

Insulin Competency Development

A Report by the Insulin Standards Working Group
(Toronto Central LHIN Region)

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Executive Summary

This report summarizes the work of the Insulin Standards Working Group from 2013 to 2017. This working group consisted of diabetes nurse educators, from the Toronto Central Local Health Integration Network (TC LHIN) region, with expertise supporting people living with diabetes and using insulin. The group used Health Quality Ontario's Quality Improvement Framework to do the following:

1. Create a comprehensive insulin order & prescription for those with type 2 diabetes which includes all required elements of a medical order and a delegation for insulin dose adjustment for all insulin regimens
2. Explore current state regarding insulin competency development by:
 - a) Identifying variation in competency level of diabetes educators as a key problem that needs to be addressed;
 - b) Establishing current practices regarding insulin competency development within diabetes education programs in the TC LHIN region; and
 - c) Completing a root cause analysis to explore potential factors leading to this variation.
3. Review resources to support insulin competency development from the Federation of Regulatory Health Colleges of Ontario and the College of Nurses of Ontario including:
 - a) Performance readiness tools
 - b) Tools to support decisions regarding procedures and authority
4. Evaluate insulin training programs using an evaluation tool, created by the group, which could be used for future insulin competency develop program evaluation or creation
5. Develop specific recommendations for the following groups:
 - a) Diabetes Education Programs in the region that may wish to develop, review, or revise a formal insulin competency development program
 - b) Regional and Sub-Regional work groups that may choose to explore future quality improvement work in this area
 - c) Organizations who may wish to develop a regional, provincial or national insulin training program

Further work is still required at a regional, provincial and/or national level to ensure that diabetes education programs are well equipped to support all individuals living with all types of diabetes. It is the hope of the Insulin Standards Working Group that this report will provide a solid foundation to support future work in this area.

Introduction

To support people living with diabetes with starting and adjusting insulin, diabetes educators in this province need to ensure that:

1. The treatment plan is appropriate and safe for the person living with diabetes;
2. They have the competency required to support the individual (i.e. the knowledge, skill, and judgement to support the treatment plan and to manage all possible outcomes); and
3. They have been given the authority to support the individual when required (1,2).

The challenge that consistently arises is regarding how programs and providers can ensure that the required competencies have been obtained and maintained to provide safe, effective support for those using insulin. As a first step, organizations hosting diabetes education programs often require diabetes educators to become certified with the Canadian Diabetes Educator Certification Board (3). This certification ensures that a number of diabetes-related competencies have been obtained; however, further competency development is still required before diabetes educators are able to safely support individuals with insulin use. Some provinces in Canada have developed training programs that focus on the development of these more advanced insulin competencies; however, Ontario is not one of them. As a result in the Toronto Central Local Health Integration Network (TC LHIN) region, some of the organizations that host diabetes education programs may not have formal insulin competency development programs. Those programs that do have formal programs have either developed their own or modified one from another organization.

Diabetes education program leaders in this region requested support from Toronto Diabetes Care Connect to help them ensure their diabetes educators have obtained the required tools and competencies to safely and efficiently support people living with diabetes using insulin. In response to this request the Insulin Standards Working Group was formed in 2013 (see Appendix A for a list of working group members). Using Health Quality Ontario's Quality Improvement Framework (4) the working group identified a number of challenges with supporting individuals using insulin. These challenges included:

1. Absence of a comprehensive, complete insulin order that contained all required elements of a medical order and necessary delegation to allow diabetes educators to support insulin dose adjustment for all insulin regimens. This was specifically a challenge in settings where the use of medical directives is not common (e.g. settings where primary care physicians have clients supported by a number of diabetes education programs/organizations across the region);
2. Variation in competency level among diabetes educators, especially when individuals are new to the professions of nursing or dietetics;
3. Variation in insulin competency development programs across diabetes education programs; and
4. Variation in the level of support provided by organizations regarding competency development.

The group's aim was to create tools to help diabetes education programs to consistently and safely support individuals using insulin. The group initially focused on the creation of an insulin order and

prescription form and then moved on to evaluate existing tools and develop recommendations to support insulin competency development in this region.

Purpose and Objectives of Report

The purpose of this report was to provide a comprehensive summary of the work of the Insulin Standards Working Group and to highlight the group's recommendations regarding insulin competency development.

Objectives

1. To provide a suggested framework for programs to use to develop a formal insulin competency development program;
2. To provide information to support diabetes programs in the evaluation, revision, and implementation of existing insulin competency development programs; and
3. To inform any future quality improvement work in this area at a regional, provincial or national level.

Disclaimer

Processes were used in the development of this report to support objectivity and accuracy whenever possible; however, users of this report will have to use their own independent judgment in the context of their own settings and professions when deciding if and how to implement any of the recommendations within the report. The working group that developed this report does not assume responsibility for any outcomes resulting from the use of any particular tool, recommendation, insulin training program or insulin competency development program.

Key Steps in the Group's Work

Key steps carried out by the Insulin Standards Working Group are outlined below. A summary of the work with timelines can be found in Appendix C.

Step 1: Create the Working Group

In the fall of 2013, registered nurses with significant diabetes and insulin-related experience from both community and hospital-based diabetes education programs were selected to participate in the working group. Registered dietitians and other healthcare providers were consulted; however, they were not formally included in the group since, in this region, it is almost exclusively registered nurses who are responsible for supporting individuals with insulin initiation and dose adjustment. Conflicts of interest questions were answered by all group members (see Appendix D for details).

Step 2: Decide on the Specific Focus of the Work

A framework (5) was used by the group to focus the work on the following:

1. Adults with type 2 diabetes using insulin (patient population);
2. Insulin initiation and dose adjustment (intervention);
3. Diabetes educators (nurses & dietitians) (target audience);
4. Insulin competency development and maintenance (outcome/purpose); and
5. Community-based diabetes education programs (setting/context).

Although diabetes nurse and dietitian educators were the professionals of focus for this report, readers may wish to consider the recommendations for other healthcare provider groups (e.g. pharmacists, etc.).

Step 3: Develop a Comprehensive Insulin Order and Prescription

In 2013, diabetes programs in this region became concerned that many of the insulin orders (i.e. direct orders) being used to support insulin initiation and dose adjustment did not contain all of the elements that are required according to the College of Nurses of Ontario (6) including: client's name and date of birth; medication dose, frequency/timing and route; dose adjustment amount, frequency and target; prescriber's name, signature and CPSO#; and date completed/signed. In addition it was decided that it would be beneficial for an order to include prescriber's instructions around existing antihyperglycemic agents in order to support client safety.

The group decided to adapt the July 2012 Ontario College of Family Physician (OCFP) Insulin Prescription Tool in order to:

1. Support dose adjustment of all insulin regimens;
2. Include all required elements of a medical order as outlined by the College of Nurses of Ontario (6); and
3. Preserve the elements that allowed it to be used a prescription.

During the development process, a variety of documents were reviewed (6,7,8,9,10) and a number of individuals were consulted including; practice advisers, from both the College of Nurses of Ontario and the College of Dietitians of Ontario; endocrinologists, including those involved with the creation of the OCFP insulin prescription tool; primary care physicians; nurse practitioners; and pharmacists.

Toronto Diabetes Care Connect (TDCC) Insulin Order and Prescription for Type 2 Diabetes was completed and launched in 2014 (Appendix B). This form can be downloaded from www.TorontoDiabetesReferral.com.

Step 4: Develop a Better Understanding of Current State and Determine Next Steps

It was determined that, in order for programs to ensure they are able to support individuals using insulin to self-manage, there are 3 main elements are required (Appendix E):

1. Access to relevant, appropriate information (e.g. education materials);
2. Access to highly competent healthcare providers; and
3. Development of specific self-management skills.

To keep the work of this group within a reasonable scope, the decision was made to focus on supporting access to highly competent healthcare providers. Group members began by examining potential causes for variation within the insulin competency level of diabetes educators in this region and grouping these potential causes into the following categories: person/client, policy, provider, place, or procedure/process-related factors (Appendix F). Again to keep the work of this group within a reasonable scope, the decision was made to focus on procedure/process-related factors such as lack of standard policies, lack of standard training, and clinical variation in basic knowledge.

Initially the group explored the possibility of developing a regional insulin training program with a standardized list of competencies, content and training/recertification processes. It soon became apparent that the standardized program would need to be housed within an organization that had the resources to develop and maintain the training program to ensure it reflected current guidelines, recommendations, and practices. Therefore, the group decided to shift their focus toward reviewing existing insulin training programs and tools that could potentially be used by programs in this region. The group also prepared this report in a way that it could be used as a resource by both diabetes education programs in the region and by larger organizations who may be interested in creating a regional, provincial, or national insulin training program.

In the fall of 2015, the group surveyed 24 diabetes education programs in the region (17 in the community and 7 in tertiary care centres) to obtain a better understanding of insulin competency development practices within organizations. Of the 24 programs that were sent the survey, 15 responded (63% overall response rate [55% from community-based programs and 71% from tertiary care-based programs]). Key results of the survey are outlined below.

1. A mix of both direct medical orders and medical directives were being used by programs
2. Not all organizations had a formal insulin competency development program and among those organizations that did have formal programs, there was significant variation
3. Not all organizations had a recertification or competency review process
4. Most organizations that reported using existing insulin training programs, as part of their insulin competency development program, used one of the following:
 - a) Diabetes Care Program of Nova Scotia Insulin Dose Adjustment Policies & Guidelines Manual 2012
 - b) The Community Diabetes Education Program of Ottawa Educator's Guide for:
 - i. Insulin Initiation for Clients with Type 2 Diabetes 2011
 - ii. Glycemia Management for Clients with Type 2 Diabetes 2011
 - c) Saskatchewan Insulin Dose Adjustment Model (May 2010)
5. Common program-level challenges affecting insulin competency development of educators included:
 - a) Inability to adequately support people using insulin while the lengthy insulin competency development was in process;
 - b) Inability to train or need to delay training due to infrequent exposure to people using insulin; and
 - c) Time and resources required for ongoing revision of the training program to include new medications, practices, and guidelines.
6. Support was desired by many of the diabetes education programs regarding:
 - a) Evaluation of existing insulin training programs;
 - b) Development of standardized insulin competency development to reduce the need for each program to individually revise and update their programs and tools; and
 - c) Creation of partnership/mentorships with experienced diabetes educators/healthcare providers across the region.

