Australian National Diabetes Audit
Australian Quality Clinical Audit

2019

Supplement

ads Australian Diabetes Society

MONASH University

nadc National Association of Diabetes Centres

Contents

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Abbreviations and acronyms

ACE	Angiotensin Converting Enzyme
ANDA	Australian National Diabetes Audit
AQCA	Australian Quality Clinical Audit
ARB	Angiotensin II Receptor Blockers
BMI	Body mass index
BP	Blood pressure
CABG	Coronary artery bypass graft
DVA	Department of Veterans Affairs
eGFR	Estimated glomerular filtration rate
GDM	Gestational diabetes mellitus
HbA_{1c}	Glycated haemoglobin
HDL	High density lipoprotein
LDL	Low-density lipoprotein
NDOQRIN	National Diabetes Outcomes Quality Review Initiative
NDSS	National Diabetes Services Scheme
NICE	National Institute for Health and Care Excellence
SD	Standard deviation
T1DM	Type 1 diabetes mellitus
T2DM	Type 2 diabetes mellitus

1. Origins of the ANDA Dataset

There has been longstanding worldwide interest in developing suitable diabetes datasets and methods of data collection to capture appropriate diabetes outcomes for quality improvement. As a result, collection, analysis and reporting of standardised diabetes datasets is now widely practised. The European Association for the Study of Diabetes (EASD) Study Group DO IT (Diabetes care Optimisation through Information Technology)[1] undertook much work aimed at improving the quality of diabetes care through the appropriate use of information technology, including promoting the collection, analysis and reporting of the DiabCare dataset[2, 3] for audit and benchmarking purposes. From this has come the DiabCare Q-Net initiative[4].

A similar initiative, the NSW Diabetes Outcomes Workshop (NDOW), was undertaken in Australia in September 1993 with funding from the NSW Health Department[5, 6]. Forty-five stakeholders including diabetes health professionals, Health Department officials and consumers met for a one-day workshop and agreed on a dataset of 59 health outcome data elements that covered demographic, acute and chronic complications and self-care practice areas of diabetes care. These items became known as the NDOW dataset, and subsequently these data items have become widely promulgated for collection (using standardised definitions) across Australia.

In 1997 the Australian Diabetes Society (ADS) Council accepted a recommendation to adopt the NDOW dataset as its Diabetes Outcomes dataset, and formed a sub-committee (now named the National Diabetes Data Working Group (NDDWG)). This sub-committee managed the dataset and promoted quality diabetes care in Australia, through the National Diabetes Outcomes Quality Review INitiative, (NDOQRIN). The NDDWG has taken a subset of the NDOW dataset and has promoted its collection as a minimum dataset (for quality diabetes care) in a variety of clinical practice settings.

After diabetes was named the 5th National Health Priority Area in 1996[7], work followed to improve diabetes care in Australia including the commissioning of the National Diabetes Strategy to update and replace the National Action Plan. One aspect reviewed was the need for local data on which appropriate planning could be carried out and assessment of the effect of initiatives could be undertaken. Consequently, several initiatives indicated the need for reliable data in Australia (including diabetes indicators work), as noted in the National Health Priority Areas Report: Diabetes Mellitus 1998[7]. However, data on clinical aspects of diabetes, including outcomes data, were deficient in Australia as highlighted in The National Diabetes Strategy and Implementation Plan report[12].

The NDDWG continued to promulgate the NDOQRIN dataset, and in 2002 was successful in having it accepted as the first clinical dataset to be included in the National Health Data Dictionary and Knowledgebase, Version 12. This dataset has since been enhanced, and is now online as part of the AIHW – Metadata Online Registry ('METeOR') as the Diabetes (clinical) Data Set Specification[8].

The NDOQRIN minimal dataset was utilised for the inaugural ANDA data collection in 1998 (then known as the Australian National Diabetes Information Audit & Benchmarking, ANDIAB). Subsequent enhancements have been made on a biennial basis to incorporate new research on diabetes quality clinical indicators, and to address feedback from centres participating in the previous audit cycle. The ANDA dataset has been reviewed for consistency with international datasets for diabetes benchmarking. There are high rates of agreement between the ANDA dataset and international diabetes benchmarking datasets, including the Diabetes Quality Indicators Project in the US[9], the National Board of Health and Welfare Quality Indicators in Sweden[10], and the National Institute for Health and Care Excellence Diabetes Quality Indicators in the United Kingdom[11].

2. Data Queries

Missing vital data fields:

A list was generated of all instances of missing data in any of the following fields: Sex, date of birth, year of diagnosis, diabetes type, diabetes management, height, weight, initial visit, fasting status (if lipids recorded).

Potentially invalid data values:

A list was generated to check potential data inaccuracies as follows:

(1) Male = Pregnant OR Female <18 or >55 = Pregnant
(2) Type 1 and insulin not indicated
(3) GDM and not currently pregnant
(4) Year of Diagnosis or Year Started Insulin < Date of birth
(5) On Insulin since - Year < Date of diagnosis
(6) Systolic BP < diastolic BP OR systolic or diastolic is missing
(7) Systolic BP <70mmHg or >200mmHg OR diastolic BP <40mmHg or >130mmHg
(8) Age >18 years and height <1.3 metres or >2.2 metres
(9) Age >18 years and weight <40 kilograms or >200 kilograms
(10) BMI >50 kg/m^2
(11) Age >18 years and BMI <15
(12) Type 1 and on insulin ≥3 years after date of diagnosis
(13) Age <2 years

Whilst some of the scenarios may be possible (e.g. 7, 8, 9), the likelihood is that they represent incorrect data recording or interpretation by the computer system.

Possible duplicates*:* (double individual registration/data entry), based on sex and date of birth match.

Potentially incorrect HbA_{1c}, lipid, and creatinine values*:* HbA_{1c} <4%, HbA_{1c} <20 mmol/mol, total cholesterol <2.0 mmol/L, HDL cholesterol >2.5 mmol/L, triglyceride <0.5 mmol/L, creatinine <50 or >1000 µmol/L.

3. Data Assumptions, Decisions and Manipulations

As in previous years, data assumptions and decisions were made based on the following rules.

Only patients aged 18 and above were included in the pooled analysis. In 2019, the results of patients with GDM and patients under 18 years were presented separately.

Missing data were also calculated conditionally where relevant:

- Date of visit=1/06/2019 if missing
- Pregnancy=Yes, if female and has GDM
- Insulin=Yes, if insulin duration and/mode indicated
- Fasting=Yes, if any lipids recorded

Invalid data were excluded:

- Date of birth after visit date
- Pregnancy if male or female aged >55
- Urinary protein/albumin value, if units not indicated
- Type 1 and insulin use not indicated, unless < 12 months since diagnosis
- 'Year of diagnosis' and 'Insulin duration' excluded if < date of birth

Data manipulations and derivation

- Duration of diabetes was calculated: Study year - Year of diagnosis
- Where diabetes was type 1, age at diagnosis was ≥40, insulin was commenced >3 years after diagnosis and BMI was ≥25, a diagnosis of type 2 diabetes was assigned
- Anti-hypertensive therapy changed to 'No' if no medications were indicated
- 'Diet only' changed to 'No' if other management methods details were indicated
- 'Lipid lowering therapy' changed to 'No' if no therapy details were indicated
- BMI was calculated: weight (kg) / height (m)2
- eGFR was calculated using the CKD-EPI equation
- Urinary protein/albumin assessment was considered in relation to published guidelines for laboratory thresholds
- Instances where patients reported multiple modes of insulin, the following hierarchical algorithm was used: Pump > Basal bolus > Pre-mixed > Basal

