Perinatal Services BC

An agency of the Provincial Health Services Authority

Annual Report 2014/15

Perinatal Services BC (PSBC), an agency of the Provincial Health Services Authority, provides leadership, support, and coordination for the strategic planning of perinatal services in British Columbia in collaboration with the Ministry of Health, health authorities, and other key stakeholders. Perinatal Services BC is the central source in the province for evidence-based perinatal information.

Vision

Healthy women having healthy pregnancies and infants.

Mission

Through partnerships and collaboration and by building a high-quality system of care across the continuum, we will optimize pregnancy and birth outcomes as a foundation for a healthy population.

How We Serve BC

PSBC uses a client-centric, population health approach in supporting perinatal services across the province and as the basis for its shared mandate with partners and stakeholders.

Our key responsibilities include:

- improving health outcomes of pregnant women and newborns;
- improving planning within the perinatal health care system;
- developing evidence-based practice standards, guidelines, and forms;
- providing training and education to health care providers in areas such as fetal health surveillance, neonatal resuscitation and stabilization, and breastfeeding;
- managing prenatal and newborn screening programs; and
- collecting and monitoring data for surveillance, policy development, and program evaluation.

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Message from Provincial Executive Director

I am pleased to provide our Annual Report for 2014/15, which is a follow-up to our Annual Report for 2013/14.

During this past year, we have completed many initiatives that improve the health and well-being of mothers and their newborns with demonstrated success. I would like to recognize our team at Perinatal Services BC (PSBC) for their ongoing hard work and dedication. I arrive at work each day with a desire to make a difference in the system and to improve care for women and newborns, and I do that within a team of talented, committed, and caring people.

We moved forward with the creation of a new Perinatal Services BC Steering Committee that replaced the former Perinatal Services Oversight Council. The Steering Committee is a collaborative forum in which Perinatal Services BC—an agency of the Provincial Health Services Authority (PHSA)—works with regional health authorities, the First Nations Health Authority, the Ministry of Health, and academic and professional organizations to improve perinatal health across the province. The Steering Committee has developed a shared vision and goals that will help us ensure there is system-wide coordination, identify and resolve issues, and advance new and innovative approaches to perinatal health.

In July 2014, PHSA realigned several portfolios into provincial service streams to better represent the provincial role of PHSA and its agencies in planning, commissioning, and delivering care. Dr. Jan Christilaw was appointed Vice President of Provincial Women's and Newborn Health, with both BC Women's Hospital & Health Centre and Perinatal Services BC under this new portfolio. This alignment will enable improved integration of provincial planning and tertiary services in maternity and newborn care and has already facilitated collaboration between agencies.

I would also like to take this opportunity to thank the Ministry of Health, BC Women's Hospital, regional health authorities, the First Nations Health Authority, professional associations, and clinicians and care providers from all areas of the province for their valuable contributions to ensure that BC has the best perinatal health system possible.

Kim Williams, RN, MSN
Provincial Executive Director
Perinatal Services BC

Education & Quality

Perinatal Services BC develops, adopts, and approves guidelines and standardized forms that support best practices for maternal and newborn care using a multidisciplinary and cross-jurisdictional approach. Collaborating with provincial stakeholders, clinicians, educators, administrators, and researchers assists us in ensuring our guidelines are evidenced-informed as well as meeting the operational requirements within our provincial maternal and newborn network. We continue to support local and regional education initiatives in an effort to increase effectiveness, efficiency, accountability, safety, and sustainability of maternal and newborn services across BC.

The following is some of work we undertook during the 2014/15 fiscal year.

Updated Practice Resources

PSBC updated practice resources that highlight current key clinical documents by providing links directly to the primary source. These practice resources are an effort to compile information into one document and to not recreate work by developing a BC-specific guideline.

The following were updated in 2014:

- *Group B Streptococcus in the Perinatal Period*: includes recommendations from recently released guidelines related to Group B Strep from the Society of Obstetricians and Gynecologists of Canada (SOGC), US Centres of Disease Control, and the Canadian Paediatric Society.

- *HIV in the Perinatal Period*: includes links to guidelines from BC Women's Hospital & Health Centre, SOGC, BC Centre for Excellence in HIV/AIDS, and the World Health Organization (WHO).

Acute Care of At-Risk Newborns (ACoRN)

ACoRN is a Canadian neonatal stabilization program designed for the multidisciplinary team who may be called upon to care for at-risk and unwell newborns as well as babies who have been resuscitated at birth, regardless of experience or training in neonatal emergencies.

The ACoRN workshop is an interactive session that utilizes a skill-based, tool-based, and case-based approach to learning. Simulations are an integral component of the workshop. PSBC offered 24 ACoRN workshops in 2014/15, with a total of 207 participants (115 nurses, 46 physicians, 38 midwives, one respiratory therapist, and seven other professionals).

Neonatal Resuscitation Program (NRP)

PSBC provides courses for expert-level practitioners who are supported by their facility to develop teaching skills in neonatal resuscitation. We offered four NRP Instructor Workshops during the 2014/15 fiscal year. They were held in Abbotsford, Kelowna, Prince George, and Vancouver, with a total of 52 participants (34 nurses, 11 physicians, four midwives, and three respiratory therapists).

PSBC also developed one regional instructor trainer and is in the process of developing an additional three regional instructor trainers to bring the pool up to 11.

To improve training of neonatal resuscitation among frontline care providers, PSBC partnered with BC Women's Hospital to develop videos of simulated neonatal resuscitation as an exercise in documenting a neonatal resuscitation. Participants watch three videos that increase in duration of the resuscitation, document it using the provincial form, then compare their notes to a sample completed form. The videos are expected to be launched in fall 2015.

Breastfeeding: Making a Difference Workshop

In February 2015, Perinatal Services BC held *Breastfeeding: Making a Difference*, a 'train the trainer' workshop designed to help health authorities in the delivery of education that meets the UNICEF/WHO guidelines for the Baby-Friendly Initiative and to support nurses and other health care providers who provide breastfeeding information and care for families prenatally and following birth. There were 33 participants, including four from the Northwest Territories.

Fetal Health Surveillance

The online version of *The Fundamentals of Fetal Health Surveillance: A Self Learning Manual* has been available since July 2014. Access to the manual is free for Canadian stakeholders, but an account is needed, and PSBC has been working with the Centre of Excellence in Simulation Education and Innovation (CESEI) to manage registrations. As of March 31, 2015, there were over 5,100 users. Perinatal Services BC presented the online manual at the SOGC West/Central CME in March 2015.

The National Fetal Health Surveillance Steering Committee has met three times, with PSBC and Champlain Maternal Newborn Regional Program as the co-chairs. A work plan has been developed to focus activities.

