

Southern Ontario Obstetrical Network

Winter 2017

Dear Colleagues,

It is my pleasure on behalf of our steering committee to write a newsletter on the events and achievements of our Network over the past six months. We would like to take this opportunity to introduce the Network's new name, the Southern Ontario Obstetrical Network, renamed in order to reflect our expanded membership extending into Southern Ontario. In addition we are in the process of revamping our website so that it reflects our new name, membership and scope, remains current, and allows us to post some of the many requests we get as a Network to assist in surveys or research projects. Thank you to Dr. Nan Okun for taking on this part of the Network organization as well as her leadership as part of the head of division of maternal fetal medicine for the University of Toronto.

Beyond our expectations, our Network has expanded and is on the verge of becoming nationally recognized as a force for quality improvement and research in obstetrics. It is with humble gratitude that I acknowledge all of you who continually contribute to this Network. Our successes belong to all of us and if some planned projects come to fruition,

I believe we will soon be internationally recognized. Gratitude is also owed to Prof. John Kingdom from the University of Toronto and Prof. Nick Leyland of McMaster University whose financial and clinical support have allowed us to achieve our first landmark research grant, outlined below. In addition, thanks to our partners at BORN (without whom we would have no ability to perform any of our quality or research projects), especially Ann **Sprague**, the scientific manager of BORN Ontario, who against my protestations is retiring in March. I cannot overstate how much her collaboration has meant to our Network in general and to me specifically, but I know that the BORN organization is intent on supporting our important work that Anne helped initiate.

Thank you to our partners at the Champlain Maternal Newborn Regional Program (CMNRP), Marie-Josée Trépanier, and the Southwestern Ontario Maternal, Newborn, Child and Youth Network (MNCYN), Felix Harmonos, for helping us bear the cost of our analyst as well as facilitating our provincial reach. Last, but not least, thank you to our partners at Salus Global,

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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 Ann Sprague, BORN Liaison, Better Outcome Registry and Network (BORN)

spearheaded by Malcolm Eade (CEO) and Sally Rogers, who have assisted us in implementing the PPH project in our Network using the MORE OB framework.

We say thank you to Dr. Terry Logaridis whose term as Chief of Scarborough Centenary has come to an end, and thus his place on the Network's steering committee. Terry was a founding father whose energy and vision was instrumental in the initial launch of projects within the Network and he will be missed. This, of course, gives rise to an opportunity for another Chief of a community hospital to be part of the steering committee. If any of you are interested, please let me know.

New Members, New Identity, & a \$1.5M CIHR Grant

Convinced that our network was a unique opportunity in Canada for collaborative research and the CIHR New Investigator grant opportunity, three investigators from our Network and four supervisors submitted an application in early 2016.

The principal investigators are **Dr**. **Howard Berger** from St. Michael's Hospital, **Dr**. **Nir Melamed** from Sunnybrook Hospital and **Beth Murray-Davis**, a midwife from McMaster University. Supervisors are **Dr**. **Michael Geary** and **Dr**. **Joel Ray** from St. Michael's Hospital, **Dr**. **Sarah McDonald** from McMaster University and myself. We were

successful in obtaining a \$1.5 million research grant which, over the next five years, will investigate the impact of hypertension, obesity and diabetes in a pregnant population. Potential projects from this grant include database cohort studies and, ultimately, a cluster randomized trial of aspirin supplementation in the Network.

The grant required considerable matching funds that were contributed by the partner hospitals and universities. Thank you to Drs. Geary, Zaltz, Kingdom and Leyland for these funds.

The principal investigators are currently meeting, hiring research personnel and prioritizing projects to be rolled out over the following five years. Some of these projects were outlined at our last members meeting and we intend to update you further in combined rounds, the first of which is planned for April 2017 (see Communication section below). We will, of course, be seeking input from anybody within the Network for these projects.

In addition to McMaster
University officially joining our network, we welcome Humber
River Hospital who have joined us wholeheartedly and already participated in some of our quality projects. Expressions of interest are coming from Halton Region and beyond to London, Ontario. We are truly a provincial Network both in membership and partnership, fulfilling one of our initial goals from 2013 when the

Network was in its formative days.

The Dashboard

With many requests for a new quality dashboard we have updated our dashboard indicators. Thank you to BORN for the analyses and to **Dr**. **Melamed** for creating the meaningful graphs from this data. The updated graphs are available on our website, and, for the first time, we are able to see some interesting trends in our hospitals.

