

Appendix Table 1

## Outcomes

Measure	Data Source(s)	Codes/Definitions
1 Had at least one hospitalization or emergency department (ED) visit for <b>hyper- or hypoglycemia</b> , 2006/07–2010/11	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> <li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li> <li>National Ambulatory Care Reporting System (NACRS)</li> </ul>	<ol style="list-style-type: none"> <li>Hospitalization for hyper- or hypoglycemia based on CIHI-DAD records with any of the following ICD-10 codes: E100, E101, E110, E111, E130, E131, E140, E141 (hyperglycemia with coma or acidosis); E15, E160, E161, E162, E1063, E1163, E1363, E1463 (hypoglycemia). Hospitalizations listing the above diagnostic codes were included regardless of whether or not these were specified as being the ‘most responsible diagnosis,’ as long as the diagnosis was present at the time of admission and not a complication arising during the hospital stay (dxtype = ‘M’ or ‘1’). Suspected cases were also included.</li> <li>ED visits based on NACRS records with any of the following ICD-10 codes listed as the main reason for coming to the ED (dxtype = ‘Main’): E100, E101, E110, E111, E130, E131, E140, E141 (hyperglycemia with coma or acidosis); E15, E160, E161, E162, E1063, E1163, E1363, E1463 (hypoglycemia); R73802, R73812 (blood glucose &gt; 14 mmol/L). Cases of varying severity (any CTAS level) and suspected cases were also included.</li> </ol>
2 Had at least one hospitalization or emergency department (ED) visit for <b>skin and soft tissue infection or foot ulcer</b> , 2006/07–2010/11	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> <li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li> <li>National Ambulatory Care Reporting System (NACRS)</li> </ul>	<ol style="list-style-type: none"> <li>Hospitalization for skin and soft tissue infection or foot ulcer, based on CIHI-DAD records where any of the following ICD-10 codes were listed as the most responsible diagnosis (dxtype = ‘M’): L00–L05, L08, M725, M726, A480, E1051, E1151, E1351, E1451, R02, E1061, E1161, E1361, E1461, E1070, E1071, E1171, E1371, E1471. Suspected cases were also included.</li> <li>ED visits based on NACRS records where any of the following ICD-10 codes were listed as the ‘main’ reason for coming to the ED (dxtype = ‘Main’): L00–L05, L08, M725, M726, A480, E1051, E1151, E1351, E1451, R02, E1061, E1161, E1361, E1461, E1070, E1071, E1171, E1371, E1471. Cases of varying severity (any CTAS level) and suspected cases were also included.</li> </ol>
3 Had at least one hospitalization or emergency department (ED) visit for <b>any acute</b>	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> <li>Canadian Institute of Health Information</li> </ul>	<ol style="list-style-type: none"> <li>Hospitalization for hyper- or hypoglycemia, skin and soft tissue infection, or foot ulcer, based on CIHI-DAD records with any of the following ICD-10 codes: E100, E101, E110, E111, E130, E131, E140, E141 (hyperglycemia with coma or acidosis); E15, E160, E161, E162, E1063, E1163, E1363, E1463 (hypoglycemia); L00–L05, L08, M725, M726, A480, E1051, E1151, E1351, E1451, R02, E1061, E1161, E1361, E1461, E1070, E1071, E1171, E1371, E1471 (skin or soft tissue infection or foot ulcer);</li> </ol>

