THE LANCET Diabetes & Endocrinology

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Tomic D, Morton JI, Chen L, et al. Lifetime risk, life expectancy, and years of life lost to type 2 diabetes in 23 high-income jurisdictions: a multinational, population-based study. *Lancet Diabetes Endocrinol* 2022; published online Sept 29. https://doi.org/10.1016/S2213-8587(22)00252-2.

Lifetime risk, life expectancy, and years of life lost to type 2 diabetes in 23 high-income jurisdictions: a multinational, population-based study: Supplementary material

Supplementary text 1: Search strategy of the systematic review used to identify data sources	2
Supplementary table 1: Summary characteristics of the data from the 23 jurisdictions	3
Supplementary table 2: Diabetes definitions by data source	4
Supplementary table 3: Incident diabetes cases and death counts for those with and without diabetes in the datasets of 23 jurisdictions	5
Supplementary table 4: Life expectancy of people with and without diabetes at age 40 years by jurisdiction, sex, and time-point	6
Supplementary table 5: Life expectancy of people with and without diabetes at age 60 years by jurisdiction, sex, and time-point	7
Supplementary table 6: Expected lifetime risk of developing type 2 diabetes from age 20 years to age 80 years by jurisdiction, sex, and time-point	8
Supplementary table 7: Sensitivity analysis of varying incidence and mortality rates in Israel Maccabi Health Services 2009-10, example of high lifetime risk	9
Supplementary table 8: Sensitivity analysis of varying incidence and mortality rates in Hungary 2018-19, example of mid-range lifetime risk	9
Supplementary table 9: Sensitivity analysis of varying incidence and mortality rates in Lithuania 2013-14, example of low lifetime risk	10
Supplementary table 10: Sensitivity analysis of varying relative risks of mortality in those with and without type 2 diabetes, United Kingdom males 2007-08	10
Supplementary table 11: Years of life lost to diabetes at age 20 years across the 23 jurisdictions	11
Supplementary table 12: Years of life lost to diabetes at age 40 years across the 23 jurisdictions	12
Supplementary table 13: Years of life lost to diabetes at age 60 years across the 23 jurisdictions	13
Supplementary figure 1: Change in life expectancy of males with and without diabetes across time-points by jurisdiction	14
Supplementary figure 2: Change in life expectancy of females with and without diabetes across time-points by jurisdiction	14
Supplementary figure 3: Years of life lost to diabetes at age 40 years by jurisdiction, males	15
Supplementary figure 4: Years of life lost to diabetes at age 40 years by jurisdiction, females	15
Supplementary figure 5: Years of life lost to diabetes at age 60 years by jurisdiction, males	16
Supplementary figure 6: Years of life lost to diabetes at age 60 years by jurisdiction, females	16

Supplementary text 1: Search strategy of the systematic review used to identify data sources

Database: Ovid MEDLINE® 1946 to Present with Daily Update

Search Strategy: 1980-2017

- 1 Diabetes Mellitus, Type 2/ep [Epidemiology]
- 2 Diabetes Mellitus/ep [Epidemiology]
- 3 Glucose Intolerance/ep [Epidemiology]
- 4 Diabetes Mellitus, Type 2/ or Diabetes Mellitus/
- 5 "inciden*".m titl.
- 6 Incidence/
- 7 5 or 6
- 8 Follow-up studies/
- 9 Cohort studies/
- 10 Prospective studies/
- 11 Longitudinal studies/
- 12 1 or 2 or 3 or 4
- 13 8 or 9 or 10 or 11
- 14 7 and 12
- 15 12 and 13
- 16 14 or 15
- Pragmatic Clinical Trial/ or Clinical Trial, Phase III/ or Randomized Controlled Trial/ or Trial.mp. or Clinical Trial, Phase II/ or "Trial of Labor"/ or Clinical Trial, Phase I/ or Clinical Trial, Phase IV/ or Clinical Trial/ or Controlled Clinical Trial.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
- 18 16 not 17
- 19 animals/
- 20 18 not 19
- 21 Letter/
- 22 20 not 21
- 23 limit 22 to yr="1980 end of 2017"

Supplementary table 1: Summary characteristics of the data from the 23 jurisdictions

Country	Origin of data	Type of data	Years included in analysis	Diabetes definition	Diabetes type	Diabetes type classification
Australia	National Diabetes Service Scheme	Registry	2013-14 and 2018-19	Clinical diagnosis	Type 2 diabetes	Algorithm
Austria	Austrian Social Insurance	Health insurance	2016-17	Anti-diabetes medications	All diabetes	
Canada*	Canadian Chronic Disease Surveillance System	Administrative	2011-12 and 2016-17	Algorithm	All diabetes	
Denmark	National Patient Register, prescription database, health insurance database, diabetes quality database, and eye screening database	Registry	2013-14 and 2018-19	Algorithm	Type 2 diabetes	Algorithm
Finland	FinDM (Diabetes in Finland) research database	Registry	2011-12 and 2016-17	Algorithm	Type 2 diabetes	Algorithm
France	National Health Data System	Administrative	2016-17	Anti-diabetes medications	All diabetes	
Germany	Statutory Health Insurance claims data	Health insurance	2013-14	Clinical diagnosis (ICD-10)	Type 2 diabetes	ICD codes
Hong Kong	Hong Kong Hospital Authority	Administrative	2013-14 and 2018-19	Algorithm	All diabetes	
Hungary	National Institute of Health Insurance Fund Management database	Administrative	2018-19	Anti-diabetes medications and clinical diagnosis (ICD-10)	Type 2 diabetes	Medication
Israel*	Clalit Health Services	Health insurance	2010-11 and 2015-16	Algorithm	All diabetes	
Israel*	Maccabi Healthcare Services	Health insurance	2009-10 and 2014-15	Algorithm	Type 2 diabetes	Algorithm
Italy*	Administrative health databases	Administrative	2013-14 and 2018-19	Algorithm	All diabetes	
Japan	National Database of Health Insurance Claims and Specific Health Checkups of Japan	Health insurance	2017-18	Anti-diabetes medications	Type 2 diabetes	ICD codes
Latvia	Latvian Diabetes Registry	Registry	2010-11 and 2015-16	Clinical diagnosis (ICD-10)	Type 2 diabetes	ICD codes
Lithuania	National Compulsory Health Insurance Fund Information System	Administrative	2013-14 and 2018-19	Clinical diagnosis (ICD-10)	All diabetes	
Netherlands	NIVEL Primary Care Database	Administrative	2015-16	Clinical diagnosis (ICPC-1)	All diabetes	
Norway	Norwegian Patient Registry, Primary Care Database and Norwegian Prescription Database	Administrative	2013-14	Clinical diagnosis (ICD-10, ICPC-2)	Type 2 diabetes	Algorithm
Scotland	SCI-Diabetes database	Registry	2013-14 and 2018-19	Clinical diagnosis (Read codes)	Type 2 diabetes	Clinical diagnosis
Singapore	National administrative data (Ministry of Health of Singapore)	Administrative	2015-16	Clinical diagnosis (ICD-10)	All diabetes	
South Korea	National Health Insurance Service – National Sample Cohort	Health insurance	2009-10 and 2014-15	Anti-diabetes medications	All diabetes	
Spain*	Information System for the Development of Research in Primary Care	Administrative	2010-11 and 2015-16	Clinical diagnosis (ICD-10)	Type 2 diabetes	ICD codes
Taiwan	National Health Insurance Research Database (LHID 2000)	Health insurance	2005-06 and 2010-11	Algorithm	Type 2 diabetes	Algorithm
United Kingdom	THIN database	Administrative	2007-08 and 2012-13	Clinical diagnosis (physician)	Type 2 diabetes	Algorithm
United States^	NHIS	Survey	2009-10 and 2014-15	Self-report	All diabetes	

