitalization of Children and Youth with Foster Home Experience: a Pan-Canadian cohort study

Andrea Evans, Ashley Quinn, Cindy Blackstock*

Purpose: To determine the rates and conditions responsible for hospitalization of children with foster home experience across Canada.
Methods: This is a cohort study of Canadian children < 18 years of age living in a foster home on the day of the 2011 Census. We determine the rate of hospitalization over 6 years using Statistics Canada’s 2011 Canadian Census Health and Environment Cohorts, which links National Household Survey (NHS) (demographics), and the Discharge Abstract Database (hospitalization encounters). Indigenous status was identified by the respondent of the NHS. Survey weights were applied to render the results representative of the Canadian population. All provinces and territories and First Nations reserves in Canada except for Quebec were included.
Results: After survey weights, our study represented 31,595 children in foster homes compared to 5,317,346 children not in foster homes. 50.5 per 1,000 of respondent-identified First Nations children lived in foster homes on the day of the Census compared to 3.3 per 1,000 of non-Indigenous and non-Racialized children (Table 1). Hospitalization rate was higher for children with foster home experience and varied by age (Figure 1). 3% of children with foster home experience were responsible for 49% of all hospitalizations in that population. The top conditions responsible for hospitalization for children with foster home experience were childbirth and mental health.
Conclusions: Our study, shared with national First Nations, Métis and Inuit agencies, indicate a substantial overrepresentation of First Nations, Métis, Inuit, and Black children in foster homes in Canada. These children face higher rates of youth pregnancies and mental health hospitalizations. As the preliminary data of one of three cohorts, these results indicate that further work is needed to expand collaborations and set research priorities to generate essential evidence on the health of this vulnerable population.

#14 Strengthening community-based family support in Nunavik: Ideas for system change to empower Inuit-led initiatives

Rosalie Dostie, Mariam Traoré, Sarah Fraser, Jade Berbari, Chantal Camden*

Purpose: In Quebec, the Ministère de la Famille (MFA – Ministry of families) funds community-based family support (CBFS) initiatives that promote family well-being and child development for both Indigenous and non-Indigenous communities. Recognizing the inadequacies of previous MFA programs in addressing the needs of Inuit families, the MFA launched an Action concertée, an initiative aiming to better understand CBFS in Nunavik in order to inform the development and implementation of novel MFA programs. The aim of this presentation is to present the perspective of leaders involved directly and indirectly in the provision of family services in Nunavik and within the MFA.
Methods: A participatory action research approach was adopted, with flexible structures that were adjusted over time to meet the needs of all partners. Interviews (n=8) were conducted with stakeholders in official positions (e.g., MFA, Nunavik Regional Board of Health and Social Services) to 1) define CBFS, 2) explore current forms of

CBFS, and 3) Provide guidance on how the MFA may better contribute to Nunavik-based CBFS initiatives. Thematic inductive analysis facilitated the exploration of themes, highlighting both convergent and contrasting perspectives across participants. Four additional interviews with Inuit partners in leadership positions within community-led Family houses are planned.
Results: Interviews revealed a nuanced understanding of CBFS across participants. Each organization had its own definition, highlighting differences in approaches (formal vs. informal), target populations (vulnerable individuals, those in crisis, general population), and intervention types (medical/social vs. strengthening social networks). Needs in terms of CBFS emphasized fostering living spaces, cultural gathering areas and connections to culture. Participants generally agreed on the importance of supporting initiatives led by and for Inuit. Recommendations on how best to do so varied. These included strengthening communications between communities and the MFA, providing flexible funding and support structures, and championing opportunities for skill development.
Conclusions: This study emphasizes the need for the MFA to shift from programs implemented in Southern Quebec to supporting CBFS initiatives reflecting the lived realities of Inuit families. As the project has evolved, numerous communications took place between Nunavik-based and MFA partners. In turn, the MFA started a process reviewing funding structures to reduce administrative barriers and exploring collaboration opportunities to better support CBFS initiatives. Strengthening local consultation and information-sharing mechanisms, establishing accountability mechanisms, decentralizing authority, providing sustained investment in training and increasing support for project development are essential for empowering communities and enhancing CBFS services in Nunavik.

#15 Characterization of Juvenile Idiopathic Arthritis in Indigenous North American Children enrolled in a North American Registry

Hayley Lynch, Jim Jarvis, For the CARRA Registry and CARRA Legacy Registry investigators*

Purpose: Several studies have noted a higher prevalence of juvenile idiopathic arthritis (JIA) in Indigenous North American (INA) children compared to the general population. However, studies to date have focused on small, regionally gathered cohorts. The Childhood Rheumatology and Research Alliance (CARRA) registry offers a unique opportunity to investigate JIA phenotypes in INA patients from across the U.S. and Canada. We sought to characterize clinical presentation, course and autoantibody profiles in JIA in the INA population captured in the CARRA registry.
Methods: Disease-related data was abstracted from the CARRA registry for all participants with a physician diagnosis of JIA who indicated INA ancestry. Data included sex-assigned at birth, JIA subtype, serologies, age at diagnosis, and presence of uveitis. For the purposes of this study, participants with extended oligoarthritis were counted with those with polyarticular arthritis, and sorted into RF-positive and RF-negative groups accordingly. Demographic data was also collected, including zip codes of enrollment sites and of participant residences.
Results: A total of 194 participants of INA ancestry were identified. Of these participants, 44 (23%) were male and 150 (77%) were female. Polyarticular, RF-negative arthritis was the most common subtype (38% of cases), consistent with previous studies showing that polyarticular JIA is the most common subtype in INA. The average distance traveled from home to enrollment site was approximately 155 miles. The clinical presentations and autoantibody expression of patterns of INA and non-Hispanic White (NHW) children in the registry were similar. However, there were significant gaps in the registry for INA children. Only a small number of INA children were enrolled from the northern Great Plains, Canadian prairie provinces, and Alaska, where large populations of children with JIA have been reported in previous studies.
Conclusions: This is the first North America-wide survey of INA children with JIA. INA children enrolled in the CARRA registry show similar clinical characteristics and autoantibody profiles to NHW children in the registry. However, the paucity of data from children on the northern Great plains, Canadian prairie provinces, and Alaska demonstrate that the INA population in the registry may not be be representative of the whole population.
Disclaimer: This study utilized data collected in the Childhood Arthritis and Rheumatology Research Alliance (CARRA) Registry and the CARRA Legacy Registry. The views expressed are the authors' and do not necessarily represent the view of CARRA

#16 Respiratory Health ten years after hospitalisation with LRTI as an infant-The Healthy Lungs Study

Adrian Trenholme, Cass Byrnes, Alan Ainsworth, Fern Goh, Shirley Tang, F Evans, Shirley Lawrence, Camron Muriwai, Robert Clarke*

Purpose: The Healthy Lungs Study (2010-2014) conducted at Kidz First Hospital, included 400 children < 2 years admitted to hospital with severe lower respiratory tract infection (LRTI). They were randomised into an intervention group with planned community assessments or control group receiving standard care. At the two-year assessment significant respiratory morbidity was recorded in both groups (Byrnes CA Thorax 2020 Apr;75(4):298-305) These children are now 10-13 years of age. Aim: To describe the prevalence of respiratory disease at 10-13 years of age following hospitalisation for LRTI <two years of age for the first 100 children seen as part of the Healthy Lungs Follow Up study

Methods: The first 100 children (of total 206) are described. All participants had a clinical review and spirometry. A chest HRCT scan was performed during inspiration for all children who consented and attended (73). The scans were scored by two radiologists using the modified Bhalla score

Results: The participants were mainly Pasifika (69%) or Māori (24%), mean age was 11.5 years and 66% were living in the poorest quintile. When seen 14% had wet cough and 7% were wheezy. The FEV1 z-score was low for 13.8%. 37% had a normal chest CT scan and the mean modified Bhalla score was 24.7 (range 17 – 27). 22 children had mild bronchial dilatation on their chest CT scan but no clinical history of bronchiectasis. 32 had asthma and 14 had bronchiectasis. Thirty six percent had a BMI > 99.6th centile. A total of 42 children required a health service referral

Conclusions: Children hospitalised with an early severe respiratory infection should be considered high risk for the development of chronic respiratory disease and other health problems. Clinical follow up of these children is suggested.

#17 The Koira4rukahukahu: Lungs4life Model of Care-A Retrospective Review

Adrian Trenholme, Cass Byrnes, Miriam Manga, Alana Ainsworth, Shirley Lawrence, Ffion Evans, Cameron Muriwai, Jessamine Del Carpio*

Purpose: Maaori and Pasifika children are over-represented for both hospitalisations for acute lower respiratory tract infections (LRTIs) in early life and subsequent chronic lung disease including bronchiectasis. Previous studies in our population suggest that 5-7% of children admitted <2 y with a severe LRTI will develop bronchiectasis during childhood. Koira4Rukahukahu:Lungs4Life is a community model of care developed to reduce respiratory inequities and has been implemented in Counties Manukau since June 2021. Counties Manukau is a health district in Auckland New Zealand with a population of 600,000 with 37% living in high deprivation areas and over 8000 births each year, 35% Pasifika and 20% Maaori. Aims: To review the processes and outcomes of the Lungs4Life programme IN Counties Manukau between June 2021 until February 2024.

Methods: Tamariki are enrolled in the Lungs4Life programme if <2 years age, have ≥ 3 admissions with LRTIs or there is clinical concern by a paediatrician of ongoing respiratory morbidity. Baseline demographics are recorded. Community nursing assessments are performed at 30 days, 3 months, 12 months, 2 year and 5 years with data from each entered onto a REDCap database. There is open communication with families through email and cell phone. Lungs4Life Nurse Practitioners and Paediatricians perform clinical reviews as required. A retrospective review of the REDcap database was performed for all data collected between June 2021 to February 2024

Results: Results: 177 children were enrolled in the Lungs4Life programme with 62 Maaori, 96 Pacific, 10 European, 6 Asian, and 3 other. Sixty-six percent live in the lowest deprivation quintile and 47% live in poor housing conditions. Smoke exposure occurs in 30%, 75% of tamariki are up to date with their immunisations at enrolment. Antibiotics for chronic cough were prescribed for 24 children, 38 started an asthma preventer and 22 had aspiration identified. Five have a CT diagnosis of bronchiectasis with 4 awaiting a chest CT scan. Other health issues identified include poorly controlled eczema, obstructive sleep apnoea, and developmental delay

Conclusions: The high number of tamariki enrolled onto the programme highlights the burden of respiratory morbidity for our community. Ongoing evaluation will provide insights into the health needs of a cohort of children at high risk of respiratory disease. It will directly inform programme delivery and guide changes required to keep lungs4life sustainable and helpful to whaanau.

