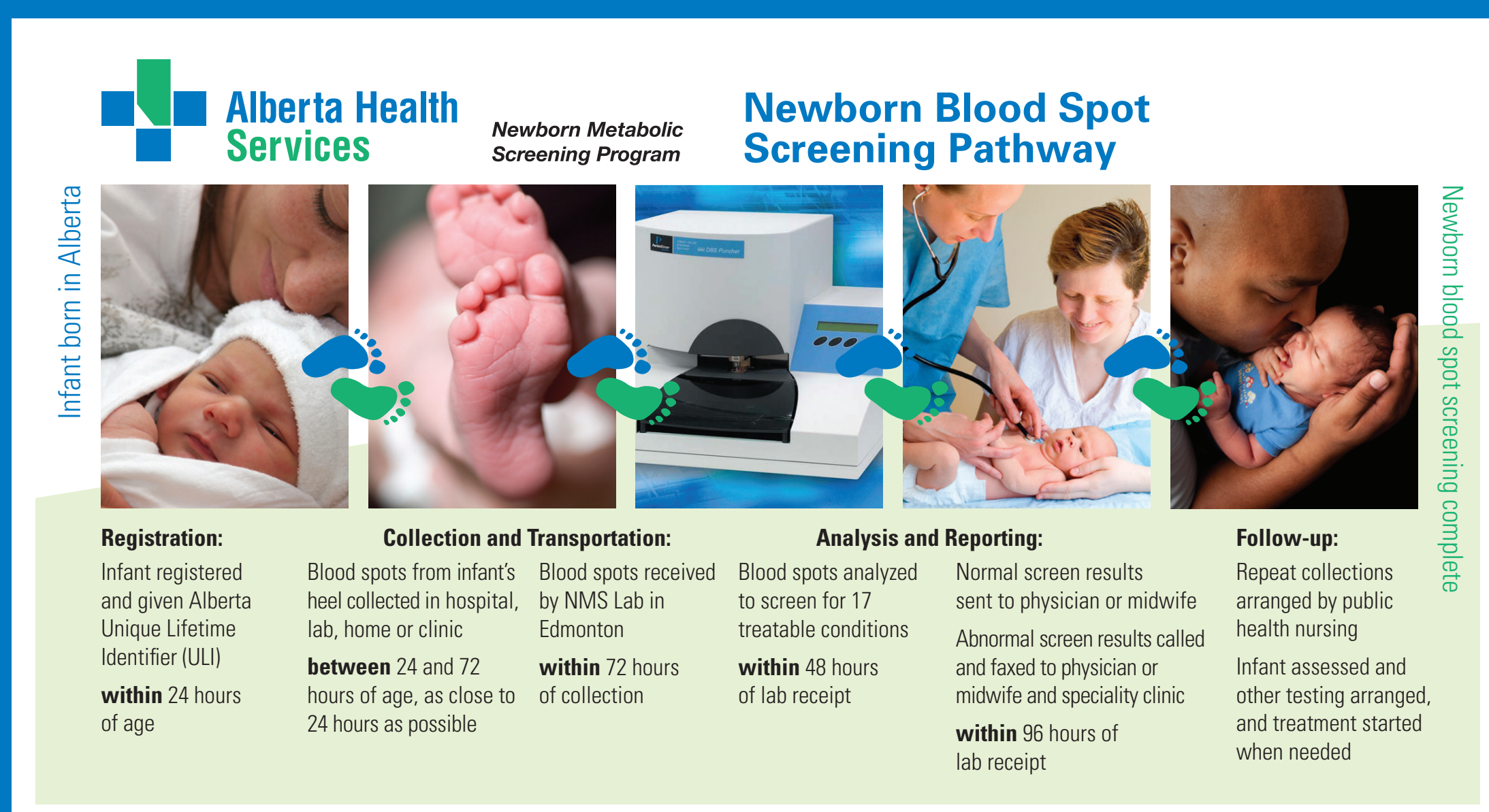


Using Targeted Stakeholder Engagement To Enhance Quality In Newborn Screening

Background

Alberta Health Services' Newborn Metabolic Screening (NMS) Program is a provincial population-based screening program delivered by Screening Programs in partnership with multiple stakeholders throughout Alberta Health Services (AHS) and the province. A Sample Collection Quality Improvement (QI) Project was initiated in the fall of 2014 to address the issue of inadequate samples collected in the Edmonton Zone. The Alberta standard for inadequate blood spot sample collections is a maximum of 2% of all samples collected. Edmonton Zone executives wanted to reduce inadequate sample collections to less than 1% so the NMS Program facilitated this QI Project by using targeted stakeholder engagement with birth hospital laboratories (labs) to help prevent inadequate collections and thereby enhance the quality of care they could provide.



Collecting a second sample is required when a newborn blood spot screening sample is considered inadequate. This not only delays reporting of infants' screen results, which decreases the ability to detect and treat a condition early, it also results in additional work for the health system wasting time, money and resources. Beyond the goal of improving the quality of sample collections, reducing collection errors through the project would also decrease the harms of screening for infants and families (discomfort of another heel poke; inconvenience and worry for parents) and ultimately improve front-line provider engagement.

