Ministry of Health and Long-Term Care

Ministère de la Santé et des Soins de longue durée

Ontario

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Dear Colleagues:

RE: Ontario IVIG Utilization Management Strategy – 2015/16 Update

I am pleased to bring you up to date on the *Intravenous Immune Globulin (IVIG) Utilization Management Strategy* (IVIG Strategy). As you may already know, the IVIG Strategy supports the government's Action Plan for Health Care by providing patients with better quality care that is patient-centered, driven by outcomes and based on evidence.

At the time of the IVIG Strategy launch in April 2012, Ontario's IVIG growth averaged about 7.0 per cent year over year (2007/08 to 2011/12). In the last update, it was reported that IVIG shipments had increased by 8.4 per cent to 1.8 million grams in 2013/14; and has since increased by 10.4 per cent to 2.0 million grams in 2014/15.

The Ministry of Health and Long-Term Care (the "ministry") continues to work with the IVIG Advisory Panel (IVIGAP) and the Ontario Regional Blood Coordinating Network (ORBCoN) to gain a better understanding of factors contributing to the continued increases in IVIG utilization (e.g. increase in number of patients, etc.) to guide next steps. Your hospital may have been contacted by ORBCoN to investigate IVIG growth at your site. Hospital specific IVIG utilization and costs are also provided through annual joint site visits by ORBCoN and Canadian Blood Services; and in a follow up letter to the hospital CEO.

Also critical to identifying next steps was an assessment of compliance with the IVIG Strategy. Accordingly, a retrospective audit was done earlier this year at four tertiary care hospitals to determine the case mix for new IVIG requests; to authenticate information provided on the Ministry of Health and Long-Term Care IVIG Request Form (MOHLTC IVIG Request Form); and to assess clinical effectiveness of IVIG treatment in patients.

The audit identified opportunities for improvement in a number of areas, including compliance with completing the MOHLTC IVIG Request Form; utilization in accordance with provincial guidelines; documentation for diagnostic criteria and proof of efficacy; and the screening process. As a result, screening of certain IVIG requests outside of the hospital setting will be piloted in 2016/17 using the ministry's Exceptional Access Program (EAP) infrastructure, but will not follow the same process for EAP drugs. Please be assured that the pilot is being developed in consultation with the IVIGAP and that patients will continue to have access to IVIG.

Other key activities in progress include revision of the Ontario IVIG Utilization Management Guidelines, creation of an online form and development of a database to store data collected from the form. Please see the attachment for a more detailed update.

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To ensure success of the IVIG Strategy, it is important that you share this communication with specialty groups (Neurology, Immunology, Hematology, Solid Organ Transplant/ Nephrology, Dermatology, Rheumatology, Infectious Disease) at your hospital that order IVIG.

If you require additional information, please contact Dai Kim, Manager, Blood Programs Coordinating Office, Ministry of Health and Long-Term Care at 416-326-6478; or by email at dai.kim@ontario.ca.

Thank you for your ongoing assistance and support of the IVIG Strategy. This important work aims to mitigate the unsustainable increases in IVIG utilization to ensure the product is available for patients with medical conditions where there is evidence of clinical effectiveness and to improve patient outcomes. Your efforts are truly appreciated.

Sincerely,

Lynn Guerriero
Assistant Deputy Minister

Enclosure

c: Mr. Dai Kim, Manager, Blood Programs Coordinating Office, MOHLTC

IVIG Utilization Management Strategy
2015/16 Update (November 20, 2015)

1. Ontario IVIG Utilization Management Guidelines ("Ontario Guidelines")

1.1. Provincial Guideline Revision. Working Groups for each Specialty that use IVIG were convened in early 2015 to review the Ontario Guidelines, version 2, March 2012. Based on a review of current literature, they were asked to indicate if revisions were required or not; and to provide a rationale with evidence to support their decision. Working Groups were also asked to provide:

a) IVIG as the 1st, 2nd, 3rd line treatment; and if not the first, what other treatment options should be tried prior to prescribing IVIG;

b) Intervals at which a patient should be reassessed to confirm that IVIG treatment continues to be effective and that the minimum effective dose is being prescribed;

c) Criteria to be met for treatment to be considered effective at the time of reassessment.