#18 The feasibility of a community-based winter preparedness plan using a Samoan community-partnered research conference model

Adrian Trenholme, Marsh S, Dowell T, Stubbe M, Asafo F, Roberts M, Hilder J, Tanuvasa SLT, Wong Shee K*

Purpose: Pacific people experience high hospitalisation rates due to influenza, yet they have low immunization coverage. During the COVID-19 pandemic, community strategies effectively increased vaccination uptake. In 2023, Flu Lab researchers collaborated with Moana Connect and visited a Samoan Catholic church in Mangere. The congregation proposed organising a church-based conference to enhance winter preparedness. A partnership was established with the Samoan Malaeola chaplaincy, utilising a community-partnered research conference model. The objective of the research was to assess the acceptability, feasibility, and exploratory health outcomes of this initiative.
Methods: Flu Lab researchers proposed an integrated approach that combined education, local data, and immunization, in collaboration with Moana Connect's network of local health providers. Feedback from stakeholders was : use Samoan language, have access to a Samoan health provider "village", cover all health issues relevant rather than just respiratory and incorporate fun and music-"Zumba" The feedback was utilised to refine the final conference format, titled "Health is Wealth" which was held on June 8th, 2024. Short interviews and questionnaires were performed. Two feedback/talanoa sessions post conference have been held with over 100 attendees

Results: Over 300 attended the conference which included Zumba, health education on a variety of topics with a focus on respiratory but gout, diabetes, rheumatic fever etc, 60 people were immunised, children were able to have a dental check and multiple local health providers were available. The interviews showed that the conference format was good, the information was of high quality and access to more health providers was requested. The questionnaires showed knowledge change and vaccine acceptability with 20% unwilling and 50% regular users. The post conference talanoa was very positive with lots of ideas for improvement and a real willingness for future conferences.
Conclusions: The conference was useful, feasible, acceptable and importantly built trust and relationships between researchers, local health providers and the community in a partnership. All felt it important to celebrate initiatives with the community and share results and feedback from all partners in talanoa. Improved knowledge , on the spot immunisation and dental checks for children were practical outcomes. There is great willingness from all partners for future conferences with an option of including other churches and using quantitative research on the impact on vaccine uptake.

#19 Walking towards each other: Stories from pediatric rehab

Vera Nenadovic, Emilie Morin, Naomi Kelly, Tess Bardikof, Yael Diamond*

Purpose: As Canada's only stand-alone pediatric rehabilitation hospital, children and their families travel from all over Ontario for services. This approach follows the colonial model of healthcare delivery, where Indigenous children and families leave their communities and travel to hospitals. Many of our clients have experienced racism in accessing and receiving healthcare. We seek to co-create the rehabilitation experience by coming together with Indigenous children and their families by holding space for them to share stories of their experiences. The goal is to acknowledge their past traumas within the healthcare systems and take accountability and build trust.
Methods: Understanding the child and family supports a healing experience: We combine our family centered care approach with Two-eyed seeing and storytelling. Getting to know each other: From admission to discharge, we approach in the spirit of genuine curiosity, incorporating a trauma lens of 'what happened to you ?' We inquire about cultural and spiritual needs. This important information is shared with the wider team to ensure consistency in care. Teaching and learning:: We share stories with our staff and students so that they can learn the impact of hospitalization on the Indigenous children and families that we serve.
Results: This story is an example of how we co-create the rehab experience. A young Cree woman was very

agitated. A Code White with injection of psychotropic medication and security presence was imminent. Staff partnered with her mother, a Cree Knowledge Keeper, so that the young woman could smudge with sage. The effect was powerful for the young woman, her mother and staff. The patient and her mother taught staff about smudging with sage and discussed plans to build a home for the eagle feather, as part of rehab. Patient and Family feedback: Families report feeling heard and respected.
Conclusions: We continue to work to uncover our own biases and transform the rehab experience. Through the shared experience of co-creation we are working to change our hospital environment and processes to address inherent colonial healthcare and rehabilitation values. Among other things, this can also include offering traditional beading through therapeutic recreation, drumming through music therapy, incorporating being outdoors in nature daily, offering bannock with meals and developing a robust smudging policy that allows for indoor and outdoor choices.

#20 Cross-kingdom biofilm formation in Early Childhood Caries: Interactions between Streptococcus mutans and Candida dubliniensis

Ryan Cunnington, Ankita Vaishampayan, Katherine Yerex, Kangmin Duan, Robert J Schroth, Prashen Chelikani*

Purpose: Severe early childhood caries (S-ECC) is a significant concern, particularly among Indigenous children in Canada. This disparity highlights potential differences in the etiology of S-ECC. Streptococcus mutans and Candida dubliniensis were linked to S-ECC in our previous research. This study explores microbial factors by investigating the interactions between these organisms in dual-species biofilms. We focus on quorum sensing (QS) genes in S. mutans, particularly examining the comCDE deletion mutant. Additionally, we assess the effects of fungal QS molecules, farnesol and tyrosol, on biofilm formation, acid production, and microbial communication. We aim to enhance our understanding of ECC pathogenesis.
Methods: We generated the S. mutans ΔcomCDE mutant via PCR ligation mutagenesis. Biofilm formation and acid production were analyzed in mono- and dual-species cultures of S. mutans UA159, S. mutans ΔcomCDE, and C. dubliniensis JB11897. Additionally, RT-qPCR was used to assess gene expression. Fungal QS molecules, farnesol and tyrosol, were tested for their impact on these interactions.
Results: Co-culturing S. mutans UA159 and C. dubliniensis enhanced biofilm formation and increased acid production compared to monocultures. The S. mutans ΔcomCDE mutant showed altered biofilm structure and reduced biofilm formation. Farnesol and tyrosol affected biofilm dynamics and microbial interaction, modulating gene expression. These findings reveal a synergistic relationship between S. mutans and C. dubliniensis in biofilm formation and acidogenicity.
Conclusions: The interaction between S. mutans and C. dubliniensis contributes to enhanced biofilm formation and acid production, key factors in ECC pathogenesis. QS genes in S. mutans play a significant role in these interactions, and fungal QS molecules further modulate biofilm dynamics. These insights may help new therapeutic strategies targeting QS pathways to manage ECC.

#21 A Naturalistic Developmental Behavioural Intervention Informed by Indigenous Knowledge for Preschool-Aged First Nations Children With Autism Spectrum Disorder in Northwestern Ontario

Laurel Schmanda, Natasha Sakchekapo, Jennifer Hoey, Chantal Labonté, Sean Bryan*

Purpose: Autism Spectrum Disorder (ASD) among First Nations children is estimated to be 2-3 times more prevalent than in the general population, but few ASD-specific interventions incorporate Indigenous Knowledge. Existing paradigms shaped by Western medical perspectives are insensitive to the unique contexts, historical traumas, and structural violence impacting Indigenous people. Naturalistic Behavioural Developmental Interventions (NBDI) that support development in social communication and behavioural flexibility are considered the standard for ASD intervention. This study champions a Two-Eyed Seeing approach to the creation and implementation of a novel NDBI in preschool-aged First Nations children with ASD living in remote northwestern Ontario (NWO) communities.
Methods: This mixed-methods study respects the First Nations data sovereignty principles of Ownership, Control, Access, and Possession. Subjects are First Nations children aged 2-5 years diagnosed with ASD living in remote

NWO communities and their primary caregivers. Selection for the pilot phase is community-based, leveraging existing partnerships with our Sioux Lookout First Nations Health Authority unit. Primary outcomes include language, social communication, play skills, adaptive functioning, and challenging behaviours, evaluated via semi-structured caregiver interviews and surveys. Secondary outcomes include caregiver empowerment and physiologic data from sensory-friendly biosensors worn by the children as tolerated.
Results: This study anticipates caregiver-identified improvements in the primary outcomes that will inform protocol revision and expansion to other communities. Consistent with our community-led philosophy, we will recruit interested pilot phase caregivers to participate as authors in future phases. We hope these cohorts foster caregiver peer networks, promoting community-level autism knowledge and autonomy. Physiologic data may echo the caregiver-reported measures and offer new applications, particularly in children with limited verbal communication (e.g., real-time notification of impending emotional dysregulation and feedback on caregiver approaches).
Conclusions: We are alarmed at the lack of research on and awareness of neurodevelopmental conditions like ASD in Indigenous children in Canada. Funding models and programming are inadequate at best for this equity-deserving population. These factors and our clinical experience in remote First Nations communities underscore the need for urgent action. The present study integrates Western medical and Indigenous perspectives to create an accessible, culturally safe, and clinically robust intervention for First Nations children and their families.

#22 A continuous quality improvement project to improve breastfeeding rates for Aboriginal babies

Natalie Strobel, Derek Swe, Clair Scrine, Dan McAullay*

Purpose: The long-term benefits of immediate and sustained breastfeeding for the first six months of a child's life are well known. However, Australia falls short of breastfeeding goals, particularly for Aboriginal and Torres Strait Islander (Aboriginal) babies living in urban areas. The overall aim of the project to improve predominant breastfeeding rates in Aboriginal infants in the Perth Metropolitan area.
Methods: We interviewed and surveyed health service providers within hospitals and community health centres to determine the barriers and facilitators of delivering breastfeeding support to mothers. The Aboriginal Health Team (AHT; Community Health-Child and Adolescent Health Service) participated in a continuous quality improvement cycle (CQI) to support mothers of Aboriginal babies in their service. The Plan-Do-Study-Act (PDSA) cycle guided the CQI project. We will be evaluating the impact of the CQI cycle on predominant breastfeeding rates using a controlled interrupted time series design.
Results: Ninety-six health service providers from hospitals and community health centres completed a survey. Health service providers showed a strong commitment to improve breastfeeding for mothers of Aboriginal babies. Several factors were identified as barriers for staff to adequately provide care to mothers including constraints on staff availability in maternity wards, limited time for breastfeeding support during child health appointments, and accessing mothers in time to support their breastfeeding challenges. This information was provided to the AHT to help them deliver a PDSA cycle which was aimed at improving breastfeeding health promotion materials and messages for mothers attending child health checks.
Conclusions: Based on the survey ideas for improving the approach of hospital and community health services staff ranged from developing more suitable resources to utilise with young mothers in particular, upskilling hospital based Aboriginal Liaison Officers, utilising peer support workers and providing continuity of care both antenatally and postnatally. The AHT experienced a number key learnings including how to complete a PDSA cycle, what mothers' experiences are regarding breastfeeding, and that having external support to complete the process was important given barriers such as capacity, time and staffing.

#23 Nuna Doctors: Empowering Inuit Youth to Make Healthy Choices

Danika Cziranka Crooks, Mark Hirst, Chris Crooks, Paula Cziranka*

Purpose: Inuit youth face unique health disparities due to many factors such as the high rate of alcohol/drug abuse and smoking. 65% of Nunavut youth are active smokers leading to Canadian Inuit having the highest rate of lung cancer globally. Studies show that indigenous youth are using alcohol and marijuana at younger ages than non-

indigenous youth. Alcohol abuse is strongly correlated with an increased risk of unintentional injury, violence, depression and suicide. Nuna Doctors is an organization that provides practical guidance on drug, alcohol and smoking use in order to empower Inuit youth to make choices responsibly and safely.
Methods: Two doctors created lesson plans and traveled to Nunavut to provide drug and alcohol awareness workshops to children aged 7-19. Through partnering with Inuit organizations and the public schools, workshops were taught at elementary schools, high schools and community centers. The interactive workshops utilize stethoscopes, reflex hammers, pen lights and CPR mannequins. The key to these workshops is creating a non-judgmental environment in which youth can openly ask doctors their questions about alcohol, drugs and smoking. There is time at the end of sessions to talk with the doctors about strategies for quitting or decreasing substance use.
Results: Nuna Doctors visited two communities (Cambridge Bay and Pangnirtung, Nunavut) and taught over 130 youth. After these workshops students are able to successfully move an adult into the recovery position and understand the importance of utilizing the recovery position for intoxicated individuals. They were also able to listen to their lungs and understand the changes smoking has on lung sounds and function. Through this exposure and interacting with doctors some youth have a new found interest in medical careers with many stating they would like to work in healthcare in the future.
Conclusions: Nuna Doctors empowers youth to be in control and make healthy choices for their bodies. These workshops equip Inuit youth with the necessary tools to safeguard their well-being and that of their community. By promoting knowledge, and informed decision-making, we aspire to empower young individuals to forge a brighter and healthier future for themselves and those around them. The Nuna Doctors model can be applied and modified in order to educate a variety of indigenous youth on the impact of substance use.

