April 2015 | Vol. 6, Issue 2

BORN Ontario



BULLETIN

In this Issue

2015 CONFERENCE HIGHLIGHTS

Ideas are easy. It's the execution of ideas that really separates the sheep from the goats.

~Sue Grafton

In February 2015, BORN hosted its inaugural conference - The Right Information in the Right Hands at the Right Time: Using Data to Improve Maternal-Child Care and Outcomes. Just over 200 participants - consisting of health care providers, policy makers, health administrators, educators, quality and risk management leaders, and researchers - convened to hear from respected colleagues who have worked hard to bring us updates on their data-driven ideas.

Participants learned about innovative ways of displaying maternal-child data, the benefits of linking data, using data to change practice, strategies for disseminating data to target populations, applying data to public health issues, and the tension involved in balancing privacy considerations with 'open' data sharing.

This issue of the Bulletin provides highlights from each of the 31 presentations – enjoy!

KEYNOTE: THE POWER OF DATA

Presenter: K.S. Joseph, MD, PhD
Highlights by: Deshayne Fell, Epidemiologist, BORN Ontario

Dr. K.S. Joseph's insightful and inspiring opening keynote address set the tone for the remainder of the inaugural BORN conference. He discussed the importance of transforming data-to-information-to-knowledge and provided several examples of how shifts in knowledge follow new evidence (e.g., planned cesarean delivery vs. vaginal delivery for breech presentation in low-risk women at term).

Dr. Joseph highlighted three essential roles of good data: (i) identifying threats to public health (e.g., thalidomide exposure), (ii) monitoring population health status (e.g., understanding reasons behind recent rises in rates of stillbirth and maternal postpartum haemorrhage), and (iii) advancing public health (e.g., quality control in maternal-newborn care).

Dr. Joseph particularly emphasized the need for multidisciplinary input to ensure appropriate interpretation of data, offering the example of decreased rates of birth asphyxia due to changes in physician documentation and coding, not due to changes in health status. Finally, Dr. Joseph called on data stewards in Canada to make their data more accessible to facilitate new and timely knowledge.

INNOVATIVE METHODS OF DISPLAYING DATA TO ENHANCE MEANING

Innovative Methods of Displaying Data to Enhance Meaning: Dashboards

Presenter: Sandra Dunn, RN, PhD
Highlights by: Sandra Dunn, Knowledge Translation Specialist, BORN Ontario

This session began with a description of the evidence/ practice gap (i.e. 30%-40% of care provided does not align with best evidence), then moved on to discuss the rationale for using dashboards as an audit and feedback tool for quality improvement. The dashboard development process was described in addition to the generation of evidence summaries to support each key performance indicator (KPI).

An overview of the features of the BORN Maternal Newborn Dashboard (MND) was provided and a sample of results for KPI #1 (Unsatisfactory Newborn Screening Samples) was examined. Use of the dashboard was linked to the Knowledge to Action Cycle and next steps were outlined.

Gapminder

Presenter: Erin Graves, MSc
Highlights by: Erin Graves, Epidemiologist, BORN Ontario

Gapminder is a data visualization tool that shows data in five dimensions using freely-available preloaded data through their web interface software. Google Analytics allows users to create similar visualizations of their own data. These software programs help users identify trends in their data that may otherwise go unrecognized.

GIS/Neighbourhood Mapping

Presenter: Mike Sawada, PhD
Highlights by: Erin Graves, Epidemiologist, BORN Ontario

Dr. Sawada talked about how GIS is being used in the Ottawa Neighbourhood Study, specifically around contextual (physical) determinants to help define neighbourhoods. GIS can be used with Dasymetric and Pcynophalactic modelling.

Considerable work has been done to make other data GIS-ready (e.g. data relating to parks, amenities and food locations). 'Access to food' - one of the elements in a neighborhood profile - is further subdivided into categories such as grocery stores, convenience stores, farmer's markets, fast food outlets etc.

Dr. Sawada also talked about the walkability of the urban environment, specifically the objective and perceptive components. The objective component refers to the distance to amenities mapped to examine spatial variability by neighbourhood. The perceptive component takes into account the qualitative dimensions that impact walkability, such as safety and how pleasant it is to walk in an area. In the Ottawa Neighbourhood Study, this data is collected on smartphones and tablets throughout Ottawa, using apps created to collect this data using mobile GIS.