4. Frequency Count Data

SECTION 4.1 PATIENT DEMOGRAPHICS

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
1.1	Date of birth									
		DOB	6436	100.0%	100%					
		Missing	0	0.0%						
		Sum	**6436**	**100%**	**100%**					
	Age									
		Age	6436	100.0%	100%	59.2	56.0	17.7	18.0	101.8
		Missing	0	0.0%						
		Sum	**6436**	**100%**	**100%**					
1.2	Sex									
		Male	3179	49.4%	50.0%					
		Female	3180	49.4%	50.0%					
		Missing	77	1.2%						
		Sum	**6436**	**100%**	**100%**					
1.2.1	Currently pregnant (females aged 18-55 years)									
		Yes	395	25.7%	27.1%					
		No	1064	69.2%	72.9%					
		Missing	78	5.1%						
		Sum	**1537**	**100%**	**100%**					
1.3	Date of visit									
		Visit Date	6436	100%	100%					
		Missing	0	0.0%						
		Sum	**6436**	**100%**	**100%**					
1.4	Initial visit									
		Yes	1319	20.5%	20.8%					
		No	5035	78.2%	79.2%					
		Missing	82	1.3%						
		Sum	**6436**	**100%**	**100%**					
1.5	Aboriginal/Torres Strait Islander									
		Yes	281	4.4%	4.7%					
		No	5760	89.5%	95.3%					
		Missing	395	6.1%						
		Sum	**6436**	**100%**	**100%**					
1.6	Country of birth									
		Country	6156	96%	100%					
		Missing	280	4.4%						
		Sum	**6436**	**100%**	**100%**					
1.7	NDSS member									
		Yes	5484	85.2%	94.2%					
		No	338	5.3%	5.8%					
		Missing	614	9.5%						
		Sum	**6436**	**100%**	**100%**					
1.8	DVA patient									
		Yes	67	1.0%	1.1%					
		No	5761	89.5%	98.9%					
		Missing	608	9.4%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.2 DIABETES TYPE & MANAGEMENT

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
2.1	Year of diagnosis									
		Year	6308	98.0%	100%	2006	2005	11.7	1939	2019
		Missing	128	2.0%						
		Sum	**6436**	**100%**	**100%**					
	Duration of diabetes									
		Duration	6308	98.0%	100%	13.0	14.5	11.7	0.0	80.0
		Missing	128	2.0%						
		Sum	**6436**	**100%**	**100%**					
2.2	Type of diabetes									
		T1DM	1729	26.9%	27.0%					
		T2DM	4143	64.4%	64.6%					
		GDM	320	5.0%	5.0%					
		Don't know	93	1.4%	1.5%					
		Other	125	1.9%	2.0%					
		Missing	26	0.4%						
		Sum	**6436**	**100%**	**100%**					
2.3	Blood glucose monitoring									
		None	492	7.6%	7.7%					
		Finger pricking**	5141	79.9%	80.6%					
		Continuous Glucose Monitoring*	485	7.5%	7.6%					
		Missing	558	8.7%						
	** multiple methods reported in some patients									
2.4	Management method									
		Diet only	405	6.3%	6.3%					
		Metformin**	3179	49.4%	49.8%					
		Sulphonylurea**	942	14.6%	14.8%					
		Glitazone**	13	0.2%	0.2%					
		Acarbose**	27	0.4%	0.4%					
		DPP4 inhibitor**	1093	17.0%	17.1%					
		SGLT2 inhibitor**	1142	17.7%	17.9%					
		GLP1 agonist**	528	8.2%	8.3%					
		Insulin**	4303	66.9%	67.4%					
		Missing	55	0.9%						
	** monotherapy or in combination with other treatments									
2.4.1	Insulin duration									
		<1 year	611	14.2%	14.5%					
		1-5 years	987	22.9%	23.5%					
		>5 years	2606	60.6%	62.0%					
		Missing	99	2.3%						
		Sum	**4303**	**100%**	**100%**					
2.4.2	Insulin mode									
		Basal**	764	11.9%	18.0%					
		Basal bolus**	2048	31.8%	48.3%					
		Pump**	496	7.7%	11.7%					
		Pre-mixed insulin*	925	14.4%	21.8%					
		Missing	66	1.0%						
	** multiple modes of insulin reported in some patients									

*Relative % = % of the total excluding the missing values

SECTION 4.3 HEIGHT, WEIGHT & SMOKING STATUS

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
3.1	**Weight**									
		Weight	6231	96.8%	100%	86.8	89.6	23.1	20.0	252.0
		Missing	205	3.2%						
		Sum	**6436**	**100%**	**100%**					
3.2	**Height**									
		Height	5912	91.9%	100%	1.7	1.7	0.1	1.0	2.0
		Missing	524	8.1%						
		Sum	**6436**	**100%**	**100%**					
3.3	**Smoking status**									
		Current	730	11.3%	11.9%					
		Past	1886	29.3%	30.7%					
		Never	3521	54.7%	57.4%					
		Missing	299	4.7%						
		Sum	**6436**	**100%**	**100%**					
3.3.1	**Number of years spent smoking (current or past smokers)**									
		<5 years	302	11.5%	12.4%					
		5-10 years	400	15.3%	16.4%					
		11-20 years	580	22.2%	23.8%					
		>20 years	1158	44.3%	47.5%					
		Missing	176	6.7%						
		Sum	**2616**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.4 BLOOD PRESSURE & ANTI-HYPERTENSIVE THERAPY

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
4.1	Systolic blood pressure									
		Systolic	6200	96.3%	100%	130	131	18	70	230
		Missing	236	3.7%						
		Sum	**6436**	**100%**	**100%**					
4.1	Diastolic blood pressure									
		Diastolic	6200	96.3%	100%	76	76	11	30	135
		Missing	236	3.7%						
		Sum	**6436**	**100%**	**100%**					
4.2	Anti-hypertensive therapy									
		Yes	3691	57.4%	57.7%					
		No	2711	42.1%	42.3%					
		Missing	34	0.5%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.5 DIABETES RELATED EYE DISEASE

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
5.1	Attended optometrist/ophthalmologist									
		Yes	4747	73.7%	74.2%					
		No	1653	25.7%	25.8%					
		Missing	36	0.6%						
		Sum	**6436**	**100%**	**100%**					
5.2	Fundus examination									
		Yes	4240	65.9%	66.4%					
		No	2146	33.3%	33.6%					
		Missing	50	0.8%						
		Sum	**6436**	**100%**	**100%**					
5.3	Retinopathy									
		Yes	1095	17.0%	17.2%					
		No	5265	81.8%	82.8%					
		Missing	76	1.2%						
		Sum	**6436**	**100%**	**100%**					
5.4	Treatment for retinopathy									
		Yes	526	8.2%	8.3%					
		No	5821	90.4%	91.7%					
		Missing	89	1.4%						
		Sum	**6436**	**100%**	**100%**					
5.5	Right or left cataract									
		Yes	1056	16.4%	16.6%					
		No	5288	82.2%	83.4%					
		Missing	92	1.4%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.6 DIABETES RELATED FOOT PROBLEMS