ICD-10 = International Classification of Diseases, version 10; ICPC-1 = International Classification of Primary Care, first version; ICPC-2 = International Classification of Primary Care, second version; NIVEL = Netherlands Institute for Health Services Research; NHIS = National Health Interview Survey; SCI = Scottish Care Information; THIN = The Health Improvement Network. *This Canadian data source excluded data from Yukon Territory and Saskatchewan and provided data by fiscal year rather than calendar year. The Italian data source only included the Lombardy region while the Spanish source only included the Catalonia region. Israeli data sources were also not country-wide coverage. *For United States data, unweighted data were used for incidence while weighted data were used for mortality. United States NHIS data are publicly available.

Supplementary table 2: Diabetes definitions by data source

Country, region	Diabetes diagnostic method	Type 1 and type 2 diabetes separated	Gestational diabetes excluded
Australia	Clinical diagnosis certified by a doctor, nurse or credentialed diabetes educator.	Yes	Yes
Austria	Defined by use of anti-diabetic medications.	No	No
Canada	Algorithm incorporating ≥ 1 hospitalisations or ≥ 2 physician claims with evidence of diabetes within 2 years.	No	Yes
Denmark	Algorithm incorporating clinical diagnosis (ICD codes) from the hospitalisations or outpatient clinics, prescription of anti-diabetic medications, clinical and billing records.	Yes	Yes
Finland	Algorithm incorporating clinical diagnosis (ICD codes) from the Care Register for Health Care, Register of Primary Health Care Visits, Medical Birth Register and Causes of Death Statistics and prescription of anti-diabetic medications.	Yes	Yes
France	Defined by use of anti-diabetic medications.	No	No
Germany	Clinical diagnosis using ICD-10 codes.	Yes	Yes
Hong Kong	Algorithm incorporating use of diagnostic or procedure codes (ICD-9) for all hospital admissions, diagnostic codes based on ICPC-2 WONCA (for general outpatient clinics), prescription of anti-diabetic medications and laboratory tests.	No	Yes
Hungary	Defined by use of anti-diabetic medications.	Yes ^a	Yes
Israel, Clalit	Algorithm incorporating annual diabetes diagnosis from hospital and community medical records, lab tests and prescription of anti-diabetic medications.	Noª	Yes
Israel, Maccabi	Algorithm incorporating blood tests, prescription of anti-diabetic medications and clinical diagnosis by clinical practitioners.	Yes	Yes
Italy, Lombardy	Algorithm incorporating certified diagnosis from disease-specific registry, prescription of anti-diabetic medication according to ATC code A10, diagnosis-related group code of hospitalisation for diabetes.	No	No
Japan	Defined by use of anti-diabetic medications.	Yes	Yes
Latvia	Clinical diagnosis using ICD-10 codes.	Yes	Yes
Lithuania	Clinical diagnosis using ICD-10 codes.	No	Yes
Netherlands	Clinical diagnosis by ICPC codes.	No	No
Norway	Clinical diagnosis using ICD-10 and ICPC-2 codes.	Yesa	No
Scotland	Clinical diagnosis using the Read coding system.	Yes	No
Singapore	Clinical diagnosis using ICD-10 codes.	No	No
South Korea	Defined by use of anti-diabetic medications.	No	No
Spain	Clinical diagnosis using ICD-10 codes.	Yes	Yes
Taiwan	Algorithm incorporating a hospital discharge code of diabetes, ≥ 2 diagnosis codes of diabetes from the outpatient clinics within one year, and prescription of anti-diabetic medications.	Yes ^a	Yes ^b
UK	Clinical diagnosis using the Read coding system.	Yes	Yes
US, NHIS	Self-report from a series of cross-sectional studies.	No	Yes

^aType 2 diabetes only. ^bPrior gestational diabetes that later was diagnosed with type 2 diabetes was not excluded.

Supplementary table 3: Incident type 2 diabetes cases and death counts for those with and without type 2 diabetes in the datasets of 23 jurisdictions

Country	Number of years included	Person-years included	Incident type 2 diabetes cases	Deaths in those with type 2	Deaths in those without type 2	Total deaths
		(1000s)		diabetes	diabetes	
Australia	4	58,141	191,170	97,417	387,770	485,187
Austria	2	6,864	56,041	19,530	137,673	157,203
Canada	4	104,411	791,290	353,580	679,220	1,032,800
Denmark	4	18,693	75,386	41,790	167,864	209,654
Finland	4	16,811	109,655	54,674	150,426	205,100
France*	2	101,719	487,204	••		
Germany*	2	102,277	1,056,051			
Hong Kong	4	24,531	194,172	73,442	110,470	183,912
Hungary	2	15,728	105,404	74,355	185,043	259,398
Israel (Clalit)	4	12,209	98,940	56,868	56,025	112,893
Israel (Maccabi)	4	5,045	32,790	8,865	14,911	23,776
Italy	4	17,962	99,840	45,784	158,235	204,019
Japan	2	185,935	1,407,156	444,302	1,580,202	2,024,504
Latvia	4	6,469	27,051	12,365	106,184	118,549
Lithuania	4	9,152	38,445	22,836	135,728	158,564
Netherlands*	2	2,282	11,589			
Norway	2	7,800	28,286	14,248	67,942	82,190
Scotland	4	16,950	64,169	40,791	183,313	224,104
Singapore	2	6,196	53,417	16,163	20,971	37,134
South Korea	4	3,197	20,069	5,270	15,823	21,093
Spain	4	18,119	94,487	50,313	132,300	182,613
Taiwan	4	3,139	22,121	7,487	12,133	19,620
United Kingdom*	4	25,044	53,626	••		
United States	4	899,024	1,226	2,566,984	7,551,810	10,118,794

^{*}Deaths in those with and without type 2 diabetes were not provided by some jurisdictions so death rates were estimated using Human Mortality Database data. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 4: Life expectancy of people with and without type 2 diabetes at age 40 years by jurisdiction, sex, and time-point