A more comprehensive analysis of these results is outlined in a separate report (11).

Step 5: Select a Guiding Framework to Inform the Work

The ADAPTE Process (12) was used as a framework to plan the following key steps in the group's work:

1. Identify insulin initiation and dose adjustment as the clinical area in which to promote best practice;
2. Establish an insulin standards working group (in our case this was already formed);
3. Establish an insulin competency development review & recommendation process;
4. Search and retrieve existing insulin competency development tools; and
5. Access insulin competency development tools for quality, content, and alignment with current guidelines.

Step 6: Select Insulin Competency Development Tools to Review

A variety of tools to support providers and programs regarding insulin competency development were considered by the group with the following programs and tools being selected for review:

1. Insulin Training Programs from:
 - a. The Community Diabetes Education Program of Ottawa;
 - b. Diabetes Care Program of Nova Scotia; and
 - c. The Province of Saskatchewan;(Information about each training program and the rationale regarding program selection can be found in Appendix G)
2. Performance readiness tools from the Federation of Regulatory Health Colleges of Ontario; and
3. Decision tools from the College of Nurses of Ontario.

Step 7: Develop the Evaluation Methodology

A formal evaluation tool and process were required to support the objective evaluation of the insulin training programs. The group was not able to source an existing evaluation tool that met their needs despite a thorough scan of the literature and a number of inquiries. Therefore, the group decided to create their own tool (Appendix H) by combining and adapting two existing tools; the Accreditation Standards for Dietetic Education Programs in Canada (13); and the Appraisal of Guidelines for Research & Evaluation II (AGREE II Instrument) (14). A more detailed version of this evaluation tool, including the scoring guide that was used by the evaluators, can be obtained by contacting Toronto Diabetes Care Connect.

The following evaluation process was followed:

1. Working group members individually reviewed each of the selected insulin training programs using the evaluation tool.
2. The individual evaluation results were reviewed by the group with consensus being established in one of two ways:
 - a) If the individual evaluation scores were evenly distributed across the range of scores, consensus was established by averaging the score (e.g. five individual scores of 1, 2, 2, 3 and 4 would become a score of 2.4)
 - b) If the individual evaluation scores were at both ends of the score range (i.e. 1-strongly disagree and 7-strongly agree), the question was revisited and consensus was established in one of the following ways:

- i. The outlier was removed and the remaining scores were averaged; or
- ii. The scores were averaged regardless of spread (if consensus could not be reached to remove the outlier).

Step 8: Explore Competency, Safety, & Authority

Through the course of this work the group identified the following two questions that required further exploration and clarification.

1. Are there any differences in the competencies that the health care provider would have to obtain/maintain in order to advise specific dose adjustment versus teach self-adjustment?
2. Can an insulin training program that was created by an organization using medical directives be used by an organization using direct orders (e.g. TDCC Insulin Order & Prescription)?

According to both the College of Nurses of Ontario and the College of Dietitians of Ontario (1,2,15):

1. Adjusting the dose of insulin is considered to be the controlled act of prescribing a drug, which would require a transfer of authority from the prescriber to the registered nurse or dietitian;
2. Teaching a procedure does not require a formal transfer of authority; and
3. Whether or not a transfer of authority is required, it is still the responsibility of the nurse or dietitian to have the required competence to support insulin dose adjustment and to ensure that the adjustment is safe and appropriate for that individual.

The need to demonstrate competency and establish safety is the same regardless of whether or not the nurse or dietitian was directly advising the client to adjust their dose or teaching them to self-adjust the dose. Therefore, the majority of the group decided that the competencies required by the health care provider would be the same regardless of whether they were advising clients to adjust or teaching them to self-adjust and that the same insulin competency development programs and tools could be used for competency development.

The group did caution, however, that even though teaching a procedure does not require a formal transfer of authority, it may be advisable for nurses and dietitians to consistently obtain adequate authorization for insulin dose adjustment since in practice the fine line between teaching self-adjustment and directing an individual to adjust the dose (i.e. prescribing) may be blurred.

Lastly, since obtaining authority for a procedure is a separate consideration from having competency to perform the procedure and ensuring the procedure is appropriate for that individual (1,2,15), the majority of the group decided that the insulin training programs and tools evaluated in this report could be used to ensure competency for nurse and dietitian diabetes educators regardless of whether a medical directive or a direct medical order is used as the authorizing mechanism.

Step 9: Complete Evaluations and Develop Recommendations

The selected tools and training programs were evaluated and recommendations were developed by the group. Evaluation and recommendation details are included below.

Insulin Training Program Evaluation Results

Commonly used insulin training programs were evaluated to help diabetes programs decide which training program they might modify and incorporate into their formal insulin competency development program. Key evaluation results are outlined in the table below. More detailed evaluation results can be found in Appendix I.

General Questions**	CDEPO Level 1*	CDEPO Level 2*	DCPNS*	Sask. Basic*	Sask. Adv.*	Sask. GDM*	Sask. Tests*
1. The training program is housed in and delivered by a parent institution/organization such as a university, health facility, or corporation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Training program support by the parent institution/organization is stable and ongoing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. The training program is guided by a mission, vision, and objectives that support healthcare provider-centered education and achievement of practice competence, and are congruent with that of the parent institution/organization	Unknown	Unknown	Yes	Yes	Yes (basic module)	Yes (basic module)	Yes (basic module)
4. The training program curriculum is aligned to <u>current</u> Canadian standards, reflects the program's philosophy, and evolves to address changes in practice, advances in technology, research, and current issues relevant to the profession (e.g. Current Diabetes Canada CPGs, FITT guidelines, DES standards etc.)	No***	No***	No***	No***	No***	No***	No***

General Questions**	CDEPO Level 1*	CDEPO Level 2*	DCPNS*	Sask. Basic*	Sask. Adv.*	Sask. GDM*	Sask. Tests*
5. The training program curriculum is logically constructed to facilitate the healthcare providers' achievement of expected learning outcomes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Teaching/precepting and learning practices (e.g. certification process) support the achievement of healthcare providers' learning outcomes	Yes	Yes	Yes	Yes	Yes	Yes	Unknown
7. Evaluation of healthcare provider performance reflects achievement of the expected learning outcomes	Yes	Yes	Yes	Yes	Yes	Yes	Unknown
8. There is a mechanism for ongoing curriculum review, analysis, and updating	Unknown	Unknown	Yes	Unknown	Unknown	Unknown	Unknown
9. The physical resources are sufficient to enable the program to fulfill its philosophy (mission, vision, objectives), and healthcare provider achievement of learning outcomes	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Modified AGREE II Score† (1=lowest score, 7=highest score)	CDEPO Level 1	CDEPO Level 2	DCPNS	Sask.	Sask. Adv.	Sask. GDM	Sask. Tests
Overall Assessment	5.8	5.3	5.2	5.3	5.0	5.3	3.5
Scope and Purpose ^{††}	6.7	5.4	5.8	6.7	6.7	6.1	1.0
Stakeholder Involvement ^{††}	2.7	3.2	5.4	6.5	5.7	5.2	1.2
Rigour of Development ^{††}	1.3	2.7	3.8	5.6	4.2	6.6	1.0
Program Currency ^{††}	2.0	1.5	3.0	2.7	1.8	1.0	1.0
Clarity of Presentation ^{††}	5.0	6.4	6.1	6.2	6.2	5.9	3.3
Applicability ^{††}	3.1	3.5	6.0	6.4	5.6	5.1	6.3
Editorial Independence ^{††}	1.0	1.4	1.0	1.0	1.2	1.0	1.0

***CDEPO Level 1** = Community Diabetes Education Program of Ottawa Educator's Guide for Insulin Initiation for Clients with Type 2 Diabetes (2011 with 2013 revisions); **CDEPO Level 2** – Community Diabetes Education Program of Ottawa Educator Guide for Glycemia Management of Clients with Type 2 Diabetes; **DCPNS** = Diabetes Care Program of Nova Scotia's Insulin Dose Adjustment Policy and Guideline Manual for Diabetes Educators; **Sask.** = Saskatchewan Insulin Dose Adjustment Module; **Sask. Adv.**= Saskatchewan Advanced Insulin Dose Adjustment Module; **Sask. GDM** =

Saskatchewan Gestational Diabetes Advanced Insulin Dose Adjustment Module; **Sask. Tests** = Saskatchewan Insulin Dose Adjustment Module for Tests-Procedures with Fasting

**Questions were adapted from Accreditation Standards for Dietetic Education Programs in Canada (13).

***All programs were developed using outdated versions of guidelines at the time of evaluation.

†Questions were adapted from the AGREE II Instrument (14).

††Scores for each question within the section (e.g. Scope of Practice) can be found in Appendix I.

Recommendations Regarding Insulin Competency Development

A number of recommendations were developed by the Insulin Standards Working Group to help support insulin competency development among healthcare providers in this region. These recommendations are outlined below.

Recommended Tools

All of the insulin training programs evaluated were recommended by the group to be used as part of the diabetes program's insulin competency development program provided that the following modifications are made:

1. Update the program to reflect current medications and guidelines including:
 - a. Current Diabetes Canada Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (2013);
 - b. Forum for Injection Technique & Therapy Expert 2015 Recommendations;
 - c. Diabetes and Driving; 2015 Diabetes Canada Updated Recommendations for Private and Commercial Drivers; and
 - d. Guidelines and recommendations that are relevant but were not available at the time of this evaluation.
2. Update the program to ensure alignment with current requirements from appropriate regulatory colleges (e.g. College of Nurses of Ontario), especially if using insulin training programs from other provinces.
3. Include information to improve the rigour of development
Revise the program according to program specific modification recommendations (see Appendix J).