Approach

Five Edmonton Zone birth hospital labs, public health (NMS zone designate) and the NMS Program participated in a Sample Collection QI Project conducted over a year (November 2014 – November 2015) to create improvements and enhance quality of newborn screening. To meet the needs of all stakeholders, which was complicated by availability of resources across multiple sites, a solution was developed consisting of online collaborative networking meetings and reporting on sample collection quality at the site level.

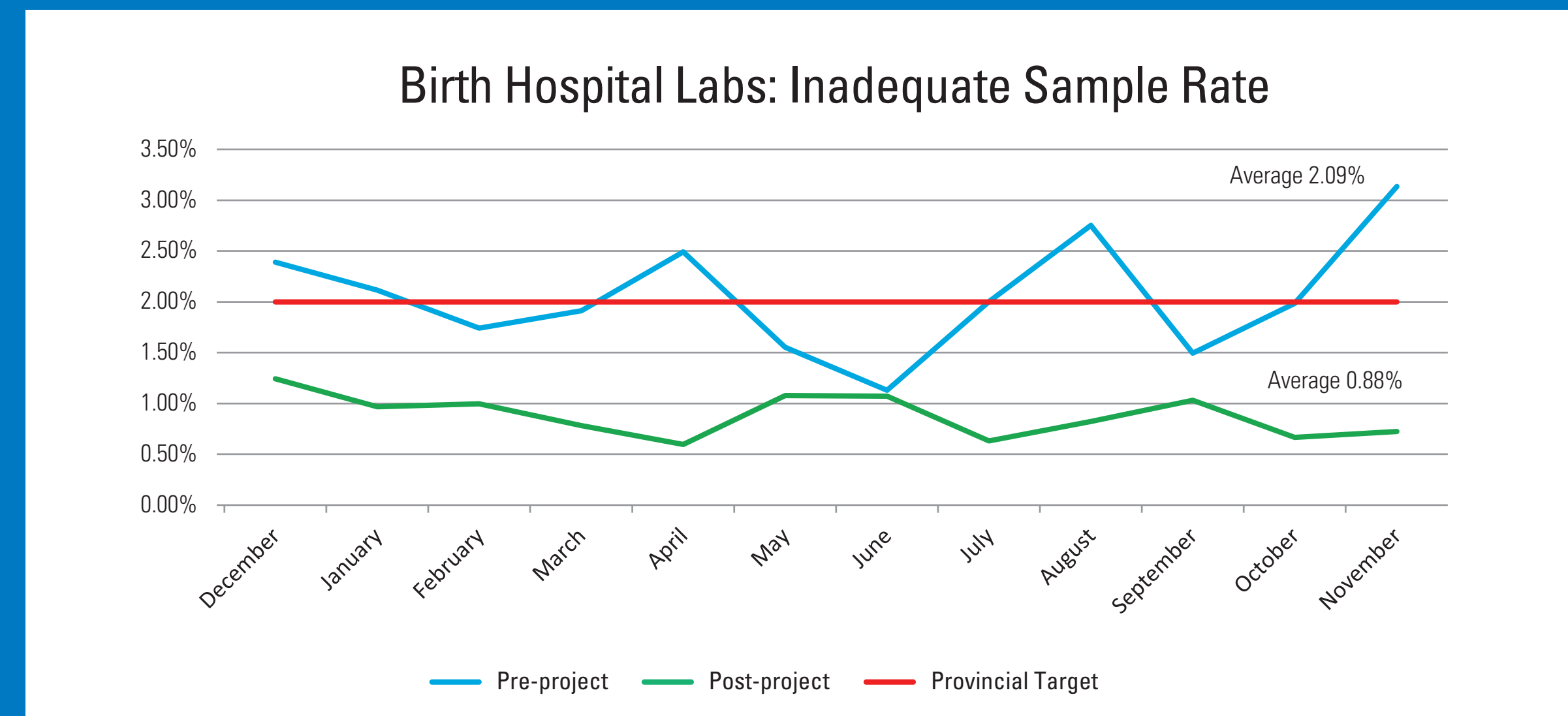
Meetings occurred every six months and enabled the participants to work simultaneously with one another while minimally impacting their daily work to help ensure adequate and engaged participation. Provision of weekly and quarterly site-specific performance data was used to keep stakeholders involved and enhance their understanding of newborn screening. The use of staff education resources was addressed in meetings to inform participants of existing and new information and strategies to take back to their specific sites. This targeted approach was used to facilitate ownership and build capacity through involving the birth hospital labs in implementing strategies to improve blood spot sample collection at their specific site.