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
6.1	Peripheral neuropathy - last 12 months									
		Yes	1208	18.8%	18.9%					
		No	5195	80.7%	81.1%					
		Missing	33	0.5%						
		Sum	**6436**	**100%**	**100%**					
	Peripheral neuropathy - previous									
		Yes	1115	17.3%	17.8%					
		No	5150	80.0%	82.2%					
		Missing	171	2.7%						
		Sum	**6436**	**100%**	**100%**					
6.2	Foot ulceration - last 12 months									
		Yes	314	4.9%	4.9%					
		No	6094	94.7%	95.1%					
		Missing	28	0.4%						
		Sum	**6436**	**100%**	**100%**					
	Foot ulceration - previous									
		Yes	349	5.4%	5.5%					
		No	6009	93.4%	94.5%					
		Missing	78	1.2%						
		Sum	**6436**	**100%**	**100%**					
6.3	Peripheral vascular disease - last 12 months									
		Yes	469	7.3%	7.3%					
		No	5935	92.2%	92.7%					
		Missing	32	0.5%						
		Sum	**6436**	**100%**	**100%**					
	Peripheral vascular disease - previous									
		Yes	518	8.0%	8.3%					
		No	5745	89.3%	91.7%					
		Missing	173	2.7%						
		Sum	**6436**	**100%**	**100%**					
6.4	Lower limb amputation - last 12 months									
		Yes	171	2.7%	2.7%					
		No	6234	96.9%	97.3%					
		Missing	31	0.5%						
		Sum	**6436**	**100%**	**100%**					
	Minor lower limb amputation - last 12 months									
		Yes	140	81.9%	81.9%					
		No	31	18.1%	18.1%					
		Missing	0	0.0%						
		Sum	**171**	**100%**	**100%**					
	Major lower limb amputation - last 12 months									
		Yes	30	17.5%	17.5%					
		No	141	82.5%	82.5%					
		Missing	0	0.0%						
		Sum	**171**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.6 DIABETES RELATED FOOT PROBLEMS (continued)

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
	Lower limb amputation - previous									
		Yes	201	3.1%	3.2%					
		No	6065	94.2%	96.8%					
		Missing	170	2.7%						
		Sum	**6436**	**100%**	**100%**					
	Minor lower limb amputation - previous									
		Yes	156	77.6%	77.6%					
		No	45	22.4%	22.4%					
		Missing	0	0.0%						
		Sum	**201**	**100%**	**100%**					
	Major lower limb amputation - previous									
		Yes	49	24.4%	25.0%					
		No	147	73.1%	75.0%					
		Missing	5	2.5%						
		Sum	**201**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.7 MEDICATIONS & LIPIDS

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
7.1	Aspirin									
		Yes	1706	26.5%	26.6%					
		No	4679	72.7%	72.8%					
		Contraindicated	37	0.6%	0.6%					
		Missing	14	0.2%						
		Sum	**6436**	**100%**	**100%**					
7.2	Other anti-platelets									
		Yes	382	6.0%	6.0%					
		No	6012	93.4%	93.7%					
		Contraindicated	21	0.3%	0.3%					
		Missing	21	0.3%						
		Sum	**6436**	**100%**	**100%**					
7.3	Anti-coagulants									
		Yes	456	7.1%	7.1%					
		No	5939	92.3%	92.6%					
		Contraindicated	19	0.3%	0.3%					
		Missing	22	0.3%						
		Sum	**6436**	**100%**	**100%**					
7.4	Lipid lowering therapy									
		Yes	3585	55.7%	55.8%					
		No	2835	44.0%	44.2%					
		Missing	16	0.3%						
		Sum	**6436**	**100%**	**100%**					
7.4.1	Statin (of patients on lipid lowering therapy)									
		Yes	3310	92.3%	92.5%					
		No	247	6.9%	6.9%					
		Contraindicated	23	0.6%	0.6%					
		Missing	5	0.2%						
		Sum	**3585**	**100%**	**100%**					
7.4.2	Fibrate (of patients on lipid lowering therapy)									
		Yes	455	12.7%	12.9%					
		No	3066	85.5%	86.8%					
		Contraindicated	9	0.3%	0.3%					
		Missing	55	1.5%						
		Sum	**3585**	**100%**	**100%**					
7.4.3	Ezetrol (of patients on lipid lowering therapy)									
		Yes	413	11.5%	11.7%					
		No	3107	86.7%	88.1%					
		Contraindicated	7	0.2%	0.2%					
		Missing	58	1.6%						
		Sum	**3585**	**100%**	**100%**					
7.4.4	Fish oil (of patients on lipid lowering therapy)									
		Yes	185	5.2%	5.3%					
		No	3334	93.0%	94.7%					
		Contraindicated	3	0.1%	0.1%					
		Missing	63	1.7%						
		Sum	**3585**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.7 MEDICATIONS & LIPIDS (continued)

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
7.5	Lipids measured									
		Yes	4396	68.3%	68.5%					
		No	2023	31.4%	31.5%					
		Missing	17	0.3%						
		Sum	**6436**	**100%**	**100%**					
7.5.1	Total cholesterol (of patients with lipids measured)									
		Total cholesterol	4348	98.9%	100%	4.2	4.3	1.2	1.2	20.8
		Missing	48	1.1%						
		Sum	**4396**	**100%**	**100%**					
7.5.2	LDL (of patients with lipids measured)									
		LDL	3721	84.6%	100%	2.1	2.2	0.9	0.0	7.6
		Missing	675	15.4%						
		Sum	**4396**	**100%**	**100%**					
7.5.3	HDL (of patients with lipids measured)									
		HDL	3832	87.2%	100%	1.2	1.2	0.4	0.1	5.4
		Missing	564	12.8%						
		Sum	**4396**	**100%**	**100%**					
7.5.4	Triglycerides (of patients with lipids measured)									
		Triglycerides	4222	96.0%	100%	1.6	2.0	2.1	0.2	48.0
		Missing	174	4.0%						
		Sum	**4396**	**100%**	**100%**					
7.5.5	Fasting lipids (of patients with lipids measured)									
		Yes	3703	84.3%	84.6%					
		No	674	15.3%	15.4%					
		Missing	19	0.4%						
		Sum	**4396**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.8 COMPLICATIONS/EVENTS/COMORBIDITIES

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
8.1	Stroke - last 12 months									
		Yes	91	1.4%	1.4%					
		No	6331	98.4%	98.6%					
		Missing	14	0.2%						
		Sum	**6436**	**100%**	**100%**					
	Stroke - previous									
		Yes	262	4.1%	4.2%					
		No	6006	93.3%	95.8%					
		Missing	168	2.6%						
		Sum	**6436**	**100%**	**100%**					
8.2	Myocardial infarction - last 12 months									
		Yes	150	2.3%	2.3%					
		No	6269	97.4%	97.7%					
		Missing	17	0.3%						
		Sum	**6436**	**100%**	**100%**					
	Myocardial infarction - previous									
		Yes	570	8.8%	9.1%					
		No	5706	88.7%	90.9%					
		Missing	160	2.5%						
		Sum	**6436**	**100%**	**100%**					
8.3	CABG/Angioplasty - last 12 months									
		Yes	147	2.3%	2.3%					
		No	6269	97.4%	97.7%					
		Missing	20	0.3%						
		Sum	**6436**	**100%**	**100%**					
	CABG/Angioplasty - previous									
		Yes	592	9.2%	9.4%					
		No	5683	88.3%	90.6%					
		Missing	161	2.5%						
		Sum	**6436**	**100%**	**100%**					
8.4	Congestive cardiac failure - last 12 months									
		Yes	253	3.9%	4.3%					
		No	5690	88.4%	95.7%					
		Missing	493	7.7%						
		Sum	**6436**	**100%**	**100%**					
	Congestive cardiac failure - previous									
		Yes	294	4.6%	5.0%					
		No	5590	86.8%	95.0%					
		Missing	552	8.6%						
		Sum	**6436**	**100%**	**100%**					
8.5	End stage kidney disease - last 12 months									
		Yes	251	3.9%	3.9%					
		No	6173	95.9%	96.1%					
		Missing	12	0.2%						
		Sum	**6436**	**100%**	**100%**					
	End stage kidney disease - previous									
		Yes	288	4.5%	4.6%					
		No	5985	93.0%	95.4%					
		Missing	163	2.5%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.8 COMPLICATIONS/EVENTS/COMORBIDITIES (continued)

