The Clinical and Economic Evaluations were used by the COMPUS Expert Review Committee (CERC) to generate recommendations for the optimal prescribing and use of insulin analogues.

Results

- A total of 16 detailed optimal therapy recommendations were produced.
- Three gaps in knowledge and practice were revealed through comparing information from the Optimal Therapy Reports: Current Utilization of Insulin Products in Canada, and Current Practice Analysis with the Optimal Therapy Recommendations for the Prescribing and Use of Insulin Analogues.
- Key messages were developed based on the gaps and recommendations.
- COMPUS intervention tools will encourage the evidence-based optimal prescribing and use of insulin analogues.

Key Messages

**Bolus insulin therapy:**
- In patients with type 1 diabetes, either regular human insulin or rapid-acting insulin analogues can be considered as first-line therapy (except in adolescent patients).
- In adolescent patients with type 1 diabetes, rapid-acting insulin analogues may be considered as first-line therapy.
- In patients with type 2 diabetes requiring bolus insulin, regular human insulin may be considered first. Although the evidence is limited and inconsistent, patients who are experiencing significant hypoglycemia while taking human insulin may benefit from rapid-acting insulin analogues.

**Basal insulin therapy:**
- In patients with type 1 or type 2 diabetes requiring basal insulin, insulin NPH should be considered first. Although the evidence is limited and inconsistent, patients who are experiencing significant hypoglycemia while taking insulin NPH may benefit from long-acting insulin analogues.

This summary is based on the CADTH Optimal Therapy Reports on Insulin Analogues.

**For complete Optimal Therapy Reports and Intervention Tools:** [www.cadth.ca](http://www.cadth.ca)