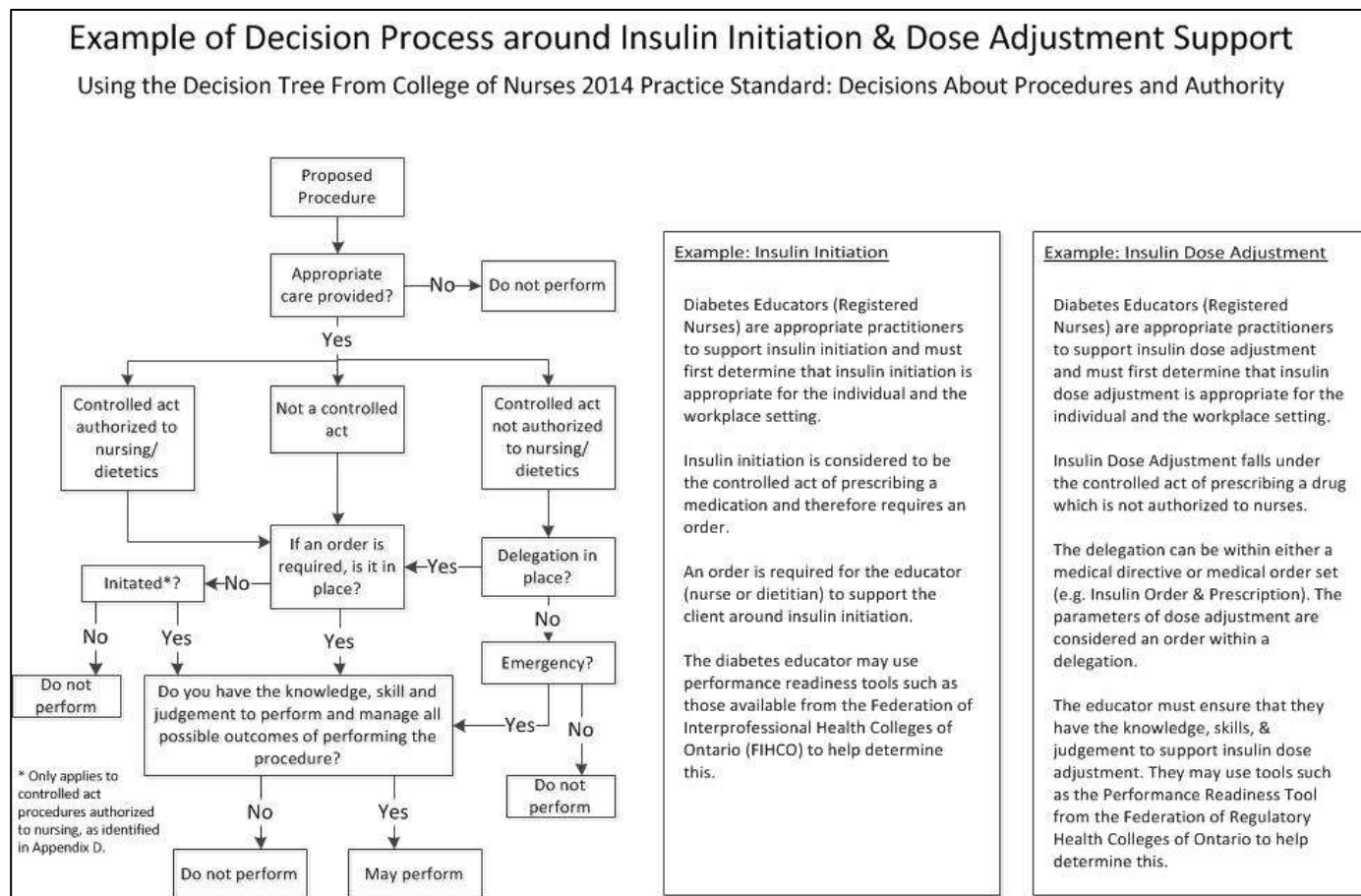
Prior to making the above modifications, diabetes programs are encouraged to connect with the insulin training program contact (Appendix G) to access the most recent version of the program.

A number of resources from the Federation of Health Regulatory Colleges of Ontario (FHRCO) were also recommended by the group. Even though many of these tools have been created for use with medical directives as the authorizing mechanisms, the majority of the group decided that the following tools were appropriate for use by diabetes programs in this region using direct medical orders (i.e. TDCC Insulin Order & Prescription):

1. Performance Readiness Assessment;
2. Performance Readiness Plan; and
3. Implementer Performance Readiness Form.

Templates of the above tools with some suggestions as to how they may be used with direct orders can be found in Appendix K. These tools can also be downloaded from the FHRCO website (<http://www.regulatedhealthprofessions.on.ca/templates.html>).

Lastly, the decision tree below from the College of Nurses (1,15) was recommended by the group. This tool can be used by programs and providers to help them think through what changes to practices and/or processes may be needed to support individuals living with diabetes. The examples below illustrate how each step in the process applies to insulin initiation and dose adjustment.



Additional Recommendations

The Insulin Standards Working Group developed a number of additional recommendations to support the following groups:

1. Diabetes education programs and their host organizations;
2. Regional or sub-regional working groups focusing on quality improvement in diabetes care; and
3. Regional, provincial, or national organizations, that may be interested in developing standardized insulin training programs.

Details of these recommendations are outlined below.

Diabetes Education Programs

The following recommendations were made to support diabetes education programs and their host organizations regarding the development, review, or revision of formal insulin competency development programs.

1. Ensure consistent use of medical directive and/or a comprehensive insulin order (e.g. TDCC Insulin Order & Prescription) as an authorizing mechanism to support insulin initiation and dose adjustment.
2. Ensure consistent use of communication tools within the circle of care (e.g. insulin initiation checklist, insulin self-management progress letters, etc.)
3. Develop insulin competency of all diabetes educators (e.g. both registered nurses and registered dietitians) to improve staff retention of those with insulin expertise.
4. Ensure use of a formal insulin competency development program using a comprehensive insulin training program (e.g. one of the evaluated insulin training programs) and tools from the Federation of Regulatory Health Colleges. Prior to implementing the formal program the diabetes education program's host organization would need to ensure adequate resources are available within the organization to implement the training process such as:
 - a. Protected staff time for competency development;
 - b. Expertise within the organization (or external to the organization but available through formal partnerships) to oversee and sign-off on the diabetes educator's competency development; and
 - c. A formal process regarding ongoing review and revision of the organization's formal insulin competency development program (e.g. every one or two years).

In addition, the working group supports the suggestion made by the College of Nurses that employers and nurses work together to ensure care delivery processes, leadership, organizational supports, communication systems, resources, and professional development systems are all in place to support delivery of quality care (1).

Lastly, it is important to note that if programs choose to use any of the suggested insulin competency development tools, further modifications may be required. The group recommends the continued use of the ADAPTE Process (12) as a framework to guide the diabetes program to:

1. Access insulin competency development tools for areas where revision is required to align with current guidelines etc.;
2. Adopt or adjust insulin competency development tools for local use (if required);
3. Seek external review – practitioner and policy maker feedback and expert peer review;
4. Finalize insulin competency development tools;
5. Obtain official organizational endorsement and adoption of the local insulin competency development program; and
6. Schedule regular review and revision of local insulin competency development tools.

Regional and Sub-Regional Work

The following recommendations were made to support sub-regional or regional level working groups regarding future quality improvement in diabetes care.

1. Explore sub-regional or regional level partnerships to support insulin training/mentoring and/or service delivery within diabetes education programs (especially within those who may not have the expertise within their organization to support certification).
2. Continue quality improvement work within the region and beyond to address other potential factors affecting the ability of diabetes programs to provide high quality care to those with diabetes using insulin.
3. Review and revise medical directives and insulin orders (e.g. TDCC Insulin Order & Prescription) regularly to ensure all insulins are included and needs of all key stakeholders are being met.

Regional, Provincial or National Program Development

The need was identified for a regional, provincial or national level insulin training program that would standardize processes and tools for competency development and certification. This standardized program could be used by organizations with diabetes education programs, as part of their performance readiness plan, to support insulin competency development. This would eliminate the need for each diabetes program to create and update an insulin training program.

The following recommendations were made to support regional, provincial or national organizations regarding the development of a standardized insulin training program.

1. Structure the insulin training program as modules to support organizations using the guide to sign-off on competencies at various points, thereby allowing healthcare providers to support appropriate clients as they work through the modules.
2. Offer an E-module format
3. Include all appropriate health care providers (e.g. RN, RD, Pharmacists, NPs, MDs, etc.) and people living with diabetes in the development of the program.
4. Include competencies related to more complex medical management in general as well as those related specifically to insulin
5. Ensure the training program:
 - a. Is created and housed in a stable, ongoing parent organization (e.g. provincial or national organization) and aligns with the organization's mission, vision and objectives;
 - b. Is designed to be delivered by a stable, accountable, organizations (e.g. community health centers, family health teams, tertiary care centres etc.) and aligns with each organization's mission, vision and objectives regarding delivery of quality care;
 - c. Aligns with current Canadian clinical practice guidelines and evolves to reflect changes in practice, evidence, and guidelines;
 - d. Includes a formal process for ongoing review of competency maintenance; and
 - e. Includes a formal, transparent process for ongoing review and revision of the training program.

6. Ensure the competency training program is developed with adequate rigour to allow confident adoption, spread, and sustainability by clearly describing:
 - a. Any conflicts of interest among program development group members, including reviewers (e.g. influence of the funding body on content)
 - b. Systematic methods including clear criteria regarding the obtainment and selection of resources to inform the development of the training program;
 - c. Clearly annotated references for each section (e.g. include all evidence used with links to the competency being addressed)
 - d. Any limitations within of the body of evidence (e.g. expert opinion used due to lack of evidence);
 - e. Methods for developing the competency list, program tools, and assessment processes;
 - f. Situations in which the use of this training program would not be appropriate; and
 - g. Processes for external review prior to finalization and for ongoing review and updating.
7. Ensure that all situations are considered and that appropriate options for management are included (e.g. absence of health insurance, homelessness, substance use, mental health challenges, etc.)
8. Ensure that all information to support the implementation of the competency training program is included such as:
 - a. Tools to support program implementation (e.g. checklists, case studies, exams, etc.);
 - b. Facilitators and barriers to program implementation (including resource implications);
 - c. Eligibility criteria for target users of the training program;
 - d. Specific, measurable learning objectives for the program;
 - e. Specific, measurable competencies with clearly outlined processes around competency development; and
 - f. Processes for ongoing recertification to ensure maintenance of required competencies.
9. Ensure the training program has a logical format and flow to facilitate learning and support efficient adoption, review, and revision as required.

Summary

It is the hope of the Insulin Standards Working Group that this report will be a useful resource for diabetes education programs in this region who wish to develop, review, or revise their current insulin competency development program. We also hope that the current state analysis, evaluation tool and recommendations will support future work in this area at a program, regional, provincial and/or national level.

