

Southern Ontario

Obstetrical Network

Newsletter Winter 2019

Dear Colleagues,

This is an exciting update on the recent activities taking place in the Southern Ontario Obstetrical Network (SOON). The research in our network is growing, the collaboration between our centres is stronger than ever, and we are working diligently to achieve many of the goals we set out to accomplish. Thanks to all of you for your continued support!

SOON Annual Meeting 2018

The 2018 SOON Annual Meeting was an enormous success. This years' meeting was graciously hosted by Mount Sinai Hospital and was well-attended!

The highlights of this meeting include a review of our **Terms of Reference**, a discussion about the **future of our Network** and how it fits into the larger Ontario healthcare landscape, and **presentations** by our colleagues on a wide range of topics. Each project presented gathered insight from our SOON centres and strengthened the collaboration between our participating sites. Our attendees also participated in a lively discussion about **partnerships and implementation of projects** across the Network.

In addition, we unveiled the updated **SOON Dashboard Indicators** as well as the new **Preterm Birth Dashboard**. Both can be viewed at the end of this Newsletter on pages 4-6!

Many of the updates presented at our meeting are included in this newsletter, and the meeting minutes will also be posted on our <u>website</u>.

<u>We hope to see you at the next SOON Annual Meeting.</u> <u>Stay tuned for details!</u>

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The Steering Committee

Jon Barrett, Chair, Sunnybrook Health Sciences Centre

Howard Berger, Teaching Hospital Representative, St. Michael's Hospital Michael Geary, Teaching Hospital Representative, St. Michael's Hospital Adrian Brown, Community Hospital Representative, North York General Hospital

Colette Rutherford, Community Hospital Representative, The Scarborough and Rouge Hospital, Centenary

Nathan Roth, Community Hospital Representative, The Scarborough and Rouge Hospital, Birchmount & General Peter Scheufler, Community Hospital Representative, Trillium Health Partners

Gareth Seaward, University of Toronto Representative, University of Toronto

Ronald Heslegrave, Ethics Advisor, Mount Sinai Hospital

Elizabeth Asztalos, Neonatal Representative, Sunnybrook Health Sciences Centre

Prakeshkumar Shah, Neonatal Representative, Mount Sinai Hospital Beth Murray-Davis, Midwifery Representative, McMaster University Sandra Dunn, Liaison, Better Outcome Registry and Network (BORN)

PPH Simulation

The Sunnybrook Canadian Simulation Centre has initiated an educational outreach initiative in Obstetrics, to **deliver** *in situ* mannequin based *simulation* to community hospital labour and delivery suites in the GTA.

While the logistics and planning of these sessions is a complex endeavour, these sessions have been **very well attended** and highly appreciated by the attendees.

This initiative has been supported by an educational grant from **Ferring Pharmaceuticals**.

For more information or to arrange a simulation for your hospital site, please contact jordan.tarshis@sunnybrook.ca!

Shoulder Dystocia Simulation

NEED AN UPDATE - Howard Berger, Nirmala

VBAC Initiative

UofT resident, Dr. Elizabeth Miazga (R4) along with Dr. Amanda Cipolla (THP), Dr. Shore (SMH), Dr. Modupe Tunde-Byass (NYGH) and Dr. Shapiro (MSH) are working together on a quality improvement initiative to decrease Caesarean section rates by supporting patients informed choice around TOLAC. This multi-site quality improvement project uses audit and feedback with additional interventions and PDSA cycles. Providers are presented with an evidence based update on TOLAC and offered the use of a TOLAC decision aid to assist with patient counselling, shared decision making and documentation. Patient educational material has been developed in the form of handout, posters and videos.

Their work will be presented on May 10th 2019 at UofT Interhospital Rounds!