	Males	Females		
	Life expectancy for	Life expectancy for	Life expectancy for	Life expectancy for
	those with type 2	those without type 2	those with type 2	those without type 2
	diabetes (years)	diabetes (years)	diabetes (years)	diabetes (years)
First time-point	T	1	1	1
Australia (2013-14)	38.3 (38.1 – 38.5)	42.4 (42.3 – 42.4)	41.6 (41.4 – 41.8)	45·3 (45·3 – 45·4)
Canada (2011-12)	37.6 (37.4 – 37.7)	43.2 (43.1 – 43.2)	40.5 (40.3 – 40.6)	46.2 (46.1 – 46.2)
Denmark (2013-14)	34.0 (33.7 – 34.4)	40.9 (40.8 – 41.0)	38.0 (37.6 – 38.3)	43.8 (43.7 – 43.9)
Finland (2011-12)	35.5 (35.2 – 35.9)	39.6 (39.5 – 39.7)	41.5 (41.2 – 41.8)	44.5 (44.4 – 44.6)
France (2016-17)	35.8 (35.8 – 35.8)	40.2 (40.2 - 40.2)	41.5 (41.5 – 41.5)	45.6 (45.6 – 45.6)
Germany (2013-14)	33.9 (33.9 – 33.9)	40.2 (40.2 – 40.2)	37.9 (37.9 – 37.9)	44.3 (44.3 – 44.3)
Hong Kong	36.7 (36.4 – 36.9)	42.8 (42.7 – 43.0)	42.9 (42.7 – 43.2)	47.8 (47.7 – 47.9)
(2013-14) Hungary (2018-19)	29.6 (29.4 – 29.8)	34.9 (34.8 – 35.0)	35.7 (35.6 – 35.9)	40.8 (40.7 – 40.9)
Israel (Clalit)	34.1 (33.8 – 34.4)	45.7 (45.6 – 45.9)	37.7 (37.4 – 38.0)	48.4 (48.2 – 48.5)
(2010-11)	34.1 (33.9 – 34.4)	43.7 (43.0 – 43.9)	377 (374 - 380)	48.4 (48.2 – 48.3)
Israel (Maccabi)	38.9 (38.2 – 39.5)	44.9 (44.5 – 45.2)	41.4 (40.7 – 42.0)	47.7 (47.3 – 48.0)
(2009-10)		1.17(11.5 45.2)	11 1(10 / 12 0)	., , (1, 3, 40 0)
Italy (2013-14)	37.0 (36.6 – 37.3)	43·1 (43·0 – 43·2)	41.5 (41.1 – 41.8)	47.0 (46.9 – 47.1)
Japan (2017-18)	40.1 (40.0 – 40.1)	45.4 (45.4 – 45.4)	44.6 (44.5 – 44.6)	49.8 (49.8 – 49.8)
Latvia (2010-11)	28·3 (27·5 – 29·1)	31·3 (31·1 – 31·5)	35·3 (34·7 – 35·9)	40.0 (39.8 – 40.2)
Lithuania (2013-14)	27.5 (26.8 – 28.0)	32·1 (31·9 – 32·2)	35.9 (35.4 – 36.4)	41.4 (41.2 – 41.5)
Netherlands	$37 \cdot 2 (37 \cdot 2 - 37 \cdot 2)$	41.2 (41.2 – 41.2)	37.5(37.5 - 37.5)	45·1 (45·1 – 45·1)
(2015-16)	,			,
Norway (2013-14)	36.6 (36.2 – 37.0)	41.0 (40.9 – 41.1)	40.6 (40.2 – 41.0)	44.2 (44.0 – 44.3)
Scotland (2009-10)	34.8 (34.4 – 35.1)	38.2 (38.1 – 38.3)	36.9 (36.5 – 37.4)	41.7 (41.6 – 41.8)
Singapore (2015-16)	36.7 (36.3 – 37.1)	43.6 (43.3 – 43.8)	41.2 (40.9 – 41.6)	47.6 (47.4 – 47.8)
South Korea (2009-10)	33.6 (32.6 – 34.5)	39·7 (39·3 – 40·1)	40.6 (39.6 – 41.6)	45·3 (44·9 – 45·6)
Spain (2010-11)	38.8 (38.5 – 39.1)	42.7 (42.6 – 42.8)	44.1 (43.8 – 44.4)	47.5 (47.4 – 47.7)
Taiwan (2005-06)	32.7 (31.8 – 33.6)	42.8 (42.5 – 43.2)	39.2 (38.3 – 40.0)	47.9 (47.4 – 48.3)
United Kingdom (2007- 08)	33·2 (33·2 – 33·2)	39.9 (39.9 – 39.9)	37·3 (37·3 – 37·3)	43.0 (43.0 – 43.0)
United States (2009-10)	34.4 (34.4 – 34.5)	42.2 (42.2 – 42.3)	38.6 (38.5 – 38.6)	45.6 (45.6 – 45.6)
Second time-point	1			
Australia (2018-19)	39.0 (38.8 – 39.2)	43.1 (43.0 – 43.2)	42.1 (41.9 – 42.3)	46.0 (45.9 – 46.1)
Canada (2016-17)	38·3 (38·2 – 38·4)	43.5 (43.5 – 43.6)	41.0 (40.9 – 41.1)	46.4 (46.3 – 46.4)
Denmark (2018-19)	35·1 (34·8 – 35·4)	42.0 (41.9 – 42.1)	39.0 (38.7 – 39.4)	44.6 (44.5 – 44.7)
Finland (2016-17)	36.7 (36.4 – 37.0)	40.7 (40.6 – 40.9)	42.0 (41.7 – 42.2)	45.2 (45.0 – 45.3)
Hong Kong (2018-19)	37·3 (37·1 – 37·6)	44·1 (44·0 – 44·3)	43.5 (43.3 – 43.7)	48.9 (48.8 – 49.0)
Israel (Clalit) (2015-16)	34.8 (34.5 – 35.1)	46.8 (46.6 – 47.0)	38·4 (38·1 – 38·7)	49·1 (49·0 – 49·3)
Israel (Maccabi) (2014-15)	39.4 (38.9 – 40.0)	46.0 (45.6 – 46.3)	42·2 (41·6 – 42·8)	48·3 (48·0 – 48·6)
Italy (2018-19)	37.9 (37.5 – 38.2)	44.1 (43.9 – 44.2)	42.3 (42.0 – 42.7)	47·3 (47·2 – 47·4)
Latvia (2015-16)	30.6 (29.8 – 31.3)	32.6 (32.4 – 32.7)	37.5 (36.9 – 38.0)	40.9 (40.7 – 41.1)
Lithuania (2018-19)	29.0 (28.5 – 29.6)	33.8 (33.7 – 34.0)	37.7 (37.2 – 38.1)	42·3 (42·2 – 42·4)
Scotland (2014-15)	35.7 (35.3 – 36.0)	39·1 (39·0 – 39·2)	37.4 (37.0 – 37.7)	42·3 (42·2 – 42·4)
South Korea (2014-15)	35.6 (34.8 – 36.4)	41.6 (41.2 – 41.9)	42.5 (41.7 – 43.3)	46.8 (46.4 – 47.1)
Spain (2015-16)	37·1 (36·8 – 37·4)	40.4 (40.3 – 40.6)	42.7 (42.4 – 42.9)	45.4 (45.3 – 45.5)
Taiwan (2010-11)	35.0 (34.2 – 35.8)	44.9 (44.5 – 45.3)	41.4 (40.7 – 42.1)	49.4 (49.0 – 49.8)
United Kingdom (2012-13)	35.0 (35.0 – 35.0)	41·1 (41·1 – 41·1)	38·7 (38·7 – 38·7)	43.9 (43.9 – 43.9)
United States (2014-15)	36.0 (35.9 – 36.0)	41.9 (41.9 – 41.9)	39.0 (39.0 – 39.1)	45.9 (45.9 – 45.9)