This report will be shared with: diabetes education program leaders in this region; Diabetes Canada; Banting & Best Diabetes Centre; Toronto Central LHIN (program funder); and any other interested parties both within and outside the Toronto Central LHIN.

The full report with appendices can be downloaded from www.TorontoDiabetesReferral.com.

For More Information

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References

1. College of Nurses of Ontario. Practice Standard: Decisions About Procedures and Authority [Internet]. 2015. Available from https://www.cno.org/globalassets/docs/prac/41071_decisions.pdf.
2. College of Dietitians of Ontario. Chapter 4: Scope of Practice, Controlled Acts, Delegation and Orders, Jurisprudence Handbook for Dietitians in Ontario, Web Edition [Internet]. March 2015. Available from [https://www.collegeofdietitians.org/Resources/Publications-CDO/Jurisprudence-Handbook-for-Dietitians-in-Ontario-\(.aspx](https://www.collegeofdietitians.org/Resources/Publications-CDO/Jurisprudence-Handbook-for-Dietitians-in-Ontario-(.aspx).
3. The Canadian Diabetes Education Certification Board. What is a CDE®? [Internet]. Available from <http://www.cdec.ca/what-is-a-cde/>.
4. Health Quality Ontario. Quality Improvement Framework [Internet]. Available from <http://www.hqontario.ca/Quality-Improvement>.
5. ADAPTE Collaboration (2009). Guideline Adaptation: A Resource Toolkit [Internet]. Version 2.0. Available from <http://www.g-i-n.net/document-store/working-groups-documents/adaptation/adapte-resource-toolkit-guideline-adaptation-2-0.pdf>.
6. College of Nurses of Ontario (2008). Practice Standard: Medication [Internet]. Available from <http://www.cno.org>.
7. College of Nurses of Ontario (2015). Practice Standard: Medication [Internet]. Available from <http://www.cno.org>.
8. Colleges of Nurses of Ontario (2015). Practice Standard: Authorizing Mechanisms [Internet]. Available from https://www.cno.org/globalassets/docs/prac/41075_authorizingmech.pdf.
9. College of Nurses of Ontario (2008). Practice Standard: Directives. Available from <http://www.cno.org>.
10. College of Nurses of Ontario (2014). Orders Webcast [Internet]. Available from <http://www.cno.org/en/learn-about-standards-guidelines/educational-tools/webcasts/controlled-acts-webcasts/orders-webcast>.
11. Toronto Diabetes Care Connect (Oct 2015). Insulin Competency Development Baseline Scan of Current Practice of Diabetes Programs in the TC LHIN. Available from Toronto Diabetes Care Connect.
12. The ADAPTE Collaboration (2009). The ADAPTE Process: Resource Toolkit for Guideline Adaptation [Internet]. Version 2.0. Available from <http://www.g-i-n.net/document-store/working-groups-documents/adaptation/adapte-resource-toolkit-guideline-adaptation-2-0.pdf/view>.
13. Partnership for Dietetic Education and Practice (2014). The Accreditation Standards for Dietetic Education Programs in Canada [Internet]. Available from https://www.dietitians.ca/Downloads/Public/PDEP_Accreditation_Std Education_Programs_2014.aspx.
14. The AGREE Next Steps Consortium (2009). Appraisal of Guidelines for Research & Evaluation II (AGREE II Instrument) [Internet]. Available from <https://www.agreetrust.org/about-the-agree-enterprise/agree-research-teams/agree-next-steps-consortium/>.

15. College of Nurses of Ontario (2015). Medication Decision Tool: Competence [Internet]. Available from <http://www.cno.org/en/learn-about-standards-guidelines/educational-tools/decision-tool-medication/competence/>.

Appendices

Appendix A: Insulin Standards Working Group Members


Name of Group Member & Organization (alphabetical)	Area of Contribution				
	Creation of Insulin Order & Prescription	Current State Analysis & Next Steps	Creation of Evaluation Tool	Review & Evaluation of Insulin Competency Development Tools	Finalization of Recommendations & Report
Angela Heerema, RN CDE, Diabetes Education Program, Unison Health & Community Services (left position Jan 2015)	X	X	---	---	---
Denise Galbraith, RN CDE, Diabetes Comprehensive Care Program, St. Michael's Hospital (Previously at West Toronto Diabetes Education Program, LAMP Community Health Centre)	X	X	X	X	X
Elaine Wylie, RN, CNS, Endocrinology Clinic, Toronto General Hospital University Health Network	---	X	---	X	---
Jane Rajah, RN CDE, Diabetes Management Program, Parkdale Queen West Community Health Centre (Parkdale site)	X	X	X	X	X
Juliet Opoku, RN CDE, Diabetes Education Program, Unison Health & Community Services (joined group Jan 2015)	---	---	X	X	X
Karen Gorecki, RN CDE, Leadership Sinai Centre for Diabetes, Mount Sinai Hospital, Sinai Health Systems	X	X	X	---	X
Leigh Caplan, RN CDE, Team Lead, SUNDEC/Sunnybrook Academic Family Health Team, Sunnybrook Hospital	X	X	X	X	X
Lori Sutton, RD CDE, Outreach Facilitator, Toronto Diabetes Care Connect, South Riverdale Community Health Center (Group Facilitator & Report Author)	X	X	X	X	X
Mary Dubyk, RN CDE, Diabetes Education Community Network of East Toronto, South Riverdale Community Health Center (retired Sept 2016)	X	X	X	X	---

Others that were involved include (alphabetical):

- Abida Rahman, RN, West Toronto Diabetes Education Program (involved in the collection of information around existing insulin competency development programs)
- Anthony Derro, Practice Advisor, College of Nurses of Ontario (consulted during TDCC Insulin Order & Prescription creation)
- Deborah Cohen, Practice Advisor, College of Dietitians of Ontario (consulted around competencies)
- Dr. Alice Cheng (consulted during TDCC Insulin Order & Prescription creation)
- Dr. Jeremy Gilbert, Endocrinology Lead, Toronto Diabetes Care Connect (consulted during TDCC Insulin Order & Prescription creation and report completion)
- Dr. Nicole Nitti, Practice Advisor – Special Projects, Toronto Central LHIN and Toronto Diabetes Care Connect team member (consulted during TDCC Insulin Order & Prescription creation and report completion)
- Hilary Hall, RN, Diabetes Education Community Network of East Toronto, South Riverdale Community Health Center (involved in early discussions around developing next steps)
- Karen Blekaitis, RD, University Health Network (involved in early discussions around group's scope and work plan)
- Myra Kreick, Practice Advisor, College of Nurses of Ontario (consulted around competency, safety and authority)
- Odelia Almeida, RN, West Toronto Diabetes Education Program (involved in the collection of information around existing insulin competency development programs)
- Shannon Wiens, Director of Organizational Health Systems and Organizational Lead for Toronto Diabetes Care Connect, South Riverdale Community Health Centre (consulted throughout)

Appendix B: Toronto Diabetes Care Connect Insulin Order & Prescription for Type 2 Diabetes

(This form can be downloaded from www.TorontoDiabetesReferral.com.)

 Insulin Order & Prescription <i>For Type 2 Diabetes Management</i> <i>Refer immediately to endocrinology if client is pregnant, planning pregnancy or has T1DM</i>		Patient/Client's Name: _____ Address: _____ D.O.B. (m/d/y): _____	
	Step 1: Choose Insulin Type (to be administered subcutaneously)	Step 2: Enter Starting Dose	Step 3: Enter Titration/Adjustment Instructions (Authorization) (amount to adjust dose by [units] and CBG target to adjust to [mmol/L])
BASAL	Long-acting analogues (clear) <input type="checkbox"/> Basaglar™ <input type="checkbox"/> Cartridge <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Lantus® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Levemir® <input type="checkbox"/> Cartridge <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Toujeo™ <input type="checkbox"/> Prefilled pen Intermediate acting (cloudy) <input type="checkbox"/> Humulin® N <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Novolin®ge NPH <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial	Once daily dosing: ____ units at bedtime ____ units at: _____ Twice daily dosing: ____ units at: _____ ____ units at: _____	+Adjust dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days For evening dosing adjust dose until CBG: fasting is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____ OR For morning dosing adjust dose until CBG: ac supper is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____
	Rapid-acting analogues (clear) Take 0-10 min before meal <input type="checkbox"/> Apidra® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Fiasp® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Humalog® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Humalog®200 units/ml <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Novorapid® <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Prefilled pen Short-acting (clear) Take 30 min before meal <input type="checkbox"/> Humulin® R <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Novolin®ge T oronto <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial	a c Breakfast: ____ units a c Lunch: ____ units a c Dinner: ____ units	+Adjust BREAKFAST dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days Adjust dose until CBG: 2 hrs pc breakfast is less than: <input type="checkbox"/> 10.0 or <input type="checkbox"/> ____ OR ac lunch is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____ +Adjust LUNCH dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days Adjust dose until CBG: 2 hr pc lunch is less than: <input type="checkbox"/> 10.0 or <input type="checkbox"/> ____ – ____ OR ac dinner is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____ +Adjust DINNER dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days Adjust dose until CBG: 2 hrs pc dinner is less than: <input type="checkbox"/> 10.0 or <input type="checkbox"/> ____
PREMIXED	Premixed analogues (cloudy) Take 0-10 min before meal <input type="checkbox"/> Humalog® Mix 25™ <input type="checkbox"/> Cartridge <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Humalog® Mix 50™ <input type="checkbox"/> Cartridge <input type="checkbox"/> Prefilled pen <input type="checkbox"/> Novomix® 30 <input type="checkbox"/> Cartridge Premixed regular (cloudy) Take 30 min before meal <input type="checkbox"/> Humulin® 30/70 <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Novolin®ge 30/70 <input type="checkbox"/> Cartridge <input type="checkbox"/> Vial <input type="checkbox"/> Novolin®ge 40/60 <input type="checkbox"/> Cartridge <input type="checkbox"/> Novolin®ge 50/50 <input type="checkbox"/> Cartridge	a c Breakfast: ____ units a c Dinner: ____ units	+Adjust BREAKFAST dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days Adjust dose until CBG: ac supper is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____ Without causing hypoglycemia post-breakfast +Adjust DINNER dose by: <input type="checkbox"/> 1 unit every 1 or more days OR <input type="checkbox"/> up to ____ units every ____ or more days Adjust dose until CBG is: fasting is <input type="checkbox"/> 4.0 – 7.0 or <input type="checkbox"/> ____ – ____ Without causing hypoglycemia post-dinner
	Insulin: Mitte: ____ boxes Repeats x ____ Supplies: <input type="checkbox"/> pen <input type="checkbox"/> pen needles <input type="checkbox"/> syringes <input type="checkbox"/> meter strips <input type="checkbox"/> lancets <input type="checkbox"/> other: _____ Instructions for existing antihyperglycemic agents: (e.g. discontinue or adjust upon insulin initiation)		Prescriber Information/Stamp: Name (printed): _____ CPSO #: _____ Address: _____ Phone & Fax: _____ Date (m/d/y): _____ Signature: _____

TAdjustment is made to only one insulin dose per day
 Abbreviations: CBG=capillary blood glucose (mmol/L); ac=before meal; pc=after meal
 Adapted March 2014 from The Ontario College of Family Physicians Insulin Prescription Tool - March 2014 using 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (Diabetes Canada) and revised September 2017 to include new insulins.