Tea & Talk Presentations

We continue to host Tea & Talk video sessions via Telehealth to share information about our initiatives with provincial partners. We held five during the 2014/15 fiscal year on the following topics:

1. Best Practice Guidelines: Mental Health Disorders in the Perinatal Period
2. Results of the BC Perinatal Data Registry Chart Re-Abstraction Project
3. Maternal/Fetal and Newborn Tiers of Service
4. Breastfeeding Trends in British Columbia
5. Province-Wide Contract for Infant Formula: One Step Closer to Baby-Friendly Designation

Our Communications Officer also began tweeting with the hashtag #perinatalchat during the Tea & Talk sessions in late 2014 to reach audiences outside of health authorities.

New Neonatal Transfer Record

The transfer of essential information and responsibility for care of a newborn from one nurse to another is an integral component of communication in neonatal care, particularly with regard to transition points such as shift change and patient transfer to another facility. In response to several requests from nurses throughout BC to standardize communication from nurse to nurse when newborns are transported throughout the province, Perinatal Services BC worked with the Provincial Neonatal Educators Working Group to develop the BC Neonatal Transfer Record.

The form is designed for inter-hospital transfers to facilitate consistent and complete documentation, communication, and continuity of nursing care between facilities. The form is completed by the nurse caring for the newborn and given to the transfer team, who subsequently gives it to the nurse at the receiving hospital. The BC Neonatal Transfer Record did not replace the telephone report, which is still an essential part of the nurse-to-nurse handover.

Additional benefits of the form:

- uses standardized terminology and abbreviations;
- can be used in all hospitals providing newborn care;
- can be used for acute and repatriation transfers;
- minimizes double charting or need for several narrative notes on several forms; and
- facilitates early recognition, timely communication, and intervention for changes in newborn conditions.

An accompanying Guide for Completion and a Quick Education Guide with sample completed acute and repatriation forms were also developed to aid in training.

Provincial Breastfeeding Think Tank

Breastfeeding is one of the most important preventive health measures for both mother and child. While BC's breastfeeding initiation rate is 93 per cent, only 42 per cent of infants were breastfed exclusively for six months, which highlights the need to continue to implement actions that advance breastfeeding in the province.

In March 2015, the Ministry of Health and Perinatal Services BC hosted a Provincial Breastfeeding Think Tank of key decision-makers and experts to help guide the way forward in the development of a provincial plan that protects, promotes, and supports breastfeeding in BC as well as advance implementation of the Baby-Friendly Initiative (BFI).

Objectives for the day were to:

- identify the key components of a provincial breastfeeding plan, priority actions, and sequencing based on the evidence and expert opinion;
- leverage opportunities for cross-jurisdictional sharing of resources, ideas, and lessons learned with the aim of supporting the advancement of breastfeeding and BFI implementation across the province; and
- learn from the development of a provincial strategy and cross-jurisdictional implementation of BFI in Ontario.

Province-Wide Contract for Infant Formula

In late 2012, the Perinatal Services BC Oversight Council officially recognized the Baby-Friendly Initiative as the minimum standard for the commitment to promotion and protection of breastfeeding for all of British Columbia. The Oversight Council subsequently asked PSBC to work with Health Shared Services BC to negotiate a province-wide contract for infant formula that was in accordance with BFI and the WHO International Code of Marketing of Breast Milk Substitutes.

In 2013, PSBC formed a working group with representation from regional health authorities, including dietitians, nurses, and physicians. Over the following year, the working group:

- conducted a literature review relevant to infant formula indications of use;
- evaluated the subcategories of infant formula based on current research to support use in hospital and community settings;
- reviewed the nutrient compositions of infant formula products available in Canada;
- established clinical specifications required for each particular formula subcategory; and
- engaged key stakeholders from each health authority to provide feedback and review proposed clinical specifications.

After a Request for Qualifications process, all regional health authorities signed with a single primary vendor for infant formula and related feeding products in early 2015.

PSBC and health authorities recognize that adhering to the WHO code does not imply Baby-Friendly status—it is only one of the steps required.

Health Promotion & Prevention

Perinatal Services BC continues to collaborate with frontline leaders in community, primary care, and acute care settings across the province, as well as the Ministry of Health, health authorities, and national organizations to lead the development and implementation of best practice initiatives that promote healthy pregnancies and healthy infants.

5 As of Healthy Pregnancy Weight Gain

Throughout the 2014/15 fiscal year, Perinatal Services BC worked at the national level through the Canadian Obesity Network and led a provincial advisory committee and working group to develop a training strategy for the new primary care practice support tool, the *5As of Healthy Pregnancy Weight Gain*.

The goals of the training strategy are to:

1. increase care provider awareness of the Institute of Medicine gestational weight gain guidelines;
2. increase their awareness of the evidence identifying excessive gestational weight gain as an independent and modifiable risk factor for a range of maternal, obstetrical, infant, and child outcomes; and
3. increase their confidence and competence to engage women in effective gestational weight gain counselling and healthy behavior change.

With provincial engagement from family physicians, obstetricians, registered midwives, nurse practitioners, registered dietitians, as well as the Continuing Professional Development Program in the Faculty of Medicine at the University of British Columbia, PSBC has developed draft content for Phase 1 of the training plan, which is an accredited online training module. Phase 2 will include in-person regional training on the 5As practice support tool and will be implemented in the 2015/16 fiscal year.

PSBC has also developed partnerships with academic researchers to conduct:

1. a baseline evaluation (through an online survey and key informant interviews) of care providers' knowledge, practices, wbarriers, and facilitators for gestational weight gain counselling; and
2. a validation study of the 5As framework and tools within a BC maternity clinic.

In addition, we are leading work at the national level to develop policy briefs and evidence-based fact sheets with infographics to increase awareness and investment in the 5As training by decision-makers across the country.

Implementation Evaluation of Prenatal Care Pathway

PSBC conducted a survey with health authority public health leads to determine how the *Population and Public Health Prenatal Care Pathway* (launched in early 2014) had been integrated into regional protocols and how it had informed regional public health prenatal practice. The results of the survey have helped us monitor and understand the extent to which the pathway has been adopted and implemented in the regional health authorities.