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
8.6	Blindness - last 12 months									
		Yes	83	1.3%	1.3%					
		No	6247	97.1%	98.7%					
		Missing	106	1.6%						
		Sum	**6436**	**100%**	**100%**					
	Blindness - previous									
		Yes	99	1.5%	1.6%					
		No	6172	95.9%	98.4%					
		Missing	165	2.6%						
		Sum	**6436**	**100%**	**100%**					
8.7	Sexual dysfunction - last 12 months									
		Yes	725	11.3%	11.5%					
		No	5583	86.7%	88.5%					
		Missing	128	2.0%						
		Sum	**6436**	**100%**	**100%**					
	Sexual dysfunction - previous									
		Yes	725	11.3%	11.5%					
		No	5583	86.7%	88.5%					
		Missing	128	2.0%						
		Sum	**6436**	**100%**	**100%**					
8.8	Dementia - last 12 months									
		Yes	76	1.2%	1.3%					
		No	5867	91.1%	98.7%					
		Missing	493	7.7%						
		Sum	**6436**	**100%**	**100%**					
	Dementia - previous									
		Yes	61	0.9%	1.0%					
		No	5824	90.5%	99.0%					
		Missing	551	8.6%						
		Sum	**6436**	**100%**	**100%**					
8.9	Diabetic ketoacidosis - last 12 months									
		Yes	194	3.0%	3.1%					
		No	6137	95.4%	96.9%					
		Missing	105	1.6%						
		Sum	**6436**	**100%**	**100%**					
	Diabetic ketoacidosis - previous									
		Yes	475	7.4%	7.6%					
		No	5789	89.9%	92.4%					
		Missing	172	2.7%						
		Sum	**6436**	**100%**	**100%**					
8.10	Hyperosmolar hyperglycaemic state - last 12 months									
		Yes	62	1.0%	1.0%					
		No	6265	97.3%	99.0%					
		Missing	109	1.7%						
		Sum	**6436**	**100%**	**100%**					
	Hyperosmolar hyperglycaemic state - previous									
		Yes	68	1.1%	1.1%					
		No	6193	96.2%	98.9%					
		Missing	175	2.7%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.8 COMPLICATIONS/EVENTS/COMORBIDITIES (continued)

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
8.11	Severe hypoglycaemia - last 12 months									
		Yes	355	5.5%	5.6%					
		No	5955	92.5%	94.4%					
		Missing	126	2.0%						
		Sum	**6436**	**100%**	**100%**					
8.11.1	Number of episodes (of patients with severe hypoglycaemia)									
		1-2 episodes	248	69.9%	70.9%					
		3-5 episodes	60	16.9%	17.1%					
		>5 episodes	42	11.8%	12.0%					
		Missing	5	1.4%						
		Sum	**355**	**100%**	**100%**					
	Severe hypoglycaemia - previous									
		Yes	564	8.8%	9.6%					
		No	5302	82.4%	90.4%					
		Missing	570	8.8%						
		Sum	**6436**	**100%**	**100%**					
8.12	Malignancy									
		Metastatic solid tumour**	128	2.0%	2.2%					
		Non-metastatic solid tumour**	268	4.2%	4.5%					
		Leukaemia**	29	0.5%	0.5%					
		Lymphoma**	39	0.6%	0.7%					
		Other**	128	2.0%	2.2%					
		Not applicable	5297	82.3%	89.1%					
		Missing	489	7.6%						
	** multiple malignacies reported in some patients									
8.13	Liver disease									
		Mild	423	6.6%	7.2%					
		Moderate/severe	156	2.4%	2.7%					
		Not applicable	5265	81.8%	90.1%					
		Missing	592	9.2%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

SECTION 4.9 RENAL FUNCTION & BLOOD GLUCOSE CONTROL

Item	Field	Category	Total	%	Relative %*	Median	IQR	Min	Max
9.1	Urinary protein/albumin result (all units)								
		Result	3784	58.8%	100%				
		Missing	2652	41.2%					
		Sum	**6436**	**100%**	**100%**				
	Urinary protein/albumin result (mg/L)								
		Result	1666	25.9%	100%	10.2	4.0 - 43.0	0.0	8460.0
	Urinary protein/albumin result (µg/min)								
		Result	33	0.5%	100%	8.0	5 - 17	0.0	3090.0
	Urinary protein/albumin result (mg/24hr)								
		Result	12	0.2%	100%	23.7	12.5 - 70	0.0	7600.0
	Albumin:creatinine (ratio)								
		Result	2073	32.2%	100%	1.9	0.4 - 7.9	0.0	1810.0
9.2	Serum creatinine (µmol/L)								
		Creatinine	5264	81.8%	100%	78	65 - 99	6	1330
		Missing	1172	18.2%					
		Sum	**6436**	**100%**	**100%**				

Item	Field	Category	Total	%	Relative %*	Median	Mean	SD	Min	Max
9.3.1	HbA1c (%)									
		HbA1c %	5792	90.0%	100%	7.8	8.1	1.8	4.1	19.9
		Missing	644	10.0%						
		Sum	**6436**	**100%**	**100%**					
9.3.2	HbA1c (mmol/mol)									
		HbA1c mmol/mol	5226	81.2%	100%	62.0	64.9	20.0	21.0	194.0
		Missing	1210	18.8%						
		Sum	**6436**	**100%**	**100%**					

*Relative % = % of the total excluding the missing values

5. Missing Data

Table 5.1 Overall missing data

	0 and ≤5	>5 and ≤10	>10 and ≤15	>15 and ≤20	>20 and ≤40	>40
Missing data	75.0%	20.0%	2.5%	2.5%	0.0%	0.0%

Table 5.2 Missing data by field

Item no.	Clinical Parameters	2019 (n=6436)		2017 (n=5719)		2015 (n=5183)	
		n	%	n	%	n	%
Demographics							
1.1	Date of birth	0	0.0	0	0.0	9	0.2
1.2	Gender	77	1.2	57	1.0	110	2.1
1.2.1	Currently pregnant (females aged 18-55 yrs)	78	1.2	77	1.3	90	1.7
1.3	Date of visit	0	0.0	0	0.0	0	0.0
1.4	Initial visit	82	1.3	129	2.3	221	4.3
1.5	Aboriginal/Torres Strait Islander	395	6.1	396	6.9	458	8.8
1.6	Country of birth	280	4.4	325	5.7	619	11.9
1.7	NDSS	614	9.5	771	13.5	1008	19.4
1.8	DVA	608	9.4	568	9.9	1005	19.4
Diabetes type and management							
2.1	Year of diagnosis	128	2.0	88	1.5	176	3.4
2.2	Type of diabetes	26	0.4	16	0.3	76	1.5
2.3	Blood glucose monitoring	558	8.7	NA	NA	NA	NA
2.4	Management method	55	0.9	29	0.5	440	8.5
2.4.1	Years on insulin	364	5.7	247	4.3	359	6.9
2.4.2	Insulin mode	66	1.0	53	0.9	335	6.5
Height, weight and smoking status							
3.1	Weight	205	3.2	149	2.6	198	3.8
3.2	Height	524	8.1	415	7.3	559	10.8
3.3	Smoking status	299	4.6	264	4.6	780	15.0
3.3.1	Number of years spent smoking (current or past smokers)	176	6.7	227	9.4	NA	NA
Blood pressure							
4.1	Blood pressure - systolic	236	3.7	261	4.6	275	5.3
4.1	Blood pressure - diastolic	236	3.7	261	4.6	274	5.3
4.2	On anti-hypertensive treatment	34	0.5	62	1.1	123	2.4
Diabetes related eye disease							
5.1	Attended optometrist/ophthalmologist	36	0.8	367	0.9	441	2.2
5.2	Fundus examination	50	0.8	51	0.9	112	2.2
5.3	Retinopathy	76	1.2	59	1.0	199	3.8
5.4	Treatment for retinopathy	89	1.4	NA	NA	NA	NA
5.5	Right or left cataract	92	1.4	NA	NA	NA	NA