#24 Vaccination Coverage Among Children living in Sioux Lookout area First Nations

Karyn Meekis, Candi Edward, Jaswinder Singh, Ahmad Shah Salehi*

Purpose: To examine childhood vaccination coverage rates among Sioux Lookout First Nations communities, identify gaps relative to provincial and national targets, and propose interventions to address disparities in immunization.
Methods: This study utilized childhood vaccination data from May 2023 to April 2024, sourced from Sioux Lookout First Nations Health Authority's Mustimuhw Information Solutions (MIS) system. Coverage was assessed across five age groups (1, 2, 7, 12, and 17 years) to align with provincial standards, enabling comparisons with Ontario’s rates and national immunization goals. Vaccination rates by age group and vaccine type were analyzed to reveal coverage trends and identify gaps.
Results: Findings indicate that vaccination rates for children in Sioux Lookout are First Nations communities are significantly below both Ontario averages and national targets. For example, coverage for 1- and 2-year-old cohorts is as low as 43.5% for certain vaccines, and only 36% of 7-year-olds have received the recommended five doses of Tetanus, Pertussis, and Diphtheria vaccines. The data show substantial declines in multi-dose vaccine completion across all age groups, underscoring the challenges in reaching recommended coverage levels.
Conclusions: This analysis highlights the need for targeted, culturally appropriate interventions to improve vaccine completion rates. Key recommendations include addressing barriers to timely vaccination, enhancing MIS usability to maintain accurate records for both on-reserve and off-reserve individuals, and incorporating community perspectives in health planning. Further research should explore sociocultural influences on vaccine uptake and develop strategies tailored to the specific needs of Sioux Lookout First Nations communities to close immunization gaps and promote better health outcomes.

#25 Alone, lost, and unprepared by the system: Indigenous care leavers' experiences of aging out of child welfare care in Manitoba with attention to care leavers' mental health challenges

Roberta Woodgate, Marlyn Bennett, Clayton Sandy, Donna Martin, Pauline Tennent, Shayna Plaut, Nicole Legras, Ashley Bell, Justin Lys*

Purpose: Limited research has been conducted with Indigenous young people about their transitioning out of care in Canada. Part of a larger mixed methods study, this poster presents findings specific to Indigenous care leavers' coherent and meaningful account of the journey of aging out of care in the province of Manitoba in Canada with attention to the mental health challenges faced by care leavers.
Methods: Seventeen Indigenous care leavers took part in the qualitative arts-based component part of the study. Ten participants identified as female, five identified as male, and two identified as Two Spirit/gender queer/gender fluid. Over half of the participants had experienced five or more placements during their time in care. Approximately one-third of the participants went through an independent living program prior to leaving care, while the remaining two-thirds did not access any programs prior to leaving care.
Results: Indigenous care leavers expressed that the Child and Family Services (CFS)-led process of planning for and transitioning out of care was unclear and failed to engage them as partners, an experience which left them ill-prepared for life post-care. Additionally, participants' experiences serve as evidence of enduring gaps in transition supports, namely in mental health supports. More than half of the participants reported difficulty accessing mental health supports while in care, and this access issue worsened during the transition period and post-care, one of the most vulnerable time periods in their lives.
Conclusions: The findings provide insight into the challenges current Indigenous care leavers face to support the need for change and to inform the design and evaluation of effective supports for this population especially in the area of mental health and well-being. The experiential knowledge from this study contributes valuable information to inform responsive child welfare transition policies and practices that are reflective of the experiences and needs of the population it intends to serve.

#26 ~~Traditional and modern approaches to limiting maternal and infant morbidity among the indigenous pygmies Baka peoples of southern Cameroon: a community model~~ WITHDRAWN

Ronie Fipa Tchudjeu, David Gonzalez Alarcon, Ntah Metomo Christian*

Purpose: The Baka Pygmies are indigenous peoples living in the forests of southern Cameroon and facing multiple health challenges. Despite these challenges, for centuries the Baka communities have developed traditional healthcare systems based on ancestral knowledge of maternal and child health. However, these practices are coming up against the realities of modernisation. The modern healthcare system is finding it difficult to establish a lasting presence in these pygmy communities, due to the geographical distance from health facilities, lack of awareness and mistrust of outside institutions. Coordination between traditional and modern approaches therefore seems to be the key to improving the situation.
Methods: This project ran from May 2023 to April 2024. The methodology was participative. Quarterly training sessions were organised. The sessions took into account the customs and languages of the Baka and were conducted in small groups. The sessions were led by trainers specialising in maternal health, in collaboration with Baka community leaders. During each session, a kit of asepsis equipment was distributed to traditional birth attendants and community health workers. Regular visits to communities to observe asepsis practices and responses to warning signs. A quarterly report is drawn up so that subsequent sessions can be adapted to the needs identified.
Results: Reduction in maternal mortality by 10% thanks to early identification and management of complications (such as post-partum haemorrhage, infections and pre-eclampsia). 8% reduction in perinatal mortality thanks to improved childbirth hygiene and early identification of warning signs in infants. Increased use of prenatal services by 13%. Reduction in mother-to-child transmission of HIV AIDS by 3%. Thanks to training in the prevention of vertical transmission of HIV and the provision of asepsis equipment. In addition, increased awareness of the importance of medical monitoring of HIV-positive women and their newborns has helped to reinforce prevention initiatives.
Conclusions: This project has achieved significant results in reducing maternal and infant morbidity in Baka pygmy

communities in southern Cameroon, thanks to an integrated approach combining traditional and modern health knowledge and the active involvement of local communities. It demonstrates that health solutions adapted to the local context, and strengthened by community action, can bring about lasting and significant changes in the reduction of maternal and infant mortality. However, although significant progress has been made, challenges remain. It is crucial to continue efforts to build the capacity of local players to ensure that the gains made are sustainable.

#27 Chronic Kidney Disease and Kidney Failure in Childhood-Onset Type 2 Diabetes

Elizabeth Sellers, Lorraine McLeod, Allison Dart, Brandy Wicklow*

Purpose: Type 2 diabetes (T2D) in children (< 18 years) is increasing with the highest rates in Indigenous children. In Manitoba, 80% of children with T2D are First Nations. Complications manifest early with high rates of chronic kidney disease (CKD). Limited data suggests that CKD in childhood-onset T2D may be more aggressive than in adult-onset T2D and childhood-onset type 1 diabetes (T1D), however direct comparisons are lacking. The objective of this study is to compare the incidence and time to CKD diagnosis in childhood-onset T2D to (1) adult-onset T2D, (2) childhood-onset T1D and (3) a matched cohort without diabetes.
Methods: We conducted a population based, retrospective, longitudinal cohort study linking the provincial administrative and clinical diabetes databases available in the Manitoba Centre for Health Policy Repository. A cohort with childhood-onset T2D was identified and compared to cohorts of (1) adults with T2D (onset 30-60 years of age) (matched 1: 4 for year of diagnosis, ethnicity, sex and geographic residence), (2) childhood-onset T1D and (3) children without diabetes (matched 1:3 for age, sex, ethnicity, and geographic residence). Outcomes: time to CKD and kidney failure (using a combination of laboratory and validated algorithms). Survival analyses were conducted.
Results: The risk of CKD was significantly higher in childhood-onset T2D (n=940) compared to (1) adult-onset T2D (n=3548) (HR 4.08 [95%CI 3.02, 5.52]), (2) childhood-onset T1D (n=1672) (HR 2.05 [95% CI 1.60, 2.62]) and matched children without diabetes (n=2646) (HR 7.59 [95% CI 6.48, 8.88]). Similarly, the cohort of childhood-onset T2D had a higher risk of kidney failure compared to: (1) adult-onset T2D (HR 4.21 [95% CI 1.34, 13.17])), (2) childhood-onset type 1 diabetes (HR 2.65 [95% CI 1.05, 6.69])) and (3) matched children without diabetes (HR 44.7 [95% CI 16.02, 124.73]).
Conclusions: This data supports that childhood-onset T2D confers a greater risk for CKD and kidney failure than either adult -onset T2D or childhood onset T1D. The reasons for this are not fully understood but may reflect differences in pathophysiology between childhood and adult-onset T2D. Further investigation is urgently needed. These results underscore the need to understand these differences and avoid extrapolation of adult data. In addition, the more aggressive progression to CKD and kidney failure in childhood-onset T2D has implications for screening and targeted intervention.

#28 Impact of out-of-home care on children's outcomes: A longitudinal cohort study using linked administrative data from Manitoba, Canada

Marni Brownell, Kayla Frank, Nathan Nickel, Jennifer Enns, Stephanie Sinclair, Elizabeth Decaire, Jennifer Chartrand, Scott Sinclair, Teresa Mayer, Chris Nash, Jamie Pfau, Mikayla Hunter, Soomin Han, Stephaney Patrick, Hera Casidsid, Sana Amjad, Marlyn Bennett, Hygiea Casiano, Laura Bowler, Therese Stukel*

Purpose: Despite growing awareness of the harm caused by the Canadian residential school system, Child Protection Services (CPS) systems across Canada continue to disrupt Indigenous families and communities by apprehending their children at alarming rates. The objective of this study was to provide rigorous quantitative evidence about the impact of out-of-home care on children's health and social outcomes. This study was conducted by a partnership of community organizations representing First Nations (FN) families, government staff from CPS, and academics from multiple disciplines, and was guided by an Advisory Circle of FN Knowledge Keepers.
Methods: We used linked, whole-population administrative data to identify all Manitoba children served by CPS at FN agencies (FNA) and other Manitoba agencies (OMA) (2007-2018). We compared health, education, and legal system outcomes of those who were taken into out-of-home care (FNA n=10,856; OMA n=8,468) to those who had

never been taken into care but had an open CPS file due to a child protection investigation (FNA n=12,896; OMA n=14,394). We used instrumental variable analysis with CPS agency rate of out-of-home care as the instrument. Outcomes between groups were compared using 2-stage multivariate probit regressions adjusted for child and maternal/family factors.
Results: Odds of teen pregnancy (FNA OR 3.69, 95% CI 1.40-9.77; OMA 5.10 (1.83-14.25)), teen birth (FNA 3.23 (1.10-9.49); OMA 5.06 (1.70-15.03)), and positive STI tests (FNA ns; OMA 7.21 (3.63-14.32)) were higher and odds of vaccination at age 2 (FNA ns; OMA 0.49 (0.29-0.80)) were lower for children in care than children not in care. Odds of being accused (FNA ns; OMA 2.71 (1.27-5.75)), victim (FNA ns; OMA 1.68 (1.10-2.56)), or charged with a crime (FNA ns; OMA 2.68 (1.21-5.96)), and odds of being incarcerated (FNA 3.64 (1.95-6.80); OMA 1.19 (1.19-8.04)) were higher for children in care.
Conclusions: Being taken into out-of-home care negatively affects children's outcomes. CPS agencies should work with FN leaders to develop strategies to reduce the number of children in care. Decision-making and actions taken by CPS agencies should be monitored and evaluated. FN communities need jurisdiction over CPS, and financial support from government to support prevention. Briefings to Manitoba Families and the Assembly of Manitoba Chiefs emphasized the importance of reducing the number of children in out-of-home care. Subsequent actions taken by governments in response to the evidence, such as changes to programs and policies, will be monitored and will inform future research.