Life expectancy at age 40 is an estimate of the number of years of life remaining at age 40. Data in parentheses represent 2.5% and 97.5% confidence intervals. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 5: Life expectancy of people with and without type 2 diabetes at age 60 years by jurisdiction, sex, and time-point

	Males			
	Life expectancy for	Life expectancy for	Females Life expectancy for	Life expectancy for
	those with type 2	those without type 2	those with type 2	those without type 2
	diabetes (years)	diabetes (years)	diabetes (years)	diabetes (years)
First time-point	T	1	1	
Australia (2013-14)	21.0 (20.9 – 21.1)	24.2 (24.2 – 24.3)	23.4 (23.2 – 23.5)	26.4 (26.3 – 26.4)
Canada (2011-12)	20.7 (20.6 – 20.8)	24.9 (24.9 – 25.0)	22.9 (22.8 – 22.9)	27·2 (27·1 – 27·2)
Denmark (2013-14)	17.8 (17.6 – 18.0)	22.7 (22.6 – 22.8)	20.6 (20.4 – 20.9)	24.9 (24.8 – 24.9)
Finland (2011-12)	19.1 (18.9 – 19.3)	22.0 (21.9 – 22.1)	23.1 (22.9 – 23.3)	25.5 (25.4 – 25.6)
France (2016-17)	20.1 (20.1 – 20.1)	22.7 (22.7 – 22.7)	23.8 (23.8 – 23.8)	27·1 (27·1 – 27·1)
Germany (2013-14)	18.7 (18.7 – 18.7)	22·3 (22·3 – 22·3)	21.7 (21.7 – 21.7)	25.7 (25.7 – 25.7)
Hong Kong (2013-14)	20.6 (20.4 – 20.8)	24·3 (24·2 – 24·4)	24.8 (24.6 – 25.0)	28.6 (28.5 – 28.7)
Hungary (2018-19)	15.4 (15.3 – 15.5)	18.5 (18.4 – 18.5)	18.8 (18.7 – 18.9)	22.5 (22.5 – 22.6)
Israel (Clalit)	18.3 (18.1 – 18.4)	27.4 (27.3 – 27.6)	20.3 (20.1 – 20.5)	29.1 (29.0 – 29.3)
(2010-11)	16 3 (16 1 – 16 4)	214(213-210)	20 3 (20 1 - 20 3)	29 1 (29 0 - 29 3)
Israel (Maccabi)	21.3 (20.9 – 21.7)	26.4 (26.0 – 26.7)	23·1 (22·6 – 23·6)	28.5 (28.2 – 28.8)
(2009-10)	213 (20 > 21 /)	20 1 (20 0 20 7)	25 1 (22 0 25 0)	
Italy (2013-14)	20.5 (20.2 – 20.7)	24.5 (24.4 – 24.6)	23.5 (23.2 – 23.7)	27.7 (27.6 – 27.7)
Japan (2017-18)	22.8 (22.7 – 22.8)	26.4 (26.3 – 26.4)	26.3 (26.2 – 26.3)	30.2 (30.2 – 30.2)
Latvia (2010-11)	14.9 (14.5 – 15.3)	16.4 (16.3 – 16.5)	18.9 (18.6 – 19.3)	22·1 (22·0 – 22·3)
Lithuania (2013-14)	14.7 (14.4 – 15.0)	17.2 (17.1 – 17.3)	19.2 (18.9 – 19.5)	23·1 (23·0 – 23·2)
Netherlands	19.5 (19.5 – 19.5)	22.8 (22.8 – 22.8)	20.1 (20.1 – 20.1)	26.5 (26.5 – 26.5)
(2015-16)	, , , , , , , , , , , , , , , , , , ,	, , , ,	, , , , ,	, , , , ,
Norway (2013-14)	19.6 (19.4 – 19.8)	22.7(22.6 - 22.8)	$22\cdot 4(22\cdot 1 - 22\cdot 7)$	$25 \cdot 2 (25 \cdot 1 - 25 \cdot 3)$
Scotland (2009-10)	18.5 (18.2 - 18.7)	21.0 (20.9 – 21.0)	20.1 (19.9 – 20.4)	$23\cdot4(23\cdot3-23\cdot5)$
Singapore (2015-16)	21·1 (20·8 – 21·4)	25.0 (24.9 – 25.2)	23.8 (23.5 – 24.0)	28.5 (28.3 – 28.7)
South Korea (2009-10)	17.9 (17.3 – 18.5)	22.0 (21.7 – 22.3)	22.6 (21.9 – 23.3)	26·3 (26·0 – 26·6)
Spain (2010-11)	21.4 (21.2 – 21.6)	24.4 (24.3 – 24.6)	25·2 (24·9 – 25·4)	28·3 (28·2 – 28·4)
Taiwan (2005-06)	18.5 (18.0 – 19.0)	25·3 (25·0 – 25·6)	22·1 (21·5 – 22·6)	29·1 (28·7 – 29·4)
United Kingdom (2007- 08)	18·1 (18·1 – 18·1)	21.8 (21.8 – 21.8)	21·1 (21·1 – 21·1)	24·4 (24·4 – 24·4)
United States (2009-10)	20.0 (20.0 – 20.0)	24.6 (24.6 – 24.6)	22.5 (22.5 – 22.6)	$27 \cdot 2 (27 \cdot 2 - 27 \cdot 2)$
Second time-point				
Australia (2018-19)	21.6 (21.4 – 21.7)	24.9 (24.8 – 24.9)	23.8 (23.7 – 23.9)	26.9 (26.9 – 27.0)
Canada (2016-17)	21.2 (21.2 – 21.3)	25·2 (25·2 – 25·3)	23·2 (23·1 – 23·3)	27·3 (27·3 – 27·4)
Denmark (2018-19)	18.5 (18.3 – 18.7)	23.6 (23.5 – 23.7)	21·1 (20·9 – 21·3)	25.5 (25.4 – 25.6)
Finland (2016-17)	19.8 (19.7 – 20.0)	22.8 (22.7 – 22.9)	23.5 (23.3 – 23.7)	26.0 (25.9 – 26.1)
Hong Kong (2018-19)	21·3 (21·1 – 21·4)	25.5 (25.4 – 25.6)	25.4 (25.2 – 25.5)	29.6 (29.5 – 29.8)
Israel (Clalit) (2015-16)	18.7 (18.5 – 18.8)	28·3 (28·1 – 28·4)	20.8 (20.6 – 21.0)	29.8 (29.7 – 30.0)
Israel (Maccabi) (2014-15)	21.6 (21.2 – 22.0)	27.2 (26.9 – 27.5)	23.7 (23.3 – 24.1)	28.9 (28.7 – 29.2)
Italy (2018-19)	21.0 (20.8 – 21.2)	25·2 (25·1 – 25·3)	24.0 (23.7 – 24.2)	27.9 (27.8 – 27.9)
Latvia (2015-16)	16.2 (15.8 – 16.6)	17·3 (17·2 – 17·4)	20.2 (19.9 – 20.5)	22.7 (22.6 – 22.9)
Lithuania (2018-19)	15.6 (15.3 – 15.8)	18.1 (18.0 – 18.2)	20.4 (20.1 – 20.7)	23.7 (23.6 – 23.8)
Scotland (2014-15)	19.0 (18.8 – 19.2)	21.5 (21.4 – 21.6)	20.2 (19.9 – 20.4)	23.8 (23.7 – 23.9)
South Korea (2014-15)	19.5 (18.9 – 20.0)	23·4 (23·1 – 23·7)	24·2 (23·5 – 24·7)	27.6 (27.2 – 27.8)
Spain (2015-16)	20.0 (19.8 – 20.1)	22·3 (22·2 – 22·4)	23.8 (23.6 – 24.0)	26·1 (26·1 – 26·2)
Taiwan (2010-11)	20.1 (19.6 – 20.6)	27.2 (26.9 – 27.5)	23.6 (23.1 – 24.1)	30.5 (30.2 – 30.8)
United Kingdom (2012-13)	19.5 (19.5 – 19.5)	22.9 (22.9 – 22.9)	22·2 (22·2 – 22·2)	25·2 (25·2 – 25·2)
United States (2014-15)	20.6 (20.6 – 20.7)	24.5 (24.5 – 24.6)	22.9 (22.9 – 22.9)	27.5 (27.5 – 27.6)

