

MATERNAL NEWBORN CHILD & YOUTH STRATEGIC CLINICAL NETWORKTM

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Alberta Normal Postpartum & Newborn Pathway Review

It has been one year since acute care sites across both AHS and Covenant Health began to implement the Alberta normal postpartum and newborn clinical pathway. In an effort to determine how well the pathways are being utilized, June 2017 was chosen as "review" month.



- 47/50 acute care hospitals have implemented the AHS normal postpartum and newborn pathways
- 2000+ nurses have been trained to the new pathway and associated tools
- 29 clinical obstetrical and newborn documentation forms have been decommissioned
- 176 nurses from 25 separate hospitals responded to a satisfaction survey
- 64 retrospective chart audits (mother and baby) from 19 separate hospitals were completed.

The purpose of the staff survey was to determine if, from the user's perspective, the pathways were helpful in:

- 1. Supporting communication between and among other health care providers
- 2. Guiding care
- 3. Identifying normal versus variant findings
- 4. Reducing documentation time
- 5. Supporting confidence in the care patients are receiving
- 6. Helping practitioners stay up-to-date
- 7. Orientating new practitioners
- 8. Serving as reminder for needed assessments and care
- 9. Promoting team based care
- 10. Promoting evidenced based decision making
- 11. Reducing variation in clinical practice
- 12. Enhancing understanding of what to expect.

The results of the staff survey indicate 10/12 of these functions are being addressed by the use of the pathways. The two functions that were identified as not being met were:

- Improving communication between care providers
- Reduction in the amount of time spent charting.

It is hoped that with continued usage and familiarity of the tools the time spent charting will be reduced.



Postpartum and Newborn Pathway Review - continued

The purpose of the chart audits was to determine if health care providers were demonstrating, through their documentation, the recommendations for care outlined in the pathway. The areas examined included: appropriate completion, frequency of vital signs, documentation and response to variances, newborn feeding, and family education. The audit highlighted the need for improved documentation related to education of patients and families – particularly in the areas of identification of newborn states and cues and how to minimize the risk of nicotine exposure to the newborn.

IEXTSTEPS Operational leaders of each acute care site that has implemented the pathways will receive their site specific results for both the HCP survey and the chart audits completed at their sites so that site specific concerns related to implementation may be addressed at the local level. In addition forms will be revised to improve user friendliness and clarity based on survey results and feedback received.

Building for the Future: Children with complex care

As children with chronic and complex health care needs transition from child to adult, there is a gap in the continuity of care that poses unwarranted risk for a vulnerable population resulting in increased emergency visits, unnecessary hospital admissions, social isolation, significant and at times irreversible health complications and death. Complex and chronic conditions include: cerebral palsy, diabetes, kidney failure, congenital heart disease, cystic fibrosis, mental health, et al. However, regardless of the clinical condition, the need for a planned approach to transition from pediatric to adult healthcare services for youth with a chronic and/or complex physical, developmental and/or mental health condition has become more evident.

Although the transition to adult healthcare services is play in the shared responsibility of patient care prior a critical part of the transition to adult life for youth with a chronic health condition and their families, reports from families indicate this is often not addressed in an organized, timely, and planned manner. In many instances, pediatric healthcare providers experience issues in finding qualified adult healthcare providers willing to accept patients with chronic, complex conditions and/or disabilities.

The goals of planned healthcare transitions are to ensure high-quality, developmentally appropriate, psychologically sound healthcare that is continuous, comprehensive and coordinated, before and throughout the transfer of youth into the adult system. In doing so, youth and their families can learn to advocate effectively for themselves, maintain good health behaviors as well as access the appropriate healthcare services when required to maintain that good health.

Transition to adult healthcare services is a process that begins prior to the actual transfer and does not stop once the transfer has occurred. Youth, their families, pediatric healthcare providers and adult healthcare providers all have an important role to to and following the transfer of care. (Continued...)