#29 Promoting Young Child Wellness in the Pediatric Clinic within the Chickasaw Nation

Beth Mittelstet, Misty Boyd*

Purpose: Hofanti Chokma is a collaborative, multi-department effort of the Chickasaw Nation to support young child wellness as a way to promote long term physical and mental health. This collaboration has adapted the Healthy Steps program to provide universal screening, developmental supports and positive parenting guidance using a team approach with children, families, medical providers, and behavioral health providers to meet this goal in a culturally relevant manner. The presentation includes annual data collection and significant changes found.
Methods: Hofanti Chokma selected the Healthy Steps model along with the Survey of Well-Being of Young Children (SWYC) to screen young children and their families for developmental delays, behavioral issues, and social determinants of health as a screening tool to use at well checks from the newborn period through 5 years of age. Follow-up with an Early Childhood Development therapist is determined by using a tiered approach based on results of the SWYC.
Results: 6,166 SWYCs were collected between October 2022 and September 2023. The highest percentage of concerning screening results include social-emotional development (46%) and family needs (28%). Other results showed parents often did not express concern regarding development or behavior despite not passing these areas of the SWYC. Family needs identified on the SWYC include, 26% tobacco use, 10% food insecurity, 6% caregiver mood concerns, 2% substance abuse, 2% interpersonal violence. Reported substance abuse decreased from 19% to 2%, consistent with national post-covid trends.
Conclusions: Applying the Healthy Steps program to patient care within the Chickasaw Nation Pediatric Clinic, not only provides early identification of developmental, behavioral, and social concerns but has allowed patients, families, medical providers, and early childhood development therapists to build connections to improve the overall quality of life of the Chickasaw people. Families are provided with supportive services and early interventions to improve children's outcomes, including development as well as physical and emotional well-being.

#30 ~~Hope and Resilience: A Partnership Between Ndinawe and the University of Manitoba Psychiatry Training Program~~ WITHDRAWN

Shanlee Scott, Erin Stranger, Lionel Houston, Scott Turner, Polina Anang, Cara Katz, Christen Rachul, Kisten Kettler, Lindsay Bristow, Serena Chen, Nicholas Krueger, Anna Gavalova

Purpose: Ndinawemaaganag Endaawaad Inc. (Ndinawe) is an Indigenous led organization serving youth in Winnipeg. Ndinawe partnered with the psychiatry training program at the University of Manitoba in Community-Based Participatory Research (CBPR) to engage urban Indigenous youth with the goal of working together toward

health equity. Since 2022 Ndinawe Elders, executive leadership, managers, and the academic partners established the parameters of a successful working relationship. This workshop will address the relevance of relationship building as a foundational step in partnerships between academia and Indigenous organizations and highlight both benefits and challenges of CBPR.
Methods: Participants will be invited to explore reflexivity as an important aspect of CBPR with a focus on the process of non-Indigenous partners relating to Indigenous communities. Presenters will share insights from their CBPR including identifying different perspectives on "mental health" and "therapy" through ongoing dialogue, especially pertaining to misunderstandings and challenges, and the structural approach to building a youth council with transient youth. Ndinawe youth will illustrate their own experiences with contributing to the design of innovative treatment models, and how these models will be instrumental in eliminating barriers to mental health care for trauma, mood, anxiety, and psychotic disorders.
Results: Future implications for building respectful relationships between psychiatry residents and community organizations will be highlighted. Thematic analysis observation logs indicate helplessness, guilt, hopefulness and connectedness as reflections of the complexity of our collaborative efforts. Reflexivity exercises of the university team address privilege, power, and the balance of being an equal partner and yet an outsider. Ongoing conversations between Ndinawe leadership, youth council, and the University of Manitoba partners about structural racism as a barrier to equitable access to mental health care underline the existing disparities of healthcare in Manitoba.
Conclusions: This Indigenous led partnership demonstrates a promising model of bridge building between tertiary care and community. Establishing genuine relationships is a foundational principle of Community-Based Participatory Research. Finding ourselves outside our comfort zones we persevere in a collaborative and open-minded way.

#31 First Nations youth and family engagement in youth-onset type 2 diabetes research: The iCARE cohort

Brianna Hunt, Elizabeth Sellers, Jon McGavock, Michelle Roy, Jackie McKee, Jennifer Lopez, Brandy Wicklow, Allison Dart*

Purpose: Meaningful collaboration between First Nations youth and families, health researchers, and clinical practitioners is essential to address ongoing health inequities resulting from policies and practices that systemically and systematically disadvantage First Nations. In Manitoba, rates of youth-onset type 2 diabetes (T2D) are the highest in the world, with First Nations youth being disproportionally affected, and at risk of early complications. Established in 2012, improving renal Complications in Adolescents with T2D through REsearch (iCARE) is the largest cohort study of youth with T2D in Canada, focused on wholistic understandings of kidney disease as a complication of youth-onset T2D.
Methods: Since 2015 the iCARE research team has included a group of young people living with T2D, family, and community members known as the iCARE Participant and Family Advisory Group (PAG), where 80% of members self-identify as First Nations. This group meets quarterly, with additional project-specific working groups and one-on-one collaborations. The PAG bringing unique expertise, ensuring that iCARE research priorities, hypotheses, methods, analyses, interpretation, and knowledge mobilization are relevant to First Nations youth and families. This collective is characterized by meaningful relationships, power sharing, and reciprocal collaboration, including co-creation of priorities, questions, materials, with co-authorship, and co-presentation of findings.
Results: Presented collaboratively by PAG members and research staff, this poster will showcase key project priorities guided by the PAG, changes in project direction, and knowledge mobilization materials co-created by the iCARE PAG. A key patient priority of the PAG has been the importance of stress and mental health as a crucial comorbidity impacting outcomes of youth-onset T2D. This priority led to the implementation of a pilot mental health skills program (Dialectical Behavioral Therapy) to support youth living with T2D, and a collaborative community-based adapted group, co-facilitated by an Anisininew community knowledge holder and a professional with training in clinical psychology.
Conclusions: The ongoing success of the iCARE cohort study and the associated projects and findings is in large part due to the meaningful and reciprocal research partnership with the PAG. While partnerships like this are increasingly recognized as best practice, many areas of research on chronic health issues where First Nations are overrepresented lack expertise from people with lived experience. Ongoing health inequities reflect the universal

need for meaningful youth, family, and community engagement. While each area of pediatric health research is unique, the iCARE PAG model serves as replicable model for application across other health and basic science research programs.

#32 Art in Action: Exploring harm reduction approaches in relation to youth experiences of homelessness through art

Sunday Queskekapow, Brianna Hunt, Cheyenne Traverse, Jaydin Peters, Ciann L. Wilson*

Purpose: In Manitoba, 84% of unhoused youth are Indigenous (Here & Now, 2016). Research demonstrates that harm reduction approaches remove barriers for those at risk of or experiencing homelessness (Gaetz, 2017), that harm reduction minimizes substance-related harm for youth, and that youth perspectives are essential in shaping these approaches (Jenkins et al., 2017). However, few related projects are led alongside Indigenous youth, or have explored harm reduction policies and practices. To fill this gap, the Art as Knowledge Mobilization (AKM) Project team brings together investigators and collaborators who have lived experience and/or belong to communities overrepresented in youth homelessness (Indigenous, Black, 2SLGBTQ+).
Methods: The AKM team worked in collaboration with a First Nations knowledge keeper, the Manitoba Harm Reduction Network, and Graffiti Art Programming for Youth to host a series of six harm-reduction-focused, capacity-building, art-based workshops in Spring 2024. Using a variety of artistic mediums (painting, drawing, writing, collaging, stop-motion video), youth workshop participants (n=11) with lived experiences of homelessness shared their perspectives on how systems can better support youth and families to prevent youth homelessness. All participants self-identified as Indigenous. The team created a collaborative zine based on participants' art and quotations, and workshop conversations were collectively analyzed for main themes.
Results: Our poster will showcase art created during the workshops and present the main themes emerging from qualitative thematic analysis (fulsome analysis still in progress.) Presenters will also circulate copies of the collaborative Zine (small magazine with art and quotations directly from the youth) to those visiting the poster. The Zine serves as a vehicle for knowledge mobilization and is one key output from this project. With content created and compiled by young people with lived experience, the Zine captures the voices of the young people who should be at the forefront of shaping future research and interventions surrounding youth homelessness.
Conclusions: Preliminary findings highlight the power and importance of ceremony when working with youth from First Nations and Metis youth. Findings will also highlight and the potential of youth-focused harm reduction to prevent homelessness and position organizations to better support youth living unhoused. This poster will also capture learnings on multidisciplinary health research conducted with mixed groups of knowledge keepers, lived experience advisors, academic researchers, and community partners.

#33 In a Good Way: Reflections of clinicians conducting neurodevelopmental assessments with Indigenous children in remote communities

Chantal Labonté, Sean Bryan*

Purpose: The prevalence of disability among Indigenous children in Canada is estimated to be at least double the rate of all Canadian children. There is a lack of research on a range of neurodevelopmental disorders, such as autism and cerebral palsy, among Indigenous peoples in Canada, resulting in limited evidence to inform the best practices for clinicians. In this presentation, two early-career clinicians share lessons from their experiences providing services in remote Anishnaabe and Anisininew communities across a northwestern Ontario, Canada region referred to as Keewaytinook.
Methods: The clinician presenters engaged in serial dialogue to reflect on their experiences in clinical practice. The clinicians, a Clinical Psychologist and a Developmental Pediatrician, who trained in large urban centres, provide consultative, diagnostic services to the 31 First Nations communities comprising the Sioux Lookout First Nations Health Authority. The model of care is to deliver services within the child's home communities. Several themes and lessons emerged from their discussions.
Results: Several key themes and lessons emerged from the dialogue. Themes include 1) challenges in applying a two-eyed seeing approach, 2) finding our voice as allies without reinforcing colonial structures, 3) the centrality of

relational health, putting oneself into the circle, and the importance of participating in community life, 4) tensions in adapting Western standard practices to meet the needs of First Nations people, and 5) the risk of burnout and vicarious trauma, and practical measures to mitigate it. The clinicians reflect on the importance of ongoing cultural education.

Conclusions: Significant and unacceptable service gaps and systems barriers face First Nations children in Keewaytinook, including a lack of access to neurodevelopmental consultation and assessment services. Jordan's Principle has helped tremendously in improving the availability of diagnostic and support programs, but many challenges remain. The presenters believe that the present lessons can assist new and experienced clinicians alike by improving and validating their experiences and the services they provide as well as informing health human resource planning and retention. This presentation highlights essential considerations for anyone interested or involved in culturally informed clinical practice in an equity-deserving population.

