



# **The Alliance for the Prevention of Preterm Birth and Stillbirth in Ontario**

Best Start Conference  
Wendy Katherine and Kate Robson  
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## Why is this important?

- About 8% of live births or approximately 11,000 Ontario infants are born preterm annually with an estimated \$67K additional cost per child until age 10
- Approximately 700 Ontario infants are stillborn annually, with costs estimated in US studies to be between 10%-70% more than normal births
- Preterm birth is responsible for 75% of neonatal deaths and 80% of newborn illness in Canada
- It is a leading cause of disability, with high rates of associated cerebral palsy, chronic lung disease, neurological disabilities, hearing problems and blindness
- Preterm birth and its complications are immensely stressful for families and expensive for Canadian taxpayers.



# Our story



# The Value of Family Engagement



From here ....



To here ...



And here!



Let's do what needs  
to be done in the  
present

And look to a future

Where preterm birth  
is a thing of the past

# Advancements in Science have Proven that Many Preterm Births and Stillbirths Can Be Prevented

The Alliance formed an unprecedented collaboration to respond. We are:

- Hospitals and Care Providers
- Pregnant People and Families
- Researchers and Data Experts
- Health Promotion Networks
- Knowledge Mobilization Programs
- International Programs



# MPP Mike Colle Introduced Bill 141, 2015

## The Bill Provides a Legal Framework for the Alliance

**An Act to require research to be undertaken and programs to be developed for pregnancy loss and infant death and to proclaim October 15 as Pregnancy and Infant Loss Awareness Day**

Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

### **Pregnancy and Infant Loss Awareness Day**

1. October 15 in each year is proclaimed as Pregnancy and Infant Loss Awareness Day.

### ***Ministry of Health and Long-Term Care Act***

2. Subsection 6 (1) of the *Ministry of Health and Long-Term Care Act* is amended by adding the following paragraph:

11. To undertake research and analysis on pregnancy loss and infant death that assists those, including mothers and families, who experience such loss and that informs the establishment or expansion of programs related to such loss.

### **Commencement**

3. This Act comes into force on the day it receives Royal Assent.

### **Short title**

4. The short title of this Act is the *Pregnancy and Infant Loss Awareness, Research and Care Act, 2015*.







# Proposed Bundle of Care

1. Risk assessment for all patients at prenatal care intake using health prior pregnancy registry data with push to EMR
2. Low dose aspirin (ASA) recommended to individuals with clinical risk factors
3. Cervical Length Measurement as part of routine mid-pregnancy anatomical ultrasound scan between 16 and 24 weeks
4. Natural vaginal progesterone to be prescribed nightly and until 36 weeks' gestation for anyone with a history of preterm birth or short cervix.
5. Fetal Movement Awareness teaching as part of routine pregnancy care and encouragement of prompt electronic fetal monitoring when fetal movement is significantly reduced.
6. Late Preterm Birth Intervention