When adopting new clinical guidelines, evaluate the outcomes, but don't overlook unintended impact.

EXAMPLES OF DATA LINKAGES

The Power of Database Linkage: A New Source of Longitudinal Maternal-Child Data is "BORN"

Presenters: Deshayne Fell, MSc, PhD(c) and Steven Hawken, PhD
Highlights by: Deshayne Fell, Epidemiologist, BORN Ontario

This presentation highlighted a new partnership between BORN Ontario and the Institute for Clinical Evaluative Sciences (ICES), which is a large repository of provincial health administrative databases. A secure, technical platform has been developed to enable linkage of maternal-newborn information from BORN with databases at ICES containing longitudinal information on the use of health services in Ontario. The potential for studies of longitudinal health outcomes was illustrated through two ongoing clinical research projects; one studying the association between maternal influenza immunization during pregnancy and infant influenza infection during the first year following birth, and another examining whether infant health outcomes can be predicted by their metabolic and perinatal profile at birth.

Placing BORN Data on the Map of York Region Public Health Practice

Presenter: Denis Heng, MSc
Highlights by: Tianhua Huang, Prenatal Screening Specialist, BORN Ontario

Public health units use data to identify and work with local priority populations. This presentation illustrated how BORN data was used, in combination with neighbourhood mapping techniques, to improve the ability to monitor maternal-child health services and outcomes in York Region.

Core reproductive health indicators from the Association of Public Health Epidemiologists in Ontario (APHEO) were examined, and York Region's sixty-four 'Early Development Instrument' neighbourhoods served as the geographic unit of analysis. A three-step data process was initiated to examine how available data could be combined to provide further insight into program planning. These steps included 1) identifying prosperity populations, 2) comparing program outcome data to areas identified in step one, and 3) profiling 'high' and 'medium' priority focus areas using PRIZM (neighbourhood and lifestyle mapping software). The examples demonstrated that BORN is an important and comprehensive data source that can be integrated into practice to inform public health program planning and service delivery.

The ImmunizeCA App: A Mobile Application for Promoting and Managing Health Information

Presenter: Chandni Sondagar, MPH
Highlights by: Shelley Dougan, Screening Specialist

"I can bank on my phone, why not use it to track my family's immunizations?" - A mother's wish for an easier way to keep track of her family's vaccinations was the springboard for the development of a great new app: ImmunizeCA.

With the increasing use of mobile devices, a multi-organization collaboration expanded the successful ImmunizeON app to the nationally-focused, ImmunizeCA.

ImmunizeCA provides the recommended vaccination schedule for the user's province of residence. The app features colour coding to alert a user to his/her vaccination status, a calendar to schedule reminders, as well as expert-reviewed information in plain language. The app also provides users with alerts about disease outbreaks in their area. At the time of the presentation, the app boasted over 74,000 registered users.

PRACTICE CHANGING DATA

Newborn Outcomes after Caesarean Section for Non-reassuring Fetal Status in British Columbia

Presenter: Patricia A. Janssen, BScN, MPH, PhD
Highlights by: Andrea Lanes, Epidemiologist, BORN Ontario

In this presentation, Apgar scores and umbilical cord gas values were discussed in terms of their predictive ability for severe neonatal morbidity. Dr. Janssen and colleagues found that the Apgar score was a better predictor of morbidity than cord gas values. A 1-minute-Apgar score of <7 had 80% sensitivity and 81% specificity for predicting long-term adverse outcomes. Dr. Janssen emphasized the limitations of electronic fetal monitoring for identifying non-reassuring fetal status (NRFS), but also acknowledged that it is the best tool available at this time.

Public health units continually use data to identify and work with local priority populations.

Can We Wait Until 39 Weeks? A Quality Improvement Project to Decrease Early Term Cesarean Deliveries

Presenter: Jessica Dy, MD, MPH, FRCS(c)
Highlights by: Andrea Lanes, Epidemiologist, BORN Ontario

Pre-labour cesarean delivery is associated with an increased risk of adverse neonatal respiratory outcomes. This presentation highlighted the results of a quality improvement (QI) project at The Ottawa Hospital. The QI project was implemented in three phases starting in 2010. An initial target for elective repeat cesarean in low-risk women was set at 30% and was achieved in the first quarter of 2012. A new target of 10% was set and was achieved in the third quarter of 2013. Dr. Dy described this quality indicator as clinically relevant, feasible to measure and amenable to change.