#34 Characterization and strain distribution of group A *Streptococcus* carriage and pharyngitis isolates among Indigenous children in the Southwest United States

Catherine Sutcliffe, Victoria Sergent, Joyselynn Pitalua, Sopio Chochua, Christopher J. Gregory, Chloe Hurley*, Zhongya Li, Saundra Mathis, Lesley McGee, Jennifer Okaro, Theresa Tran, Robert Weatherholtz, Laura L Hammitt*

Purpose: Group A *Streptococcus* (GAS) causes a range of conditions, with non-invasive disease (e.g., pharyngitis) and carriage (estimated prevalence of 4% and 12% among children <5 and <17, respectively) likely driving invasive GAS infections. Indigenous individuals in the Southwest United States are disproportionately affected by GAS disease. Understanding GAS carriage prevalence and risk factors, and characteristics of carriage and pharyngitis isolates provides critical insight to inform optimal use of existing interventions and vaccine development and evaluation. This work was approved by ethical review boards of the Johns Hopkins School of Public Health, Navajo Nation, and Phoenix Area Indian Health Service.

Methods: Two cross-sectional carriage studies were conducted among Indigenous children 0–14 (n=768) in 2019 and 0–4 years (n=498) in 2022-23 in Navajo Nation and White Mountain Apache Tribal lands. Study activities included a questionnaire, medical chart review, and collection and culture of an oropharyngeal sample. GAS prevalence and risk factors for carriage were evaluated. Additionally in 2023-24, clinical throat swabs collected from Indigenous children 0–17 years and GAS-positive by rapid test were obtained and cultured. GAS isolates were sent to CDC’s Streptococcus Lab for sequencing to determine *emm* type. Coverage with the 30-valent vaccine in development was calculated.

Results: GAS carriage prevalence among children aged <5 years was 4.2% (n=33/792; no difference between studies) and 18.1% (n=86/474) among children aged 5-14 years. Carriage prevalence was significantly higher among males, children with an elevated BMI or documented GAS infection in the prior year, and households with fewer young children. The top three *emm* types in carriage were 12 (26.9%), 91 (13.5%), and 1 (8.4%). Overall, 190 clinical GAS pharyngeal isolates were collected. The top three *emm* types were 12 (47.9%), 1 (22.1%), and 53 (8.9%). Coverage by the 30-valent vaccine was 84.2% for pharyngeal isolates and 73.9% for carriage isolates.

Conclusions: Carriage prevalence was similar to estimates reported from the general U.S. population for children <5 and 5-14 years. Carriage prevalence was significantly higher among school-aged children, suggesting that interventions to reduce carriage targeted at this age group would be most impactful in preventing GAS disease. Similar to other settings, *emm* type 12 was predominant in carriage and pharyngitis isolates, contributing to high estimated coverage by the 30-valent vaccine. It will be important to continue to monitor GAS in these communities so that trends over time in carriage, disease burden, and *emm* type distribution can be evaluated, particularly as vaccines become available and are implemented.

#35 The association between diabetes in pregnancy and infant feeding practices

Yash Rawal, Priscilla Irabor, Chukwudumebi Onyiuke, Elizabeth Sellers, Brandy Wicklow*

Purpose: Despite the known benefits of breastfeeding, women experiencing diabetes in pregnancy may face unique barriers to breastfeeding. In partnership with our Next Generation study indigenous parent advisory group and the Four Arrows Regional Health Authority, this study aimed to examine the association between diabetes in

pregnancy with infant breastfeeding practices in the Next Generation cohort.
Methods: Cross-sectional analysis of data from maternal-infant dyads in the cohort. Data was collected through hospital records and questionnaires including maternal diabetes status, gestational age, NICU stay, infant hypoglycemia, birth mode and infant feeding (any vs no breastfeeding). Descriptive statistics, chi square tests and one-way anova were used.
Results: 421 infants were included (50.4% female) with 50.4% exposed to T2D, 24.9% to GDM, and 24.7% to no diabetes. Infants exposed to T2D(39.6%) and GDM(43.8%) were less likely to be breastfed compared to not exposed to diabetes (79.8%)($p<0.001$). Infants exposed to T2D were more likely to be premature (T2D-36.8weeks, GDM-37.8weeks, no DM-38.5weeks,$p<0.001$),delivered by C-section (40% T2D vs 20.8% GDM vs 20.7% no DM,$p=0.001$ and $p=0.002$, respectively), hypoglycemic episodes (44.3% T2D vs 12% GDM vs 3.8% no DM,$p<0.001$) and admitted to the NICU (33.1% T2D vs 6.6% GDM vs 13.8% no DM,$p<0.001$,$p=0.002$,respectively). There were no significant differences in birthweight between groups.
Conclusions: Infants exposed to any diabetes in utero are less likely to be breastfed. This may be in part related to the increased likelihood of c-section delivery, prematurity, and NICU stay. In addition, delivering outside of the community and dislocation from the home environment to a less hospitable, and supportive environment may also impact breastfeeding capacity. A better understanding of the clinical and social challenges in breastfeeding is necessary to inform timely, targeted and appropriate interventions.

#36 The Effect of the HNF1-α G319S Polymorphism on Kidney Health of Children in the Next Generation Cohort Exposed to Type 2 Diabetes in utero

Priscilla Irabor, Allison Dart, Elizabeth Sellers, Chukwudumebi Onyiuke, Stephanie Goguen, Yash Rawal, Brandy Wicklow*

Purpose: Exposure to type 2 diabetes (T2D) in utero is associated with long-term risk of chronic kidney disease. The HNF1-α G319S polymorphism increases the risk of developing T2D, however, associations with kidney outcomes prior to diabetes onset is unknown. In partnership with the Next Generation study's Indigenous parent advisory group and Four Arrows Regional Health Authority, we sought to evaluate markers of kidney health in children exposed to T2D in utero with and without the HNF1-α G319S polymorphism.
Methods: This is a cross-sectional analysis of participants from the Next Generation cohort who were exposed to T2D in utero, normoglycemic and 5 to 11 years old. Outcomes (glycosuria, random urine albumin: creatinine ratio (ACR), albuminuria status (ACR>3mg/mmol) and hypertension status) were analyzed using descriptive statistics.
Results: A total of 142 participants were included in the analysis (52.1% female, 8.98±1.91 years, median BMIz {2.20[1.73, 2.46]}, median Hemoglobin A1C {5.50[5.30, 5.70]}). The wildtype group (n=67) had 4 participants with albuminuria while the variant group (n=75) had no one with albuminuria. None of the participants in either group tested positive for glycosuria. Median ACR was (0.50 [0.30, 0.92] vs 0.60 [0.30, 0.90], $p = 0.616$) and hypertension rates were 57.4% vs 61.0%, ($p = 0.843$) in the wildtype and variant group respectively.
Conclusions: We observed no glycosuria and low rates of albuminuria in the cohort. There were high rates of hypertension in both groups, which requires further investigation to determine its association with exposure to T2D in utero.

#37 Adaptation of a Dialectical Behaviour Therapy Program for First Nations Youth Living with Type 2 Diabetes in Manitoba, Canada

Brandy Wicklow, Melissa Del Vecchio, Lily Pankratz, Leslie E. Roos, Emily E. Cameron, Elizabeth Sellers, Jonathan McGavock, Mandy Archibald, Linda Diffey, Laurence Y. Katz, Tanya Dawn McDougall, Jennifer Harper, Lionel Mason, Chukwudumebi Onyiuke, Allison Dart*

Purpose: Youth living with type 2 diabetes (T2D) have identified mental health as an important component of diabetes management. Type 2 diabetes diagnosed in childhood disproportionately affects First Nations children, families and communities. Dialectical Behavior Therapy (DBT) is a Western based program, which includes teachings on mindfulness, emotion regulation, and distress tolerance and interpersonal effectiveness. This pilot project examines the adaptations such as minor worksheet modification and incorporation of Ansininimowin cultural teachings to develop an impactful culturally relevant community-based mental health intervention based on feedback from Anisininew youth living with T2D.

Methods: An initial scoping review revealed previous incorporation of First Nations ways of knowing and being into health interventions. Consultations with Indigenous lead organizations in research (IPERC and DREAM steering circles) and with elders and knowledge keepers from different nations informed a focused intervention in partnership with a Knowledge carrier and community members from one community St Theresa Point. Recruitment, enrollment, and adherence rates to the DBT program are being determined.

Results: The research team including Four Arrows Regional Health Authority, child psychologists and trainees, and a knowledge carrier from St Theresa Point with expertise in mental health reviewed and adapted images and examples to reflect the lived experience of youth living with T2D in community. Currently the DBT intervention is being co-led by a community knowledge carrier and an educator with 2 child psychologists as an after-school program including a healthy snack in the community high school. We are collecting data on the feasibility, acceptability and satisfaction of the program which will be available for reporting in Spring 2025.

Conclusions: Building trusting relationships between university-based researchers and community led researchers, knowledge keepers and community leadership, and sharing health priorities which are derived from the youth living with T2D allowed the development of a better intervention which is culturally relevant and delivered in community.

#38 Assessing the wellness of young Indigenous children: co-creating a version of the ACHWM for child-caregiver pairs

Mylène Michaud, Nancy L. Young*

Purpose: Culture is a key determinant of Indigenous health. Culturally appropriate solutions to assess wellness are critical. In 2009, Indigenous health leaders and scientists began a research partnership to create a culturally-appropriate measure of Indigenous child health. They developed the Aaniish-Naa-Gegii: The Children's Health and Well-being Measure (ACHWM). The ACHWM is a tablet-based self-reported measure that assesses health and well-being from the perspectives of Indigenous children aged 8 to 18 years. Timely results inform strengths-based conversations between children and their support network. The aim of this project was to adapt the ACHWM for children aged 4.0 to 7.9 years.

Methods: This study has 3 steps. Step I – Candidate Item Identification: With a Rash analysis, the research team reviewed data from 402 respondents. Step II – Expert Evaluation of Item Content: Five experts in child development and Indigenous perspectives reviewed the proposed measure according to age-appropriateness and importance, and were challenged to identify any essential items that were missing. Step III – Feedback from child-caregiver Pairs (ongoing): Cognitive debriefing interviews are scheduled with 5 to 10 child-caregiver pairs. During the interview a member of the ACHWM team explored their understanding of the items. Critical perspectives from Indigenous child-caregiver dyads are gathered.

Results: Step I: A Rash analysis was published in 2022 that identified 41 ACHWM items that clustered together and focused on wellness. These were reviewed by the research team and resulted in a provisional version of 25 items for a young child version of the ACHWM. Step II: The experts recommended modifications to three items. Those items were simplified for a younger audience. For example, ''I am physically fit…'' became ''I am healthy…'' Step III: This step builds on the modified version from Step II and is currently in progress with the help of our community partners.

Conclusions: This study aimed to create a wellness measure to guide community-based health services leaders in planning for young children. We adapted the ACHWM for a younger population (4.0 to 7.9 years of age). Experts' feedback was critical to improve the measure, in preparation for input from child-caregiver pairs in Step III. The Young Child ACHWM will help elevate the collective voice of Indigenous children, and in doing so, empower leaders to implement evidence-based health care. Clinically, it has the potential to support individual assessments and tailor interventions, while prioritizing children most in need of support while also celebrating their strengths.