Fetal Growth Working Group

Standardization of care across SOON centres is a key goal of our Network. Assessment of fetal growth, and specifically the choice of the fetal growth standard used to evaluate fetal growth, has been identified as an area of considerable variation between SOON centres. This variation often results in inconsistency in the diagnosis of growth abnormalities and patient care as women are frequently referred from one SOON centre to another. It was therefore agreed that there is a great need for developing a Network-wide standardized protocol for the assessment of fetal growth.

First steps: establish a sonographic fetal weight estimation **working group** whose mandate is to **"Establish a consensus regarding various aspects of sonographic fetal weight estimation"** within SOON. This working group, led by **Dr. Nir Melamed** and **Dr. Jon Barrett**, will include a multidisciplinary team consisting of MFMs, radiologists, and neonatologists who have a special interest and experience in the field of fetal growth. The plan for the working group is to have **1-2 meetings** in which we will

- identify the problems that need to be addressed,
- review available evidence related to these problems, and
- come up with **recommendations** for a SOON-based consensus.

These recommendations will be subsequently presented to the **full forum of SOON** to get **feedback and support**, and the team will work with each SOON representative to help them implement these recommendations in their centre.

Some of the **topics** that will be discussed in the working group include:

- Is there a role for routine 3rd trimester ultrasound? If so, at which week?
- 2. What is the preferred technique for measuring fetal biometric indices?
- 3. which equation should we use to calculate estimated fetal weight based on individual fetal biometric indices?
- 4. <u>And more!</u>

First meeting is May 1st 2019.

For more info, please contact nir.melamed@sunnybrook.ca!

Coming SOON...

PTB/Cervical Screening Bundle

The **PTB/Cervical Screening Bundle** was launched at this years' SOON Annual Meeting 2019! The goal of this project is to **encourage universal cervical length (CL) screening** in the SOON centres. Studies are now underway to see if universal CL screening is effective in **reducing preterm birth**. Next steps are **broader dissemination into the SOON centres** and evaluating the impact of these changes.

To learn more and/or get involved, contact Noor Ladhani at noor.ladhani@sunnybrook.ca!

IMProve Pregnancy in APS with Certolizumab Therapy: The IMPACT Study

Dr. Carl A. Laskin and **Dr. Ann Kinga Malinowski** are the Canadian investigators for the IMPACT Study, a long-overdue study to try and improve the high rate of adverse pregnancy outcomes in **women with APS and repeatedly positive tests for lupus anticoagulant (LAC)**.

They would very much like to engage your help in identifying such patients!

Participants in this IRB-approved study will receive both standard treatment (heparin or low molecular weight heparin and low-dose aspirin) as well as treatment with certolizumab, a TNF alpha inhibitor that is not actively transported across the placenta.

Animal studies strongly suggest that this treatment will improve placentation and thus ameliorate or avoid resulting in early-onset preeclampsia or severe placental insufficiency, thereby improving live birth rate. Certolizumab is Health Canada approved for use in rheumatoid arthritis, psoriasis, and Crohn's disease. It has been used in hundreds of pregnancies without evidence of teratogenesis or other adverse pregnancy outcomes. It will be provided and paid for by the study.

To be included in this study, patients must meet eligibility criteria. If you or your colleagues are interested in learning more about this study, and/or to receive more information for providers or patients, please contact Dr. Laskin at <u>calaskin@triofertility.com</u> or Dr. Malinowski at <u>ann.malinowski@sinaihealthsystem.ca</u>.

They are also happy to see potential candidates for a pre-pregnancy evaluation.

SOON Dashboard: Updated and Revised

As our network grows and changes, so too does our Dashboard. See below for Version 2 of the SOON Dashboard Indicators.

SOON Dashboard Indicators: <u>Version 1</u>	SOON Dashboard Indicators: <u>Version 2</u>
Admission to NICU at term	Admission to NICU at term
CS at 2nd stage	CS at 2nd stage
РРН	РРН
CS in low-risk primiparous	CS in low-risk primiparous
OASIS (removed in V2)	VBAC (NEW)
Shoulder dystocia (removed in V2)	VBAC (NEW)
	Preterm Birth Dashboard (NEW Dashboard, page X)

All data is provided by **BORN** Ontario!