Life expectancy at age 60 is an estimate of the number of years of life remaining at age 60. Data in parentheses represent 2.5% and 97.5% confidence intervals. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 6: Expected lifetime risk of developing type 2 diabetes from age 20 years to age 80 years by jurisdiction, sex, and time-point

	Males			Females		
	Lifetime risk at	Lifetime risk at	Difference	Lifetime risk at	Lifetime risk at	Difference
	first time-point	second time-	across time-	first time-point	second time-	across time-
	1	point	points	1	point	points
Australia	27.0% (26.6 –	20.8% (20.4 –	- 6.2%	20.2% (19.8 –	14.4% (14.0 –	- 5.8%
(2013-14, 2018-19)	27.4)	21·1)		20.6)	14.7)	
Austria* (2016-17)	24.5% (24.0 –	′		20.5% (20.0 –		
, ,	24.9)			20.9)		
Canada	42.9% (42.5 –	41.1% (40.8 –	- 1.8%	35.7% (35.4 –	33.8% (33.5 –	- 1.9%
(2011-12, 2016-17)	43.2)	41.4)		36.0)	34.1)	
Denmark	24.5% (23.9 –	24.7% (24.0 –	+ 0.2%	19.4% (18.7 –	19.0% (18.3 –	- 0.4%
(2013-14, 2018-19)	25·2)	25·4)		20.0)	19.6)	
Finland	40.2% (39.4 –	32.2% (31.5 –	- 8.0%	35.4% (34.6 –	25.5% (24.8 –	- 9.9%
(2011-12, 2016-17)	40.9)	33.0)		36·1)	26.2)	
France (2016-17)	28.3% (28.1 –	′		21.9% (21.7 –		
()	28.5)			22·1)		
Germany (2013-	46.3% (46.1 –			40.0% (39.8 –		
14)	46.5)			40·1)		
Hong Kong	46.4% (45.7 –	50.6% (50.0 -	+ 4.2%	42.1% (41.4 –	43.6% (42.9 –	+ 1.5%
(2013-14, 2018-19)	47.0)	51·2)	1	42.8)	44.2)	
Hungary (2018-19)	33.7% (33.2 –			32·2% (31·7 –		
11411841) (2010 1))	34·2)			32.7)		
Israel (Clalit)	51.2% (50.2 –	43.0% (42.0 –	- 8.2%	48.9% (48.0 –	36.8% (35.8 –	- 12·1%
(2010-11, 2015-16)	52·1)	43.9)	0 2/0	49.8)	37.7)	12 170
Israel (Maccabi)	47.7% (45.9 –	49.6% (48.0 –	+ 1.9%	42.3% (40.6 –	40.9% (39.4 –	- 1.4%
(2009-10, 2014-15)	49.4)	51·1)	1 270	43.9)	42.4)	1 170
Italy	29.4% (28.7 –	31.8% (31.0 –	+ 2.4%	26·3% (25·5 –	31.0% (30.1 –	+ 4.7%
(2013-14, 2018-19)	30.0)	32.5)	2	27.0)	31.8)	. , , ,
Japan (2017-18)	45.7% (45.5 –			29.0% (28.9 –		
заран (2017-10)	45.9)			29·2)		
Latvia	17.2% (16.3 –	16.4% (15.5 –	- 0.8%	24.7% (23.7 –	20.2% (19.3 –	- 4.5%
(2010-11, 2015-16)	18·1)	17.3)	0.070	25.6)	21·1)	1 370
Lithuania	16.6% (15.8 –	21.9% (21.0 –	+ 5.3%	19.9% (19.1 –	23·2% (22·3 –	+ 3.3%
(2013-14, 2018-19)	17.4)	22.8)	1 3 370	20.7)	24·1)	1 3 370
Netherlands	29.3% (27.9 –			24·1% (22·7 –		
(2015-16)	30.7)			25.4)		
Norway (2013-14)	24.2% (23.4 –			18.2% (17.5 –		
1101Wdy (2015 14)	24.9)			18.8)		
Scotland	26.7% (26.0 –	21.1% (20.4 –	- 5.6%	19.7% (19.0 –	14.9% (14.3 –	- 4.8%
(2013-14, 2018-19)	27.4)	21 170 (20 4 -	- 3 070	20.3)	15.5)	- 4 670
Singapore	53.8% (52.8 –			49.5% (48.5 –	13 3)	
(2015-16)	54.7)			50.4)		
South Korea	40.9% (39.0 –	38.7% (36.9 –	- 2.2%	37.4% (35.6 –	33·3% (31·5 –	- 4.1%
(2009-10, 2014-15)	42.8)	40.5)	2 2/0	39.3)	35.1)	7 1/0
Spain	41.9% (41.1 –	31.0% (30.2 –	- 10.9%	31.6% (30.8 –	21.7% (21.1 –	- 9.9%
(2010-11, 2015-16)	42.6)	31.7)	- 10 9/0	32.3)	22.4)	- 2 2/0
Taiwan	47.0% (45.0 –	44.4% (42.4 –	- 2.6%	50.3% (48.2 –	42.9% (40.9 –	- 7.4%
(2005-06, 2010-11)	48.9)	,	- 2.070	52.4)		- / 4/0
United Kingdom	30.1% (29.3 –	46·3) 24·6% (23·9 –	- 5.5%	20.8% (20.1 –	45·0) 16·3% (15·7 –	- 4.5%
	30.1% (29.3 –	`	- 3.370	20.8% (20.1 – 21.4)	16.9)	- 4.3%
(2007-08, 2012-13)	44.7% (44.6 –	25·4) 32·2% (32·1 –	- 12·5%	37.9% (37.8 –	34·3% (34·2 –	- 3.6%
United States			- 12.3%			- 3.6%
(2009-10, 2014-15)	44.8)	32·3)	1	ustria represent lifetii	34·4)	1

Data in parentheses represent 2.5% and 97.5% confidence intervals. Data for Austria represent lifetime risk from age 50. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 7: Sensitivity analysis of varying incidence and mortality rates in Israel Maccabi Health Services 2009-10, example of high lifetime risk