Building for the Future (continued)

On June 12, 2017, 52 people representing patients and families, pediatric medical specialists, and allied health from across the province attended a full day workshop in Calgary to Identify strengths, weaknesses, opportunities and barriers related to transition to adult care for children with complex care needs. The group identified

the next steps in establishing a provincial plan on how to improve transitions to adult care and an existing working group with members from ACH, Stollery and Glenrose, will be expanded to begin the development of an approach to support transitions in care for children with complex care needs.

Regional Pediatric/Neonatal Workforce Crises

The inability to recruit and retain appropriately trained pediatricians to Regional facilities in Alberta is resulting in risk to the ability to provide consistent and sustainable general and emergency pediatric services, high risk obstetrical services and neonatal intensive care support in zones outside of Edmonton and Calgary.

In spite of significant recruitment strategies, the breadth of responsibilities, required of the pediatrician working in the three zones outside of Edmonton or Calgary has been cited as the major reason for relocation of newly hired physicians. The complexity and diversity of care needs required to support Regional facilities includes the ability to attend high risk births, admit and manage Level 2 NICU neonates, provide inpatient pediatric unit and emergency department consultations, address pediatric mental health concerns, manage pediatric outpatient clinics as well as commit time to private practice clinics to support the community's needs. Not only does the expanse of this work make it difficult to provide quality care in each specialty area, the current model of medical care delivery is not seen as sustainable.

Recruitment challenges are further compounded by limitations of current Canadian and foreign residency programs. Alberta pediatric resident graduates have cited rationale for not choosing to locate in regional sites as related to "breadth of responsibility, lack of supports and insufficient residency training".

A number of short and long term solutions to address these concerns are being considered including:

- Division of pediatrics and neonatology as two distinct subspecialties with layered multidisciplinary team supports
- Employment of neonatal nurse practitioners as part of a multidisciplinary team to provide consistent care to NICUs and high risk Obstetrics in regional facilities
- Employment of pediatric clinical assistants
- · Pediatric hospitalist positions
- An Alternate Remuneration Plan for Neonatologists in Regional Facilities
- Increase in use of Locums
- Changes to residency training programs

To achieve sustainable pediatric and neonatal services across the province, a comprehensive long term strategy needs to be developed that addresses community and population needs as well as travel and referral patterns in rural and remote geographical locations across Alberta. While this long range planning gets underway the short term solution being recommended to avert the current crises is the employment of Pediatric Clinical Assistants to work under the tutelage and guidance of existing regional Pediatricians. Three regional facilities within the province are currently embarking on this recommendation.





Montana First Nation - Garden Project









Montana First nation, the most isolated of the 4 Maskwacis communities has been working with MNCY, SCN through a MERCK for Mothers grant to establish a sustainable garden that will provide more than food to pregnant women and their families.

The garden provides an opportunity for the community to learn and grow together, to support women and their families in learning cultural lessons related to nutrition, the sacred journey of motherhood and parenting.

Community members provided their input and ideas for the garden at a community engagement meeting on May 29, Erik Lee was hired as the community gardener, a site next to the Montana Band Office was chosen and supplies were purchased. A groundbreaking event was held to open up the garden to the community on June 7, 2017. As part of the event a ceremony was held where Elders blessed the garden site and all that will be involved. Then the planting began!

There has been tremendous support from surrounding communities and learning institutions to ensure this project gets off to a good start. Two owners of a nearby landscaping and horticultural business (Spruce Permaculture) volunteered their time to help with the garden design, planting, harvesting, teaching gardening skills, etc. Richard Oster held several meetings with partners from Prairie Urban Farm, Sustainable Food Edmonton, and the University of Alberta Green and Gold Garden and the positive response from these partners is helping to build community capacity and new relationships. They will provide ongoing expertise

and intellectual input via guidance and advice throughout the project, and will host several gardening training sessions for involved community members. This collaboration also will provide insights/expertise into designing an evaluation framework for the gardening project. The collaboration with Prairie Urban Farm has led to a successful small grant application to host a one day garden meeting that will bring together pregnant women from Maskwacis and inner-city Edmonton to provide opportunities for women from diverse backgrounds but facing similar challenges to meet and develop relationships, enhance their systems of support, and build off of community strengths through gardening.