	<p><b>complication</b> (hyper- or hypoglycemia, skin and soft tissue infection, or foot ulcer), 2006/07–2010/11</p>	<p>Discharge Abstract Database (CIHI-DAD)</p> <ul style="list-style-type: none"> <li>National Ambulatory Care Reporting System (NACRS)</li> </ul>	<p>specified as being the ‘most responsible diagnosis’ (dxtype = ‘M’) or, for hyper- or hypoglycaemia, as being a preadmission comorbidity (dxtype = ‘1’). For all outcomes, suspected cases were also included.</p> <p>2. ED visits for hyper- or hypoglycemia, skin and soft tissue infection, or foot ulcer, based on NACRS records with any of the following ICD-10 codes listed as the ‘main’ reason for coming to the ED (dxtype = ‘Main’): E100, E101, E110, E111, E130, E131, E140, E141 (hyperglycemia with coma or acidosis); E15, E160, E161, E162, E1063, E1163, E1363, E1463 (hypoglycemia); R73802, R73812 (blood glucose &gt; 14 mmol/L); L00–L05, L08, M725, M726, A480, E1051, E1151, E1351, E1451, R02, E1061, E1161, E1361, E1461, E1070, E1071, E1171, E1371, E1471 (skin and soft tissue infection or foot ulcer). Cases of varying severity (any CTAS level) and suspected cases were also included.</p>
4	<p>Had at least one hospitalization for a <b>cardiovascular condition</b>, 2006/07–2010/11</p>	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> <li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li> </ul>	<p>1. Hospitalization for acute myocardial infarction (AMI): based on CIHI-DAD records with most responsible diagnosis of AMI (ICD-10 codes I21 and I22, dxtype = ‘Main’); or</p> <p>2. Hospitalization for stroke: based on CIHI-DAD records with the most responsible diagnosis of stroke (ICD code = I61, I63, I64, dxtype = ‘Main’); or</p> <p>3. Hospitalization for congestive heart failure (CHF): based on CIHI-DAD records with most responsible diagnosis of CHF (ICD-10 code I50; dxtype = ‘Main’); or</p> <p>4. Hospitalization for unstable angina (UA): based on CIHI-DAD records with most responsible diagnosis of UA (ICD-10 code I20; dxtype = ‘Main’); or</p> <p>5. Hospitalization for transient ischemic attack (TIA) based on CIHI-DAD records with most responsible diagnosis of TIA (ICD-10 codes G450, G453, G458, G459; dxtype = ‘Main’).</p>
5	<p>Had at least one hospitalization for a <b>lower extremity amputation</b>, 2006/07–2010/11</p>	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> <li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li> </ul>	<p>Hospitalization with any of the following Canadian Classification of Interventions (CCI) procedure codes in CIHI-DAD: 1VC93, 1VG93, 1VQ93, 1WA93, 1WE93, 1WI93, 1WJ93, 1WK93, 1WL93, 1WM93, 1WN93. These procedure codes were not included if they occurred in the setting of cancer or major trauma (identified by the following ICD-10 diagnostic codes if present on the same admission: C40.2, C40.3, C46.1, C47.2, C49.2, D16.2, D16.3, D21.2, S72–S79, S82–S89, S97, S98, T02.3, T02.5–T02.9, T03.3–T03.9, T04.3–T04.9, T05.3–T05.9, T07, T13.2–T13.9, T14.2–T14.9).</p>
6	<p>Had received <b>chronic dialysis or kidney transplantation</b>, 2006/07–2010/11</p>	<ul style="list-style-type: none"> <li>Ontario Diabetes Database (ODD)</li> </ul>	<p>1. Chronic dialysis – any of the following:</p> <ol style="list-style-type: none"> <li>Chronic dialysis record in CORR; or</li> <li>Chronic dialysis, defined as dialysis for a minimum duration of 90 days, based on OHIP claims with any of the following fee codes: R849, G323, G326, G330, G331, G332, G333, G860, G861</li> </ol>

	<ul style="list-style-type: none"><li>Ontario Health Insurance Plan (OHIP) Database</li><li>Canadian Organ Replacement Register (CORR) Database</li><li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li><li>Trillium Gift of Life Network (TGLN) Database</li></ul>	<p>G862, G863, G864, G865, G866. Duration = last date [minus] first date [minus] any gaps &gt; 21 days.</p> <p>2. Kidney transplantation – any of the following:</p> <ul style="list-style-type: none"><li>a) Record in TGLN database;</li><li>b) OHIP claim including fee code for kidney transplantation: E769, E771, S434 or S435; or</li><li>c) Procedure codes from CIHI-DAD: Canadian Classification of Procedures (CCP) code V42.0 (prior to April 1, 2002) or Canadian Classification of Interventions (CCI) code Z940 (from April 1, 2002 onwards).</li></ul>
7 Had at least one <b>chronic complication</b> (hospitalization for a cardiovascular condition, lower extremity amputation or end-stage renal disease), 2006/07–2010/11	<ul style="list-style-type: none"><li>Ontario Diabetes Database (ODD)</li><li>Ontario Health Insurance Plan (OHIP) Database</li><li>Canadian Organ Replacement Register (CORR) Database</li><li>Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)</li></ul>	<ul style="list-style-type: none"><li>1. Hospitalization for a cardiovascular condition;</li><li>2. Lower extremity amputation; or</li><li>3. End-stage renal disease, defined as chronic dialysis or kidney transplantation, using the same definitions as in measures 6, 7 and 8 listed above</li></ul>

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- Trillium Gift of Life Network (TGLN) Database

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\*Death records were used to verify that all individuals captured in the Registered Persons Database were alive on the index date before including them in the population denominators. LHIN = Local Health Integration Network

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