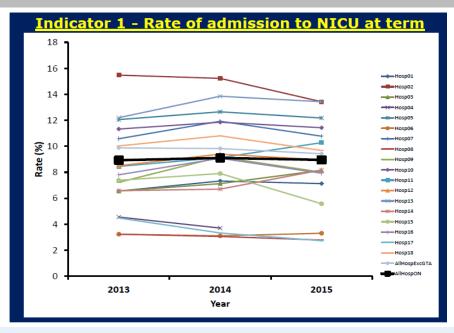
The fact that the province has used one of our indicators, *Low Risk LSCS Rate*, as an upcoming QBP is, I think, testament to our foresight in choosing this as a dashboard indicator.

Additionally, the indicator of *admission of the term infants to the NICU* is to be implemented across the province as part of the provincial neonatal dashboard indicators. You saw it first in the Southern Ontario Obstetrical Network!

At the collaborators' meeting in September it was decided that this dashboard is ripe for an EPIQ program of quality improvement. In short - a hospital with an indicator of concern to them will visit and consult with a hospital with an indicator that suggests an improved quality of care. Using this method, our sister network – The Canadian Neonatal Network – has improved neonatal outcomes in tertiary units over the last 10 years. This, of course, requires that each

hospital's dashboard scores are revealed in some way. It was agreed that the scores would be revealed in private and confidential face-to-face meetings and not be disseminated. It was, however, also realized that many of these outcomes are going to be in the public domain anyway, so it probably behooves us to address them before they are done in a less academic manner publicly. We are waiting for anyone in the Network to take on this EPIQ process with our assistance in any way we can.

In the meantime, <u>visit the dashboard!</u>
The identity of your hospital can be obtained by contacting us.



Definition:

Term live newborns (≥37+0 weeks) admitted to NICU

all term live newborns

Exclusion: Congenital anomalies

Stratification: Mode of delivery

Quality Intervention Projects



Members of SOON attending simulation day and workshop on PPH facilitated by MORE OB

Flush with success of our common protocol for gestational diabetes, we embarked on an ambitious project for tackling **postpartum hemorrhage** within our Network.

You may have seen the latest Ontario coroner's report that draws attention to sub-optimal management of patients with

postpartum hemorrhage. Kudos to the nurse practitioners, led by **Leigh Andrews** from Sunnybrook Health Sciences Centre and Sharon Adams from St. Michael's Hospital in collaboration with Sally Rogers and the MORE OB team, in our Network hospitals who embarked on an ambitious rollout of the MORE OB PPH module. Teams met in person and via conference calls to identify gaps in the PPH management pathway and attended a simulation day at Sunnybrook Health Sciences Centre. Massive transfusion protocols are now establishing themselves in every Network hospital and we are evaluating our process and clinical outcomes as this project continues in the Network. This work was presented at the Ontario SOGC meeting and we have since received a request

from the SOGC to explore if we can take this program national!

One of the most rewarding things to witness was the way in which hospital teams share information about processes and procedures, so that one of our goals of common management of patients across the SOON is being realized.

For those of you who still wish to join, it is not too late – please contact us and we will connect you with this initiative.

In the same vein, **Dr. Geary** and the nurse educators, led by **Sharon Adams** from St. Michael's Hospital, facilitated a **shoulder dystocia training model** throughout the Network hospitals. The model has been on our labour floors and all our staff have had a chance to practice with it. I know personally it has

changed the way that I approach shoulder dystocia.

In addition, the key cards for the correct performance of right mediolateral episiotomy have proven very useful to those who use it. We are similarly evaluating both process and outcome measures.

Please <u>visit our website</u> to view these and other recent <u>Tools & Guidelines</u> that may be relevant to your practice!

Publications

The SOON is proud to showcase publications that have arisen from Network activities and from Network members. All can be found by visiting our website.

Recent Publications

- 1. Clinical Practice Guideline: Hepatitis B and pregnancy (Castillo E, Murphy K & van Schalwyk J, JOGC, Mar 2017)
- 2. Vaginal progesterone decreases preterm birth and neonatal morbidity and mortality in women with a twin gestation and a short cervix: an updated meta-analysis of individual patient data. (Romero R et al., Ultrasound Obstet Gynecol Mar 2017)
- 3. Five Things to Know About...

 Preeclampsia (D'Souza R &
 Kingdom J, CMAJ Nov 2016)
- 4. Induction of labor before 40 weeks is associated with lower rate of cesarean delivery in women with gestational diabetes mellitus (Melamed N et al., AJOG Jan 2016)
- 5. Clinical Practice Guideline: Diabetes in Pregnancy (Berger H,

Gangon R & Sermer M, JOGC July 2016)



Research Projects

There have now been several research projects that have been carried out and published in international journals originating from data from the SOON. We also had a presence in international meetings where the Network is front and centre in our presentations.