Appendix C: Work Summary with Timelines (Insulin Standards Working Group 2013-2017)

1. Create the Insulin Standards Working Group
(First meeting September 2013)
2. Decide on Specific Focus of the Work
(Sept 2013)
3. Develop Toronto Diabetes Care Connect Insulin Order and Prescription
(November 2013 - March 2014)
 - a. Consultation with CNO
(January - March 2014)
4. Develop a Better Understanding of Current State of Insulin Competency Development (e.g. identification of problem, root cause analysis, possible next steps etc.)
(Fall 2013 to April 2014) and
5. Determine Next Steps around work of the group
(April 2014 to April 2015)
6. Develop Evaluation Tool/Process to Evaluate Insulin Competency Development Programs
(May – October 2015)
7. Evaluate Insulin Competency Development Tools & Programs
(November 2015 – January 2017)
 - a. Consultation with College of Nurses
(July – September 2016)
8. Develop Recommendations & Complete Report
(September 2016 – December 2017)

Appendix D: Conflict of Interest

All Insulin Standard Group members involved in the evaluation and recommendation development were asked the following questions*:

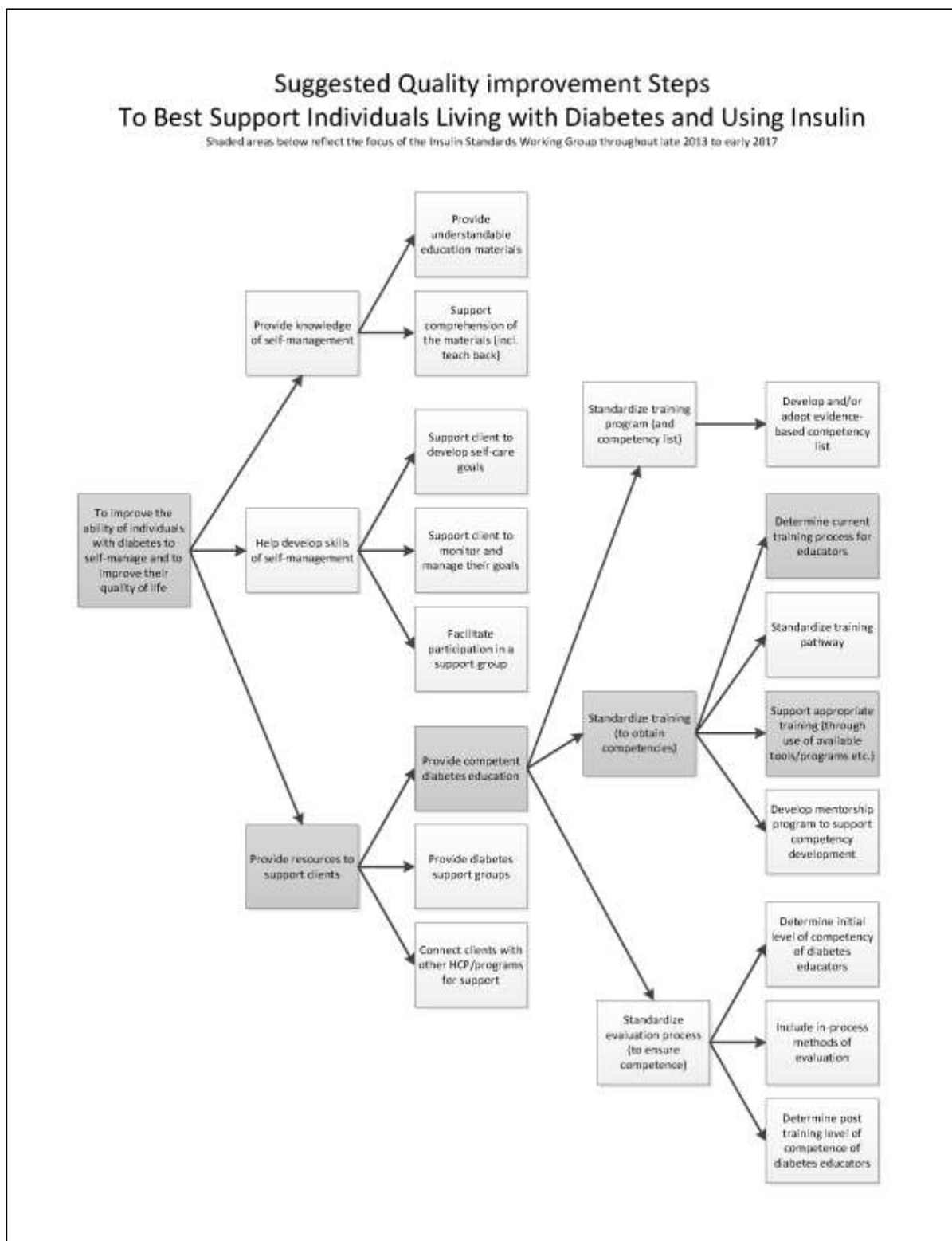
1. Have you been involved in the development on any of the training programs under review?
2. Have you directly participated in any process to formally endorse any of the training programs under review?
3. Are you or have you been employed by an organization that was involved in the development of the training programs under review or an entity that has a commercial interest in any of the training programs under consideration?
4. Have you served as a consultant for any organization that was involved in the development of the training programs under review or an entity that has a commercial interest in any of the training programs under consideration?
5. Do you have any ownership interests (including stock options) in any entity, the stock of which is not publicly traded, which has a commercial interest in any of the training programs under consideration?
6. Do you have any ownership interests (including stock options but excluding indirect investments through mutual funds and the like) valued at \$1500 or more in any entity that has a commercial interest in any of the training programs under consideration?
7. Are you currently receiving or have you received research funding from any entity that has a commercial interest in any of the training programs under consideration?
8. Have you been paid honoraria or received gifts of value equal to or greater than \$3500 per year or 7500 over a three year period from any organization that was involved in the development of the training programs under review or an entity that has a commercial interest in any of the training programs under consideration?
9. Do you have any other potential conflicts of interest?

*Adapted from The ADAPTE Collaboration (2009). The ADAPTE Process: Resource Toolkit for Guideline Adaptation (Version 2.0). Available from: <http://www.g-i-n.net>.

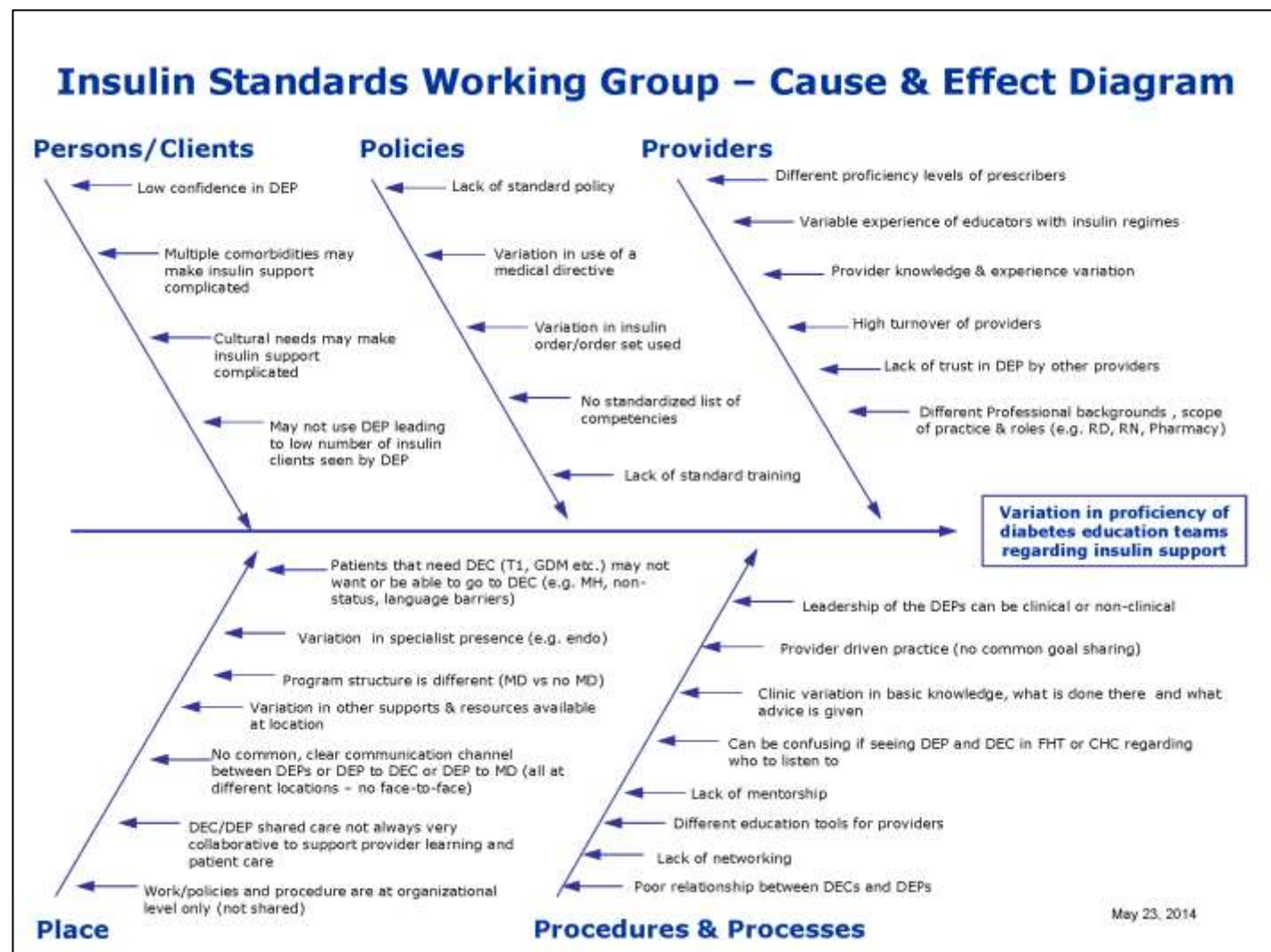
Answers:

- For questions 1-8, all group members answered no.
- For question 9, one group member (Leigh Caplan) reported that she had been paid to speak by BD, Abbott in the past but that these talks were in no way related to the work of this group. No others group members had any potential conflicts of interest to declare.