Women's Health Pregnancy Passport and Cultural Adaptation

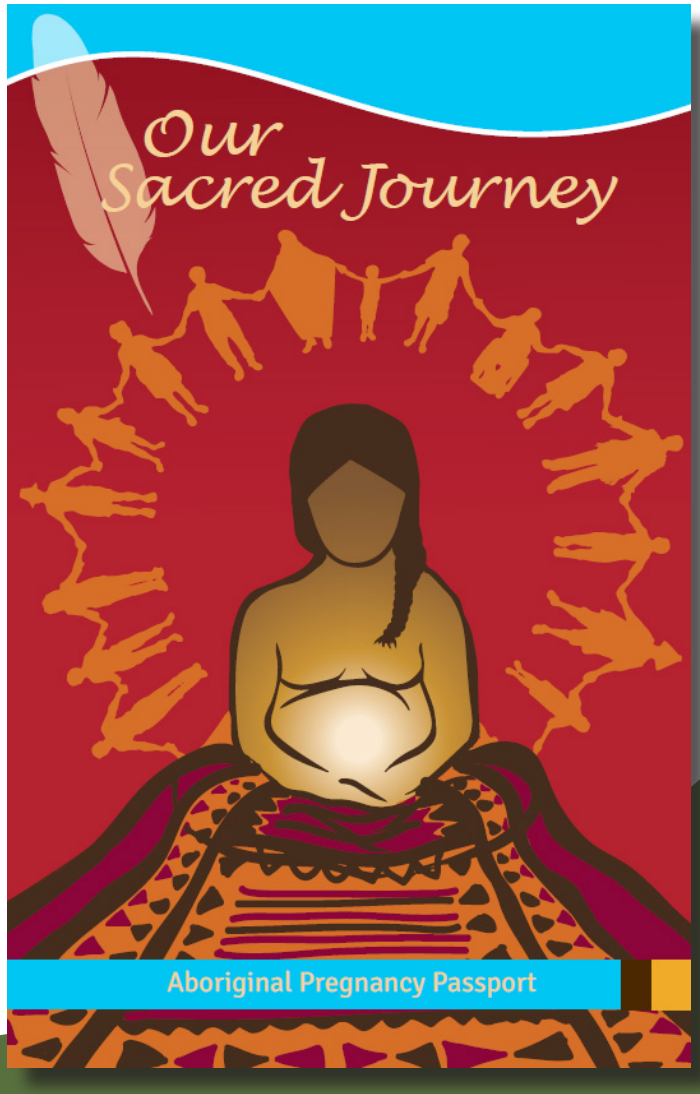
A quality improvement evaluation was completed on the *Women's Health Pregnancy Passport*. We will use the results of the initial evaluation and learnings from the cultural adaptation process to make improvements to the *Women's Health Pregnancy Passport* in 2015/16.

The results of the evaluation also enabled us to capitalize on a timely funding opportunity to develop a cultural adaptation of the passport for Aboriginal women and families, in collaboration with the Ministry of Health and First Nations Health Authority (FNHA). The passport is called *Our Sacred Journey: Aboriginal Pregnancy Passport.*

A provincial advisory committee conducted five focus groups with women in Terrace, Williams Lake, and Vancouver to review the initial draft and provide cultural feedback. The draft was also sent for scientific review to OB/GYNs, midwives, nurses, and GPs in acute care and public health to ensure the physical aspects of pregnancy were accurate.

The Aboriginal Pregnancy Passport is a culturally appropriate health promotion resource that incorporates First Nations/Aboriginal traditional beliefs and values as well as clinical best practices. The Aboriginal Pregnancy Passport empowers women and their families through their sacred journey of pregnancy, birth, and baby's first few weeks. The passport provides expectant mothers with health information, resources, traditional teachings, growth charts, checklists, and a place to write down goals, thoughts, ideas, and dreams for their babies.

PSBC and FNHA distributed 20,000 hard copies of the passport to health care providers across BC. Additional hard copies can be ordered through the PSBC website.



Aboriginal Health

Perinatal Services BC recognizes the value of and celebrates Aboriginal cultures and traditions. We continue to lead efforts to produce culturally appropriate and inclusive perinatal resources for Aboriginal peoples across the province and to ensure that an Aboriginal perspective of health is addressed throughout any program.

Aboriginal Doula Services

Evaluation of the Tripartite First Nation Aboriginal Doula Initiative was completed in 2014, and the report identified many successes as well as challenges that were overcome during the implementation. As a result of what was learned during the initiative, doula services have been transferred into the hands of the community. Communities interested in providing doula services will be able to choose, train, and support the people they decide are the right fit as a doula in their community.

To assist community organizations and individuals interested in becoming doulas, PSBC took the lead and collaborated with First Nations Health Authority to develop content for FNHA's website, including information about: doula training; what needs to be in place in the community to support a doula; financial assistance; networking; and practice resources, including downloadable templates.

Preventing Low Blood Sugar in Babies

Some First Nations infants and young children may be at an increased risk of low blood sugar. This increased risk is due to a common genetic variant in the CPT1a gene, which results in a slower rate of fatty acid oxidation. Along the coast of BC and Vancouver Island, one in five First Nations babies are born with the gene variant, and in the Interior region, one in 25.

In general, these children with the CPT1a genetic variant are healthy and will grow and develop normally; healthy babies and young children are not at risk for low blood sugar when they are feeding regularly. However, some infants and children may be susceptible to low blood sugar during prolonged fasting and/or illnesses that could interfere with feeding. Very low blood sugar can cause brain injury.

To increase awareness of CPT1A and low blood sugar, a joint working group with BC Children's Hospital, Island Health, the Ministry of Health, and Perinatal Services BC was formed. The group developed a medical guideline for health care providers for the prevention and management of hypoglycemia in BC First Nations infants and young children. A parent brochure was also developed in consultation with First Nations communities and families and the First Nations Health Authority.

Screening Programs

Perinatal Services BC is responsible for the coordination and management of prenatal genetic and newborn screening in BC. We ensure there is a centralized, coordinated system to guide screening across the province, measure outcomes, evaluate and disseminate new evidence and knowledge, and provide educational and informational materials to women and health care providers.

Education for Prenatal Genetic Screening Program

In 2014/15, we initiated an education campaign about the need to optimize the time of the second blood draw for women having integrated prenatal screening. Each year, approximately 25,000 women in BC opt for screening. Of these women, 20,000 have integrated prenatal screening, and five per cent of those will have a positive screen. To enable women who will screen positive to access further diagnostic testing earlier and have sufficient decision-making time, it is ideal for women to access their second blood draw as early as possible (15th to 16th week) within the biochemical timeframe (15th to 20th week).

However, a review of 2013 utilization data indicated that only 64 per cent of women have their second blood test drawn within the ideal timeframe, which meant that 7,000 women had their blood drawn late (after 17th week). Therefore, we advised care providers to give all women specific instructions to get their second blood draw for integrated prenatal screening at 15 weeks two days, or as early as possible after that date and before 16 weeks six days. Utilization data from 2014 will be reviewed this year to determine if there has been an improvement.

The Prenatal Genetic Screening Program remains abreast of all national and international evidence-based non-invasive prenatal testing (NIPT) information and access to self-pay testing and translates that knowledge for health care providers and women in BC through our educational materials, website, and conference presentations.