Right Information, Right Hands, Right Time… Still Problems Changing Practice

Presenter: Ian Graham, PhD, FCAHS
Highlights by: Sandra Dunn, Knowledge Translation Specialist, BORN Ontario

Dr. Graham defined knowledge translation (KT) and reviewed the Knowledge-to-Action (K2A) cycle, and discussed how this framework can be used to guide implementation. The K2A cycle involves the following components and Dr. Graham provided examples of each from specific projects:

- Identify the problem (scope, magnitude, use various types of data to define)
- Identify relevant evidence to support optimal practice
- Adapt guidelines to local context (a team sport, all about engagement)
- Assess barriers/supports to knowledge utilization (identify what might get in the way of implementation)
- Match the interventions to the practice issue of interest
- Select a KT intervention to neutralize the barriers
- Monitor knowledge use and evaluate outcomes and sustainability of practice change

A number of KT resources were highlighted at the end of the presentation.

SHOWCASE OF SUCCESS

Development of a Standardized Breastfeeding Surveillance Data Collection Tool and Method for Ontario Public Health Units

Presenters: Asma Razzaq, MPH and Suzanne Fegan, MSc
Highlights by: Laurel Silenzi, Coordinator, BORN Ontario

Members from twenty-seven Ontario public health units (PHUs) worked together on a locally-driven collaborative project (LDCP) to develop a standardized breastfeeding surveillance system to help PHUs obtain locally useful and externally comparable data.

Ontario PHUs need to have a standardized breastfeeding surveillance system to inform program planning and evaluation needs and meet requirements for the Baby Friendly Initiative (BFI) designation.

A five-phase pilot project was initiated. This included an environmental scan of all thirty-six PHUs, creation of a surveillance tool, and implementation of the pilot in seven PHUs serving both remote and urban populations. Pilot sites were then surveyed regarding use of the tool and recommendations were documented.

Be Sweet to Babies

Presenter: Denise Harrison RN, RM, PhD
Highlights by: Valerie Emmerson, Administrative Assistant, BORN Ontario

The focus of this presentation was pain management in babies. CHEO's Be Sweet to Babies research team and the University of Ottawa's School of Nursing created a video demonstrating how to ease infant discomfort during painful procedures using three simple techniques: skin-to-skin care, breastfeeding and giving small amounts of sucrose.

To evaluate the efficacy of these approaches, a study was conducted with fifty parents of babies in the NICU (seventeen dads and thirty-three moms). Most parents were not familiar with using breastfeeding or skin-to-skin care to reduce pain, but all knew about sucrose. After viewing the video, 96% of parents expressed intent to use skin-to-skin care and/or breastfeeding to reduce infant pain. An intervention using the video is now in the planning stage.

As of April 7, 2014, a pain management data element was added to the BORN Information System to help monitor the use of pain relief measures for newborns.

Dashboards can provide awareness of issues to – one of the first steps in addressing care gaps.

How do we use BORN Data? St. Thomas General Hospital's Transformational Journey

Presenter: Leanne McCullough RN, BScN
Highlights by: Laurel Silenzi, Coordinator, BORN Ontario

This presentation highlighted how the team at St. Thomas General Hospital has been using the BORN Maternal Newborn Dashboard (MND) to improve practice. The MND is reviewed on a daily basis and is a regular topic of discussion within the interdisciplinary care team.

The following themes were discussed:

- Measure what matters
- Know your data
- Front line staff can drive practice change when they have the data and support
- Always strive for perfection

Babies Born to Homeless Women in Toronto: Collaborative Data Collection

Presenter: Joyce Bernstein, Msc, PhD
Highlights by: Laurel Silenzi, Coordinator, BORN Ontario

Dr. Bernstein is a Toronto Public Health researcher who focuses on disenfranchised urban populations. She presented an overview of the work of the Young Parents No Fixed Address (YPNFA) Network in the GTA. This organization represents a collaboration of thirty plus agencies that address the needs of homeless and street-involved pregnant women or parents and their children. More than 600 mothers in the GTA reported having no fixed address.