For information about the BORN Ontario upcoming conference, please see page _

Indicator 1: Rate of Admission to NICU at Term



Data Source: BORN Ontario 2017/2018

Definition of Indicator: The rate of term infant NICU/SCN admissions, by SOON hospital, expressed as a percentage of all live term (\geq 37 weeks gestation) births, excluding infants with at least one confirmed major sentinel congenital anomaly.



Indicator 3: Rate of Postpartum Hemorrhage (PPH)

Data Source: BORN Ontario 2017/2018

Definition of Indicator: The rate of women who had a PPH as a complication, expressed as a percentage of all live deliveries at \geq 24 weeks' gestational age in Ontario, by SOON hospital.

S= Suppressed due to cell size <6



Indicator 2: Rate of Cesarean Section at 2nd Stage



Data Source: BORN Ontario 2017/2018

Definition of Indicator: The rate of women who had a cesarean section at 2nd stage of labour and full dilation, expressed as a percentage of all live deliveries at \geq 34 weeks' gestational age in Ontario, by SOON hospital.



Indicator 4: Rate of Cesarean Section in Low-Risk **Primiparous Women**

Data Source: BORN Ontario 2017/2018

Definition of Indicator: The rate of cesarean section, expressed as a percentage of all singleton deliveries of low-risk Primiparous women excluding deliveries <37+0 weeks in Ontario, by SOON hospital. Low-risk pregnancies excluded any women with: diabetes, hypertension, preeclampsia, IUGR, fetal anomalies, breech and transverse presentation, placenta previa, multiples.

Indicator 5 (NEW): Rate of Attempted VBAC in Eligible Women with 1 Previous Cesarean Section



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Rate of attempted vaginal birth after cesarean (VBAC), expressed as a percentage of women who had a live birth, with 1 previous cesarean section and who were eligible for VBAC, by SOON hospital. SOGC guidelines were used to determine eligibility. We excluded: 1) Women without previous C/S; 2) Previous uterine rupture; 3) Women who declined TOL with planned scheduled repeated C/S; 4) Women with placenta previa or malpresentation; 5) Not eligible for VBAC is clearly defined in the dataset.

Indicator 6 (NEW): Successful VBAC Rate in Attempted Women with 1 Previous Cesarean Section



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Successful vaginal birth after attempted trial of labour for women with 1 previous cesarean section. Expressed as a percentage of all eligible women who had a live birth, 1 previous cesarean section and who attempted VBAC, by SOON hospital. We excluded: 1) Women without previous C/S; 2) Previous uterine rupture; 3) Women who declined TOL with planned scheduled repeated C/S; 4) Women with placenta previa or malpresentation; 5) Not eligible for VBAC is clearly defined in the dataset.

SOON Preterm Birth Dashboard

Our NEW PRETERM BIRTH DASHBOARD indicators are:

Percentage of preterm births

Spontaneous preterm birth

PROM preterm birth

latrogenic preterm birth

Proportion of live late preterm infants with a neonatal health condition (respiratory distress syndrome, transient tachypnea of newborn, hyperglycemia or hyperbilirubinemia)

Proportion of babies <32 weeks gestation born out of scope in SOON hospitals

Proportion of babies <30 weeks gestation born out of scope in SOON level IIb and IIc hospitals



Percentage of Preterm Births in SOON Hospitals

Data Source: BORN Ontario 2017/2018

Definition of Indicator: The rate of preterm births (<37 weeks gestation) by SOON hospital, among all live hospital births. Expressed as a percentage of total live births for each SOON hospital in fiscal year 2017/2018. S=Suppressed due to cell size <6

Spontaneous preterm birth by SOON hospital



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Proportion of spontaneous preterm births by SOON hospital. Live births and hospital births were included. Expressed as a percentage of total preterm births for each SOON hospital. Preterm is defined as any infant born less than 37 weeks gestation. Spontaneous preterm birth is defined as any preterm birth with spontaneous labour that is not jatrogenic and no PROM/PPROM

S=Suppressed due to cell size <6. Note: Hospital 10 has 12.9% missing data.