The approach "allowed us to get up-to-date feedback regarding NMS collections so issues [could] be addressed in a timely manner. . . Having a group meeting allows more interaction and explanation of why a particular process is better."

Technologist III, Sturgeon Hospital

Results

All participating birth hospital labs indicated the benefits of this project were increased awareness of and timely feedback to existing collection issues, and being able to network with other sites to discuss potential solutions. Evaluations administered after each meeting to ensure project progress showed the stakeholders were committed to the project and their new gained knowledge would be acted upon. Data indicated an improvement of 57.26% in quality of samples collected; the inadequate sample rate average was 2.09% before the initialization of this project and 0.88% after.



Sustainability

All stakeholders expressed an ongoing commitment to this improvement work as part of their operational work. The sense of ownership created through stakeholder engagement to improve quality has resulted in a continued desire to achieve further improvements along the newborn blood spot screening pathway and will enhance the sustainability of what was already attained. Based on the significant quality improvements resulting from this project the NMS Program will continue to use a targeted stakeholder engagement approach with future projects.

"Discussing with other sites how they have improved processes was very helpful. I would recommend other zones take part in this type of project."

Team Lead, Royal Alexandra Hospital

Lesson Learned

The most substantial lesson learned from this project was the importance of having the stakeholders work together to achieve improvement. As meeting facilitators we could see first-hand that the success was directly linked to letting the birth hospital sites network and create solutions amongst themselves, instead of having an outside source tell them what to do. This created 'buy in' to the strategies implemented because they helped develop them and therefore believed in the ability of their strategies to positively affect the quality of their work.



Alberta's Newborn Metabolic Screening Program

The Newborn Metabolic Screening (NMS) Program screens for 17 treatable conditions to identify and treat infants with any of the screened conditions as early as possible.

The purpose of the NMS Program is to provide timely and effective screening to all infants born in Alberta. Early screening can make the difference between healthy development and lifelong health problems. The NMS Program helps find treatable conditions early so treatment can begin in time to prevent health problems, improve infant health and save lives.