Currently, the garden is up and running well with dropin times for community members to participate. Although the project is focused on pregnant and postpartum women, all community

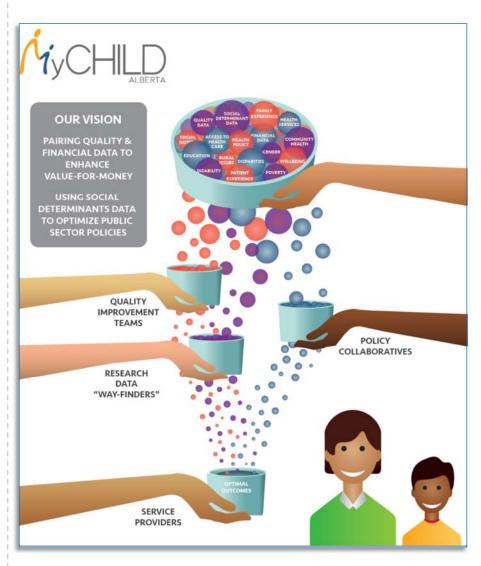
members are welcome to partici-

pate.

Over the fall and winter of 2017/2018, the harvested vegetables and fruit will be used in an education and community kitchen mod-

el that focuses on nutrition during pregnancy and early childhood nutritional needs, and incorporates cultural traditions. The garden model will be expanded to other Maskwacis communities in 2018 and 2019.

MyCHILD Alberta is growing!!



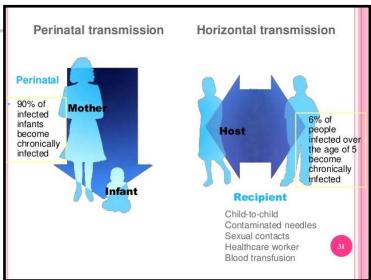
Two new data analysts, Olesya Barrett and Danny Lu, have been hired and started training in June. They join Brett Simms who joined MyCHILD last December with funding provided by the Pediatric Department Chair, University of Calgary.

- **Brett** supports quality improvement initiatives at Alberta Children's Hospital.
- Olesya will provide analytic support for 3 of the large Health Outcomes Improvement Fund projects including: the evaluation of a patient navigator to facilitate adolescents with chronic disease transitioning to adult care, the evaluation of implementation of a concussion pathway at five Alberta emergency departments and the creation of a clinical dashboard of evidence-based quality indicators for children with diabetic ketoacidosis, severe asthma, anaphylaxis, status epilepticus, sepsis and head injury.
- **Danny** will provide analytic support for the Secondary Use Data Project (SUDP) Case 5, which is a joint initiative of PolicyWise for Children and Families and MNCY. SUDP is an Alberta-wide initiative to create a provincial data repository that has been endorsed by Alberta Health, Alberta Health Services and Campus Alberta, and is funded by Alberta Innovates. To complete the project, extensive health and social service data set will be linked and analyzed to determine key health and social service outcomes and costs for two populations of Alberta children: those with medical complexity and those with disabilities.

The search for a **fourth data analyst**, supported by WCHRI through funds provided by both Stollery and Royal Alexandra Hospital Foundations is on-going. Once hired and in place, this data analyst will be based at the University of Alberta Hospital, and will provide support to researchers of WCHRI for maternal and neonatal quality improvement initiatives.

Hepatitis B: Highly infectious but vaccine preventable!

Chronic infection with HBV can cause significant morbidity and mortality. Globally, HBV is most commonly acquired perinatally, which results in chronic infection in 90% of cases¹. Effective perinatal HBV prophylaxis has drastically reduced the rate of mother to child transmission (MTCT). However, prophylaxis fails in 2% of deliveries, most commonly in mothers with high viral loads and who are HBe antigen positive. Risk of prophylaxis failure can be as high as 27% for those with a viral load >2X10⁸ IU/ml². Multiple studies have shown MTCT can be prevented in such cases by using antiviral treatment during the third trimester^{3,4}.