The collaboration attempts to collect a minimal amount of data - maternal initials, baby date of birth, and birth weight. This small amount of data allows for connectivity and tracking to assist these marginalized families.

The Greater Toronto Area Obstetric Network – A Vision of the Future

Presenter: Arthur Zaltz, MD, FRCSC
Highlights by: Chantal Wright, Data Quality Specialist, BORN Ontario

In October 2013, thirty-three people from across the Greater Toronto Area (GTA) came together with a goal to create a link between maternal treatment and fetal outcomes and to explore the possibility of integrating the Toronto Academic Health Science Network (TAHSN) and GTA hospitals in a research network which would focus on establishing evidence-based best practice guidelines.

The group's deliverables included organizing structured meetings, building stronger connections between obstetricians practicing in academic and community hospitals, developing useful guidelines, and developing a connected research and data collection platform.

A GTA-OBS Dashboard was proposed to measure the following quality care indicators: admission to NICU at term,

cesarean section in second stage labour, 3rd and 4th degree perineal tears, postpartum hemorrhage, shoulder dystocia, and cesarean section in low-risk primiparous women.

The Network is also currently working on several research initiatives including guidelines for screening with gestational diabetes that will include the use of BORN data.

Facility-specific Perinatal Indicators: A New Set of Metrics for British Columbia

Presenter: Brooke Kinniburgh, MPH
Highlights by: Chantal Wright, Data Quality Specialist, BORN Ontario

Perinatal Services British Columbia's (PSBC) key role is to monitor how BC hospitals are performing in maternity and neonatal care. Their registry contains variables and episodes of care that are not part of the discharge abstract database.

PSBC created a dashboard with indicators that differ from other publicly-reported obstetric or neonatal indicators, and are measurable, actionable, meaningful, and evidence-based.

The dashboard indicators include:

- Vaginal delivery rate for nulliparous women aged twenty to thirty-nine years with a singleton vertex pregnancy at term
- Early term repeat cesarean delivery without medical indication
- Post-date induction before 41+0 weeks gestation for women under forty years of age at time of delivery
- Exclusive use of intermittent auscultation in labouring women without risk factors who delivered vaginally
- Healthy term singletons receiving exclusive breast milk from birth to discharge

Utilizing Healthy Babies Healthy Children (HBHC) Administrative Data to Evaluate and Improve Programming for Vulnerable Families in Ontario: The provincial and local context

Presenter: Heather Manson, MD, FRCPC, MHSc
Highlights by: Paula Morrison, Public Health Coordinator, BORN Ontario

Dr. Manson provided an overview of the use of the Healthy Babies Healthy Children (HBHC) - Integrated Services for Children Information System (ISCIS) administrative database as a key component of the provincial HBHC process implementation evaluation. Public Health Ontario (PHO) was asked to undertake a process implementation evaluation of the first six months of the program. Two main evaluation questions were asked: 1) To what extent have process implementation outcomes been achieved? and, 2) Which factors are related to the delivery of the enhanced HBHC program?

Once the evaluation was complete, thirty-six individual Public Health Unit Reports and dissemination meetings were conducted. The HBHC-ISCIS database analysis provided a comprehensive understanding of the implementation outcomes achieved over the first six months of the HBHC program. The enhanced HBHC program has been implemented across Ontario with significant variability among peer groups and public health units. Through the evaluative process it was discovered that taking an individualized approach to dissemination has supported local continuous quality improvement (CQI) work. The HBHC-ISCIS database analysis can also support provincial surveillance activities both within and beyond the HBHC program.

Midwifery Capacity: Using Data to Drive Regional Planning

Presenters: Marie-Josée Trépanier, RNC, MEd; Wendy Grimshaw, MBA, CMA; Genevieve Gagnon, RM
Highlights by: Vivian Holmberg, Coordinator, BORN Ontario

This presentation described the process undertaken by the Champlain Maternal Newborn Regional Program (CMNRP) to determine the current state of midwifery capacity in Eastern and South Eastern Ontario.

Data from various sources, including BORN, was analyzed to understand the factors affecting supply and demand. Several key questions were explored: Do existing midwifery practice groups want to expand? Is funding available? Can hospital privileges be managed? What about midwifery education programs? Are applicant numbers rising? Where are the midwifery graduates going?