Appendix E: Driver Diagram: Steps Required to Reach Common Aim (Created by the Insulin Standards Working Group)



Appendix F: Cause & Effect Diagram: Problem Statement & Contributing Factors (Created by the Insulin Standards Working Group)



Appendix G: Insulin Training Program Information and Rational for Selection

Insulin Competency Development Program Information

	Province of Saskatchewan	Diabetes Care Program of Nova Scotia	Community Diabetes Education Program of Ottawa
Modules Available	<ol style="list-style-type: none"> 1. Insulin Dose Adjustment (IDA) Module 2. Advanced IDA Module 3. Gestation Advanced IDA Module 4. IDA for Tests and Procedures Module 	<ol style="list-style-type: none"> 1. Initial Certification for Insulin Dose Adjustment with Adults with Type 2 Diabetes 2. Specialty Area Certification <ol style="list-style-type: none"> a. Pregnancy b. Children/adolescents c. Pump therapy (CSII) 	<ol style="list-style-type: none"> 1. Educators Guide for Insulin Initiation for Clients with Type 2 Diabetes 2. Educators Guide for Glycemic Management of Clients with Type 2 Diabetes
Target Users	Diabetes Educators working for organizations offering diabetes support in the province of Saskatchewan.	Diabetes Educators working for one of the District Health Authorities of Nova Scotia hire, plan, and manage health services within their district.	Diabetes Educators working for Community Diabetes Education Program of Ottawa.
Eligibility for Certification	Diabetes Educator with CDE or 2000 or more hours of practice.	Diabetes Educator with CDE or 6-12 months (800 hours minimum) of clinical experience in direct diabetes education and management experience in the last 3 years.	<p>Level 1: Diabetes Educator who has participated in diabetes education for a minimum of 800 hours.</p> <p>Level 2: Completion/Certification of Level 1 and at least 800 hours of clinical experience in diabetes education and insulin initiation as a CDE.</p>
Certification Process	<ul style="list-style-type: none"> • Readings • Mentoring (i.e. shadowing/being shadowed) • Written Exam (provincial exam that is administered by the Ministry of Health) 	<ul style="list-style-type: none"> • Readings • Mentoring (i.e. shadowing/being shadowed) • Written Exam 	<ul style="list-style-type: none"> • Readings • Mentoring (i.e. shadowing/being shadowed) • Written exam & case review
Organization Granting Certification	Saskatchewan Ministry of Health (ministry representative)	Each District Health Authority (medical advisor or delegate)	Community Diabetes Education Program of Ottawa (clinical manager)

Authorizing Mechanism Used by Certified Educators	Transfer of medical function	Delegated medical function	Direct medical order
Recertification Process	Recertification process is established by each organization independently	Formal recertification is required every 2 years	Biannual recertification required.
Additional Information	Saskatchewan Ministry of Health is in the process of reviewing this training program (and method of establishing competency) and may change their approach to this in the future.	Diabetes Care Program of Nova Scotia is in the process of updating the training program. It has been adapted for use by New Brunswick and PEI.	The Educator's Guides are currently under revision.
Contact:	<p>Leanne Neufeld Primary Health Services Branch Saskatchewan Ministry of Health 3475 Albert Street Regina SK S4S 6X6 Phone: 306-787-0886 Fax: 306-787-0890 Email: lneufeld@health.gov.sk.ca</p>	<p>Peggy Dunbar, MEd PDt CDE Program Manager, Diabetes Care Program of Nova Scotia 1276 South Park Street Bethune Bldg., Suite 548 Halifax, NS B3H 2Y9</p> <p>Tel: (902) 473-3209 Fax: (902) 473-3911 Email: Peggy.Dunbar@dcpsns.health.ca Website: http://diabetescare.nshealth.ca</p>	<p>Tina Leech, RD, CDE Clinical Manager Community Diabetes Education Program of Ottawa (CDEPO) 613-233-4443 x2235 tleech@centretownchc.org</p>

Rational for Insulin Training Program Selection

Initially the group did a scan of existing insulin competency development programs focusing on Canadian programs that support official certification and follow the Canadian Diabetes Association Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. The group selected programs according to the following criteria:

- Larger scale programs that had a higher likelihood of having stable stakeholder/organization involvement and commitment for ongoing updates etc.
- Programs that supported insulin-related competency development among a variety of health professionals

Phone meetings were set up with Saskatchewan, Nova Scotia, and Ottawa to obtain more information about the programs that may be useful to both the working group members and those wishing to modify the insulin training program for their own use.

Programs selected for further evaluation included the following:

- Community Diabetes Education Program of Ottawa's Educators Guides for: Insulin Initiation for Clients with Type 2 Diabetes 2011 with correction July 2013 (CDEPO Level 1); and Glycemia Management of Clients with Type 2 Diabetes 2011 (CDEPO Level 2)
- Diabetes Care Program Nova Scotia's Insulin Dose Adjustment Policy and Guideline Manual for Nova Scotia Educators 2012 (DCPNS)
- Saskatchewan's Insulin Dose Adjustment Modules for: Initial module (Sask. Basic); Advanced module (Sask. Adv.); Gestational Diabetes Module (Sask. GDM); and Tests & Procedures Module (Sask. Tests)

Appendix H: Insulin Training Program Evaluation Tool

Insulin Competency Development Program Name: _____

Evaluator (name): _____ Date: _____

General Evaluation Questions:

Questions†	Yes/No (Y/N) or Unknown
1. The training program is housed in and delivered by a parent institution/organization such as a university, health facility, or corporation.	
2. Training program support by the parent institution/organization is stable and ongoing.	
3. The training program is guided by a mission, vision, and objectives that support healthcare provider-centered education and achievement of practice competence, and are congruent with that of the parent institution/organization.	
4. The training program is aligned to current Canadian standards, reflects the program's philosophy, and evolves to address changes in practice, advances in technology, research, and current issues relevant to the profession.	
5. The training program is logically constructed to facilitate the healthcare providers' achievement of expected learning outcomes.	
6. Teaching and learning practices support the achievement of healthcare providers' learning outcomes.	
7. Evaluation of healthcare provider performance reflects achievement of the expected learning outcomes.	
8. There is a mechanism for ongoing curriculum review, analysis, and updating.	
9. The physical resources are sufficient to enable the Program to fulfill its philosophy (mission, vision, objectives), and healthcare provider achievement of learning outcomes.	

† The above general questions were adapted from the standards within the Accreditation Standards for Dietetic Education Programs in Canada – 2014 (13). The following standards were adapted and included in this evaluation tool: 1.1, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, and 5.1. Adaptations included: “program” changed to “training program”; “curriculum” changed to “training program”; “student/intern” changed to “health care provider”; “dietetic” removed; and “precepting” removed.

Scoring Questions††:

Domain 1: Scope and Purpose

1. The overall objective(s) of the training program is (are) specifically described.
2. The competencies covered by this training program are specifically described.
3. The population (patients, public, etc.) to whom the training program is meant to apply is specifically described.

Domain 2: Stakeholder Involvement

4. The training program development group included individuals from all relevant professional groups.
5. The views and preferences of the target population for the training guide have been sought (e.g. patients, diabetes educators, etc.).
6. The target users of this training program are clearly defined.

Domain 3: Rigour of Development

1. Systematic methods were used to search for evidence.
2. The criteria for selecting the evidence are clearly described.
3. The strength and limitations of the body of evidence are clearly described.
4. The methods for formulating the recommendations are clearly described.
5. The situations when this training guide does not apply are clearly specified (e.g. diabetes & pregnancy, type 1 diabetes).
6. There is an explicit link between the recommendations and the supporting evidence.
7. The training program has been externally reviewed by experts prior to its publication.
8. A procedure for updating the training program is provided.

Domain 4: Clarity of Presentation

9. The recommendations are specific and unambiguous.
10. Key recommendations are easily identifiable.

Domain 5: Applicability

11. The training program described facilitators and barriers to its application.
12. The training program provides advice and/or tools on how the recommendations can be put into practice.
13. The potential resource implications of applying the recommendations have been considered.
14. The training program presents monitoring and/or auditing criteria.

Domain 6: Editorial Independence

15. The views of the funding body have not influenced the content of the training program.
16. Competing interest of training program development group members have been recorded and addressed.

Overall Assessment

1. Rate the overall quality of this training program (1=Lowest Possible Quality to 7=Highest Possible Quality).
2. I would recommend this training program for use by TC LHIN diabetes programs. (Yes, Yes, with modifications, or No)

††The above scoring questions were adapted from the AGREE II Instrument (14) which includes 2 overall assessment ratings as well as a number of specific item ratings organized into the following 6 domains:

1. Scope and Purpose
2. Stakeholder Involvement
3. Rigour of Development
4. Clarity of Presentation
5. Applicability
6. Editorial Independence

The following adaptations were made to the AGREE II instrument:

- “Guideline” was replaced with “training program” throughout;
- “Health question” was replaced with “competencies” throughout;
- “Recommendation” was replaced with “training program throughout; and
- Some examples specific to insulin-related competency development were added in to the question or scoring guide for clarity.

The AGREE II 7-point scale and rating guide was used by the evaluators when answering these questions with a:

- A score of 1 (Strongly Disagree) being given when there is no relevant information to address the item or if the concept is very poorly reported;
- A score of 7 (Strongly Agree) being given when the quality of reporting is exceptional addressing all criteria and considerations; and
- Scores between 2 and 6 being given when the quality of reporting falls somewhere between in terms of quality of reporting.