	Males				Females			
	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)
Original result	52.0%	58.3	64.5	6.2	47.7%	61.0	67.5	6.5
10% increased incidence	55.2%	58.3	64.5	6.2	50.8%	61.0	67.5	6.5
10% decreased incidence	48.4%	58.3	64.5	6.2	44.2%	61.0	67.5	6.5
10% increased mortality in those with type 2 diabetes	51.9%	57.3	64.5	7.2	47.6%	60·1	67.5	7.4
10% decreased mortality in those with type 2 diabetes	51.9%	59.4	64.5	5·1	47.6%	62.0	67.5	5.5
10% increased mortality in those without type 2 diabetes	51.2%	58.3	63.6	5.3	47·1%	61.0	66.7	5.7
10% decreased mortality in those without type 2 diabetes	52.7%	58.3	65.5	7.2	48·2%	61.0	68.3	7.3

Supplementary table 8: Sensitivity analysis of varying incidence and mortality rates in Hungary 2018-19, example of mid-range lifetime risk

	Males				Females			
	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)
Original result	35.5%	47.2	53.7	6.5	35.7%	54.9	60.4	5.5
10% increased incidence	38.0%	47.2	53.7	6.5	38.3%	54.9	60.4	5.5
10% decreased incidence	32.7%	47.2	53.7	6.5	32.8%	54.9	60.4	5.5
10% increased mortality in those with type 2 diabetes	35.5%	45.9	53.7	7.8	35.6%	53.9	60.4	6.5
10% decreased mortality in those with type 2 diabetes	35.5%	48.6	53.7	5·1	35.6%	56.0	60·4	4.4
10% increased mortality in those without type 2 diabetes	34·3%	47.2	52.6	5.4	34.8%	54.9	59.5	4.6
10% decreased mortality in those without type 2 diabetes	36.7%	47.2	54.9	7.7	36.5%	54.9	61.4	6.5

Supplementary table 9: Sensitivity analysis of varying incidence and mortality rates in Lithuania 2013-14, example of low lifetime risk

	Males				Females			
	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)
Original result	17.3%	43.7	50.0	6.3	21.7%	54.9	61.0	6.1
10% increased incidence	18.7%	43.7	49.9	6.2	23.5%	54.9	61.0	6.1
10% decreased incidence	15.7%	43.7	49.9	6.2	19.7%	54.9	61.0	6.1
10% increased mortality in those with type 2 diabetes	17·2%	42.3	49.9	7.6	21.6%	53.8	61.0	7.2
10% decreased mortality in those with type 2 diabetes	17·2%	45.2	49.9	4.7	21.6%	56·1	61.0	4.9
10% increased mortality in those without type 2 diabetes	16.6%	43.7	48.7	5.0	21.2%	54.9	60·1	5.2
10% decreased mortality in those without type 2 diabetes	17.9%	43.7	51.3	7.6	22·1%	54.9	62.0	7.1

Supplementary table 10: Sensitivity analysis of varying relative risks of mortality in those with and without type 2 diabetes, United Kingdom males 2007-08

	Lifetime risk	Life expectancy at age 20 years for those with type 2 diabetes (years)	Life expectancy at age 20 years for those without type 2 diabetes (years)	Years of life lost to type 2 diabetes (years)
Original result	32·4%	49.6	59.0	9.4
Relative risk* = 2	32·4%	52.2	59.3	7.1
Relative risk* = 3	33.3%	49.0	60.4	11.4

^{*}Relative risk represents risk of all-cause mortality in those with compared to those without type 2 diabetes

Supplementary table 11: Years of life lost to diabetes at age 20 years across the 23 jurisdictions

	Males		Females			
	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint		
Australia	4.4(4.2-4.5)	4.4 (4.2 – 4.5)	4.0(3.7-4.1)	4.1(3.9-4.3)		
(2013-14, 2018-19)	, , , , ,	, ,	` ′	, ,		
Austria* (2016-17)	4.0(3.8-4.2)		3.6(3.4 - 3.9)			
Canada (2011-12, 2016-17)	6.3 (6.1 – 6.3)	5.7 (5.6 – 5.7)	6.2 (6.1 – 6.3)	5.8 (5.8 – 5.9)		
Denmark (2013-14, 2018-19)	7.7 (7.4 – 8.0)	7.6 (7.3 – 7.8)	6.4 (6.0 – 6.7)	5.9 (5.7 – 6.2)		
Finland (2011-12, 2016-17)	4.5 (4.3 – 4.8)	4.5 (4.3 – 4.7)	3.1 (2.9 – 3.3)	3·3 (3·1 – 3·5)		
France (2016-17)	5.1 (5.1 – 5.1)		$4 \cdot 4 (4 \cdot 4 - 4 \cdot 4)$			
Germany (2013-14)	9.0 (9.0 – 9.0)		7.8(7.8 - 7.8)			
Hong Kong (2013-14, 2018-19)	7·3 (7·2 – 7·6)	8.0 (7.9 – 8.2)	5.2 (5.0 – 5.4)	5.8 (5.6 – 5.9)		
Hungary (2018-19)	6.5 (6.3 – 6.7)	••	5.5 (5.4 – 5.6)			
Israel (Clalit) (2010-11, 2015-16)	12.7 (12.5 – 12.9)	12.9 (12.7 – 13.0)	11.2 (11.1 – 11.4)	11·2 (11·1 – 11·4)		
Israel (Maccabi) (2009-10, 2014-15)	6.2 (5.9 – 6.6)	6.8 (6.6 – 7.0)	6.2 (6.2 – 7.0)	6.2 (6.0 – 6.6)		
Italy (2013-14, 2018-19)	7.0 (6.8 – 7.4)	6.9 (6.7 – 7.2)	5.9 (5.6 – 6.3)	5.2 (5.0 – 5.5)		
Japan (2017-18)	6.0 (6.0 - 6.0)		5.6(5.6-5.7)			
Latvia (2010-11, 2015-16)	4.1 (3.1 – 5.1)	2.5 (1.7 – 3.4)	5·3 (4·8 – 5·9)	3.8 (3.4 – 4.2)		
Lithuania (2013-14, 2018-19)	6.3 (5.5 – 7.1)	6.3 (5.8 – 7.0)	6.1 (5.7 – 6.6)	5.1 (4.8 – 5.5)		
Netherlands (2015-16)	4.1 (4.1 – 4.1)		8.0 (8.0 – 8.0)			
Norway (2013-14)	4.8(4.6-5.2)		3.8(3.5-4.2)			
Scotland (2013-14, 2018-19)	3.8 (3.5 – 4.0)	4.2 (4.0 – 4.4)	5.6 (5.3 – 5.9)	6.2 (5.9 – 6.5)		
Singapore (2015-16)	8.3 (8.1 – 8.7)		7.0 (6.8 – 7.3)			
South Korea (2009-10, 2014-15)	7.1 (6.4 – 8.0)	7.0 (6.4 – 7.7)	4.9 (4.2 – 5.7)	4.5 (4.0 – 5.1)		
Spain (2010-11, 2015-16)	4.2 (4.0 – 4.4)	3.7 (3.5 – 4.0)	3.5 (3.4 – 3.7)	2.8 (2.6 – 2.9)		
Taiwan (2005-06, 2010-11)	12·1 (11·4 – 12·9)	11.5 (10.9 – 12.1)	9.3 (8.7 – 9.8)	8·3 (7·9 – 8·8)		
United Kingdom (2007-08, 2012-13)	9.4 (9.4 – 9.4)	8.6 (8.6 – 8.6)	7.1 (7.1 – 7.1)	6.6 (6.6 – 6.6)		
United States (2009-10, 2014-15)	9.9 (9.9 – 9.9)	7.2 (7.1 – 7.2)	8.3 (8.2 – 8.3)	8.1 (8.0 – 8.1)		