Item no.	Clinical Parameters	2019 (n=6436)		2017 (n=5719)		2015 (n=5183)	
		n	%	n	%	n	%
Diabetes related foot problems							
6.1	Peripheral neuropathy - last 12 months	33	0.5	20	0.3	94	1.8
	Peripheral neuropathy - previous	171	2.7	294	5.1	NA	NA
6.2	Foot ulceration - last 12 months	28	0.4	16	0.3	95	1.8
	Foot ulceration - previous	78	1.2	170	3.0	NA	NA
6.3	Peripheral vascular disease - last 12 months	32	0.5	20	0.3	102	2.0
	Peripheral vascular disease - previous	173	2.7	299	5.2	NA	NA
6.4	Lower limb amputation - last 12 months	31	0.5	30	0.5	43	0.8
	Lower limb amputation - previous	170	2.6	292	5.1	653	12.6
Medications and lipids							
7.1	Aspirin	14	0.2	21	0.4	35	0.7
7.2	Other anti-platelets	21	0.3	29	0.5	107	2.1
7.3	Anti-coagulants	22	0.3	36	0.6	109	2.1
7.4	On lipid lowering therapy	16	0.2	15	0.3	31	0.6
7.4.1	On lipid lowering therapy - Statin	5	0.1	7	0.1	21	0.4
7.4.2	On lipid lowering therapy - Fibrate	55	0.9	112	2.0	323	6.2
7.4.3	On lipid lowering therapy - Ezetrol	58	0.9	102	1.8	320	6.2
7.4.4	On lipid lowering therapy - Fish oil	63	1.0	113	2.0	330	6.4
7.5	Lipids measured	17	0.3	19	0.3	NA	NA
7.5.1	Lipids measured - Total cholesterol	48	0.7	15	0.3	1018	19.6
7.5.2	Lipids measured - LDL cholesterol	675	10.5	883	15.4	1779	34.3
7.5.3	Lipids measured - HDL cholesterol	564	8.8	575	10.1	1544	29.8
7.5.4	Lipids measured - Triglycerides	174	2.7	159	2.8	1116	21.5
7.5.5	Lipids measured - Fasting lipids	19	0.3	476	8.3	1734	33.5
Complications/events/comorbidities							
8.1	Stroke - last 12 months	14	0.2	11	0.2	27	0.5
	Stroke - previous	168	2.6	287	5.0	641	12.4
8.2	Myocardial infarction - last 12 months	17	0.3	139	2.4	33	0.6
	Myocardial infarction - previous	160	2.5	287	5.0	638	12.3
8.3	CABG - last 12 months	20	0.3	14	0.2	44	0.8
	CABG - previous	161	2.5	291	5.1	643	12.4
8.4	Congestive cardiac failure - last 12 months	493	7.7	478	8.4	816	15.7
	Congestive cardiac failure - previous	552	8.6	628	11.0	1059	20.4
8.5	End stage renal disease - last 12 months	12	0.2	17	0.3	41	0.8
	End stage renal disease - previous	163	2.5	294	5.1	648	12.5
8.6	Blindness - last 12 months	106	1.6	139	2.4	403	7.8
	Blindness - previous	165	2.6	294	5.1	658	12.7
8.7	Sexual dysfunction - last 12 months	128	4.0	NA	NA	NA	NA
	Sexual dysfunction - previous	234	7.4	NA	NA	NA	NA
8.8	Dementia - last 12 months	493	7.7	478	8.4	827	16.0
	Dementia - previous	551	8.6	629	11.0	1171	22.6

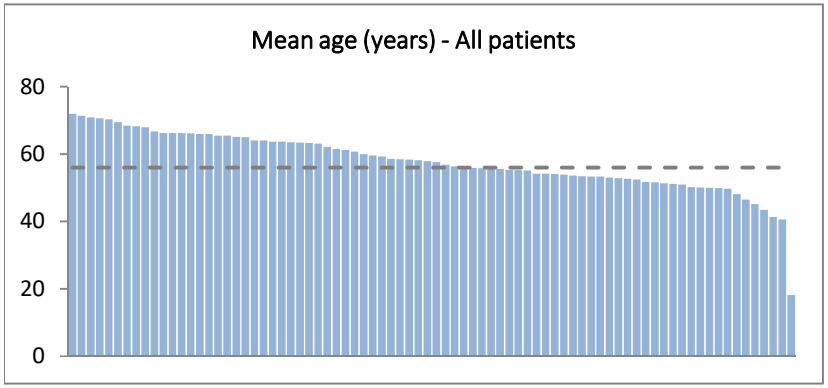
Item no.	Clinical Parameters	2019 (n=6436)		2017 (n=5719)		2015 (n=5183)	
		n	%	n	%	n	%
8.9	Diabetic ketoacidosis - last 12 months	105	1.6	NA	NA	NA	NA
	Diabetic ketoacidosis - previous	172	2.7	NA	NA	NA	NA
8.10	Hyperosmolar hyperglycaemic state - last 12 months	109	1.7	NA	NA	NA	NA
	Hyperosmolar hyperglycaemic state - previous	175	2.7	NA	NA	NA	NA
8.11	Severe hypoglycaemia - last 12 months	126	2.0	27	0.5	55	1.1
	Severe hypoglycaemia - last 12 months - No. of episodes	5	1.4	16	4.3	NA	NA
	Severe hypoglycaemia - previous	570	8.9	628	11.0	NA	NA
8.12	Malignancy	489	7.6	750	13.1	1324	25.5
8.13	Liver disease	592	9.2	574	10.0	970	18.7
Renal function and blood glucose control							
9.1	Urinary protein/albumin collected	24	0.4	15	0.3	448	8.6
9.1.1	Urinary protein/albumin result	0	0.0	9	0.2	1	0.0
9.1.2	Urinary protein/albumin unit	0	0.0	9	0.2	59	1.1
9.2	Serum creatinine	1172	18.2	1082	18.9	796	15.4
9.3.1	Glycated haemoglobin (%)	644	10.0	649	11.3	786	15.2
9.3.2	Glycated haemoglobin (mmol/mol)	1210	18.8	1053	18.4	3514	67.8