Newborn Screening Updates

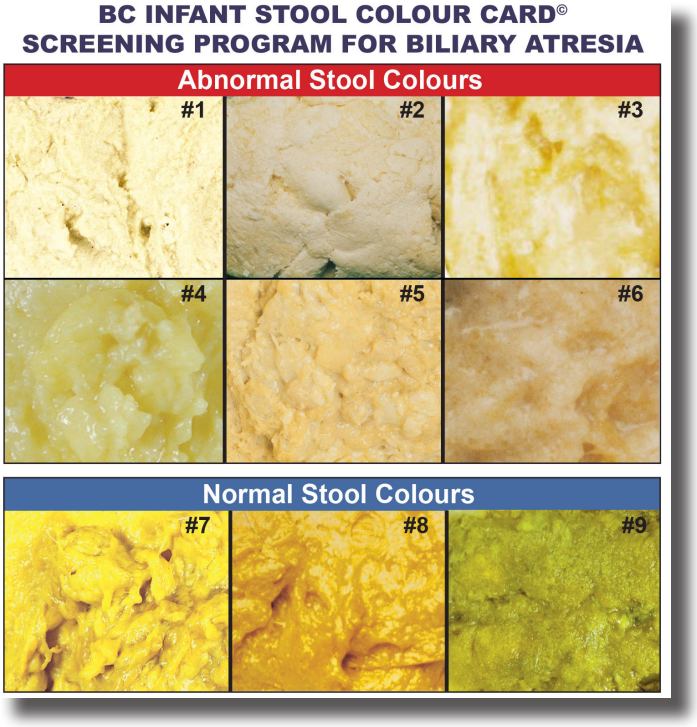
BC Newborn Screening Program educational efforts in 2014/15 focused on updating the newborn blood spot card to have a perforated tear-off information sheet attached to the front of the card. This allows nurse and lab staff doing the heel poke at bedside to tear off the information sheet and hand it directly to the family at point of contact as an educational reminder for newborn screening.

We are also enhancing the quality of the blood specimen collection and are embarking on a series of educational videos and online training modules for phlebotomy staff, which (when completed in 2015) will be a job requirement for all staff to complete.

Revised Stool Colour Card for Biliary Atresia Screening

Based on a new colour card being used in Taiwan, Perinatal Services BC made revisions to the original six-colour stool card. Three abnormal colours have been added, so the new card now has six boxes depicting abnormal stool colour and three boxes depicting normal stool colour.

In addition, after receiving feedback from care providers and patients, changes were made to the text to make instructions clearer and to emphasize that if the family goes to their health care provider during the first month because they are concerned about their infant's stool colour, they should take the card with them to help facilitate follow-up. The new card was translated into 11 languages, intended to be used for the instructions (i.e. not the colours).



Informatics & Surveillance

The mandate of Perinatal Services BC is directly supported by the operation and maintenance of the BC Perinatal Data Registry (PDR). Data from the PDR are widely used for surveillance and research purposes and to support health care providers, researchers, and policymakers in their work to improve maternal, fetal, and neonatal health outcomes as well as to enhance the delivery and quality of perinatal services in BC.

New Perinatal Data Registry: PDR Data Field Evaluation Project

Following on the heels of a comprehensive chart re-abstraction study and subsequent internal stakeholder consultation, PSBC conducted an online survey in the fall of 2014 to consult with external stakeholders on proposed changes to the PDR. The survey was designed to address the comprehensiveness of the PDR data fields and to solidify a core data set to be included in the registry's redevelopment. This data set will strengthen the registry's future perinatal surveillance goals and better align with current clinical practices and trends in maternal and newborn care. Fifty respondents from across the province completed the survey. PSBC is in the process of analyzing the expert insights and recommendations in order to finalize the core perinatal data set.

Data Access Stakeholder Consultation

During the 2013 review of PSBC, it was identified that there were concerns expressed by some members of the research community regarding access to perinatal data for research purposes. In response, PSBC conducted an extensive stakeholder engagement and consultation process to evaluate our data access role and improve services. The objective was to understand stakeholders' perceptions of PSBC's data access role in providing data for research purposes, identify any barriers to data access, and create an opportunity to inform stakeholders of our processes.

We welcomed the feedback from the researchers and key stakeholders who were interviewed. Some of the process improvement suggestions offered by stakeholders were already underway, and other

planned improvements were in alignment with recommendations. These included: the transfer of linked perinatal health data to Population Data BC (see below), hiring a data access and research coordinator (see below) to serve as the single point person and to assist researchers in creating applications for data; streamlining internal processes to ensure consistency and transparency of operations; updating communication materials; and implementing a tracking system for application status. These actions have and will continue to improve the efficiency and consistency of research data application and access. PSBC continues to work towards finding balance between fulfilling our mandate to support perinatal surveillance and performance improvement with providing researchers with access to maternal and newborn health outcome data.

New Process for Researchers Requesting Linked Perinatal Health Data

Perinatal Services BC and Population Data BC (PopData) reached an exciting milestone in 2014 with the signing of an information sharing agreement to incorporate data from the Perinatal Data Registry (PDR) into the data holdings at PopData. PopData is a multi-university, data, and education resource, facilitating interdisciplinary research on the determinants of human health, well-being, and development. It offers researchers access to one of the world's largest collections of health care, health services, and population health data as well as a comprehensive education and training service on how to best use those data.

Prior to the agreement, researchers would utilize PopData to access linked data sets between the PDR and other PopData holdings on a project-specific basis. Linked data allows information on an individual from one data source to be linked to information on the same individual from another data source. Using linked data makes it possible to gain a more comprehensive understanding than could be obtained from either data source individually. To be launched in the summer of 2015, the new process will enable researchers requesting linked perinatal health data to submit their request to only one source—PopData. (Research data requests that use only PDR data will still be managed through PSBC.) The new process will be more efficient, improve data access, and leverage the linkage expertise and research management infrastructure at PopData. This will enable PSBC to focus on surveillance and analysis of perinatal health data for strategic priorities and service planning.

New Position: Data Access and Research Coordinator

The Surveillance team recruited for a new position, Data Access and Research Coordinator. The coordinator will manage internal and external research requests for PSBC data and assist researchers with application documents, data preparation, and data output processes. The coordinator will also liaise with researchers and research institutions, monitor adherence to appropriate privacy and confidentiality policies and compliance of research and data agreements, and track research activities using PSBC data.

Publicly Reported Facility-Level Indicators

In November 2014, PSBC updated data for five facility-level maternal and neonatal indicators available on our website. The data are now based on maternal discharges in four fiscal years: 2009/10, 2010/11, 2011/12, and 2012/13 (i.e. April 1, 2009 to March 31, 2013).