The complete evaluation tool (with question specific scoring guides) can be obtained from the Toronto Diabetes Care Connect, a program of South Riverdale Community Health Centre (955 Queen Street East, Toronto, Ontario M4M 3P3 416-778-0676).

Appendix I: Detailed Insulin Training Program Evaluation Results

Modified AGREE II Score** (1=lowest score, 7=highest score)	CDEPO Level 1	CDEPO Level 2	DCPNS	Sask.	Sask. Adv.	Sask. GDM	Sask. Tests
Scope and Purpose							
1. The overall objective(s) of the training program is (are) specifically described.	7	6	5.5	6.7	6.5	5.5	1
2. The competencies covered by this training program are specifically described.	6	4	6	6.5	6.5	6	1
3. The population (patients, public, etc.) to whom the training program is meant to apply is specifically described.	7	6.3	6	7	7	6.7	1
Average score for section:	6.7	5.4	5.8	6.7	6.7	6.1	1
Stakeholder Involvement							
4. The training program development group included individuals from all relevant professional groups.	1	1.3	5.2	7	6.5	6	1.3
5. The views and preferences of the target population for the training guide have been sought (e.g. patients, diabetes educators, etc.).	1	1.3	4.8	6	4.3	2.5	1.3
6. The target users of this training program are clearly defined.	6	7	6.3	6.5	6.3	7	1
Average score for section:	2.7	3.2	5.4	6.5	5.7	5.2	1.2
Rigour of Development							
7. Systematic methods were used to search for evidence.	1	1.5	2.5	4	2	4	1
8. The criteria for selecting the evidence are clearly described.	1	1.8	2.7	4	2.5	1.5	1
9. The strength and limitations of the body of evidence are clearly described.	1	1.8	1.3	5.3	2.6	2	1
10. The methods for formulating the training program are clearly described.	1	1.5	2.2	5	3.6	1.3	1
11. The situations when this training guide does not apply are clearly specified (e.g. diabetes & pregnancy, type 1 diabetes).	1	6.5	5.3	6.7	6.7	7	1
12. There is an explicit link between the training program and the supporting evidence.	3	1	6.5	7*	5	5.7	1

13. The training program has been externally reviewed by experts prior to its publication.	1	5	6	7	6.7	7	1.3
Average score for section:	1.3	2.7	3.8	5.6	4.2	6.6	1
Program Currency							
14. A procedure for updating the training program is provided.	2	1.5	3	2.7	1.8	1	1
Average score for section:	2	1.5	3	2.7	1.8	1	1
Clarity of Presentation							
15. The training process is specific and unambiguous.	5.8	6.5	6	6.7	5.8	6	1 (unknown)
16. The different options for management of the condition or health issue are clearly presented (e.g. different insulin regimens).	3.3	7	6.5	6.3	6.8	7	4.7
17. Key recommendations are easily identifiable.	5.8	5.7	5.7	5.7	6	4.7	4.3
Average score for section:	5.0	6.4	6.1	6.2	6.2	5.9	3.3
Applicability							
18. The training program described facilitators and barriers to its application.	1	2	6	7	6.3	5.5	2
19. The training program provides advice and/or tools on how the competencies can be put into practice.	5.9	6.3	6	7	6	6	2.3
20. The potential resource implications of applying the competency development process have been considered.	1.3	1	5.6	6	5.7	6	1
21. The training program presents monitoring and/or auditing criteria.	4	4.5	6.3	5.5	4.5	2.7	1
Average score for section:	3.1	3.5	6.0	6.4	5.6	5.1	6.3
Editorial Independence							
22. The views of the funding body have not influenced the content of the training program.	1 (unknown)	1 (unknown)	1 (unknown)	1 (unknown)	1 (unknown)	1 (unknown)	1 (unknown)
23. Competing interest of training program development group members have been recorded and addressed.	1	1.7	1	1	1.3	1	1
Average score for section:	1.0	1.4	1.0	1.0	1.2	1.0	1.0
Overall Assessment							
24. Rate the overall quality of this training program.	5.8	5.3	5.2	5.3	5	5.3	3.5

Overall Recommendation						
I would recommend this training program for use by TC LHIN diabetes programs.						
CDEPO Level 1	CDEPO Level 2	DCPNS	Sask.	Sask. Adv.	Sask. GDM	Sask. Tests
Yes with modifications	Yes with modifications	Yes with modifications	Yes with modifications	Yes with modifications	Yes with modifications	Yes with modifications

***CDEPO Level 1** = Community Diabetes Education Program of Ottawa Educator's Guide for Insulin Initiation for Clients with Type 2 Diabetes (2011 with 2013 revisions); **CDEPO Level 2** – Community Diabetes Education Program of Ottawa Educator Guide for Glycemia Management of clients with Type 2 Diabetes; **DCPNS** = Diabetes Care Program of Nova Scotia's Insulin Dose Adjustment Policy and Guideline Manual for Diabetes Educators; **Sask.** = Saskatchewan Insulin Dose Adjustment Module; **Sask. Adv.**= Saskatchewan Advanced Insulin Dose Adjustment Module; **Sask. GDM** = Saskatchewan Gestational Diabetes Advanced Insulin Dose Adjustment Module; **Sask. Tests** = Saskatchewan Insulin Dose Adjustment Module for Tests-Procedure with Fasting

†Questions were adapted from the AGREE II Instrument (14).

Note: All programs were developed using outdated versions of guidelines.

Appendix J: Modification Recommendations for Each Insulin Training Program

Insulin Training Program	Suggested Modifications from Insulin Standards Working Group Members (2016)
CDEPO Level 1	<p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines • update references & teaching tools to reflect current evidence <ul style="list-style-type: none"> ○ For example: <ul style="list-style-type: none"> ▪ exercise ▪ driving guidelines – ensure complete ▪ sick day management ▪ alcohol <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • add pictorial instructions for insulin initiation & hypoglycemia management (including signs & symptoms of hypoglycemia) & include role of glucagon • clarify if teaching process on page 8 to apply to all insulin regimens • change “pooped” pancreas to “tired” pancreas • ensure site rotation/lipodystrophy information is clearer • include more emphasis on readiness and self-identified challenges or ordering of things • add delegation and medical order templates (both preprinted direct order and directive) would be useful • include section on 3rd party involvement in managing injection (e.g. CCAC or family member) • outline complications more clearly • Suggested Layout changes: <ul style="list-style-type: none"> ○ put program objectives are on one page ○ put competencies to be obtained all on one page <p>Suggestions to improve rigour of development: (see below)</p>
CDEPO Level 2	<p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines • update medication lists (including insulins) • add more evidence/references/research to support the thought that that this type of training program is the best way to train RN/RD in these skills - program seems strong regarding diabetes-related facts and weak in program planning evidence based focus <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • make some changes to layout & font/bolding etc. to better organize content <p>Suggestions to improve rigour of development: (see below)</p>
DCPNS	<p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines • include analogues • include FIT guidelines and more on how to adjust insulin <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • add more on steroids and hyperglycemia • state target population (i.e. Adult Type 2, (Type 1?) & exclusions more clearly • Identify and include potential barriers to use of this training program by other diabetes programs include RD and client rep in development • Include the following content: <ul style="list-style-type: none"> ○ what to do with patients who are fasting (religious or procedural) what to do if a patient is having a colonoscopy for example ○ Physiological changes (age, weight loss/gain, renal function, liver disease,) that can impact insulin action/glycemic control

	<ul style="list-style-type: none"> ○ Adjustment for the elderly or those at increased risk for hypoglycemia(ex is that they are on beta blockers) ○ Potential side effects of insulin therapy and how to avoid /minimize and manage them: Lipohypertrophy Infection Weight gain Allergy Hypoglycemia ○ Risk for hypoglycemia in older adults and accommodations to insulin adjustment required Instruction for clients that have made an error in their usual insulin dose (wrong insulin/wrong time/wrong dose) ○ Knowledge of insulin stacking and preventative strategies for MDI patients ○ Impact, risks, and preventive strategies for alcohol consumption ○ More education for Sick day management for different insulin regimes and insulin adjustments <ul style="list-style-type: none"> • Include a clear, specific process for updating <p>Suggestions to improve rigour of development: (see below)</p>
Sask.	<p>Training module is very well organized and with great detail on how to apply to RN or organizations with frameworks and sample tools. Overall very well prepared with detail practice question with answers</p> <p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • Make esthetic changes (e.g. bold title, learning activity, readings, bulleting recommendations at end of each section) to organize information better • reorganize competencies (lists of competency indicator & observed/joint practice are currently separate from the practice of each line and therefore, it is hard to assess, where in the book each competency indicator practice is located) • competency indicators are difficult to measure as listed - consider putting answers at the end of each section instead of at the end of the documents and clarifying competency indicator which are currently vague <p>Suggestions to improve rigour of development: (see below)</p>
Sask. Adv.	<p>Similar to the basic IDA, the advance module is a template which will require review and, as needed customizing of the policy & procedure by each program/region. The Transfer of medical function is a region-specific process.</p> <p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines • update to reflect current therapies (i.e., long acting insulin) <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • summarize recommendations for each section • include a mentoring checkoff list • include information to address challenges of education with clients with language barriers, low literacy etc. • include strategies for those without insurance who cannot visit emergency at hospital etc. • include recommendations on sick day management <p>Suggestions to improve rigour of development: (see below)</p>
Sask. GDM	<p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • make competency list more specific and include criteria for obtaining competency • include mentoring section with competence • include topic of effective teaching/precepting • summarize recommendations at the end of each section • address areas scoring low on the evaluation instrument <p>Suggestions to improve rigour of development: (see below)</p>

Sask. Tests & Procedures	<p>Suggestions to reflect current evidence:</p> <ul style="list-style-type: none"> • update to new guidelines <p>Suggestions to improve training program:</p> <ul style="list-style-type: none"> • clearly outline training program development and implementation processes with issues of rigour etc. addressed • include clearly outlined method for establishing initial and ongoing competencies • link to evidence through referencing • add the following: competency list; more examples of case studies; and exam <p>Suggestions to improve rigour of development: (see below)</p>
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Suggestions to improve rigour of development that apply to all programs:

- Use modified Agree II questions for a framework
- Describe systematic methods used to obtain supporting evidence for program development (including criteria for selection and strength and limitations of the body of evidence)
- Explicitly reference the evidence used with each of the recommendations in the training program (e.g. Diabetes Canada's "Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada"; Diabetes Canada's "Building Competency in Diabetes Education: The Essentials": and/or expert option)
- Clearly describe the methodology of the training program development (so that it could easily be duplicated if necessary).
- Ensure who the training program applies to and situations when this training guide does not apply are clearly specified.
- Consider external review of training program (include all key stakeholders)

Appendix K: Federation of Regulatory Health Colleges of Ontario Tools

Suggestions have been include regarding how these tools might be used by programs and providers who are using direct orders (e.g. TDCC Insulin Order & Prescription) as the authorizing mechanism.