SOON Preterm Birth Dashboard 2017/2018 (continued)

PROM preterm birth by SOON hospital



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Proportion of PROM preterm births by SOON hospital. Live births and hospital births were included. Expressed as a percentage of total preterm births for each SOON hospital. Preterm is defined as any infant born less than 37 weeks gestation. PROM preterm birth is defined as any preterm birth with prelabour rupture of membranes (PROM) or preterm prelabour rupture of membranes (PROM).

S=Suppressed due to cell size <6. Note: Hospital 10 has 12.9% missing data.

Proportion of babies <32 weeks gestation born out of scope in SOON hospitals, by gestational age and year



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Proportion of infants less than 32 weeks gestation born out of scope by fiscal year, among all live infants born less than 32 weeks gestation in all Southern Ontario Obstetrical Network (SOON) hospitals. Expressed as a percentage of total live SOON hospital births less than 32 weeks by fiscal year. Only hospital births were included. Out of scope in terms of gestational age was defined using Provincial Council for Maternal and Child Health (PCMCH) level of care definitions. Out of scope for Level I hospitals includes any babies born less than 36 weeks gestation. Level IIa includes any babies born less than 32 weeks gestation. Level IIc includes any babies born less than 30 weeks gestation.

Proportion of babies <30 weeks gestation born out of scope in SOON level IIb and IIc hospitals



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Proportion of babies <30 weeks gestation by SOON hospital and fiscal year. Expressed as a percentage of all live babies <30 weeks born at a SOON hospital. Out of scope in terms of gestational age was defined using Provincial Council for Maternal and Child Health (PCMCH) level of care definitions. Any baby <30 weeks that is not born at a level III hospital was considered out of scope. S=Suppressed due to cell size <6.

latrogenic preterm birth by SOON hospital



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Proportion of iatrogenic preterm births by SOON hospital. Live births and hospital births were included. Expressed as a percentage of total preterm births for each SOON hospital. Preterm is defined as any infant born less than 37 weeks gestation. Iatrogenic preterm birth is defined as a preterm birth following labour induction or caesarean delivery without PROM or prior onset of labour. S=Suppressed due to cell size <6. Note: Hospital 10 has 12.9% missing data.

Proportion of live late preterm infants with a neonatal health condition (respiratory distress syndrome, transient tachypnea of newborn, hyperglycemia or hyperbilirubinemia) by SOON hospital



Data Source: BORN Ontario 2017/2018

Definition of Indicator: Neonatal health conditions (respiratory distress syndrome, transient tachypnea of newborn, hyperglycemia or hyperbilirubinemia) by SOON hospital for live preterm infants. Only live births and hospital births were included. Neonatal health conditions was taken from both the aggregate infant and NICU encounter neonatal health condition variable. BORN is currently only collecting NICU data from 3 of the 8 NICU's and therefore there may be some infants with the specified conditions that we do not have data on.

S=Suppressed due to cell size <6. MD=Missing data >50% Note: Hospital 10 has 12.9% missing data.



With very best wishes to all of you,

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BORN 2019 CONFERENCE Ottawa Conference and Event Centre November 7th & 8th, 2019

Improving Care Through World-Class Data and Innovation

BORN is hosting a two-day conference for health-care providers, administrators, policy makers, researchers, and students.

Join the conversation:

- disruptive technology in health care
- perinatal risk and safety
- Ontario's maternal-newborn data partnerships
- using data to support better care future trends

Comments from previous conference participants:

"I enjoyed learning from examples where BORN date has been used to change practice"

"Presentations were linked to real world experiences.../ "Loved this conference – BORN has done exceptional work..."

#BORN2019Conference Registration Details Coming Soon!