#39 Adapting an Indigenous Child Wellness Assessment for Nunavut

Nancy Young, Mylène Michaud, Victoria Madsen*

Purpose: Culturally appropriate assessment is a keystone of learning health systems that promote wellness. There are few such tools for Indigenous populations, particularly for children and youth. In 2009 a collaboration was formed to address this gap. It began in a First Nation with the co-creation of the Aaniish-Naa-Gegii: The Children's Health and Well-being Measure (ACHWM) with and for Indigenous children 8 to 18 years of age. In 2014 it was adapted for urban Inuit in Ottawa as the Qanuippit. In 2018 the Government of Nunavut expressed interest is using the measure. This study aimed to culturally adapt the Qanuippit for use with Inuit children in the Canadian arctic.
Methods: Mental health leaders in Nunavut collaborated with researchers to conduct a mixed-methods study. Experts in education, culture, and children's health in Iqaluit reviewed the content of the Qanuippit, proposed necessary revisions necessary, and identify missing content. These results were shared with Inuit children (8 to 18 years of age) in Iqaluit, to gather their input via individual interviews. When concerns were raised, we sought solutions, made revisions, and explored the revisions with subsequent participants. A series of consultation meetings were conducted to understand how the local health team sees the tool contributing to children's wellness.
Results: Face-to-face interviews were completed with 8 experts in July and Aug. 2023. They identified a mean of 4.9 items with a concern, suggested a modification to one item, and 7 additional items were flagged for detailed review with children. Interviews were completed with 15 children (ages 7.7 to 17.9 years) in Feb. 2024. They identified 11 items as potentially problematic. Clear solutions were identified for 2 items, and we continue to consult on possible solutions for the remaining items. Local health staff suggest that the measure may serve as a communication tool for Inuit children and support local data gathering to inform service planning.
Conclusions: This study produced a measure the Inuit call Qanuippit that fits with the culture and lexicon of Inuit children in Iqaluit. There are few substantive differences from the urban Inuit version of the Qanuippit, and thus we believe the validity of the original version has been maintained. This measure may help kick-start local conversations with children who have difficulty verbalizing their feelings and/or face barriers to accessing mental health providers in Nunavut. The assessment is being explored further in an implementation study that will gather input from local health workers regarding the impacts on service.

#40 Moving towards Culturally Safe Care: A comparative review of values between Indigenous Traditional Medicine and Western Medicine

Nicole Leblanc, Natalie Inamura*, Intissar Souli, Carly Demont*

Purpose: The Canadian healthcare system has struggled to address the healthcare needs of Indigenous populations since its inception. To develop culturally safe pediatric care practices, it is essential to understand the values and principles that guide actions in First Nations traditional medicine and Western medicine. Our review aimed to identify and compare the values and principles guiding First Nations traditional medicine with those of the Canadian healthcare system, with the goal of understanding their origins to find a balanced approach that contributes to culturally safe pediatric care for Indigenous children and their families.
Methods: To identify relevant literature, we searched for sources in PubMed, Embase, EBSCOhost, CINHAL, and grey literature. The data screening and extraction were guided by inclusion and exclusion criteria, based on the PICO method where two independent reviewers carefully examined each article in three stages: title, abstract, full text. The extracted data from the selected articles were summarized in a Microsoft Word© table.
Results: Results from our search produced 5933 references which 13 articles were selected for data extraction. Within these results, we identified four key themes: traditional medicine, Western medicine, value comparison, and Two-Eyed Seeing. Traditional medicine emphasized family, balance, respect, spirituality and community, while Western medicine prioritized efficiency, innovation (evidence), rigor and objectivity. We found combining strengths from both systems, in line with the Two-Eyed seeing approach, emerged as a promising model for enhancing culturally safe care for Indigenous populations.
Conclusions: This review emphasizes the importance of understanding the values and principles of both First Nations traditional medicine and Western medicine. While their approaches differ, both share the common goal of

healing. By comparing these perspectives, we can gain insights into their distinct origins and find potential for meaningful teachings and integration. Our results will be used to enrich healthcare practices, inform policy, help guide culturally safe care and improve outcomes for the Indigenous children and their families. They could also be used for the broader Indigenous population to develop and deliver culturally safe care.

#41 Teaming Up for Tiny Teeth: Exploring Natural Caries Protection in Collaboration with Métis and First Nations Families in Manitoba

Carol Youssef, Betty-Anne Mittermuller, Robert J Schroth, Felicitas Bidlack ,Jacqueline R. Starr, Xuesong He, Karaaslan Hakan, Wenyuan Shi*

Purpose: Early childhood caries (ECC) is a significant public health issue in Canada, particularly affecting young children in underserved and Indigenous communities, leading to high rates of oral health complications and unmet treatment needs. This study aims to identify natural caries-protective mechanisms in high-risk First Nations and Métis children under six, who remain disproportionately affected by ECC despite advances in dental care. By exploring interactions between the oral microbiome and tooth properties, we aim to uncover factors that inherently guard against decay. In collaboration with Indigenous communities, this research will inform culturally relevant, preventative strategies against ECC.
Methods: This NIH-funded study is enrolling 240 First Nations and Métis children under 72 months in Manitoba. After screening, caregivers complete a questionnaire on the child's health and nutrition. Biological samples (saliva and plaque) are collected, with an option to donate naturally shed or extracted baby teeth. Plaque analysis evaluates acid-producing bacteria to assess caries risk and compare microbiomes between children. Participants are classified as ECC-affected or caries-free, with additional analysis of bacterial interactions and enamel/dentin properties—such as mineral density and biochemical markers—to identify protective traits in children with high acid-producing bacteria but no caries.
Results: Preliminary findings from a pilot study show significant microbial and enamel differences between caries-free (CF) and ECC-affected children. CF children exhibited either less microbial acid production or beneficial microbial interactions that may reduce decay risk. Differences in enamel and dentin composition suggest that biochemical properties may contribute to caries protection. These findings support the hypothesis that Indigenous children's oral environments possess unique natural defenses.
Conclusions: Collaborative research with Indigenous communities will highlight unique caries-resistance mechanisms in First Nations and Métis children. Identifying protective microbiome and enamel traits could lead to the development of culturally sensitive, preventative strategies for ECC. These insights have the potential to inspire future treatments that harness these natural defenses, promoting healthier smiles and reducing oral health disparities among Indigenous children.

#42 Risk factors contributing to ECC-causing bacteria in young First Nations and Métis children in Manitoba

Athena Monayao, Robert Schroth, Prashen Chelikani, Kathy Yerex, Rhonda Campbell, Julianne Sanguins, Frances Chartrand, Elizabeth Decair, Vivianne Cruz de Jesus, Ankita Vaishampayan, Betty-Anne Mittermuller*

Purpose: Many First Nations and Métis children develop Early Childhood Caries (ECC), defined as any caries experience in children <6 years of age. Children with ECC can suffer from an aggressive sub-type called severe ECC (S-ECC), which requires children to undergo major dental surgery under general anesthesia. The oral microbiome is the major risk factor for caries. The purpose of this study is to investigate other risk factors such as access to oral health care, poverty, food insecurity and lack of traditional diets and how they contribute to higher levels of virulent microbial strains that increase the risk for ECC.
Methods: The target population are First Nations and Métis children <72 months of age and their primary caregiver(s). Dental plaque and saliva samples will be collected for analysis of the oral microbiome. Primary caregivers will complete a questionnaire that aims to capture the following data from the child: general health, feeding history, nutrition, and oral health habits. Demographic data and family characteristics will also be collected through the questionnaire.
Results: Recruitment is ongoing with support from First Nations Health and Social Secretariat of Manitoba

(FNHSSM), Manitoba Métis Federation (MMF), and community partners. We are building relationships with families and directors in urban and rural Head Start programs, and learning from First Nations community health directors and dental providers about individual communities. Following data analysis of plaque and saliva samples, the study will help characterize the microbiota in children with and without ECC. Findings from the questionnaire will reveal significant factors associated with bacterial strains that increase risk for caries.
Conclusions: This study aims to provide a comprehensive understanding of the factors contributing to ECC in First Nations and Métis children. By integrating plaque microbiome analysis with socioeconomic, dietary, and environmental data collected in the questionnaire, we anticipate identifying key risk factors and patterns that influence oral health outcomes in young Indigenous children. The findings can guide culturally sensitive oral health prevention and intervention that can reduce the prevalence of ECC in Indigenous communities.

#43 Utilization of Silver Diamine Fluoride by Dentists in Canada: A Review of the Non-Insured Health Benefits Dental Claims Database

Robert Schroth, Mohamed El Azrak, Mary F Bertone, Anil Menon*

Purpose: Silver diamine fluoride (SDF) has the potential to arrest caries in young children. In August 2020, the Non-Insured Health Benefits (NIHB) program approved reimbursement for SDF. The purpose of this study was to investigate the utilization of SDF by Canadian dental providers for First Nations and Inuit Canadians with dental benefits through the NIHB program.
Methods: The NIHB program provided data on claims for SDF for children < 17 years for the period from August 1, 2020 to July 31, 2022. Claims made by general dentists, pediatric dentists, prosthodontists, and dental hygienists were included. Statistical analysis included descriptive statistics and rates of SDF application by province or territory.
Results: There were 4,158 claims for SDF between August 1, 2020 and July 31, 2022 for 3,465 children. The mean age was 7.9±4.0 years and 52.9% were female. General dentists made the majority of claims. Claims revealed that traditional restorative treatment was also performed on the same day of SDF application for nearly one third of patients. Manitoba had the most initial SDF claims (19.6%). However, Alberta was the highest province for follow-up SDF claims. Nunavut and Northwest Territories had the highest rates of SDF claims for children (37.0/1,000) and (20.9/1,000) respectively.
Conclusions: Data suggest that there has been an overall continuous increase in the number of SDF claims among registered First Nations and Inuit children. While, Ontario and the Western provinces had the highest number of claims, Nunavut and the Northwest Territories had the highest rates of claims.

#44 Indigenous Children in Care: The Path Forward

Dawn-Ellen Young, Tamara Babiak, Mira Zorniak*

Purpose: According to Statistics Canada (2021), Indigenous children represent 53.8% of children in foster care, despite making up only 7.7% of the total child population. In Alberta, this figure rises to 76%. The disparity stems from multiple factors, including intergenerational trauma, government policies, and a disconnect between Indigenous and non-Indigenous stakeholders. The Edmonton Pediatric Kids in Care (PKIC) program was created in collaboration with Children and Family Services to compassionately address the needs of children in government care.
Methods: PKIC delivers culturally sensitive care through a trauma-responsive approach, recognizing every child we serve has experienced trauma. Rather than focusing on challenges, we prioritize understanding each child's experiences and the effects of familial trauma. Our holistic team includes trauma-informed professionals—pediatricians, nurse practitioners, nurses, social workers, child life specialists, and child psychiatrists, who conduct medical, developmental, and social-emotional assessments. This provides stakeholders the insights needed to support each child’s unique needs while avoiding a "fix the kid" mentality. Our resilience-based team collaborates with community partners, such as schools and other complex systems our families navigate, ensuring a comprehensive support network.
Results: The PKIC program supports the reunification of children with their families and communities, highlighting

the importance of partnerships with Children and Family Services and Indigenous organizations. We will present successes and challenges in areas such as reunification, trauma-informed therapy implementation, early educational assessments, cultural connections, and medication reduction. Using a trauma-based medical approach, we will illustrate how medication can be beneficial while emphasizing the critical role of caregivers in adapting parenting strategies.
Conclusions: The Path Forward – Some things to think about
· What are we doing well?
· What can we do better?
· Are we culturally appropriate and sensitive to the needs of the individual child and/or family?
· Are we proactively engaged with our Indigenous partners?
· In this partnership are the mandates outlined by the Truth and Reconciliation Committee being met?