These tools can be downloaded from: <http://www.regulatedhealthprofessions.on.ca/templates.html>.

Performance Readiness Assessment

Interprofessional Guide – Performance Readiness Assessment – Instruction Templates		Page 1
Performance Readiness Assessment For Determining the Appropriateness of Establishing Directives, Delegation and Performing Procedures beyond Principal Expectations of Practice		
Title/Procedure:	Insulin Dose Initiation and Adjustment	
Applicable Authorizing Mechanism:	<input checked="" type="checkbox"/> Delegation <input type="checkbox"/> Medical Directive <input checked="" type="checkbox"/> Direct Order <input type="checkbox"/> Unnecessary	
Authorizing Profession:	Physician or Nurse Practitioner	
Implementing Profession:	Diabetes Educator (Registered Nurse and Registered Dietitian)	
Patient(s):	Adults (18 year or older) with type 2 diabetes	
Disposition:	<input type="checkbox"/> Approved <input type="checkbox"/> Being forwarded for Approval <input type="checkbox"/> Not Approved	
Date:		
Sponsors (This Section For Use in Large Multi-professional Settings)		
Representative(s) of Authorizing Profession:	e.g. Medical Director, Clinical Physician and/or NP lead, etc.	
Representatives(s) of Implementing Profession:	e.g. Experienced RN and/or RD diabetes educator, team lead, or professional practice lead	
Administrative Representative(s):	e.g. Diabetes Program Manager, Organization's Clinical Manager, etc.	
Have all applicable stakeholders been consulted: (See Section 11 for list) <input type="checkbox"/> Yes <input type="checkbox"/> No		
Is a completed Medical Directive or Delegation template attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Is a completed Performance Readiness Plan attached <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

Assessment Parameters

1. Reason and Specific Benefits of the Directive or Delegation:

- 1.1. Does establishing the directive or delegation address patients' best interests? ☒ Yes ☐ No ☐ Unsure

Comments: e.g. Allows timely insulin dose adjustments to help meet individualized glycemic targets.

The "Delegation Template" that needs to be attached (mentioned on the previous page) in this case would be the TC LHIN Diabetes Program Insulin Order.

2. Authorizer:

Does the authorizer:

- 2.1. Have the scope, authority from their college, competencies and privileges (where applicable) to authorize performance? ☐ Yes ☐ No ☐ Unsure
- 2.2. Have an established or anticipated professional relationship with the patient? ☐ Yes ☐ No ☐ Unsure
- 2.3. Agree the directive applies to all his/her patients who meet the conditions? ☐ Yes ☐ No ☐ Unsure
- 2.4. Have the ability to provide ongoing supervision directly, or are other provisions for appropriate supervision in place? ☐ Yes ☐ No ☐ Unsure

Comments: Note: "Authorizer" applies to the physician or nurse practitioner who is completing & signing the TC LHIN Diabetes Program Insulin Order.

Note: 2.3 Does not apply when the TC LHIN Insulin Order is being used so an n/a category would have to be used or this question would have to be removed.

Note: Ongoing supervision would be through regular communication between RN or RD and MD or NP.

3. Implementer:

Does the implementer:

- 3.1. Have the scope and authority from their own college (where applicable) to perform the procedure(s) ☐ Yes ☐ No ☐ Unsure
- 3.2. Have the baseline competencies to perform the proposed procedure(s) and manage the outcomes given the:
- 3.2.1. predictability of the patient's condition and needs,
 - 3.2.2. predictability of the procedure and its outcomes, and
 - 3.2.3. circumstances in the situation including resources and safeguards (such as established standards of practice, written materials, back-up and supervision), and opportunities to attain and maintain competence? ☐ Yes ☐ No ☐ Unsure

Comments: Note: Implementers would have to have completed the Performance Readiness Plan and be part of ongoing processes to ensure ongoing competence is maintained. A form similar to the Implementer Performance

Readiness Form (Individual) or (Group) could be used to document each educators readiness to support insulin initiation and dose adjustment.

4. Consent:

4.1. Can informed consent be properly obtained?

☐ Yes ☐ No ☐ Unsure

Comments:

5. Review and Quality Monitoring Processes:

5.1. Is there a process in place to ensure a regular review of the directive or delegation?

☐ Yes ☐ No ☐ Unsure

5.2. Is there a process in place to address questions or concerns arising from the directive or delegation?

☐ Yes ☐ No ☐ Unsure

Comments:

6. Practice Setting Feasibility

6.1. Are the necessary human and material resources available to support the practice?

☐ Yes ☐ No ☐ Unsure

6.2. Is the practice sustainable? (For example can new staff readily adopt the practice? If intensive resources are required to support the practice over the longer-term, is this feasible?)

☐ Yes ☐ No ☐ Unsure

6.3. Does the practice broadly support effective health care delivery? (For example, if implementers are responsible for implementing the directive or delegation or performing the proposed procedure, will other services only they can provide be disrupted? Will other team members or care delivery systems be negatively impacted? Can these effects be offset?)

☐ Yes ☐ No ☐ Unsure

6.4. Can any billing, cost or liability considerations be appropriately managed?

☐ Yes ☐ No ☐ Unsure

6.5. Are there any other situation-specific factors to consider?

☐ Yes ☐ No ☐ Unsure

Comments:

7. Risk/Benefit Analysis:

7.1. Do the benefits of proceeding by way of the directive, delegation or practice outweigh the risks?

☐ Yes ☐ No ☐ Unsure

Comments:

8. Education and Performance Readiness Plan:

8.1. Is there a plan for enabling implementers to attain the necessary competencies and achieve performance readiness? (Identify a basic plan here, or where the plan is more involved, refer to the Performance Readiness Plan.)

☐ Yes ☐ No ☐ Unsure

Comments:		
9. Communication Plan: 9.1. Is there a plan for informing stakeholders and for activating the directive, delegation or practice? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure Comments:		
10. References to Support Practice: 10.1. Are there references to support practice? (References may be listed here or attached) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure Comments: e.g. CDA cpgs, FITT Guidelines, [insert Insulin Competency Training program selected for use], etc.		
11. Those Consulted for Input: 11.1. Have all affected stakeholders been consulted? List those consulted in the table below. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure Comments:		
Stakeholders Consulted	Names/Positions	Agree?
1. Authorizers		<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Implementers: <ul style="list-style-type: none"> • Implementer(s) or representatives, • Co-implementers (if applicable) • Educators (if applicable) 		<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Administrators		<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Professional Leaders of: <ul style="list-style-type: none"> • Authorizers; • Implementers; & • Co-implementers (if applicable) 		<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Applicable profession-specific groups/committees of: <ul style="list-style-type: none"> • Authorizers • Implementers • Co-implementers (if applicable) 		<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Program Committees		<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Corporate Committees		<input type="checkbox"/> Yes <input type="checkbox"/> No
8. Other Relevant Individuals or Committees		<input type="checkbox"/> Yes <input type="checkbox"/> No

Performance Readiness Plan

<i>Interprofessional Guide – Performance Readiness Plan</i>	<i>Page 1</i>
<div style="border: 1px solid black; padding: 10px; margin-bottom: 20px;"> <p>Performance Readiness Plan</p> <p>The Performance Readiness Plan may be used when more indepth education is required to attain necessary competencies, for example to perform delegated controlled acts, and procedures that are not controlled acts but are beyond principal expectations of practice.</p> </div> <p>Procedure: <u>Insulin Initiation and Dose Adjustment</u></p> <p>Date: _____</p> <p>Plan Endorsed by: <small>(name, position, signature)</small> <u>e.g. Diabetes Program Manager, Organization's Clinical/Physician Lead, etc.</u></p> <p>Designated Educators <small>(if applicable, name, position, signature)</small> <u>The idea is that this would be completed for each diabetes education who will be supporting clients. The details below would most likely be common to all individual readiness plans.</u></p>	

<i>Interprofessional Guide – Performance Readiness Plan Instructions Template</i>	<i>Page 2</i>
<ol style="list-style-type: none"> 1. Competence and Authority of Educator(s) (if applicable) Identify whether any applicable educators have the scope, authority from their College and competencies to perform and teach the procedure. <p>Comments: Some organizations began their competency development process using physicians educators who have diabetes expertise. Then once diabetes educators have developed the required competencies they then become educators.</p> <p>Partnerships with other organizations may be needed to ensure there is a educator available with the required competence and authority.</p> 2. Education Plan Identify the: <ol style="list-style-type: none"> 2.1. Knowledge, Skills and Judgment Component (Attach any relevant slides, references and hand-outs). 2.2. Supervised Practice Component (If any). 2.3. Evaluation of Competence Component (Attach any relevant test materials). <p>Comments: Note: All of this information can be taken from whatever Insulin Competency Development Program or combination of programs the organization has decided to use.</p> 3. Plan for Assuring Ongoing Competence <ol style="list-style-type: none"> 3.1. Identify the plan for assuring ongoing competence. <p>Comments: Note: This information may be taken from the Insulin Competency Development Program selected by the organization. If this plan is not outlined then the organization will have to outline their own plan for assuring ongoing competence.</p> 4. Practical Arrangements <ol style="list-style-type: none"> 4.1. Identify the arrangements for delivering the education, both initially and ongoing. <p>Comments: e.g. identify a plan for staff turnover (e.g. consider competency development of both RN and RD), describe any partnerships that are required to carry out this plan</p> 	

Implementer Certification Form

Interprofessional Guide – Implementer Certification Form (Individual)

Page 1

Implementer Performance Readiness Form - Individual

(Name of Implementer)

has demonstrated performance readiness for implementing:

(Name of Directive, Delegation or Practice)

and is authorized to perform the procedure in accordance with the education program (if applicable) and relevant policies and procedures for the period:

and is authorized to teach in the education program:

(Yes or No)

Implementer

Signature

Date

Authorizer or Educator

Signature

Date



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