The presenters acknowledged the complexity of the issue and the many stakeholders involved. The importance of quality data was also highlighted.

How does BORN data help you facilitate care? Have you been able to use BORN data to inform practice or improve outcomes? We want to tell your story.

If you have a success story you would like to share please contact info@BORNOntario.ca with details so we can write your story.

External Quality Assurance of Prenatal Screening in Ontario Using BORN Data

Presenter: Shelley Dougan, MPA, MSc, CGC
Highlights by: Tianhua Huang, Prenatal Screening Specialist, BORN Ontario

This presentation illustrated how BORN data is used to improve External Quality Assurance (EQA) for prenatal screening in Ontario. Prenatal screening mainly targets Down syndrome and open neural tube defects. Prenatal screening records are uploaded to BORN on a weekly basis by five screening centres. An automated laboratory quality report was developed to monitor screening performance and is accessible to all screening centres. Nuchal translucency (NT) quality assurance reports for screening centres and sonographers were developed to assess the quality of NT. Follow-up data on screen-positive women are entered directly into the BORN Information System by specialty centres with improved efficiency and accuracy. BORN is working on a future partnership to capture data on Non-Invasive Prenatal Testing and cytogenetic diagnosis, and continually advocating for provincial standards and better engagement.

THE INTERSECTION OF INNOVATION, PEOPLE AND PRIVACY

mHealth-Implications of Point of Care Diagnosis and Treatment

Presenter: Matthew Bromwich, MD
Highlights by: Wendy Katherine, Director, OMama Project

Dr. Bromwich presented observations gleaned from developing medical-technological innovations that improve care, reduce cost, enhance patient-provider relationships and support skill maintenance.

Reflecting on his experience as a physician, teacher and innovator, he raised questions such as: Does health care provider reliance on apps and other handheld technologies impede professional fluency? How can the privacy of personal health information be assured, especially if data is stored via the cloud – for example when storing/sending digital medical images? What is the potential for mHealth technologies to extend health provider impact and/or improve outcomes in both low and high-resource environments?

Information Innovations to Drive Integrated Care

Presenter: Farhana Alarakhiya, BSc Eng, MSc
Highlights by: Wendy Katherine, Director, OMama Project

Farhana Alarakhiya reflected on keeping the patient at the centre when designing and implementing IBM mHealth strategies for women and infants. She urged us to look beyond innovative information systems designed to improve financial performance, manage quality and monitor patient/provider care and challenged us to consider new EMR designs to improve interdisciplinary virtual team functioning and patient-centred care.

Presenting Information to Patients and Health Care Providers to Support Choice and Normalcy

Presenter: Vicki Van Wagner, RM, PhD
Highlights by: Wendy Katherine, Director, OMama Project

Drawing from her own doctoral work, Dr. Wagner presented a framework for analysing 'risk talk,' the nuanced ways maternity care providers portray information to their patients as part of care planning.

Based on her extensive qualitative analysis, Vicki presented important themes via quotes by various types of maternity care providers. The quotes illustrated the many subtle strategies practitioners use to balance information to preserve normalcy in maternity care, de-escalate patient anxiety and engage women in participatory decision making.

Privacy in the New World of Apps, Social Networking and Data Innovations – Will it Still Exist and How can we Protect It?

Presenter: Khaled El-Emam, PhD
Highlights by: Heather Irwin, Privacy Officer, BORN Ontario

Dr. El-Emam described the benefits of sharing data, but also emphasized that data should be de-identified at the earliest opportunity. Much of his talk focused on the anonymization of data.

Anonymizing data requires strong techniques to prevent hacking (hacking is now taught in some computer science programs!). Weak anonymization techniques applied to a dataset of New York City taxi cab travel logs allowed them to be reverse engineered, re-identifying all drivers, their fare routes and their estimated income.

Good examples of effective anonymization exist; sharing clinical trial data is a growing area with good, precedent-setting examples. Effective anonymization looks at a dataset in different ways and produces an appropriate anonymization technique. Examples include using year of birth rather than full birth date and/or the first three characters of a postal code rather than full postal code. Data anonymization should be used in conjunction with other tools like enforceable data sharing agreements. This protects against attackers and is defensible to regulators.