## For Unavoidable Preterm Births

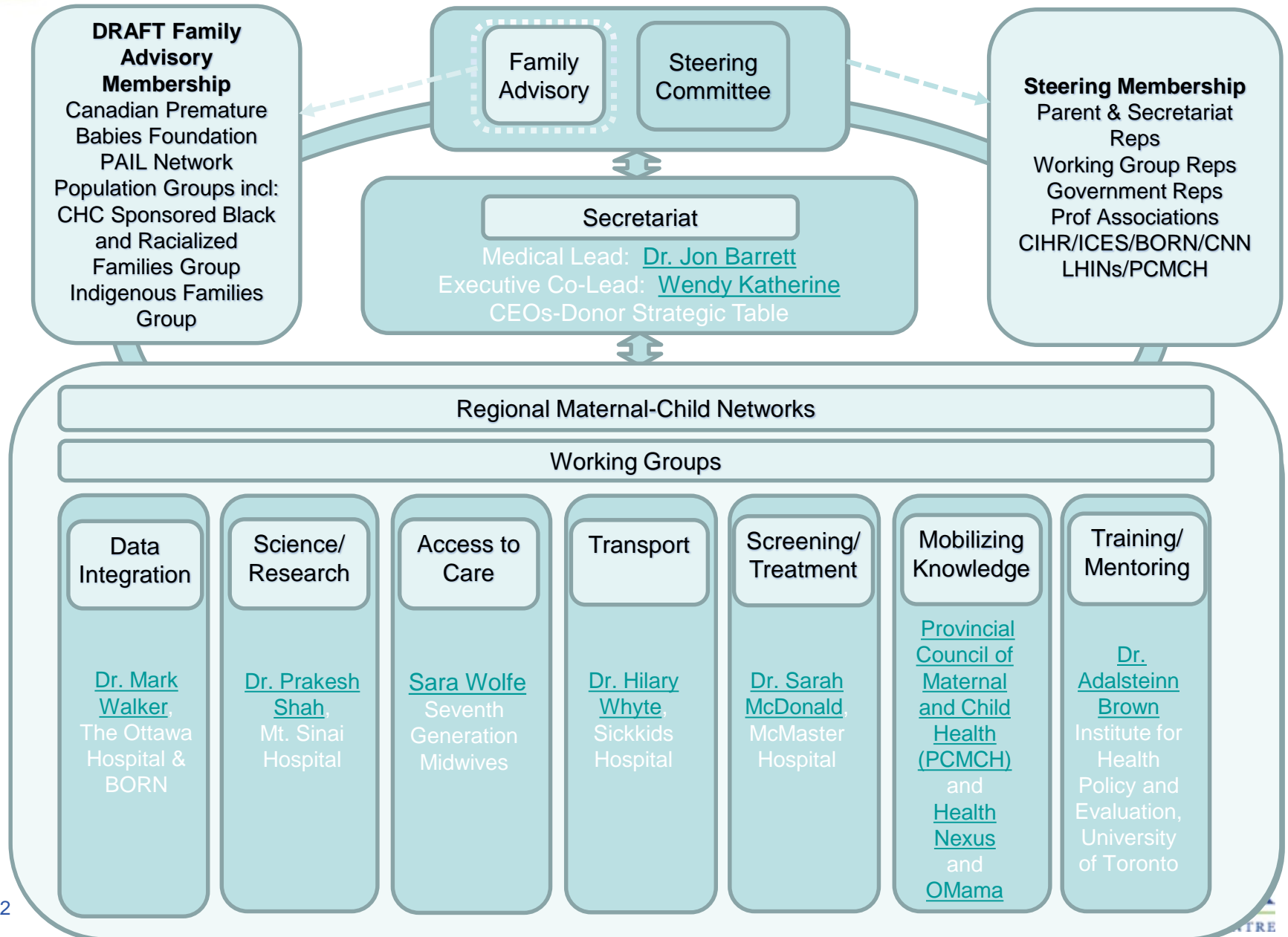
The Alliance has partnered with neonatal experts to improve coordination of threatened premature labour cases so care is optimized where premature birth cannot be avoided, including:

- Timely maternal transport to a centre tailored to the gestational age of the pregnancy
- Steroid administration in advance of birth to encourage fetal lung maturation
- Delayed umbilical cord clamping at birth
- Follow-up resources for families of preterm babies.

# Accomplishing our Goal



# Alliance for the Prevention of Preterm Birth and Stillbirth DRAFT Governance





## Program Alignment

The Alliance has linked with Ontario, Canadian and international partners to optimize implementation, research and evaluation opportunities. We are:

- partnered with a Canadian Network of CIHR-funded researchers on the causes and outcomes of preterm birth
- working with Western Australia, which reduced preterm births by 8% using screening, cervical length measurement and administration of progesterone along with an education campaign
- linking up with the International Stillbirth Alliance (ISA), which has reduced stillbirths using screening and fetal movement monitoring
- aligned with Bill 141 and Ministry investments to the Pregnancy and Infant Loss (PAIL) Network, and other Ministry-funded programs.

