

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

# Management of Diabetes in Long-Term Care Facilities: Guidelines

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## Research Question

1. What are the evidence-based guidelines for the management of patients with diabetes in long-term care facilities?

## Key Findings

One evidence-based guideline was identified regarding the management of patients with diabetes in long-term care facilities.

## Methods

A limited literature search was conducted on key resources including PubMed, CINAHL, the Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. A methodological filter was applied to limit retrieval to guidelines. The search was limited to English language documents published between Jan 01, 2013 and Jun 19, 2018. Internet links were provided, where available.

## Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

**Table 1: Selection Criteria**

|                      |   |
|----------------------|---|
| <b>Population</b>    | Patients with diabetes in long-term care facilities   |
| <b>Intervention</b>  | Insulin therapy   |
| <b>Comparator</b>    | No comparator   |
| <b>Outcomes</b>      | Evidence-based guidelines (frequency of blood glucose monitoring, therapy targets, medication regime, etc.) |
| <b>Study Designs</b> | Evidence-based guidelines   |

## Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Normally, health technology assessment reports, systematic reviews, and meta-analyses are presented first; however in reports where guidelines are primarily sought, the aforementioned evidence types are presented in the appendix.

One evidence-based guideline was identified regarding the management of patients with diabetes in long-term care facilities. Additional references of potential interest are provided in the appendix.

## Overall Summary of Findings

One evidence-based guideline was identified regarding the management of patients with diabetes in long-term care facilities.<sup>1</sup> The Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada provided various recommendations regarding insulin therapy for the management of diabetes in older people. Key recommendations for older adults with diabetes include:

- For those with multiple comorbidities and/or frailty, hypoglycemia should be strictly prevented, e.g., via the choice of antihyperglycemic therapy and less stringent glycated hemoglobin (A1C) target;
- A higher A1C target of 7.1 to 8.0% may be considered for functionally dependent older adults taking antihyperglycemic agent(s) with risk of hypoglycemia;
- A higher A1C target of 7.1 to 8.5% may be considered for older adults with frailty and/or dementia taking antihyperglycemic agent(s) with risk of hypoglycemia;
- A1C measurement is not recommended for end of life care. Symptomatic hyperglycemia and any hypoglycemia should be avoided;
- Use of reactive and supplemental insulin protocols should be avoided in elderly Long Term Care residents to prevent deteriorating glycemic control.

## References Summarized

### Guidelines and Recommendations

1. Meneilly GS, Knip A, Miller DB, et al. Diabetes Canada 2018 clinical practice guidelines for the prevention and management of diabetes in Canada: Diabetes in older people. *Can J Diabetes* [Internet] 2018 [cited 2018 Jun 28];42(Suppl 1):S283–95. <http://guidelines.diabetes.ca/Browse/Chapter37>

## Appendix — Further Information

### Previous CADTH Reports

2. Management of diabetes in the long-term care population: A review of guidelines (CADTH rapid response report: summary with critical appraisal) [Internet]. Ottawa (ON): CADTH; 2013 [cited 2018 Jun 28]. Available from: <https://www.cadth.ca/management-diabetes-long-term-care-population>

### Guidelines – Systematic Methods Not Described

3. Guidelines & Protocols Advisory Committee. Diabetes care [Internet]. Victoria (BC): BC Guidelines.ca; 2015 [cited 2018 Jun 28]. Available from: [https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/diabetes\\_care\\_full\\_guideline.pdf](https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/diabetes_care_full_guideline.pdf)
4. Long Term Care Working Group of Health Care Professionals Working in the Central Local Health Integration Network (Ontario). Individualizing diabetes care for long term care residents: A guidebook - Practical information for diabetes management in long term care settings [Internet]. 2013 [cited 2018 Jun 28]. Available from: [http://www.centralhealthline.ca/healthlibrary\\_docs/Individualizing\\_Diabetes\\_Care\\_LTC.pdf](http://www.centralhealthline.ca/healthlibrary_docs/Individualizing_Diabetes_Care_LTC.pdf)
5. Clinical practice guidelines for residents with diabetes in long term care [Internet]. Edmonton (AB): Alberta Health Services; 2013 [cited 2018 Jun 28]. Available from: [http://extcontent.covenanthealth.ca/Policy/CC\\_RCM\\_ii-c-1\\_2013\\_Revised\\_Diabetes\\_Standard.pdf](http://extcontent.covenanthealth.ca/Policy/CC_RCM_ii-c-1_2013_Revised_Diabetes_Standard.pdf)
6. Mallery LH, Ransom T, Steeves B, Cook B, Dunbar P, Moorhouse P. Evidence-informed guidelines for treating frail older adults with type 2 diabetes: from the diabetes care program of Nova Scotia (DCPNS) and the palliative and therapeutic harmonization (path) program. J Am Med Dir Assoc [Internet]. 2013 [cited 2018 Jun 28];14(11):801-808.  
[PubMed: PM 24074961](#)

### Additional References

#### *Position Statements*

7. Wong CW, Lee JS, Tam KF, Hung HF, So WY, Shum CK, et al. Diabetes in older people: position statement of the Hong Kong geriatrics society and the Hong Kong society of endocrinology, metabolism and reproduction. Hong Kong Med J. 2017 Oct;23(5):524-33.  
[PubMed: PM29026049](#)
8. Munshi MN, Florez H, Huang ES, Kalyani RR, Mupanomunda M, Pandya N, et al. Management of diabetes in long-term care and skilled nursing facilities: A position statement of the American diabetes association. Diabetes Care. 2016 Feb;39(2):308-18.  
[PubMed: PM26798150](#)

9. American Diabetes Association. (13) Diabetes care in the hospital, nursing home, and skilled nursing facility. *Diabetes Care*. 2015 Jan;38 Suppl:S80-5.  
[PubMed: PM25537715](#)

*Formulary*

10. Diabetes targets in long term care (expectations and outcomes) [Internet]. Calgary (AB): Alberta Health Services; 2013 [cited 2018 Jun 28]. Available from:  
<https://www.albertahealthservices.ca/Assets/info/hp/ltc/if-hp-ltc-e-09-diabetes-targets.pdf>