#45 ~~Ilitaqsiniq Early Years (EY) - An early childhood education program that nurtures Inuit children~~ WITHDRAWN

Hilary Manik, Laura Merritt*

Purpose: Ilitaqsiniq, led by an Inuit Board of Directors, is a holistic well-being organization that strengthens the well-being of Inuit children and families in Nunavut. Developed in partnership with the Martin Family Initiative, the EY program supports families and communities in their ability to serve, protect, and nurture their children in a manner that reflects Inuit resilience and self-determination. This approach is critical because the quality of early care services in Nunavut has not kept pace with other parts of Canada. The EY program addresses this discrepancy by providing early childhood education, facilitating healthy child development and reinforcing children's Indigenous identities.
Methods: The EY program is built on Inunnguiniq—the Inuit practice of raising capable, well-rounded individuals who can contribute meaningfully to society. The program was piloted in Rankin Inlet and Arviat, two of seven communities in the Kivalliq Region, in April 2022. EY Visitors are from the communities they serve and establish strong, supportive relationships with parents, caregivers, and young children. Visitors conduct home visits, where they engage with parents on topics related to early childhood development and well-being. Visitors also support parents overcome barriers to accessing care by referring them to community services and providing reliable transportation to relevant appointments.
Results: After the successful pilot and to meet the growing demand from community members, EY expanded to Naujaat in 2023 and Baker Lake in 2024. The EY program employs 25 Visitors full-time across the four communities. From its launch, EY has supported 475 families. Notably, program benefits extend to everyone in the household during visits. During the 1,892 visits completed in the past year, at least one other person (e.g., spouse or sibling) was present in half of these visits. This underscores the strong emphasis on collective caregiving in the community, where extended family actively contribute to a child's well-being.
Conclusions: Ilitaqsiniq's EY program delivers essential services that the provincial or federal government does not provide. The EY program has proven its ability to reach Inuit families with culturally specific, community-led support. EY addresses child development-related needs in ways that honour families' lived experiences and strengthen their ties to both their culture and one another. By creating opportunities for meaningful employment, EY also contributes meaningfully to the self-sufficiency and overall economic well-being of Inuit families. As one of the only universally accessible, culturally responsive early childhood programs in the region, the Ilitaqsiniq EY program fills a significant service gap in Nunavut.

#46 Partnership in Action: A Community-Led Approach to Improving Access to Neurodevelopmental Assessments for Children and Youth through the Sunny Hill/ Mission Primary Care Network/Leq'á:mel Health Centre Partnership

Bill McMillan, Sabine Barrett, Barbara Blanchard, Jen Cook, Claire Chadwick, Gurpreet K Salh*

Purpose: In Spring 2023, Leq'á:mel Health Center raised concerns about children and youth with complex developmental presentations facing barriers to accessing Complex Developmental Behavioural Conditions (CDBC) and BC Autism Assessment Network (BCAAN) services. These barriers included transportation difficulties and a lack of accessible pediatricians. Leq'á:mel Health Center, Mission Primary Care Network (PCN), and CDBC at Sunny Hill

Health Center responded by forming a partnership to conduct developmental assessments in the community.
Methods: The success of the program stems from collaboration based on shared goals and value for each organization's expertise. Leq'á:mel Health Center and Mission Primary Care Network informed local communities and supported families in obtaining referrals and attending appointments. CDBC clinicians conducted assessments with the support of health center staff. This reduced barriers to assessments, minimized travel time, and allowed families to remain close to social and cultural support. Importantly, we aim to provide children and families with wholistic and actionable recommendations for continued care, including by collaborating with the First Nations Health Authority (FNHA) to build upon existing services for follow-up care.
Results: In the first year of this partnership, 67 young people received a developmental assessment. Additionally, there was a 46% increase in referrals from the areas within this partnership. Due to the collaborative approach taken by Leq'á:mel Health Center and Mission Primary Care Network, 97% of families have been able to attend their appointments as scheduled. Further, we have begun a developmental evaluation to identify the values underlying this process, and thereby develop relevant methods of evaluating our collaborative process. This work is ongoing and aims to allow us to extend partnership-based service to other communities within British Columbia.
Conclusions: While the program functions to provide neurodevelopmental assessments, it is the non-hierarchical collaboration between a tertiary care program, primary care network, and Nation-based health center that has allowed us to meet community needs in a meaningful way. This relational, community-led approach could be beneficial across the healthcare system and is evidence that patient needs are best met when we step outside silos with the shared goal of community wellness.

#47 Tackling Tots Teeth Together: A Collaborative Approach in Understanding the Social Determinants of Oral Health Inequities in Métis and First Nations Children in Manitoba

Maria Regine Manigque, Robert J. Schroth, Olubukola O. Olatosi, Daniella DeMaré, Betty-Anne Mittermuller, Rhonda Campbell, Frances Chartrand, Kathy Yerex, Jeanette Edwards, Maryam Sharifzadeh-Amin*

Purpose: Early Childhood Caries (ECC) is a public health concern in Manitoba that needs to be addressed as it is a chronic illness that is preventable. This study began in response to high ECC rates in Indigenous communities in Manitoba and growing wait times for surgery to treat First Nations and Métis Children with ECC. Working in collaboration with Indigenous communities, we hope to gain insight on the childrens lived experiences with oral health disparities. We will then employ strategies for oral health promotion based on the perspectives we have gained from Indigenous communities and explore if this approach was effective.
Methods: The study focuses on a community-driven approach in which multiple perspectives are explored. The first aim of the study includes an oral health assessment for children under six years old (72 months), followed with a questionnaire for the childrens primary caregiver, and focus groups to welcome the community members oral health knowledge and experiences. The second aim of the study involves focus groups with non-dental primary care providers (NDPC's). We hope to implement the use of the Caries Risk Assessment (CRA) tool by NDPC's as a means to decline the rate of ECC in Indigenous communities.
Results: We have been able to assess Indigenous childrens oral health, hear from community members and NDPC's who serve these populations. We have visited Aboriginal HeadStart Programs including Little Red Spirit and have visited Pine Falls, Pine Creek First Nations, Selkirk, Camperville, Swan River, St. Laurent and more. In aim one, we have recruited 102 Indigenous children who received oral health screenings, been offered fluoride varnish and whose caregivers have completed questionnaires. 22 community members have also done focus groups. In aim two, we have conducted focus groups with 50 NDPC's including nurses, nurse practitioners, physician assistants, physicians and etc.
Conclusions: The is an ongoing five year study. As we continue to gain an enhanced understanding of the oral health disparities experienced by Indigenous children, we hope to better understand the multi-factorial causes effecting the high ECC rates in Manitoba Indigenous Populations and create solutions to address this issue. We hope to integrate traditional oral health teachings to improve the effectiveness of the Healthy Smile Happy Child (HSHC) initiative. Moving forward, we want to deliver oral health promotion using a collaborative approach with Indigenous partners, collaborators, and knowledge users who are actively engaged during all stages of this research.

#48 Guided by Lived Experience: How can Healthcare Providers Recognize and Intervene in the Trafficking of Indigenous Peoples through Indigenous-Led Research and Community Collaboration

Adrienne Schuler, Preeti Panda*

Purpose: Child trafficking is a public health crisis in the United States disproportionately affecting Indigenous peoples. About 30% of Indigenous girls experience sexual violence and are 5 times more likely to be incarcerated for prostitution than White counterparts. These adverse childhood experiences are linked to observed disparities of poor health outcomes in Indigenous communities and increased risk for exploitation. Little is known about how Indigenous children experiencing trafficking access health care or how health care providers can screen and intervene. This work is especially salient to work towards equitable and decolonized health care.
Methods: This is a work in progress. Our deadline for completion will be March 2025. We are conducting a systematic review of the literature. Searches were conducted in multiple databases. Screening was performed by 2 independent reviewers, with interrater reliability calculated at each stage. Data extraction, thematic analysis, and appraisal for bias will be performed for the final included studies to evaluate study quality and identify best practices. Partnerships were created with 2 Indigenous survivors of human trafficking. We will utilize best practices in community engaged research and trauma-informed care to incorporate their perspectives into the study discussion and recommendations.
Results: This project aims to improve health equity for trafficked Indigenous children through: 1) Synthesizing best practices in healthcare setting screening and intervention for Indigenous children experiencing trafficking 2) Creating partnerships with Indigenous survivors of trafficking to incorporate perspectives in recommendations and creation of a toolkit for pediatric healthcare practitioners.

Conclusions: In collaboration with the survivors on this study, we will create one toolkit and a shorter policy brief based on the results of the systematic review. These translational materials will be geared towards healthcare providers to provide an overview of the issue, recommendations for screening and intervention, as well as resource provision. These materials will be co-authored by the Indigenous survivors we partner with and disseminated to local health systems and through survivor networks . The systematic review will be disseminated via peer-reviewed manuscripts with acknowledgements provided to the survivor collaborators

#49 ~~Paediatric Residents' preparedness to care for Indigenous patients and families: A needs assessment survey to inform clinical curriculum development~~ WITHDRAWN

Kathryn Hynes, Preet Sandhu, Leanne Morris, Liz Erasmus, Georgina Bird, Suzette Cooke, Tanya Beran*

Purpose: There continues to be gaps in care for Indigenous children in Canada, stemming from historical acts of colonialism and racism1. The TRC call to action #24 implicates medical training programs to require skills-based training in Indigenous health to begin to counteract these inequalities2. Despite this, Canadian medical training may not be effectively educating physicians on Indigenous health and wellness3. A recent review of Canadian residencies has highlighted a need for community-driven Indigenous partnerships4,5. The purpose of our study was to explore residents' comfort levels in providing care for Indigenous patients. The results will inform next stages in clinical curriculum development.
Methods: As per Kern's model of curriculum development, we conducted a survey-based needs assessment of pediatric residents at the University of Calgary. Survey questions explored residents' knowledge, experience, and skills related to culturally safe care. Topics included understanding of Indigenous health practices, identifying medical mistrust, incorporating Indigenous ways of knowing in management plans, clinical exposure, mentorship and advocacy. Quantitative data was analyzed using descriptive statistics. Thematic analysis was used to analyze written responses. This study was reviewed with the Indigenous Research Support Team through University of Calgary to ensure content validity and received ethics approval for completion.
Results: Survey response rate was 21/53 (40%). All participants strongly agreed on the value of learning about this topic (M= 5/5, SD=0). Participants reported lower comfort levels in incorporating Indigenous ways knowing into their practice (M= 2.4/5, SD=.9), but higher levels of confidence in advocacy (M=3.8/5, SD=.5). Overall participants reported low scores in confidence working with Indigenous populations in a culturally safe way (M=2.85/5,

SD=1.0). Preliminary qualitative thematic analysis revealed common themes: limited previous learning opportunities, multiple barriers to learning and a dearth of experiences on treaty lands or indigenous healthcare settings.
Conclusions: While pediatric residents see the importance of culturally safe care, most still feel unprepared to provide high quality care, and report low comfort levels in incorporating Indigenous ways knowing into their practice. The results from this survey highlight the need for improved Indigenous health training in our pediatric residency program. The next phase of this needs assessment is underway to partner with local Indigenous communities to better understand how we can provide holistic care and teach culturally safe practices. The results from this needs assessment will guide clinical curriculum development.