# Indigenous Health Disparities Require Tailored Solutions

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Health Reports, Vol. 28, no. 11, pp. 11-16, November 2017 • Statistics Canada, Catalogue no. 82-003-X

*Birth outcomes among First Nations, Inuit and Métis populations • Research Article*

**Table 2**  
**Rate of adverse birth outcomes, by Indigenous identity, singleton births, Canada, 2004 through 2006**

Adverse birth outcome	Non-Indigenous			Indigenous			p-value**	First Nations			Métis			Inuit			p-value†
	Rate	95% confidence interval		Rate	95% confidence interval			Rate	95% confidence interval		Rate	95% confidence interval		Rate	95% confidence interval		
Preterm birth (per 100)	6.7	6.6	6.9	8.7	8.1	9.3	< 0.01	9.0	8.2	9.7	7.6	6.3	8.9	11.4	9.7	13.1	< 0.01
Small-for-gestational-age birth (per 100)	8.6	8.5	8.8	6.6	6.0	7.1	< 0.01	5.8	5.2	6.3	8.3	6.8	9.7	8.0	6.3	9.7	< 0.01
Large-for-gestational-age birth (per 100)	10.6	10.5	10.8	18.8	18.1	19.6	< 0.01	20.9	19.9	21.8	14.4	12.7	16.1	15.6	13.5	17.7	< 0.01
Stillbirth (per 1,000)	5.6	5.3	5.8	9.0	7.0	11.0	< 0.01	10.4	7.8	12.9	5.7	1.8	9.5	9.7	5.0	14.4	0.01
Infant death (per 1,000 live births)	4.4	4.2	4.7	9.6	7.8	11.5	< 0.01	9.2	7.5	11.3	10.5	7.1	15.5	12.3	9.9	15.2	0.52
Neonatal death (per 1,000 live births)	3.4	3.1	3.6	4.9	3.5	6.3	< 0.01	4.4	3.4	5.8	7.5	4.6	12.3	7.2	5.4	9.7	0.04
Postneonatal death (per 1,000 surviving births)	1.1	0.9	1.3	4.8	3.4	6.1	< 0.01	4.8	3.6	6.4	3.1	1.5	6.1	5.1	4.0	6.4	0.29

\*\* from chi-square tests for comparison of Non-Indigenous versus Indigenous population

† from chi-square tests for overall comparison of three Indigenous populations

Source: 2006 Canadian Birth-Census Cohort database.





## Sub-population Considerations

To address the higher burden of preterm birth and stillbirth that some subpopulations bear – including Indigenous, black and racialized families, the Alliance plans to work with cultural groups to spread best practices through use of:

- traditional, electronic and social media knowledge translation campaigns
- practitioner engagement and practice change support via clinical networks covering Ontario
- audit and feedback through BORN Ontario dashboards
- alerts and personal health record reminders that align with the recently published Ontario Perinatal Record and, eventually, electronic medical records
- Ontario Telehealth Network clinical support, including ultrasound interpretation and clinical case review





# Funding Partnership

- Received \$200K in donor seed funding 2017-18 to establish itself while we seek further donor and MOHLTC funds.
- Positive discussions with the MOHLTC and partners including the Provincial Council for Maternal and Child Health and BORN Ontario and a major donor are underway to determine a cost-sharing budget over five years.
- The Alliance has partnered with a recently-approved \$5M Canadian Institute of Health Research (CIHR) grant to improve preterm birth outcomes (Jon Barrett – PI)
- The Alliance plans to apply to upcoming CIHR grants and to engage First Nations-focused initiatives.



## Alliance Leads:

- We welcome your encouragement and feedback. Please contact us using the emails below:

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