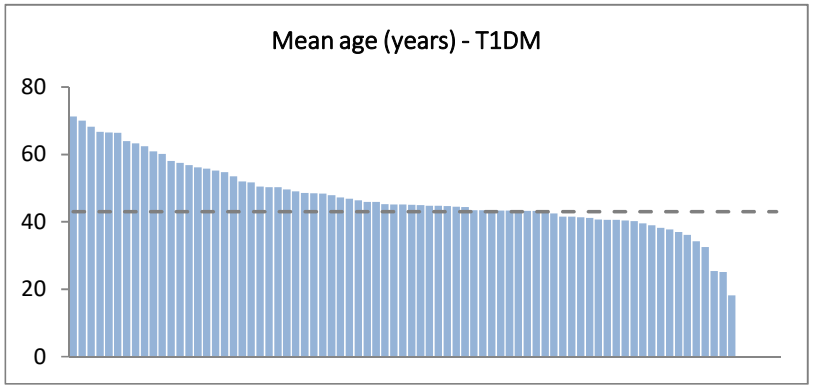
6. Descriptive Report

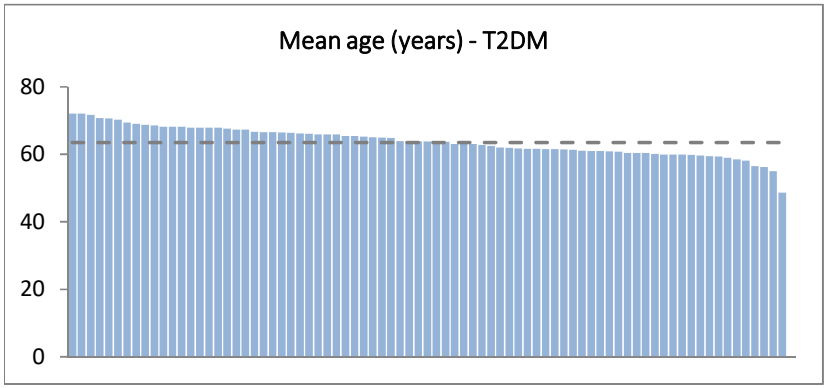
6.1 Patient Characteristics

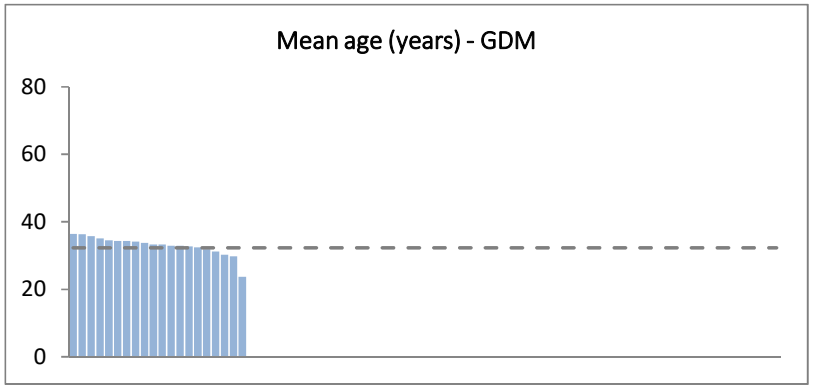
Mean age, BMI and duration by diabetes type

Diabetes type	Age (years)					BMI (kg/m^2)					Duration (years)				
	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max
T1DM	1729	43.0	16.9	18.0	97.9	1584	27.8	6.7	12.5	120.8	1721	20.3	14.2	0.0	80.0
T2DM	4143	63.5	13.3	18.6	101.8	3856	33.5	10.0	0.0	387.1	4095	13.4	9.5	0.0	70.0
GDM	320	32.3	5.4	18.0	58.0	300	31.5	6.9	13.0	55.1	319	0.1	0.5	0.0	7.0
Don't know	93	49.0	18.8	18.9	88.4	30	29.5	7.6	17.3	50.1	24	10.4	13.9	0.0	45.0
Other	125	54.1	17.0	18.8	84.9	116	27.7	7.3	15.9	70.7	123	8.1	9.2	0.0	60.0
Unstated	26	50.5	19.9	20.0	79.1	15	26.5	8.9	0.0	37.0	26	13.3	13.3	0.0	52.0
Total	**6436**	**56.0**	**17.7**	**18.0**	**101.8**	**5901**	**31.7**	**9.3**	**0.0**	**387.1**	**6308**	**14.5**	**11.7**	**0.0**	**80.0**









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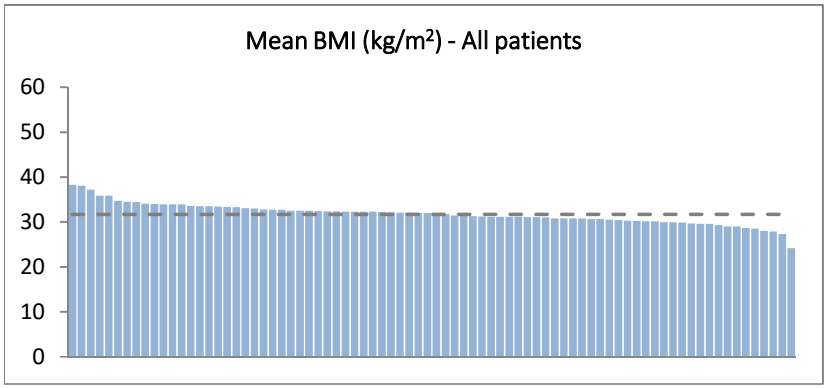