The five indicators are:

1. Vaginal delivery for first-time mothers;
2. Early repeat cesarean delivery;
3. Post-date inductions done early;
4. Only intermittent auscultation in low-risk deliveries; and
5. Healthy babies fed only breast milk.

Perinatal Health Report

In 2014, PSBC released *Perinatal Health Report for 2008/09 to 2012/13*, which contains five years of data on maternal health, labour and delivery, and newborn health for all deliveries in BC as well as separately for residents of each of the five regional health authorities. Perinatal Health Reports provide an overview of the care, treatment, and outcomes of mothers and newborns in BC and help health authorities, policymakers, planners, and perinatal health care providers to enable action. Actions may include policy development, service delivery planning, quality improvement initiatives, and educational and research activities. Going forward, the Perinatal Health Report will be updated on an annual basis.

Facts Sheets

We hosted a Master of Public Health student from the School of Population and Public Health at the University of British Columbia, who compiled and completed an analysis of breastfeeding data from 2004/05 to 2012/13. We subsequently published the resulting *Fact Sheet on Breastfeeding Trends in BC: 2004/05 to 2012/13*, which includes key findings, public health implications, background, method, results, and discussion. The fact sheet was well-received by stakeholders, so we may publish fact sheets on additional perinatal topics on an ongoing basis.

Publications

Hutcheon JA, Harper S, Strumpf EC, Lee L, Marquette G. *Using inter-institutional practice variation to understand the risks and benefits of routine labour induction at 41+0 weeks.* BJOG 2014; DOI: 10.1111/1471-0528.13007.

System Planning

Perinatal Services BC both leads and collaborates with stakeholders to develop and implement initiatives designed to support planning for perinatal health across the continuum. We are committed to ensuring that our initiatives intersect with other services and projects to provide true cross-continuum and cross-sector integration.

All our planning initiatives are based on the needs-based framework and align with an overall commitment to ensure we are planning client-centred services.

Needs-Based Planning

In 2014, the Ministry of Health published *Primary Maternity Care: Moving Forward Together*, which built on *Primary Maternity Care Action Plan 2013*. These reports identified 29 issues to be addressed by the multiple partners and stakeholders involved in planning, implementing, and providing primary maternity care. As the provincial agency that has oversight responsibility for perinatal services across the care continuum from public health to primary and community care to hospital care, Perinatal Services BC was tasked with starting "an ongoing needs-based planning process which would identify, in consultation with communities and service providers, geographic service requirements, projected maternal and newborn care human resource requirements, and preferred strategies for addressing gaps or sustaining services."

Needs-based planning in a patient-centered environment should be based on the needs of the patient and, in the case of maternity services, the women and families. In order for it to be effective, and potentially fruitful, the planning also has to account for the environment in which the community is situated.

Neonatal Daily Classification

In April 2014, we began the expansion of Neonatal Daily Classification to include all newborns born in or transferred to facilities with planned maternity services as well as infants fewer than 28 days of age re-admitted to pediatric units/beds. Nurses classify infants on a daily basis as Level 1a (normal), 1b, 2a, 2b, 3a or 3b based on their acuity, risk, and the services they require.

The rollout is complete, with 52 maternity sites and 20 pediatric units trained. This initiative included 23 education webinars, one-to-one support calls, a toolkit for clinicians (algorithm, guide for completion, FAQs, case studies, laminated tools for charts, and training video), and a toolkit for health information management staff/coders (abstraction rules, guide for completion, FAQs, case examples, and training video).

Daily classification is also now documented on the updated Newborn Clinical Path as part of the ongoing assessment. As complete and reliable data from the classification become available, we will be able to use that data for provincial systems planning.

Tiers of Service for Maternal/Fetal and Newborn Services

PSBC and the Tiers of Service working group developed documents to support each site, region, and health authority in identifying what services they are currently providing, as well as an online self-assessment survey. The survey was completed by each site in February 2015.

The working group is in the process of compiling and validating the data and will analyze any gaps, overlaps, and issues. Once that has been completed, the working group will draft a current state summary document for each site, health authority, and the province as a whole. The summaries will be sent to sites for review and validation in summer 2015. The working group will subsequently develop recommendations for use by individual sites, health authorities, and the Ministry of Health.

Collaborative Primary Maternity Care

We created two new roles within PSBC: Primary Maternity Care Lead – Family Physician and Primary Maternity Care Lead – Midwifery. They are working closely to support primary maternity care and promote interdisciplinary collaborative practice. Together, they will provide ongoing clinical consultation on initiatives that impact primary maternity care, including data collection and analysis, guideline development, knowledge translation, and system planning. Each will be the clinical link between PSBC and family physicians and midwives respectively.

Sustainment of Rural Maternity and Surgical Services

Rural maternity services show system stresses early and are particularly vulnerable to shifts in provider supply or availability for intra-partum care. Several consultations have pointed to the importance of sustained availability of cesarean section capacity in preserving the small maternity services. The availability of general practitioners with c-section (and general surgery) skills or anaesthesia skills could play a significant role outside of urban areas. Perinatal Services BC was asked to begin consultation to explore multi-stakeholder participation in developing potential responses to this ongoing issue.

With funding provided by the Specialist Services Committee's Health Authorities System Redesign Initiative, PSBC hosted a series of forums that have brought together both perinatal and surgical stakeholders from across the province, and even from other provinces facing similar challenges. The commitment to work together has produced an energy that continues to gather momentum. We have started to build a community of practice using a model of collaboration called Pentagram Partnerships, which shows the relationships and partnerships that must be developed and strengthened in order to sustain and improve the current health system. This model provides a framework for this group to use going forward with planning for sustainment of rural and remote maternity/surgical services. Members of the community of practice include health administrators, health care providers, academic institutions, policymakers, and community members.

Outputs from these meetings have included collaborative responses to the provincial privileging process for physicians and Ministry of Health policy papers as well as support for a rapid literature review by the Applied Policy Research Unit at the Centre for Rural Health Research. This work is ongoing.

Communications

Our communications priorities are to share information effectively and build strong relationships with our internal and external stakeholders. We are guided by our annual communications strategy to address these priorities.

Stakeholder Newsletter

This year marked the first anniversary of *Perispectives*, our quarterly e-newsletter for stakeholders. There are 450 subscribers, with 77 per cent from health authorities. We conducted an online survey in spring 2015 to assess the newsletter's effectiveness, and preliminary results show positive feedback with suggested improvements that could be made for future issues.

Website

To improve timeliness of dissemination of information, we added an email subscription functionality for stakeholders to receive updates about new content on the PSBC website. When new content is uploaded, subscribers receive a weekly email with links to the content. There are approximately 100 subscribers.