Data in parentheses represent 2.5% and 97.5% confidence intervals. Data for Austria represent lifetime risk from age 50. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 12: Years of life lost to diabetes at age 40 years across the 23 jurisdictions

	Males		Females	
	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint
Australia	4.1 (3.9 – 4.2)	4.1 (4.0 – 4.2)	3.7 (3.6 – 3.9)	3.9 (3.8 – 4.0)
(2013-14, 2018-19)	71(3) 72)	71(70 72)	37(30 37)	3 7 (3 0 4 0)
Canada (2011-12, 2016-17)	5.6 (5.5 – 5.7)	5.2 (5.2 – 5.3)	5.7 (5.6 – 5.8)	5.4 (5.3 – 5.4)
Denmark (2013-14, 2018-19)	6.9 (6.6 – 7.1)	6.9 (6.7 – 7.1)	5.8 (5.6 – 6.1)	5.6 (5.3 – 5.8)
Finland (2011-12, 2016-17)	4.1 (3.8 – 4.3)	4.0 (3.9 – 4.2)	3.0 (2.8 – 3.2)	3.2 (3.1 – 3.3)
France (2016-17)	4.4 (4.4 – 4.4)		4.1 (4.1 – 4.1)	
Germany (2013-14)	6.3 (6.3 – 6.3)		6.4 (6.4 – 6.4)	••
Hong Kong (2013-14, 2018-19)	6.1 (6.1 – 6.3)	6.8 (6.7 – 6.9)	4.9 (4.7 – 5.0)	5.4 (5.3 – 5.5)
Hungary (2018-19)	5.3(5.2-5.4)		5.1 (5.0 – 5.1)	
Israel (Clalit) (2010-11, 2015-16)	11.6 (11.5 – 11.8)	12.0 (11.9 – 12.1)	10.7 (10.5 – 10.8)	10.7 (10.6 – 10.9)
Israel (Maccabi) (2009-10, 2014-15)	6.0 (5.7 – 6.3)	6.6 (6.3 – 6.7)	6.3 (6.0 – 6.6)	6.1 (5.8 – 6.4)
Italy (2013-14, 2018-19)	6.1 (5.9 – 6.4)	6.2 (6.0 – 6.4)	5.5 (5.3 – 5.8)	5.0 (4.7 – 5.2)
Japan (2017-18)	5.3 (5.3 – 5.4)	.,	5.2(5.2-5.3)	
Latvia (2010-11, 2015-16)	3.0 (2.4 – 3.6)	2.0 (1.4 – 2.6)	4.7 (4.3 – 5.1)	3.4 (3.1 – 3.8)
Lithuania (2013-14, 2018-19)	4.6 (4.2 – 5.1)	4.8 (4.4 – 5.2)	5.5 (5.1 – 5.8)	4.6 (4.3 – 5.0)
Netherlands (2015-16)	4.0 (4.0 – 4.0)		7.6 (7.6 – 7.6)	
Norway (2013-14)	4.4(4.1-4.7)		3.6(3.3 - 3.8)	
Scotland (2013-14, 2018-19)	3.4 (3.2 – 3.7)	3.4 (3.2 – 3.7)	5·1 (4·4 – 5·1)	4.9 (4.7 – 5.2)
Singapore (2015-16)	6.9 (6.7 – 7.0)		6.4 (6.2 – 6.5)	
South Korea (2009-10, 2014-15)	6.1 (5.6 – 6.7)	6.0 (5.5 – 6.4)	4.7 (4.0 – 5.3)	4.3 (3.8 – 4.7)
Spain (2010-11, 2015-16)	3.9 (3.7 – 4.1)	3·3 (3·2 – 3·5)	3.4 (3.3 – 3.6)	2.7 (2.6 – 2.9)
Taiwan (2005-06, 2010-11)	10.1 (9.6 – 10.7)	9.9 (9.5 – 10.3)	8.7 (8.3 – 9.1)	8.0 (7.7 – 8.3)
United Kingdom (2007-08, 2012-13)	6.7 (6.7 – 6.7)	6.1 (6.1 – 6.1)	5.7 (5.7 – 5.7)	5.2 (5.2 – 5.2)
United States (2009-10, 2014-15)	7.8 (7.8 – 7.8)	5.9 (5.9 – 6.0)	7.0 (7.0 – 7.1)	6.9 (6.8 – 6.9)

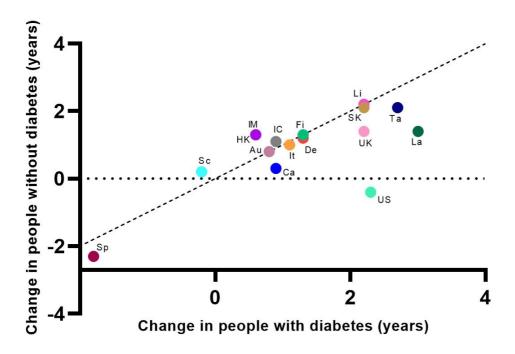
Data in parentheses represent 2.5% and 97.5% confidence intervals. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary table 13: Years of life lost to diabetes at age 60 years across the 23 jurisdictions