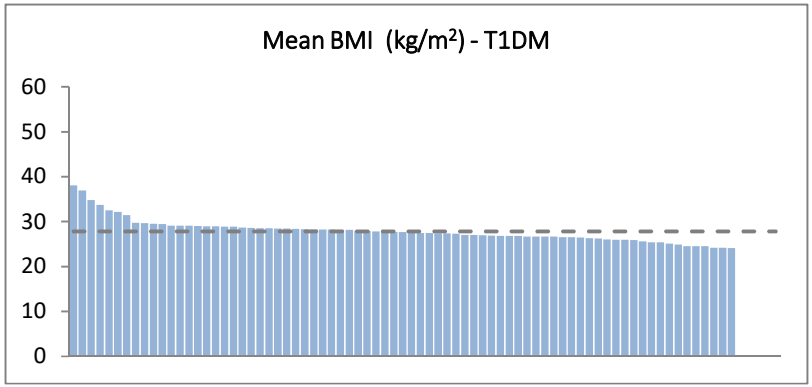

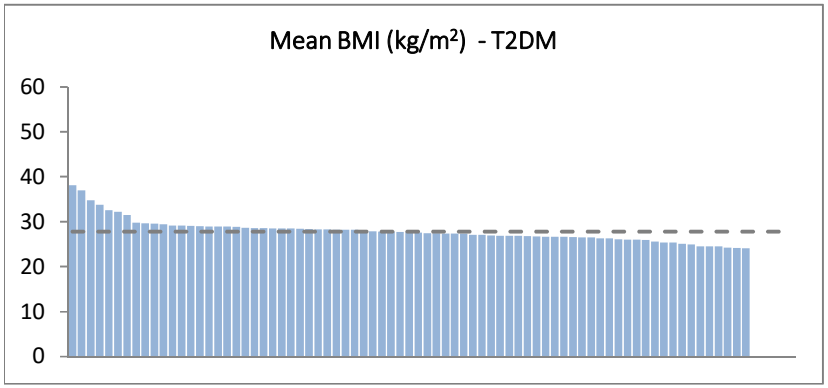

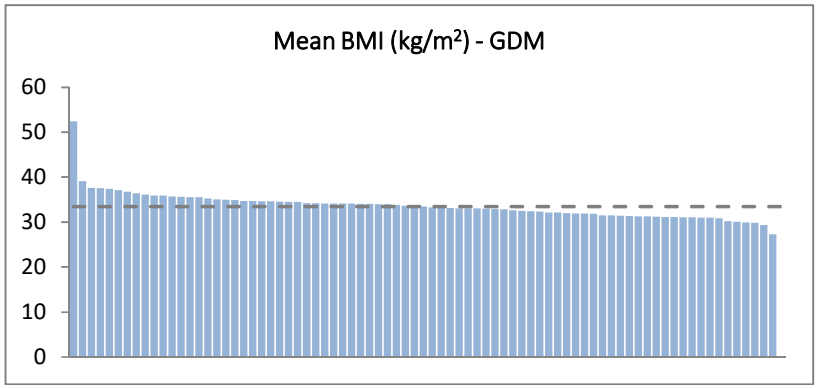

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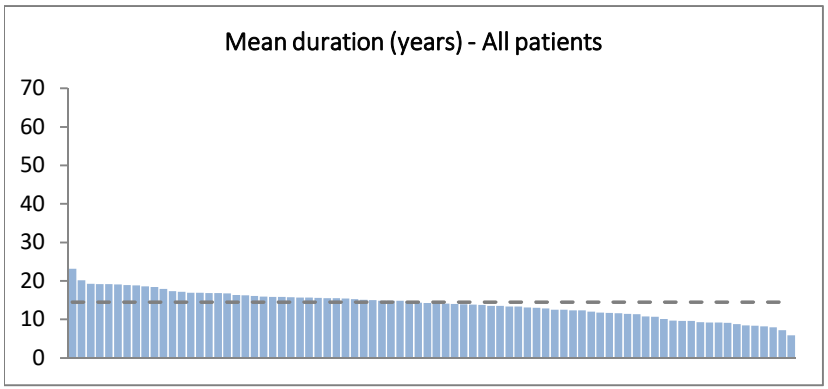
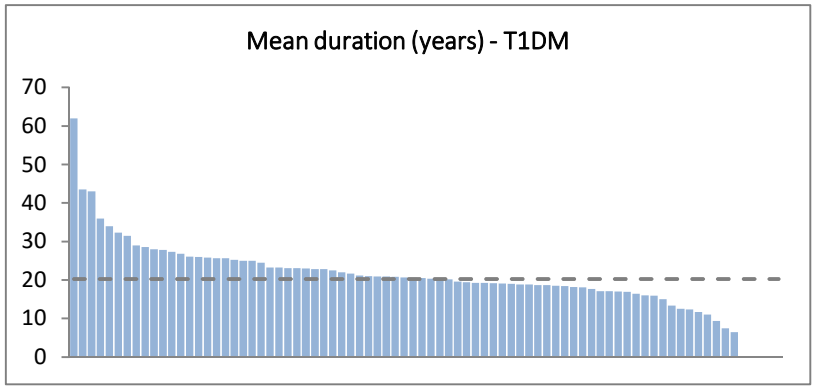
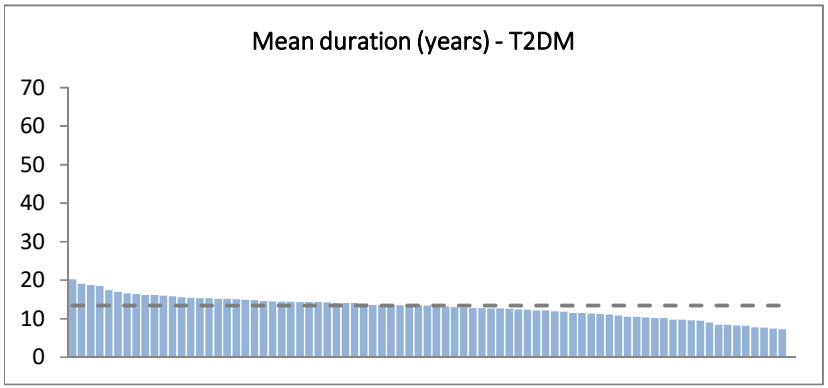
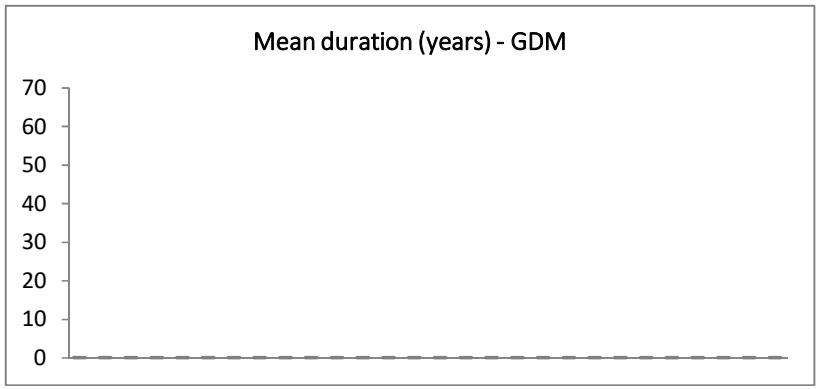




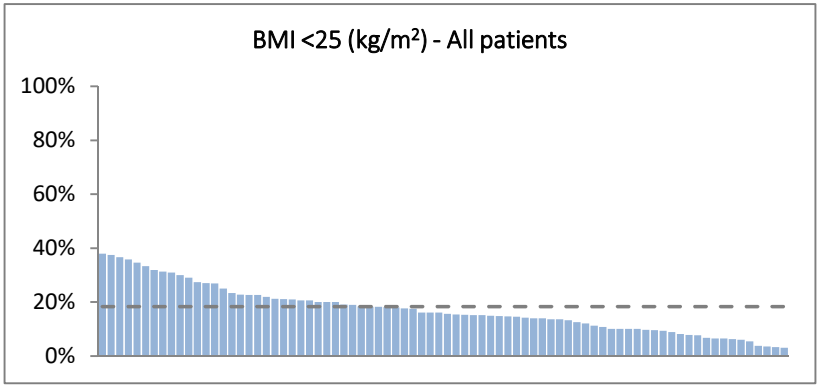


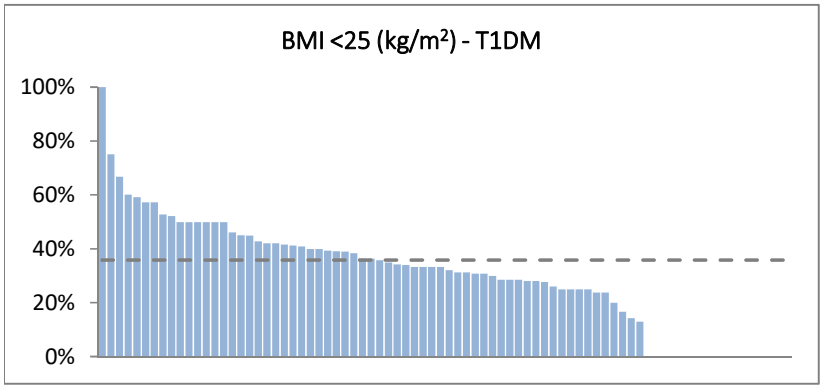


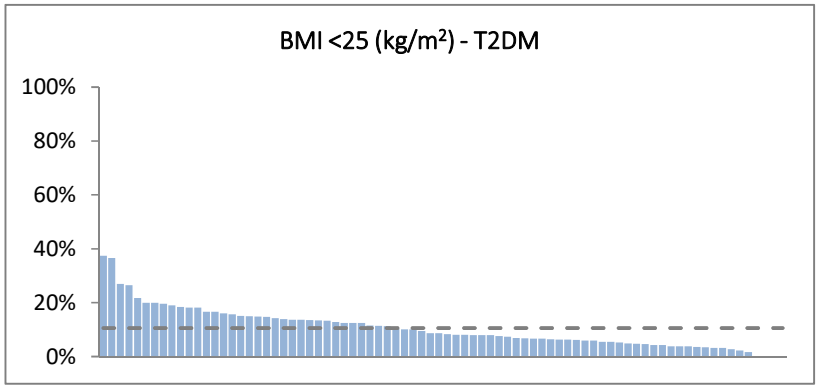
X-axis: All sites (Descending order)