Perinatal Services BC will be launching a new website in September, with a new design and website structure. The new site will also be smartphone- and tablet-friendly, which makes for easier browsing and reading while on the go. This is part of a larger health authority initiative within the Provincial Health Services Authority to migrate all websites onto the Sharepoint 2013 platform, which provides a more interactive, user-focused online experience.

Social Media

We continue to use our Twitter account (@PerinatalBC) to share perinatal information with stakeholders outside our regular health authority networks and are seeing a steady increase of followers every month. We now tweet from and during events, such as our Tea & Talk presentations and conferences.

Staff Engagement

In October 2014, our PSBC team participated in a day-long strategic planning session to reconfirm our alignment with our vision and mission, PHSA priorities, and the Ministry of Health strategic direction. We were able to identify and gain consensus for our top priorities, which were also integrated into the PSBC Steering Committee priorities for the coming year.

Towards the Future

Over the winter of early 2015, the new Perinatal Services BC Steering Committee completed its priority setting work to align our collective initiatives with the Ministry of Health Priorities and Policy Paper Framework. We agreed on three strategic priority areas of focus for the 2015/16 – 2017/18 fiscal years: collaborative primary maternity care; sustainment of rural maternity/ surgical services; and tiers of service planning.

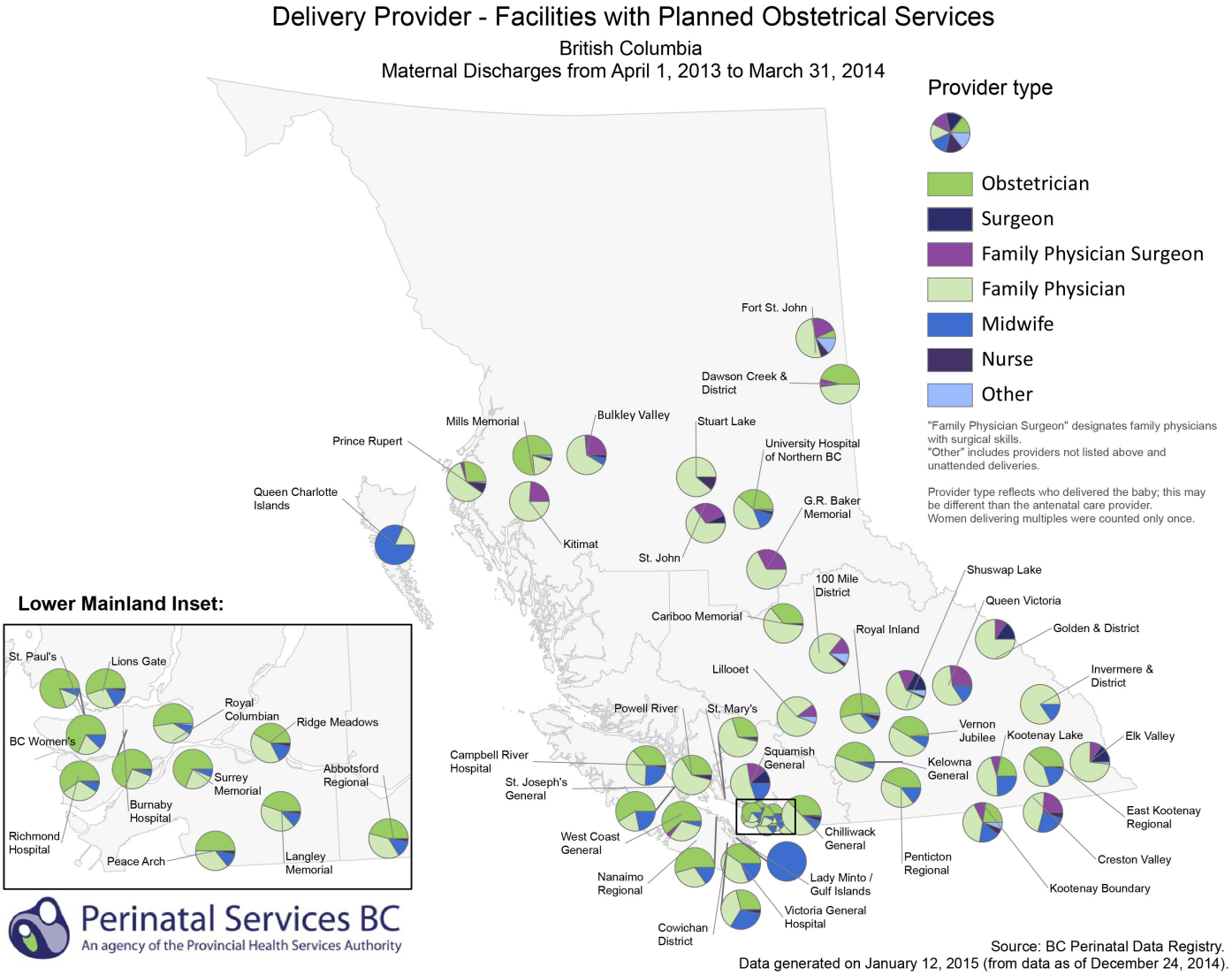
The PSBC Steering Committee also agreed on two quality improvement priorities: normalizing birth (i.e. increasing vaginal birth rates); and creating a baby-friendly province. With these priority areas identified, PSBC will develop action plans to assist us in meeting these objectives.

PSBC has also been asked to work with BC Women's Hospital to explore the feasibility of birthing centres within the context of optional models of maternity care.

As we begin another exciting year, we look forward to continue working with our regional and provincial stakeholders to strengthen our efforts to improve maternal and newborn health across British Columbia.

