



Nova Scotia Provincial Blood Coordinating Program (NSPBCP)

Mission

Promoting excellence in transfusion medicine.

Core Activities

Created in 2003, the Nova Scotia Provincial Blood Coordinating Program (NSPBCP) provides the leadership to collaborate with health care providers across the province and Canadian Blood Services to maximize the safe and appropriate management of blood and related products received by patients in Nova Scotia through utilization, surveillance, quality assurance and communication and coordination.

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novascotia.ca/health/nspbcpc

Red Blood Cells – Inventory Management and CMV irradiated

The NSPBCP reviewed the use of red blood cells in the NSHA and IWK against current inventory level and presented data to hospitals. A review of transfusion requirements for neonates also contributed to the reduction. Hospital inventory levels decreased by 1307 units per year. At a cost of \$425 per unit this is a cost avoidance of \$555,475 annually.

Red Blood Cells – Avoiding Unnecessary Transfusion

The NSPBCP has developed a Red Blood Cell Transfusion pathway which promotes patient safety by preventing unnecessary transfusions. The pathway discourages transfusions if hgb greater than 80g/L and supports the transfusion of one unit RBC at a time. This strategy is in accordance with the Choosing Wisely campaign in Canada, which recommends transfusing only the minimum number of units required instead of a liberal transfusion strategy. This strategy is expected to prevent unnecessary transfusions with resultant cost avoidance.

Rh Testing Guidelines

In collaboration with transfusion services within the NSHA and IWK, and the Rh Program, the Nova Scotia Provincial Blood Coordinating Program (NSPBCP) facilitated the development of a provincially standardized approach to Rh testing, reporting and interpretation of results. There will be no additional cost to the system to implement this approach to testing. The benefits to this approach include standardization across the province, less WinRho being administered to pregnant women with a corresponding costs savings and reduced risk. Standardizing testing throughout Nova Scotia ensures similar results and similar treatment throughout the province.

Standardized Platelet Selection Criteria

The Nova Scotia Provincial Blood Coordinating Program (NSPBCP) developed provincial guidance regarding the transfusion of platelets which are group compatible in non urgent situations. This approach decreases the potential of intravascular hemolysis in the patient as well as increases platelet survivability post transfusion.

Atlantic savings from dosing of Intravenous Immune Globulin (IVIG) using Dosing Body Weight

The Nova Scotia Provincial Blood Coordinating Program (NSPBCP) leads the Atlantic Blood Utilization Strategy (ABUS) which optimizes the utilization of blood and blood products in the Atlantic Provinces.

Dosing IVIG based on the adjusted body weight instead of actual weight of the patient was implemented in the Atlantic provinces upon the recommendation from ABUS. Actual body weight (which includes the weight of fat tissues of the patient) is used for calculating the dose of fat soluble drugs. As immunoglobulin is not lipid soluble an adjusted body weight is appropriate to use for dosing. This strategy has been associated with an estimated cost avoidance of \$3,406,967 for the Atlantic region in 2013-2014 and \$1,008,630 in Nova Scotia for the same fiscal year. NSPBCP monitors the utilization of all IVIG used in the Atlantic provinces. IVIG is broadly used in immunodeficiency conditions and autoimmune diseases. Numerous clinical conditions are included under these two categories. In 2014-2015, 97% use was for appropriate indications.

Tissue and Organ Surveillance – Partnership

The NSPBCP conducts surveillance on adverse reactions to tissues and organs. While the Regional Tissue Bank provides 70% of the tissues used in the hospital setting, the amount of tissue used by dentists is currently unknown. A survey was conducted with all 555 licensed dentists in the province, with a 54.7% (n = 304) response rate. Of the respondents, 12% (n=35) indicate they are users of human allograft tissue in practice. A partnership was established with the Provincial Dental Board of Nova Scotia to identify these products and support adverse reaction reporting form this group through the identification of allograft users as part of the annual licensing requirement effective fall 2015, ongoing educational support, and eventually the creation of a database to capture data on allograft usage.