#50 We tutuska towin~Forging Paths Together: The Co-Creation of Culturally Rooted and Physical Literacy Enriched Early Learning Environments

Amanda Froehlich Chow, Erica Stevenson, Elder Kathy Wahpepah, Louise Humbert, Natalie Houser, Amanda Gannon, Fatima Ali*

Purpose: The Developmental Origins of Health and Disease (DOHaD) is a theory that hypothesizes that interactions among genetics and social environmental factors during the early years have a significant impact on overall wellness later in life. Among DOHaD approaches there are culturally diverse perspectives and practices, such as Indigenous DOHaD, which considers intergenerational environmental factors alongside diverse Indigenous ways of knowing being and doing as effective avenues to promoting children wellness. Although diverse Indigenous communities have their own unique teachings and sacred knowledges, the vast majority share the belief that strong intergenerational bonds are essential in promoting childhood wellness. However, globally many Indigenous cultural practices, teachings, and languages have been systemically threatened as a result of colonialism (e.g., residential schools) and widespread racism toward Indigenous peoples. This loss of culture is reflected in most existing public health and educational programing and resources for early years children, which are informed solely by Western practices. Moreover, Indigenous children and adults alike are disproportionally represented among those impacted by chronic diseases. To address this gap, our team of Knowledge Holders, Indigenous families, early childhood educators, and community-based researchers, has embarked upon a journey of co-creating a culturally rooted wellness initiative called Nature's Way-Our Way. Together we are cultivating early learning environments, which are diverse, inclusive, and rich in culturally rooted approaches aimed at supporting child-caregiver bonds, land-
Methods: This initiative incorporates a combination of interventional–DOHaD and implementation sciences approaches, alongside etuaptmumk (Two-eyed Seeing) to braid Indigenous ways of knowing, being and doing about early childhood wellness and cultural land-based games alongside Western knowledge of developing health promoting behaviours among early years children.
Results: To date this initiative has been piloted and shared in rural and urban early learning centres, which together serve 150 Indigenous children and their families. The initiative has resulted in a set of culturally rooted activity cards, educator training, and activity kits.
Conclusions: By promoting wholistic wellness, Nature's Way-Our Way aims to contribute to reducing health disparities and preserving Indigenous sovereignty in early childhood development approaches.

#51 Indigenizing Mental Wellness; Evaluating Community-Based Inuit-Led Mental Wellness Initiatives: A Rapid Review

Ariana Doody, Jennifer Shea*

Purpose: Given this growing research in support of Indigenous-led mental wellness initiatives, the following study aims to review the literature with the goal of synthesizing, organizing, and mapping Indigenous-led mental wellness frameworks that include Indigenous voices and have been successful in improving mental health outcomes in Indigenous communities.
Methods: Following the guidelines set out by the Cochrane Rapid Reviews protocol and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for scoping review (PRISMA-ScR)

guidelines, this rapid review was designed with an analytical framework that synthesizes, organizes, and maps the components of successful Inuit-led mental wellness initiatives. The databases yielded a total of 352 studies. These records were then exported from their platforms to Covidence where all the duplicates were removed. Next, a single reviewer screened the abstracts of the remaining articles to confirm that their methodology meets the eligibility criteria of our rapid review, that the area of focus is related to community-based mental wellness initiatives, and to ensure that the study population of focus were Inuit. This yielded a total of 11 studies to be included in this review.
Results: Of the studies targeting Inuit youth, four (50%) fostered youth leadership, community engagement, coping skills, and and strengthened their sense of community. One of the youth-targeted studies (12.5%) decreased negative emotions in youth (i.e., hopelessness, self-blame, rumination, and catastrophizing). All youth studies felt strongly about its impact on Inuit youth mental wellness and about its impact on decreasing suicidality in this population. Across studies that incorporated traditional Inuit activities of healing and wellness, community engagement and participation in the initiative was improved. In addition, communities voiced appreciation for the process of coming together to take collective action and for the fact that traditional activities were being prioritized to respond to a local need.
Conclusions: Until recently, interventions aimed at improving mental wellness among Indigenous populations have been largely Western-centered, emphasizing the importance of evidence-based psychotherapy and medication over traditional healing to improve mental wellbeing. This is despite high rates of participant dropout for these initiatives, lack of improvement in Indigenous mental wellbeing, and cultural barriers that decrease the efficacy of implementation, and concerns voiced by Indigenous leaders and communities. In recent years, Indigenous voices and traditional healing preferences have become incorporated into evidence-based mental wellbeing initiatives. This combination of Indigenous traditional healing with evidence-based mental wellness techniques has not only been more successful in improving mental wellbeing among Indigenous communities, but can be sustainably led by the community, improves and restore traditional Indigenous relationships with their land and culture, and fosters more connected and supportive networks within Indigenous communities.

#52 ~~A collaborative and mixed methods approach to exploring understandings of quality learning and care for young First Nations children in early childhood settings on reserve~~ WITHDRAWN

James Allen, Lisa Murdock, Denise Webb, Amy Nahwegahbow*

Purpose: All Indigenous children, families, and communities in Canada need early learning and child care-focused research. The overarching goal of this study, however, was to identify key factors associated with the optimal learning and development of First Nations children in early childhood settings on reserve, for the purpose of informing and strengthening programs and policies designed to support families with young children (birth to six years) in First Nations communities.
Methods: This qualitative work engaged multiple First Nations partners—through individual interviews and group discussions with policy makers, program administrators, early childhood educators, and parents and grandparents—to explore their insights on the quality care and development of First Nations children in early childhood program environments situated on reserve. The quantitative work focused on conducting new analyses of data from the First Nations Regional Early Childhood, Education and Employment survey (FNREEES) to explore the ways that social and environmental factors in First Nations children's home and caregiving environments can support their growth and well-being.
Results: Together with a detailed review of early childhood education curriculum and related post-secondary training materials, as well as relevant legislation and policies underlying early childhood programming, the results from this study offer a deepened understanding of the current sociopolitical situation concerning First Nations early learning and child care in Canada, and what quality early childhood programming means to First Nations families and communities.
Conclusions: Taken together, these interrelated studies of children's early learning and child care offer a bigger picture of their growth and development within the context of their families and communities, as well as insight into the early childhood experiences that will follow them throughout their lifetime.

#53 Exploring the legislative complexity of early learning and child care for First Nations children

Denise Webb, Lisa Murdock, Regine Halseth*

Purpose: Quality early learning and child care (ELCC) programs can be instrumental in promoting the healthy growth and development of young First Nations children, especially when ELCC programs are designed, delivered, and managed by and for First Nations people. Still, First Nations control of ELCC programs on reserve is complex, with intersecting influences from federal and provincial or territorial legislation and regulations. This study aims to untangle the legislative complexities underlying the control, regulation, and cultural appropriateness of ELCC programs operating on reserve for First Nations children and families across Canada.
Methods: This study reviewed provincial and territorial ELCC legislation and regulations, supplemented by grey literature from ministerial offices responsible for ELCC, Gale in Context: Canada, Government of Canada Publications, LEGISinfo, and CanLII. Sources were examined if they included on-reserve ELCC programs for First Nations children aged birth to six. Nunavut was not included due to the territory's absence of First Nations reserves. Information was organized according to seven principles of the First Nations ELCC Framework, co-developed by federal and Indigenous partners, and explored through a narrative analysis and data tables.
Results: All provinces and territories were found to have existing arrangements either within or outside ELCC legislation which lend or transfer control of ELCC programs to First Nations governing bodies on reserve. All jurisdictions also have ELCC regulations that align with at least two principles of the First Nations ELCC framework. Gaps in the legislation point to the absence of leadership from Elders and Knowledge Keepers, as well as a lack of intergovernmental collaboration in the development of ELCC initiatives—two critical aspects of the framework principles.
Conclusions: This study is part of a larger project partnership between the National Collaborating Centre for Indigenous Health and the First Nations Information Governance Centre who together are working on a series of interrelated projects aimed at exploring the optimal health and well-being of First Nations children and families. This study provides legislative context to support this work. In light of the new Canada Early Learning and Child Care Act (2024) and the Canada-wide ELCC agreements, this study may also inform the work of jurisdictions, researchers, and policymakers in supporting and establishing First Nations-led ELCC systems.

#54 Family, Culture, Community: A Northern First Nations Community-Directed Needs Assessment for Pediatric Rehabilitation Care

Hailey Dunn, Stacey Lovo, Chantal Camden*

Purpose: First Nations children in Canada experience significant health inequities including decreased access to rehabilitation services for developmental and chronic conditions, which is necessary to optimize health and well-being. The Elders Advisory group in the northern Saskatchewan Cree community of Pelican Narrows (PN) and Peter Ballantyne Cree Nation (PBCN) directed researchers that access to pediatric rehabilitation services was an urgent priority for collaboration. In partnership with the community, a needs assessment (CNA) was implemented to a) develop, sustain and nurture new and existing community-researcher relationships and b) identify community needs and preferences for pediatric rehabilitation.
Methods: A community-based participatory action research approach incorporating Indigenous research principles was utilized. Community partners were involved throughout planning, data collection and analysis. Families of children aged 0-18 years old residing in PN and PBCN who would benefit from rehabilitation services due to neurodevelopmental, orthopaedic, chronic conditions or other growth and development concerns were invited to participate. Descriptive statistics about the children in the sample (N=9) were obtained using a health history and demographic questionnaire. Lived experiences and stories were gathered from three healthcare providers and eight families using semi-structured interviews. Thematic analysis using NVIVO software followed.
Results: The questionnaire and story sharing identified that all children in the sample had developmental concerns that could benefit from at least one type of rehabilitation service, with all reporting a need for speech therapy services. Further, the stories from healthcare providers and caregivers revealed that "Family, Community and Culture" provided an overarching theme for four additional themes: "Barriers to Care", "Service Disparities", "Preferences for Pediatric Rehabilitation" and "Potential of Virtual Care". The results from the CNA additionally provided recommendations for the design and evaluation of future pediatric rehabilitation virtual and in person

service models.
Conclusions: The CNA identified an urgent need for the provision of multi-disciplinary rehabilitation services within the community to limit the need for travel and thus enhance access to critical care for children and families. The findings highlight the importance of partnering with community members who have lived experience and understanding of local culture and needs to develop culturally appropriate and sustainable models of pediatric rehabilitation care. Our next steps will involve working closely with the community to co-develop, implement, and evaluate a pilot hybrid (virtual using remote presence technology and in-person), family-centered and culturally-responsive pediatric rehabilitation care clinic.