The Society of Obstetricians and Gynecologists of Canada and the Public Health Agency of Canada recommend **specialist referral of pregnant women with HBV**^{5,6}. A recent review of newly diagnosed HBV patients in Alberta revealed less than 13% of women identified during pregnancy were referred within the 6 year study period⁷. Alberta public health data showed six infants between 2013 and 2015 acquired HBV perinatally⁸. All received appropriate prophylaxis; only one mother was seen by a specialist during her pregnancy. Five of these women had had subsequent viral load testing showing high viral loads and therefore would have benefited from antiviral therapy. In Alberta, HBV positive women can be referred to one of two clinics located in Calgary and Edmonton. Contact information appears on positive lab reports and is listed below.

- For Central Zone south of Red Deer, Calgary and South Zones, contact the Calgary Clinic: Phone 403-944-6555 and Fax 403-944-6559.
- For Central Zone Red Deer and north, Edmonton and North Zones, contact the Edmonton clinic: Phone 780-407-1650 and Fax 780-407-8659.

Dr. Joanna Oda, Medical Officer of Health Dr. Leah Remmington

Flu Season is Coming.....

Pregnant women are at high risk of serious complications of influenza (flu) infection such as intensive care unit admission, preterm birth, and maternal death. Encourage your patients to have the flu shot.

Pregnant patients with flu-like illness should be treated with antiviral medications presumptively regardless of vaccination status. Do not rely on test results to initiate treatment; treat presumptively based on clinical evaluation.





Maternal Newborn Child & Youth Strategic Clinical Network™

AHS Vision

Healthy Albertans.

Healthy Communities. Together.

MNCY SCN™ Mission

To bring together people, evidence and data to achieve the best possible health outcomes for mothers, newborns, children, youth and families within a sustainable publically funded health care system

METRICS THAT MATTER

MyCHILD***** system-linked data sets to improve quality & sustainability

MNCY SCN™

Vision

Healthy mothers.

newborns, children, vouth and families

NICU Dashboard to support clinical & operational improvements

Determine Key Performance Indicators (KPI) that reflect MNCY's vision

Successes

MyCHILD^{ALBORIA} built in partnership with PolicyWise, funded by WCHRI, Alberta Innovates, U of C Pediatrics, & supported by 4 data analysts

Modified Delphi process used to develop Key Performance Indicators

QUALITY & SUSTAINABILITY

AHS Pregnancy Pathways

Health Outcome Improvement Fund (

Clinical Knowledge Topics to support common problems

Improved outcomes for Indigenous populations

Appropriate use of methodology & resources

Support Family Integrated Care in NICU

Pediatric Concussion Pathway

ACCESS & CAPACITY

Sustainable Pediatric & Neonatal workforce

Optimized pediatric capacity supported through Standardized Pediatric Nursing Education & Telemedicine support for physicians

Improved Access to OBS care for rural, Indigenous & marginalized populations

Facilitated transitions for families of children with complex care needs to adult services

Successes

46/50 Hospitals have implemented the Normal Postpartum & Newborn pathways

The MNCY SCN™ Health Outcomes Improvement Fund supports 19 pediatric, neonatal and obstetrical research projects for a total of \$3.1 million

Clinical pathways & associated medical order sets developed for Induction of labour, Pediatric Concussion, Pediatric Diabetic Ketoacidosis, & Postpartum Hemorrhage

3 Indigenous community outcome improvement projects funded through MERCK & Alberta Innovates

\$5 Million savings from discontinuation of fetal fibronectin usage

5/10 Level 2 NICUs have implemented Family Integrated Care

Research project underway to implement and evaluate the pediatric concussion pathway in 5 Alberta emergency departments

Successes

Neonatal clinical assistants to address pediatrician workforce crises in regional hospitals

Pilot project to be implemented using telemedicine between ACH & Medicine Hat

Supporting Corridors of Care pilot with development of antenatal pathway

Clinical practice guidelines developed to support criteria for obstetrical care, assessment of risk for preterm labor, care of the late preterm newborn, obstetrical triage, NICU capacity management, & developmental of care in the NICU

Research project underway to examine effectiveness of transitions navigator for children with complex needs

Guiding Principles

Families as Partners

Revised August 8th, 2017

Innovation & Knowledge Translation

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Coordination & Collaboration

Integration

Focus on Outcomes

Transformational Road Map 2017-2020