The revisions will be reviewed and endorsed by the IVIG Advisory Panel (IVIGAP), the top five IVIG user hospitals for each Specialty and Specialty Associations.

The IVIG Strategy 2014/15 Update included an open invitation for anyone to provide input into the provincial guideline revisions process; to date no comments have been received.

Target implementation is April 2016.

1.2. National Guideline Revision. The National Advisory Committee on Blood and Blood Products (NAC), who led the development of national guidelines, has now implemented a new formal process to update guidelines. Signal detection began for national IVIG guidelines for Hematology and Neurology, to be completed April 2016. If deemed necessary, the NAC will then begin to revise these guidelines. Once complete, the same process will occur for Solid Organ Transplant and Immune Deficiency.

2. MOHLTC IVIG Request Form

2.1. Revised Form. The MOHLTC IVIG Request Form (Request Form) will be revised to reflect changes in guidelines and will be made available upon completion of the Provincial Guideline Revision process.

2.2. Forms Database. The Ontario Regional Blood Coordinating Network (ORBCoN) is exploring development of a Forms Database to store data from the MOHLTC IVIG Request Form and to facilitate future compliance and utilization audits. This is a three phase project to be rolled out as follows:

- Phase I: 2-3 month pilot with 6 hospitals; manual entry by ORBCoN
- Phase II: 3-4 months; direct web-based data entry by pilot hospitals using online form
- Phase III: Province wide staggered roll out of online form to begin in 2016/17

After each phase, an evaluation will be done to determine how to proceed.

3. Review/Approval of Requests for IVIG

To enhance the screening model, the following strategies are in development or being explored to ensure the approval process for use of IVIG within hospitals follows similar processes to that of other therapeutics.

3.1. For Approved Indications. Transfusion Services will review all requests to ensure completeness, e.g., all mandatory fields have been filled in, prerequisites have been met, dose has been verified, etc. If any information is missing or dose is to be adjusted, the ordering physician must be consulted and all issues resolved prior to issuing IVIG.

3.2. **NEW!** For Unapproved or "Other" Indications. In addition to 3.1:

- Supporting documentation for why IVIG is being requested for an Unapproved Indication must be submitted with the MOHLTC IVIG Request Form.
- Once these criteria are met (e.g. supporting evidence is attached) IVIG will be provided for up to a maximum trial period of three to six months (to be determined).
- To receive additional IVIG, an assessment of clinical outcome must be completed to ensure effectiveness of IVIG treatment; and supporting documentation that shows effectiveness must be provided with a new Request Form.

While this process was implemented by some hospitals at their own discretion, it will be mandatory in all hospitals effective April 2016.

3.3. **NEW!** Screening Pilot. To improve compliance with the IVIG Strategy, a feasibility pilot study for external screening (outside the hospital) of certain IVIG requests will be developed with input of specialty stakeholders.

The pilot will leverage the ministry's Exceptional Access Program (EAP) infrastructure to receive, adjudicate, document and reply to requests. Please note that the screening process for IVIG will not be the same as the current process for EAP drugs.

This approach provides a standardized, external, arm's length review protocol; and is familiar to ordering physicians thereby minimizing training and education.

The scope of the screening pilot is currently being determined (e.g. for a particular specialty, for specific indications, for renewals only, etc.), in consultation with the IVIG Advisory Panel and its ad hoc specialty members. The pilot will ensure that patients continue to have access to IVIG while at the same time receiving appropriate treatment.

All other requests outside of the pilot will be processed in accordance with 3.1 and 3.2.

More details on the new screening pilot will be provided over the next few months as they are developed. Implementation of the pilot is targeted for April 2016.

4. Dosing Through Adjusted Body Weight Calculation

Much of the information below has been provided in previous updates and is included as a reminder and for clarification.

4.1. Use minimum effective dose. Patients receiving IVIG maintenance therapy should be monitored closely to ensure they are receiving the minimum effective dose to relieve symptoms.

4.2. Dose should not be changed without the ordering physician's knowledge/consent. Discussions with Transfusion Medicine/Laboratory Services regarding dosing are encouraged. If there is any discrepancy in the dose calculation, the ordering physician must be consulted before changing the request and their approval to change the dose must be obtained and recorded on the Request Form.

Ordering physicians should also consider feedback provided by Transfusion Medicine/ Laboratory Services given their role in the screening/ approval process.