Ongoing Projects

- 1. Timing of delivery in women with preexisting hypertension
- 2. A customized standard to assess fetal growth in a Canadian population
- 3. Is the risk of gestational diabetes increased in multiple gestations?
- 4. Is Caesarean section during the second stage of labour associated with increased risk of preterm birth in subsequent pregnancy?
- The relationship between pregravid body mass index and pregnancy outcome in twin pregnancies
- 6. Neonatal outcomes by mode of delivery in women with morbid obesity: trial of labor compared

with planned Caesarean delivery

We have had several requests to use the Network for protocol dissemination and recruiting. These can be found on our website, and we encourage you to assist with these studies as it increases the value of our collaboration to researchers across Canada.

Preterm Birth Initiative

Preterm Labour & Short Cervix Protocol Drs. Ladhani and Czikk from Sunnybrook and Mount Sinai Hospital respectively coordinated a preterm birth meeting, to review current practices in the antenatal management of women with a history of preterm labour and incidental findings of a short cervix. Recommendations from this meeting will be used to develop a protocol for the SOONparticipating hospitals, to embark upon a program of cervical length screening in the Network. We will be in touch shortly as to how and when this will roll out. It is a major project requiring funding which I'm pleased to say is on the threshold of being made available to us!

Maternal Transfer Database

Another noteworthy endeavor is the Maternal Transfer Database, a pilot project through the SOON. Information from this database will address the high rate of preterm infants born in nontertiary centres in Ontario – a major contributor to increased morbidity and mortality among these 'outborn' infants. This project seeks to determine the barriers to best practice for

transferring these patients to high risk perinatal sites. Stay tuned for more information regarding this project!

LSCS Initiative

Coming from Credit Valley Hospital is an exciting new quality initiative lead by Dr. Amanda Cipolla, aimed at reducing primary C/S rates in nulliparous patients in both spontaneous and induced labour, by reducing C/S rates for Failure to Progress. She is working closely with the SOON to bring this project network-wide, with the aim of reviewing, auditing, and providing constructive feedback to OBs to effect change. Keep in touch with us for more updates on this exciting intervention!

Growth Initiative

An initiative just starting up is the Growth Initiative, to standardize care with regards to monitoring for fetal growth in fetuses suspected of IUGR, arising from the 5th International Fetal Growth Meeting, hosted by UofT OBGYN in November 2016. Get involved in the discussion at the next SOON meeting!

Communication

It has become clear that newsletters and website are not sufficient to keep everybody apprised on the activities going on within the Network. We therefore approached **Dr. Rory Windrim** who in his capacity as Director of Continuing Professional Development has

agreed to avail us of his skills and resources to hold Southern
Ontario Obstetrical Network
Medical Rounds at least once a quarter. The first of these will be on April 7 at 7:45am at St.
Michael's Hospital (room TBA), and will be available to all using the same mechanism of joining as that used for the obstetrical grand rounds.

Funding & Leadership

Thank you for your continued commitment and support in funding our network. There was unanimous acceptance that each community hospital agree to pay \$3000/year and each academic hospital agree to pay \$5000/year for the next two years. We also could not function without the major contributions from Dr. John Kingdom and the University of Toronto and we are grateful to Dr. Gareth Seaward who so successfully integrated our network into the **University** Quality of Care Program.

2017 Hospital Contributors

- Humber River Hospital
- Mackenzie Health Mackenzie Richmond Hill Hospital
- McMaster Hospital Hamilton
- Mount Sinai Hospital
- North York General Hospital
- Royal Victoria Regional Health Centre
- ❖ Southlake Regional Health Centre
- St. Joseph's Health Centre Toronto
- St. Michael's Hospital
- Sunnybrook Health Sciences Centre
- The Scarborough and Rouge Hospital - Centenary

- The Scarborough and Rouge Hospital - Birchmount Campus
- The Scarborough and Rouge Hospital - General Campus
- Toronto East General Hospital
- Trillium Health Partners Credit Valley Hospital
- Trillium Health Partners -Mississauga Hospital
- William Osler Health Centre -Brampton Civic
- William Osler Health Centre -Etobicoke General Hospital

Next Steps...

I think the next steps are consolidating what we have and making sure we maintain our contribution to the SOON, both fiscally and in participation of Network initiatives.

We cannot do this without you and we hope we continually prove of value to you as obstetricians and to your institutions.

Exciting developments are on the horizon as a soon-to-be-launched stillbirth prevention initiative will highlight the collaboration of our Network in a major way.

I truly believe within the next few years we will become a household name nationally and internationally.

With very best wishes to all of you,

Jon Barrett

Chair, Southern Ontario Obstetrical Network