Cross Provincial Program Initiatives, Highlights 2014-2015

Provincial Blood Coordinating and Rh (RCPNS) Programs

The Blood Coordinating Program facilitated development of a provincial approach to Rh testing, reporting and interpretation of results, in collaboration with transfusion services at the NSHA, IWK, and the Rh Program. Pregnant women, who are Rh negative, need to receive Rho (D) immune globulin to prevent hemolytic disease in the newborn. The Rh status for some women is only determined with additional testing. This testing is now standardized across the NS, avoiding retesting and the potential for some women to receive unnecessary prophylaxis.

Nova Scotia Breast Screening Program (NSBSP), Cancer Care Nova Scotia (CCNS), Cardiovascular Health Nova Scotia (CVHNS), Diabetes Care Program Nova Scotia (DCPNS), Reproductive Care Program Nova Scotia (RCPNS) and Nova Scotia Renal Program (NSRP) – Nova Scotia First Nations Client Registry Project

Six provincial programs from DHW's Acute & Tertiary Branch, Public Health and Mental Health, Addictions & Children's Services, BIAP and the Trauma Program are collaborating with NS's First Nations to create health indicator reports for the Mi'kmaq population and 11 participating communities. Health indicator reports will allow First Nations to compare data, track changes, see progress and identify areas for improvement. This year's focus was to identify and refine indicators for each health issue or population. The 'Strength in Numbers' project builds on the earlier success of the 'Telling our Stories' project, a partnership established in 2012 with the five Cape Breton First Nations.

CVHNS and NSRP – Cardiac Catheterization in Patients with Renal Impairment

An audit showed that impaired renal status was one of the key reasons that patients were not referred for cardiac catheterization. CVHNS and the Nova Scotia Renal Program (NSRP) developed a protocol for preparation and follow up of this population. The final protocol was disseminated in the spring of 2015 is available on both the CVHNS and NSRP websites.

DCPNS, CVHNS, and NSRP

The "Come on Nova Scotia ... Check it!" Blood Pressure Challenge has just completed its fourth successful year with over 100 awareness events and 4,200 blood pressures screened across NS in May 2014. Since 2012, over 13,500 blood pressures have been measured. This number grows every year thanks to health sector participants, community partners, businesses and education facilities across NS.

In Fall 2014, the three programs collaborated with DHW's Primary Health Care (PHC) Branch, Dalhousie University's Department of Continuing Medical Education and the Registered Nurses Professional Development Centre, Nova Scotia Health Authority to design and deliver professional development for PHC Collaborative Team Day events. Ninety participants, representing many disciplines participated in the three-hour, CME accredited program. It included an update on hypertension targets, a review of pharmacological treatment and nutrition management/counseling across multiple morbidities and introduced basic quality improvement techniques to use at the practice level.

DCPNS and RCPNS

Diabetes and RCP partnered to standardize the approach to screening for gestational diabetes and to plan and deliver Diabetes in Pregnancy sessions and symposia. Standardized materials about diabetes screening during and after pregnancy were prepared for patients and health care providers. This included preparing for the oral glucose tolerance test (OGTT).

All Provincial Programs – Strategy for Patient-Oriented Research (SPOR)

All provincial programs are participating in SPOR. Led by the Canadian Institutes of Health Research (CIHR), the focus is on integrating health research into care. There are SUPPORT (Support for People and Patient-Oriented Research and Trials) Units across Canada, including the Maritime SPOR SUPPORT Unit. Participants include patients and caregivers, researchers, health practitioners, policy makers, health authorities, academic institutions, non-profit organizations, and the pharmaceutical sector. CCNS, DCPNS, Legacy of Life, and RCPNS are represented on one of the advisory committees for the Maritime SPOR SUPPORT Unit. An epidemiologist, who works across several provincial programs, co-chairs the Data Access Privacy Advisory Committee.