4.3. Dose Adjustment for Obesity. The dose calculator is best used for obese patients (BMI>30). Calculations are based on a patient's ideal body weight. This may result in a slightly reduced dose for some patients that are neither obese nor overweight but are not at their ideal weight.

4.4. Dose Verification. The Dose Calculator can also be a useful tool for all adult patients (over 5 feet) to avoid calculation errors. Some hospitals found that use of the dose calculator has increased patient safety as errors have been revealed pre-infusion that would have otherwise not been identified. At a minimum, it is expected that the dose be verified by the healthcare professional that receives the IVIG request, using a simple g/kg calculation.

4.5. Pediatric/Adults < 5 Feet. There continues to be requests for a dose calculator for pediatric patients and/or patients that are less than 5 feet in height. The IVIGAP and ORBCoN do not plan on investigating further or developing such a tool as pediatric facilities have done so.

4.6. Update on Adverse Events. According to Ontario TTISS (Transfusion Transmitted Injuries Surveillance System) data, since 2010, IVIG represents about 94% of adverse events possibly, probably or definitely caused by a plasma derivative; and about 15% of all adverse events reported annually to TTISS.

The use of the Request Form and the screening process have assisted hospital staff and physicians to catch near misses of overdosing with IVIG.

5. Evaluating Clinical Outcomes

Reassessment to determine effectiveness of IVIG treatment and documentation of effectiveness should be done. Without reassessment, patients may be on IVIG for years when another more effective treatment is available or receiving higher doses than required resulting in less favourable patient outcomes and waste of an expensive product.

5.1. Outcome Questionnaire. The IVIGAP are currently discussing development and implementation of an Outcome Questionnaire to assist hospitals with assessing effectiveness of IVIG treatment.

6. No Outdating

6.1. Plasma Protein Product (PPP) Redistribution Program. ORBCoN redistributed about 2,215g of IVIG in 2014/15 resulting in estimated savings of about $121,380 (based on 2014/15 pricing). Hospitals are encouraged to participate in this program.

6.2. Discarded IVIG. In 2014/15 about $49,400 worth of IVIG was discarded because vials were expired (2%); broken (6%) or wasted (92%).

There has been a reduction of expired vials from 38% in 2013/14 to 2% in 2014/15. This illustrates improvement in inventory practices and continued vigilance by Hospital Transfusion Services to reduce wastage of IVIG. These efforts are greatly appreciated.

7. Audit

7.1. Compliance Audit. A retrospective audit, led by McMaster University, compared data on the MOHLTC IVIG Request Form to information in the patient's chart to determine the case mix for new IVIG requests; to authenticate information provided on the Request Form; and to assess clinical effectiveness of IVIG in patients.

The final report is expected in December, 2015. Preliminary key findings are listed below:

- 39/189 cases (20.6%) had a discrepancy between the indication written on the MOHLTC IVIG Request Form and the chart diagnosis.
- 34% of clinic records noted only a subjective improvement in the overall patient cohort. 25% of clinic records did not document any indication of efficacy after IVIG administration.

7.2. **NEW!** Regular Compliance Audits. There will be greater ministry oversight over non-compliant requests for IVIG. Based on the methodology used for the 2015 Compliance Audit, random audits will be performed beginning in 2016/17.

The ministry is currently investigating various formulas and options to address non-compliance in consultation with the IVIGAP.

8. Other News

8.1. Alternatives to IVIG. Both the 2012 and 2015 Audits, while different in scope, recommended that access to alternative therapies should be optimized due to evidence of potential significant improvements to patient outcomes paired with more cost effective treatments.

8.2. Physician Education. Dr. Collins, ORBCoN Physician Resource, is available for group education on IVIG utilization. Please contact ORBCoN for more information.

8.3. SCIG Home Infusion Toolkit. ORBCoN launched the Home Infusion Toolkit, on March 3, 2015. The toolkit includes information for both SCIG (subcutaneous immune globulin) and C1 Esterase Inhibitor and provides hospitals an outline of the requirements of such a service and sample documents to support it, including: a request form, patient participation/consent agreement, infection log, infusion log, etc.

Please note that more information and education on new initiatives will be provided as details are confirmed.

If you would like to participate in the PPP Redistribution Program, schedule an education session or have any questions/comments, please contact your regional ORBCoN representative.