Provincial Clinical Policy Implementation

Newborn Metabolic Screening Program Initiative: Implementation

The Newborn Metabolic Screening (NMS) Program offers timely and effective screening to all infants born in Alberta. Early screening can make the difference between health 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.

Over a two year period 2011-2013 the NMS Program within Alberta Health Services (AHS) developed a province-wide clinical policy as part of the response to a directive from Alberta Health and Wellness regarding the Alberta Newborn Metabolic Screening Policy Document, 2010. [www.health.alberta.ca/documents/Newborn-Metabolic-Screening-Policy-2010.pdf](http://www.health.alberta.ca/documents/Newborn-Metabolic-Screening-Policy-2010.pdf)

A communication campaign was developed within the NMS Program Initiative Implementation phase to integrate, organize and manage the implementation of the NMS Program clinical policy and its supporting resources with the goal of sustaining changes in newborn blood spot screening practices.

Implementing the NMS Program clinical policy

The NMS Program communicated with health care providers, physicians, consultants, executives and support staff across Alberta between October 2013 and January 2014 about clinical policy and supporting resources. This was achieved through three multifaceted communication phases, each introducing information and support to newborn blood spot screening service providers.

Evaluating NMS Program clinical policy implementation

NMS Program clinical policy implementation was evaluated for the effectiveness of the process and its impact on program performance. Data was collected from stakeholders through a survey on the process and channels used in the communication phases, and through performance measures comparisons. The intent was to improve the NMS Program process and channels, and the overall implementation process for future provincial health programs and projects within AHS. Highlights of the evaluation include:

- Over 3000 health care providers and support staff across Alberta received communication
- Survey respondents felt the processes and channels used for implementation support were more than adequate
- The inadequate sample rate is at an all time low of 1.92%; resulting in fewer unnecessary repeat collections

Newborn Metabolic Screening Program
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Implementation process
The three communication phases focused on capacity building through facilitation and the availability of resources. Mass targeted emails and interactive online meetings significantly increased interactions between the NMS Program and service areas resulting in improved health care provider awareness, knowledge and commitment to newborn screening.

Service Area Interactions

In order to meet the needs of service area providers across Alberta the communication phases used multiple communication channels to present clinical policy expectations. Of survey respondents who used a communication channel, receiving information from the NMS Program coordination team by email (82.26%) or through a colleague (89.83%) was predominantly valued compared to using the web pages or interacting with a coordination team staff member directly. When participating in education, using the non-interactive PDFs (87.69%) was valued by respondents over the interactive web sessions and learning assessments.

NMS Program performance
NMS Program performance improved in significant areas, contributing to minimizing morbidity and mortality of infants through early diagnosis and treatment. Rates for registering infants within 24 hours of birth, inadequate samples and transporting blood spot cards to the central laboratory for analysis within 72 hours of collection have all improved. The provincial screening rate is holding steady above 99.4% and high analysis and follow-up rates are also being maintained*

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<tbody>
<tr>
<td>Birth Registration within 24 hours of age rate:</td>
<td>99.08%</td>
<td>98.96%</td>
<td>98.96%</td>
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<td>Inadequate samples rate (target is 2% or less):</td>
<td>1.92%</td>
<td>2.10%</td>
<td>2.81%</td>
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<td>Sample receipt within 72 hours of sample collection rate:</td>
<td>94.25%</td>
<td>94.18%</td>
<td>92.43%</td>
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* Performance data from October to December of 2013 was used and has been compared to June to September 2013 and October to December 2012. Campaign data for performance measures is preliminary; finalized data will not be available until the fall of 2014.

Impact of implementing the NMS Program clinical policy
Applying a communication campaign approach to implementing province-wide health policy appears to be a successful way to support program quality. Eighty five percent of survey respondents reported the communication phases enabled service areas and individuals to meet the expectations in the NMS Program clinical policy. Phasing the communication activities enabled the NMS Program to build audience capacity through meeting their individual needs and preferences. Sustaining quality newborn screening practices will depend on continued quality management through dedicated provincial coordination.

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“...The NMS Program’s communication related to the implementation of their clinical policy has been excellent; we can see the areas where we need to change our existing services...”