Appendices

Appendix 1
Delivery Provider Map



Appendix 2
Indicators Quarterly Report

SURVEILLANCE PERINATAL INDICATORS: QUARTERLY REPORT

Indicator	2009/10 YTD	2010/11 YTD	2011/12 YTD	2012/13 YTD	2013/14 Q1	2013/14 Q2	2013/14 Q3	2013/14 Q4	2013/14 YTD	2014/15* Q1	2014/15* Q2	2014/15* Q3	2014/15* Q4	2014/15* YTD
Deliveries (Mothers): Number	**44,376**	**43,360**	**43,595**	**43,906**	**10,844**	**11,370**	**10,416**	**10,518**	**43,148**	**10,888**	**11,443**	**10,627**	**10,087**	**43,045**
Labour Induction (rate per 100 deliveries)	20.9	21.4	21.2	20.4	21.6	20.7	22.0	20.5	21.2	21.3	21.1	21.5	22.3	21.5
Cesarean Delivery (rate per 100 deliveries)	30.2	30.7	30.9	31.2	30.9	32.0	31.3	31.9	31.5	32.7	31.7	32.2	33.5	32.5
Pre-Pregnancy Body Mass Index Category (rate per 100 mothers with known BMI)														
Underweight	6.0	5.5	5.7	6.1	5.9	5.4	5.6	6.1	5.7	5.7	6.2	6.3	5.8	6.0
Normal	60.3	60.1	60.1	60.5	60.9	60.2	59.9	58.8	60.0	60.6	61.0	59.7	59.8	60.3
Overweight	20.9	21.1	21.2	20.1	20.1	20.5	20.8	21.2	20.7	20.6	19.8	21.1	20.5	20.5
Obese	12.9	13.3	12.9	13.0	13.1	13.9	13.7	13.9	13.7	13.1	13.0	12.9	14.0	13.2
Pre-Pregnancy Body Mass Index Unknown (rate per 100 mothers)	33.9	29.6	26.8	24.8	23.2	24.5	25.0	23.8	24.1	23.2	23.9	24.6	24.0	23.5
Maternal Transfers to Higher Level of Care Following Delivery§ (rate per 1,000 deliveries)	4.1	5.1	5.7	5.2	6.5	4.7	6.7	5.7	5.9	5.7	7.1	8.5	7.4	7.2
Births (Babies)†: Number	**45,131**	**44,049**	**44,340**	**44,633**	**11,043**	**11,585**	**10,574**	**10,690**	**43,892**	**11,080**	**11,650**	**10,819**	**10,255**	**43,804**
Stillbirth Rate (rate per 1,000 total births)	10.5	10.3	9.8	9.4	10.9	10.4	10.0	10.6	10.5	12.4	11.1	10.2	11.6	11.3
Antepartum	7.9	8.2	8.1	7.9	9.3	9.1	9.0	9.5	9.2	11.1	9.8	9.1	9.6	9.9
Intrapartum	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.2	0.4	0.5	0.4	0.6	0.2	0.4
Unknown	2.1	1.5	1.1	1.0	1.0	0.8	0.7	0.8	0.8	0.8	0.9	0.6	1.9	1.0
Live Births by Gestational Age, Weeks (%)¶														
<34	2.4	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.4	2.6	2.1	2.4
34-36	7.3	7.1	7.2	7.6	8.0	7.4	7.5	8.0	7.7	8.2	7.4	7.6	8.3	7.9
37-40	79.0	79.6	80.1	80.2	80.3	81.2	80.0	80.7	80.6	80.3	81.3	80.6	81.0	80.8
41+	11.4	11.0	10.3	9.7	9.3	9.0	10.0	9.0	9.3	9.1	9.0	9.1	8.6	9.0
Unknown	0.2	0.03	0.04	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01
Preterm NICU admissions (rate per 1000 live births)	43.8	38.0	34.2	35.7	40.1	32.9	34.5	32.7	35.0	36.5	31.2	34.3	32.2	33.5
>2 day stay	33.5	29.8	25.5	25.6	28.1	17.2	21.2	17.7	21.0	29.1	22.5	26.4	23.6	25.4
Sepsis	1.8	1.6	1.0	1.4	2.1	1.7	2.3	0.6	1.7	1.3	2.1	1.5	0.7	1.4
Ventilatory support	8.2	7.7	6.8	6.7	8.0	7.2	6.9	7.4	7.4	6.8	5.6	6.0	4.3	5.7
Term NICU admissions (rate per 1000 live births)	40.5	34.4	23.1	24.6	26.5	28.0	27.5	24.7	26.7	30.6	28.2	27.2	32.0	29.4
>2 day stay	13.0	9.8	6.3	6.1	8.1	8.0	8.7	7.1	8.0	11.5	10.4	11.2	12.6	11.4
Sepsis	1.3	0.9	0.6	0.3	0.6	1.0	1.2	1.4	1.1	0.5	0.9	0.7	1.2	0.8
Ventilatory support	2.1	2.1	1.9	2.4	2.9	2.7	2.4	1.4	2.4	3.0	2.6	2.0	3.0	2.6
Term Infants Receiving Exclusive Breast Milk During Birth Admission (rate per 100 live term births)	72.4	71.5	72.7	72.3	73.8	73.9	71.5	72.8	73.0	73.3	74.3	71.9	70.6	72.8
Neonatal Transfers to Higher Level of Care Following Birth (rate per 1,000 live births)	8.5	10.5	11.4	11.2	11.6	10.2	11.3	11.6	11.2	10.8	13.0	13.4	15.6	13.1
Neonatal Deaths (rate per 1,000 live births)	2.4	2.7	3.0	2.8	3.0	2.0	2.5	3.2	2.7	2.7	3.2	2.4	1.9	2.6

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Data Source: BC Perinatal Data Registry

*Data for 2014/15 are preliminary.