INNOVATIVE USES OF DATA

Ontario's Enhanced 18-Month Well-Baby Visit Electronic Medical Record (EMR) Integration and Repository Project

Presenters: Cynthia Emerson, Nancy Novak BScN, MEd, PhD
Highlights by: Cynthia Emerson, Project Manager, BORN Ontario

BORN Ontario, the Ministry of Child & Youth Services and eHealth Ontario partnered to build a repository of data to allow tracking of children who are receiving the Enhanced 18-month Well-Baby Visit. The objective of this pilot project was to identify toddlers who are at risk or who have been identified with developmental delay, and provide a population-level understanding of the health of children at this important age.

Ten Family Health Teams and two EMR vendors participated, generating information from 1,337 visits that were captured in the BORN Information System (BIS). Just over 95% of those visits were matched to a BIS birth record. Pilot success has led to the expansion of the project to include well-baby and child visits from birth to age five and continued data standardization and reporting tools at the person, practice and provincial level to support the facilitation of care and improvement of child health outcomes.

Practical Considerations for Sharing Public Information

Presenter: Dan Finerty, BSc Eng
Highlights by: Monica Poole, Coordinator, BORN Ontario

Dan Finerty discussed how the creation and consumption of public information is affected by a rapidly changing landscape, pointing to the new Ontario Open-Government Initiative and recent privacy legislation. He covered "how to use data", "how to share data vs. know data" and "how and when to anonymize data."

The importance of good data governance and the development of consistent policies for managing data was also emphasized. Dan advocated for open data with the right controls and pointed out that quality is critical. Finding the balance between privacy protection and data quality can be a challenge.

His take-home message - it's all about the data - was further qualified: data needs to be in the right place (efficiently moving between systems), at the right time (supported by all data delivery latencies and architectures), in the right form (structured and cleansed for operational systems or analysis), and in the hands of the right people (properly governed, business semantics applied, collaboratively managed).

Healthy Birth Weights: from Fragmented System to Community of Care

Presenter: Vanessa Parlette, PhD and Jennifer Vickers-Manzin, BA Psych, BScN, MEd
Highlights by: Glenda Hicks, Coordinator, BORN Ontario

The presenters shared lessons learned from data and community-driven research in the development of a care pathway to support the best possible care for young parents. The importance of data in terms of catalyzing change, prompting exploration, driving multi-sector collaboration, and inspiring innovative strategies was discussed in the context of the Healthy Birth Weights Coalition work in Hamilton.

Hamilton Public Health Services coordinates a multi-sector coalition of partners committed to developing an evidence-informed and community-driven strategy to reduce the risk of low-birth-weight (LBW). The Healthy Birth Weights Coalition is building citywide targeted strategies to strengthen the community of supports available to young parents in Hamilton through shared education and is developing system navigation tools to support collaboration and integration.

Elective Repeat Cesarean in Low-Risk Women: Economic Evaluation Comparing Births before and after 39 Weeks

Presenter: Joann Harrold MD, Neonatologist
Highlights by: Cathy Ottenhof BORN Coordinator, BORN Ontario

The goal of the study was to examine costs and overall clinical effect of elective low-risk C/S at 37-38 weeks vs. 39-40 weeks. The study was prompted by the BORN dashboard indicator that looks of rates of caesarean section in low risk women done between 37 and 39 weeks.

Births occurring between 37-38 weeks had a 0.92% NICU/SCN admission rate whereas births occurring between 39-40 weeks had a 0.72% NICU/SCN admission rate (a statistically significant difference). A cost comparison revealed an expenditure of $1297 for the early group vs $1210 for the later group. Five-minute Apgar scores were not significantly different. An annual savings of $315,000 in neonatal care could be achieved by postponing C/S done at 37-38weeks to 39-40 weeks.

Dr. Harold concluded that delaying elective repeat C/S to 39 weeks or greater will save the health system resources without negatively affecting outcomes for mother and baby. She acknowledged that this is an early, simplified examination and shared plans for a more extensive evaluation.

DATA INFORMING POPULATION HEALTH

Using BORN Data as Part of the Best Start Resource Centre's Breastfeeding Community Project

Presenter: Hiltrud Dawson RN, BTech, IBCLC
Highlights by: Sandra Dunn, Knowledge Translation Specialist, BORN Ontario

An overview of the Best Start Resource Centre was provided, followed by a discussion of their Breastfeeding Community Project. BORN data was used to identify populations with lower rates of breastfeeding in Ontario.