	Males		Females	
	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), first timepoint	Years of life lost to type 2 diabetes at age 20 (95% CI), second timepoint
Australia (2013-14, 2018-19)	3.2 (3.2 – 3.3)	3·3 (3·2 – 3·4)	3.0 (2.9 – 3.1)	3·1 (3·1 – 3·2)
Canada (2011-12, 2016-17)	4.2 (4.2 – 4.3)	4.0 (4.0 – 4.0)	4.3 (4.3 – 4.3)	4.1 (4.1 – 4.2)
Denmark (2013-14, 2018-19)	4.9 (4.8 – 5.0)	5·1 (5·0 – 5·2)	4.3 (4.0 – 4.4)	4.4 (4.3 – 4.5)
Finland (2011-12, 2016-17)	2.9 (2.8 – 3.0)	3.0 (2.9 – 3.0)	2.4 (2.3 – 2.5)	2.5 (2.4 – 2.6)
France (2016-17)	2.6(2.6 - 2.6)		3·3 (3·3 – 3·3)	
Germany (2013-14)	3.6(3.6 - 3.6)		4.0 (4.0 - 4.0)	
Hong Kong (2013-14, 2018-19)	3.7 (3.6 – 3.8)	4.2 (4.2 – 4.3)	3.8 (3.7 – 3.9)	4.2 (4.2 – 4.3)
Hungary (2018-19)	$3 \cdot 1 (3 \cdot 0 - 3 \cdot 1)$		3.7 (3.7 – 3.8)	
Israel (Clalit) (2010-11, 2015-16)	9.1 (9.1 – 9.2)	9.6 (9.6 – 9.6)	8.8 (8.8 – 8.9)	9.0 (9.0 – 9.1)
Israel (Maccabi) (2009-10, 2014-15)	5·1 (5·0 – 5·1)	5.6 (5.5 – 5.7)	5.4 (5.2 – 5.6)	5.2 (5.1 – 5.4)
Italy (2013-14, 2018-19)	4.0 (3.9 – 4.2)	4.2 (4.1 – 4.3)	4.2 (4.0 – 4.4)	3.9 (3.7 – 4.1)
Japan (2017-18)	3.6(3.6 - 3.6)		3.9(3.9-4.0)	
Latvia (2010-11, 2015-16)	1.5 (1.2 – 1.8)	1.1 (0.8 – 1.4)	3·2 (3·0 – 3·4)	2.5 (2.4 – 2.7)
Lithuania (2013-14, 2018-19)	2.5 (2.3 – 2.7)	2.5 (2.4 – 2.7)	3.9 (3.7 – 4.1)	3·3 (3·1 – 3·5)
Netherlands (2015-16)	3·3 (3·3 – 3·3)		6.4 (6.4 – 6.4)	
Norway (2013-14)	$3 \cdot 1 (3 \cdot 0 - 3 \cdot 2)$		2.8(2.6-3.0)	
Scotland (2013-14, 2018-19)	2.7 (2.3 – 2.7)	2.5 (2.4 – 2.6)	3·3 (3·1 – 3·4)	3.6 (3.5 – 3.8)
Singapore (2015-16)	3.9 (3.8 – 4.1)		4.7 (4.7 – 4.8)	
South Korea (2009-10, 2014-15)	4.1 (3.8 – 4.4)	3.9 (3.7 – 4.2)	3.7 (3.3 – 4.1)	3.4 (3.1 – 3.7)
Spain (2010-11, 2015-16)	3.0 (3.0 – 3.1)	2·3 (2·3 – 2·4)	3·1 (3·0 – 3·3)	2·3 (2·2 – 2·5)
Taiwan (2005-06, 2010-11)	6.8 (6.6 – 7.0)	7·1 (6·9 – 7·3)	7.0 (6.8 – 7.2)	6.9 (6.7 – 7.1)
United Kingdom (2007-08, 2012-13)	3.7 (3.7 – 3.7)	3.4 (3.4 – 3.4)	3·3 (3·3 – 3·3)	3.0 (3.0 – 3.0)
United States (2009-10, 2014-15)	4.6 (4.6 – 4.6)	3.9 (3.9 – 3.9)	4.7 (4.6 – 4.7)	4.6 (4.6 – 4.7)

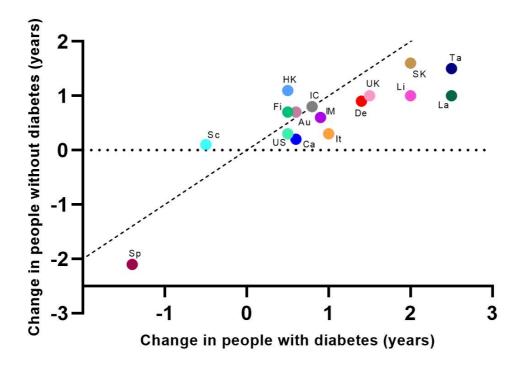
Data in parentheses represent 2·5% and 97·5% confidence intervals. Clalit = Clalit Health Services; Maccabi = Maccabi Health Services.

Supplementary figure 1: Change in life expectancy of males with and without type 2 diabetes across time-points by jurisdiction

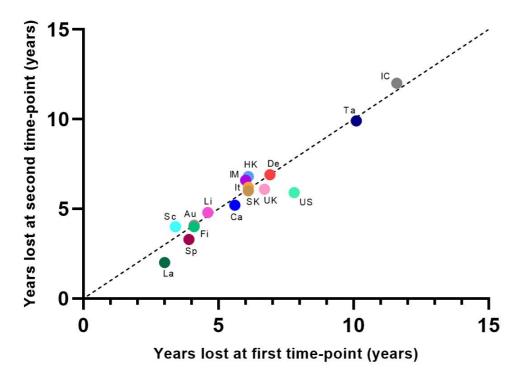


Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater changes in people with type 2 diabetes.

Supplementary figure 2: Change in life expectancy of females with and without type 2 diabetes across time-points by jurisdiction

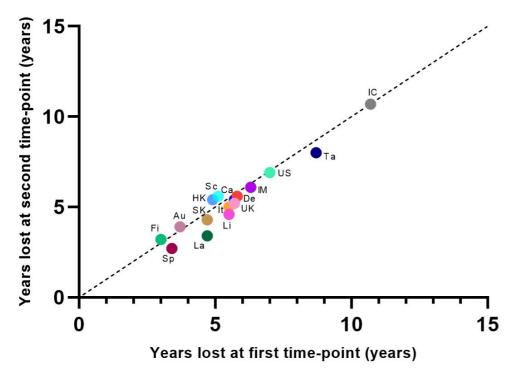


Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater changes in people with type 2 diabetes.

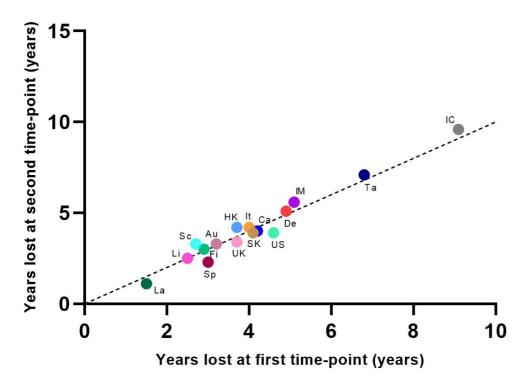


Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater years lost at first time-point.

Supplementary figure 4: Years of life lost to type 2 diabetes at age 40 years by jurisdiction, females

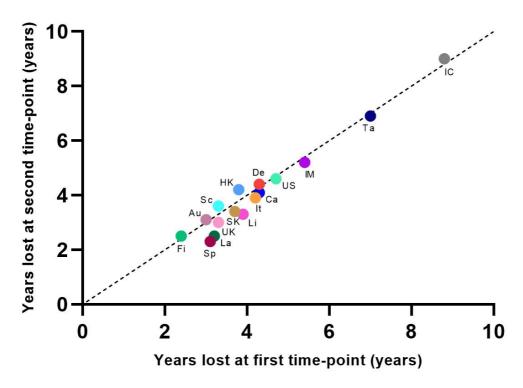


Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater years lost at first time-point.



Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater years lost at first time-point.

Supplementary figure 6: Years of life lost to type 2 diabetes at age 60 by jurisdiction, females



Clalit = Clalit Health Services; Maccabi = Maccabi Health Services. Dashed line represents line of unity, with points to the right of the line representing greater years lost at first time-point.

Legend for Supplementary Figures 1 – 6:

Au = Australia

Ca = Canada

De = Denmark

Fi = Finland

HK = Hong Kong

IC = Israel (Clalit)

IM = Israel (Maccabi)

It = Italy

La = Latvia

Li = Lithuania

Sc = Scotland

SK = South Korea

Sp = Spain

Ta = Taiwan

UK = United Kingdom

US = United States