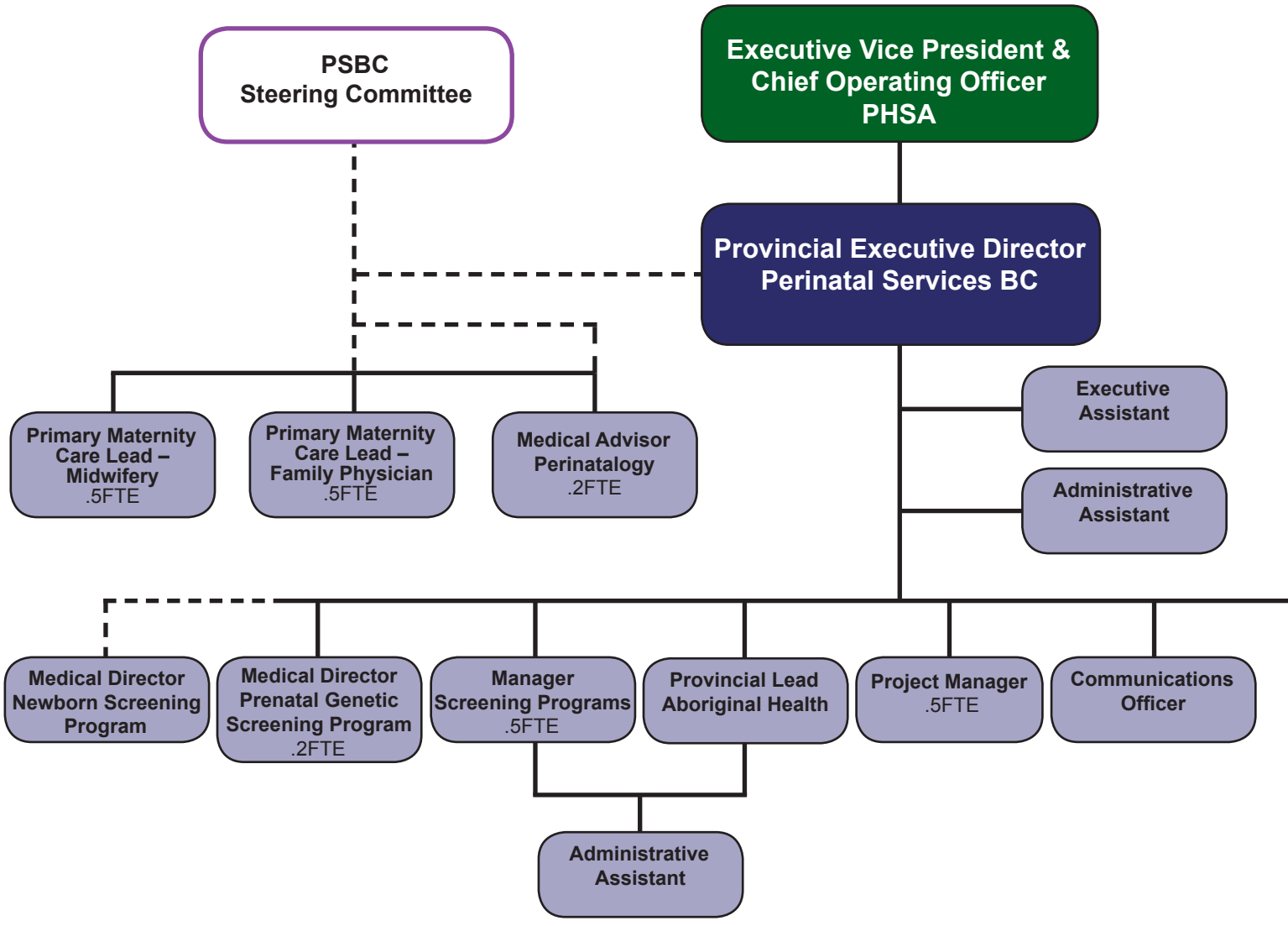
Report Data Generated: August 6, 2015

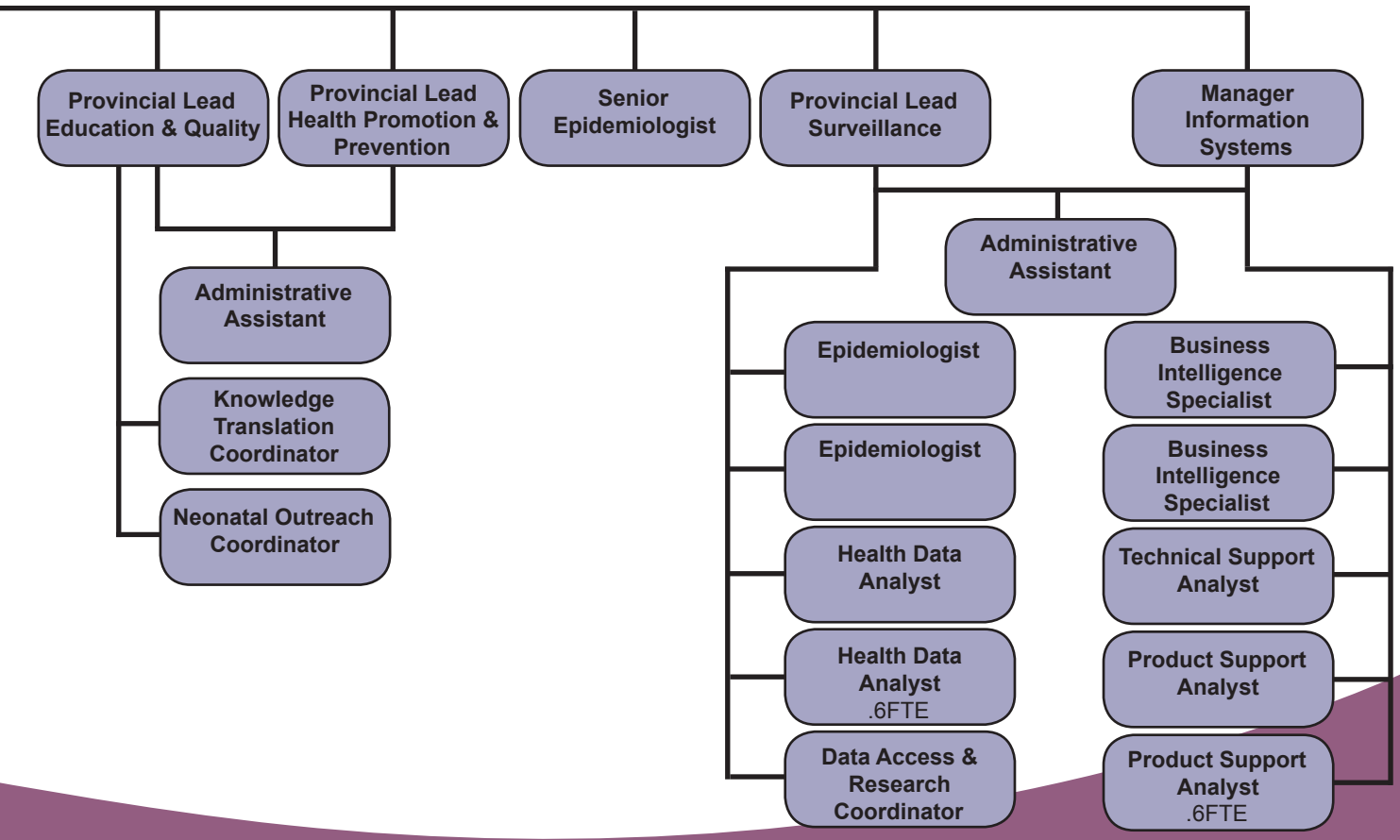
§Maternal transfers to higher level of care - added Surrey Memorial Hospital to 2nd Tier Hospitals effective April 1, 2013 discharges.

¶Gestational Age Calculation - revised effective April 1, 2013.

Please see the Summary of Changes on Page 2 for changes to the indicators since the last report.
Please see Technical Notes on Page 3 for methodology, limitations, and descriptions of indicators.

Appendix 3
Organizational Chart




Provincial Lead Education & Quality
Provincial Lead Health Promotion & Prevention
Senior Epidemiologist
Provincial Lead Surveillance
Manager Information Systems
Administrative Assistant
Knowledge Translation Coordinator
Neonatal Outreach Coordinator
Administrative Assistant
Epidemiologist
Epidemiologist
Health Data Analyst
Health Data Analyst .6FTE
Data Access & Research Coordinator
Business Intelligence Specialist
Business Intelligence Specialist
Technical Support Analyst
Product Support Analyst
Product Support Analyst .6FTE

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