The group explored rates of breastfeeding exclusivity and supplementation and identified risk factors for breastfeeding duration and found that breastfeeding initiation, exclusivity, and duration were lower among younger women and those with less education. Next steps are to complete a literature review, continue to use BORN data for surveillance, and complete interviews and a needs assessment with service providers and pregnant women.

Prevalence and Predictors of Early Breastfeeding Cessation and In-hospital Formula Use among Ottawa Mothers

Presenter: Katherine Russell, MHSc
Highlights by: Sandra Dunn, Knowledge Translation Specialist, BORN Ontario

An overview of the Ottawa Health Unit Surveillance project was provided. The project involved conducting phone interviews with mothers at six months and at twelve months. Topics covered during the six-month-call included: delivery type, parity, breastfeeding initiation and duration, formula use, introduction of solids, reasons for breastfeeding cessation, reasons for formula introduction, previous breastfeeding, and support. Topics covered during the twelve-month call included: type of milk consumption, reasons for breastfeeding cessation, and support.

The group found that exclusive breastfeeding drops the most between five and six months. Breastfeeding initiation was high (97%); however 45% of those who initiate breastfeeding supplement with formula in-hospital. This is important because in-hospital formula use is highly influential on six-month breastfeeding rates. Preterm, multiple birth, caesarean section, and immigration/other mother tongue were the strongest predictors of in-hospital formula use.

Beyond BMI: Investigating the Feasibility of Using NutriSTEP® and Electronic Medical Records as a Surveillance System for Healthy Weights Including Risk and Protective Factors in Children

Presenters: Kathy Moran, BSc, MHSc; Susan Snelling, PhD
Highlights by: Dan Bedard, Data Requests and Research Coordinator, BORN Ontario

This presentation explored the feasibility of an EMR-based healthy weight surveillance system for children (including risks and protective factors). The research team framed the problem as a lack of data and the need to move beyond self-reported measures.

Two studies were completed as part of this project: the first examined 18-month well-baby visit data from BORN Ontario; the second focused on nutritional status screening in primary care. Preliminary

Balance the use of data and technology with the humanity of pregnancy and birth.

analysis showed that 50% of children aged 17-22 months were in the optimal growth category. Results for the NutriSTEP ® study indicated that the screening was easy to incorporate and participants were receptive to gathering NutriSTEP® data electronically and linking it to EMR data.

The presenters summarized the implications for EMR vendors, primary care, BORN Ontario, and PHUs. Next steps include increasing understanding of factors that will enable a collaborative screening program for improving care and management and for local population health assessment and surveillance purposes. The team also pointed out that an ongoing mechanism is needed to support interactions between BORN Ontario, EMR vendors, primary care practitioners and public health.

Mobile applications offer innovative platforms for connecting people with information.

KEYNOTE: REFLECTIONS ON RIGHT INFORMATION, RIGHT HANDS RIGHT TIME – THE FUTURE OF MATERNAL CHILD CARE

Presenter: Mark Walker, MD, FRCS(C), MSc Epi, MSc HCM

Highlights by: Wendy Katherine, Director, OMama Project

Following Mari Teitelbaum's humorous acknowledgement of Mark Walker's leadership at BORN in the form of a personal dashboard of his professional skills, Mark summed up the work of the BORN team's legacy in the form of a journey. He recapped highlights by conference speakers and plotted a path for the future of BORN, citing the organization's many accomplishments and thanking its key partners. Mark closed the conference proceedings by inviting participants to take up the challenge to work in collaboration with BORN to stay at the forefront of privacy, quality and innovation in the age of artificial intelligence.

Use the power of data to transform care.

INTERESTED IN JOINING ONE OF BORN'S COMMITTEES?

If so, please send your CV and committee preference to committees@bornontario.ca to have your application considered for upcoming calls for expressions of interest

BORN Ontario
CHEO Research Institute | Centre for Practice Changing Research Building
401 Smyth Road |Ottawa, ON | K1H 8L1
T: 613.737.7600 x 6022 | F: 613.737.6504
info@BORNOntario.ca | www.BORNOntario.ca

Stay connected with BORN Ontario.

Join our distribution list