

Transition Probabilities for 10-year and Lifetime Models; values listed at age 45 (mean age at first cycle Markov model)

	Risk per annum, value assigned at age 45*	Plausible range	Variables used in determination	Source	Distribution
Mortality with no comorbidity					
<i>Surgical</i>	0.00137	0.00130-0.00190	Age, sex	¹⁻³	Lognormal
<i>Medical</i>	0.00191	0.00137-0.00455	Age, sex	¹⁻³	Lognormal
<i>Standard Care</i>	0.00274	0.00137-0.0980	Age, sex	¹⁻³	Lognormal
Mortality with Diabetes					
<i>Surgical</i>	0.00274	0.00274-0.00821	Age, sex	^{1,4,5}	Lognormal

<i>Medical</i>	0.00383	0.00274- 0.0138	Age, sex	1,4,5	Lognormal
<i>Standard Care</i>	0.00547	0.00274- 0.588	Age, sex	1,4,5	Lognormal
Mortality with Hypertension					
<i>Surgical</i>	0.00274	0.00274- 0.0038	Age, sex	1,6-8	Lognormal
<i>Medical</i>	0.00383	0.00274- 0.00460	Age, sex	1,6-8	Lognormal
<i>Standard Care</i>	0.00548	0.00274- 0.196	Age, sex	1,6-8	Lognormal
Mortality with Diabetes and Hypertension					
<i>Surgical</i>	0.00548	0.00548- 0.164	Age, sex	1,4,5,7,8	Lognormal
<i>Medical</i>	0.00767	0.00548- 0.0276	Age, sex	1,4,5,7,8	Lognormal
<i>Standard Care</i>	0.0110	0.00548- 1.18	Age, sex	1,4,5,7,8	Lognormal

Diabetes acquisition					
<i>Surgical</i>	0.0077	0.0073-0.077	Age	4,5,9,10	Beta
<i>Medical</i>	0.0111	0.0077-0.200	Age, BMI	4,5,9 10	Lognormal
<i>Standard Care</i>	0.0157	0.0077-0.200	Age, BMI	9 4,5,10	Lognormal
Diabetes Resolution					
<i>Surgical</i>	0.0162	0-0.0162	Age, sex	9,11	Lognormal
<i>Medical</i>	0	0-0.0162	-	9,11	-
<i>Standard Care</i>	0	0-0.0162	-	9,11	-
Hypertension acquisition					
<i>Surgical</i>	0.0245	0.0186-0.0245	Age, sex, blood pressure, smoking status, BMI	7,12,13 9,14	Beta
<i>Medical</i>	0.0808	0.023-0.85	Age, sex, blood pressure,	7,9,12-14	Beta

Appendix 2, as supplied by the authors. Appendix to: Lester ELW, Padwal RS, Birch DW, et al. The real world cost-effectiveness of bariatric surgery for the treatment of severe obesity: a cost-utility analysis. *CMAJ Open* 2021. DOI:10.9778/cmajo.20200188. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup@cmaj.ca.

			smoking status, BMI		
<i>Standard Care</i>	0.0917	0.023-0.85	Age, sex, blood pressure, smoking status, BMI	7,12-14	Weibull
Hypertension Resolution					
<i>Surgical</i>	4.813 $\times 10^{-5}$	0-4.813 $\times 10^{-5}$	Age, sex	9,11	Logistic
<i>Medical</i>	0	0-4.813 $\times 10^{-5}$	-	9,11	-
<i>Standard Care</i>	0	0-4.813 $\times 10^{-5}$	-	9,11	-

* Rates are determined by evidence found in the literature and informed by the primary APPLES data. For instance, mortality tables from Statistics Canada were employed to determine mortality rates, adjusting for the sex, BMI and comorbidity states as determined from the APPLES data. Using the same tables, the rate of mortality increased with increasing age.

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