BMI by diabetes type

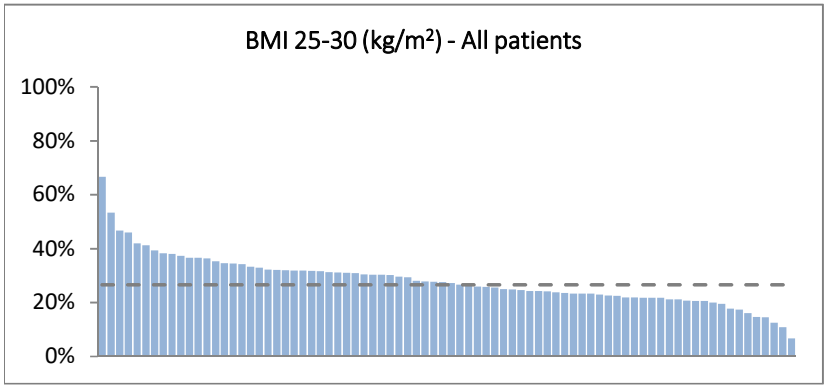
Diabetes type	<25 (kg/m^2)			25-30 (kg/m^2)			≥30 (kg/m^2)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	567	35.8	52.4	558	35.2	32.6	459	29.0	14.8	**1584**	**26.8**
T2DM	408	10.6	37.7	1012	26.2	59.2	2436	63.2	78.4	**3856**	**65.3**
GDM	50	16.7	4.6	86	28.7	5.0	164	54.7	5.3	**300**	**5.1**
Don't know	7	23.3	0.6	10	33.3	0.6	13	43.3	0.4	**30**	**0.5**
Other	46	39.7	4.3	37	31.9	2.2	33	28.4	1.1	**116**	**2.0**
Unstated	4	26.7	0.4	7	46.7	0.4	4	26.7	0.1	**15**	**0.3**
Total	**1082**	**18.3**		**1710**	**29.0**		**3109**	**52.7**		5901	

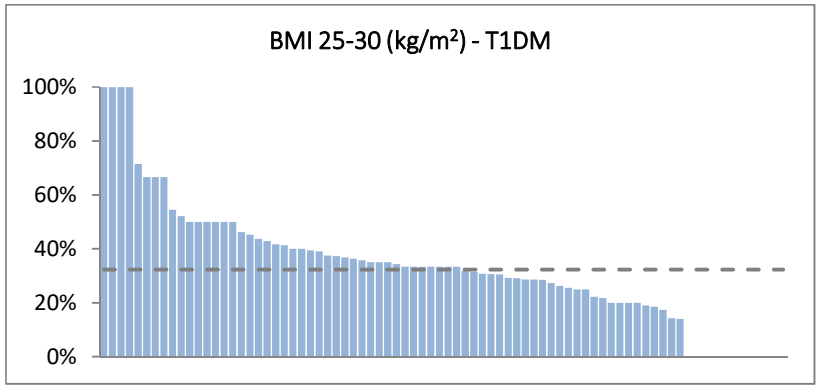


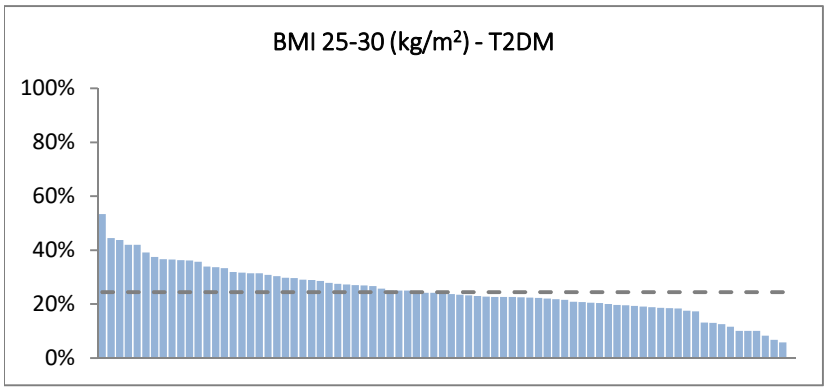


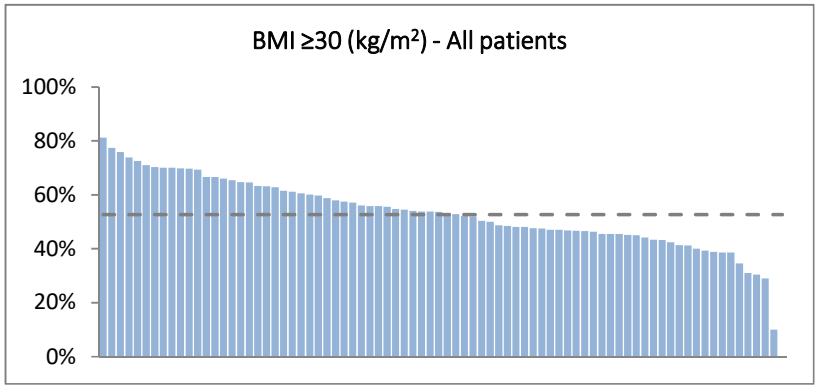


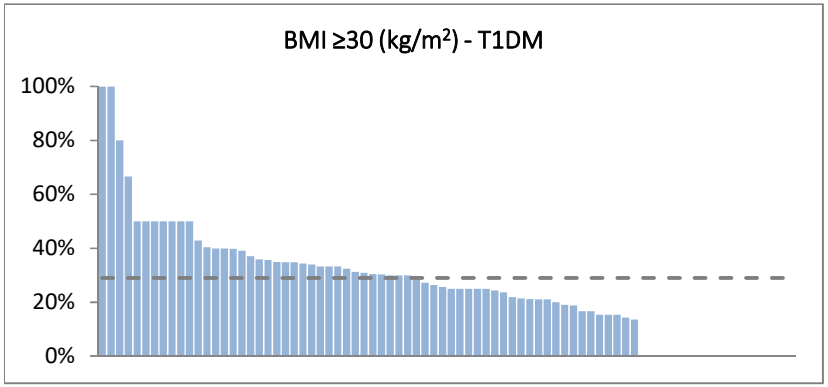
X-axis: All sites (Descending order)

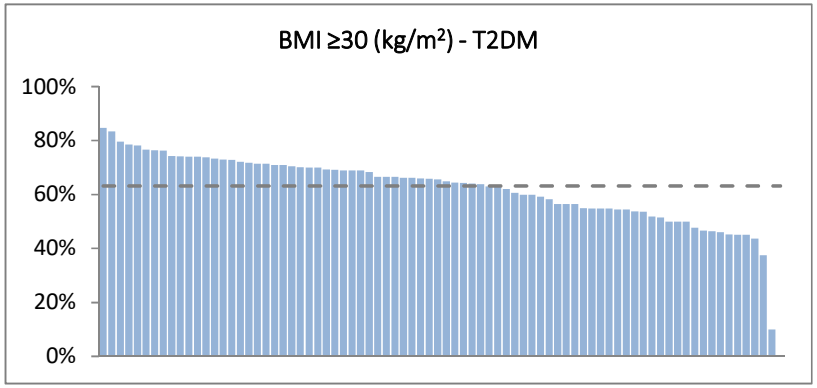








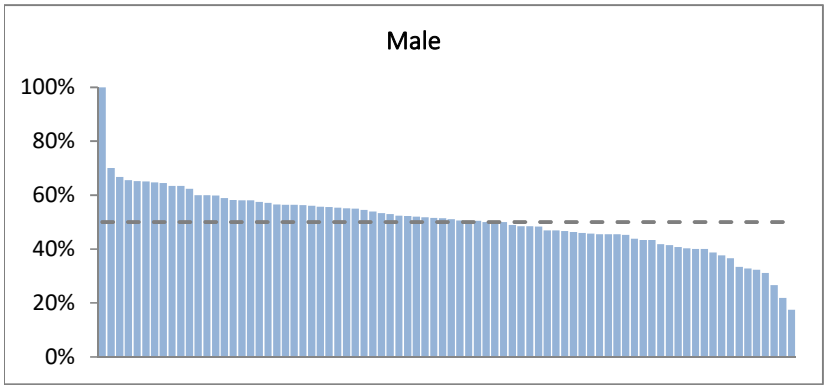


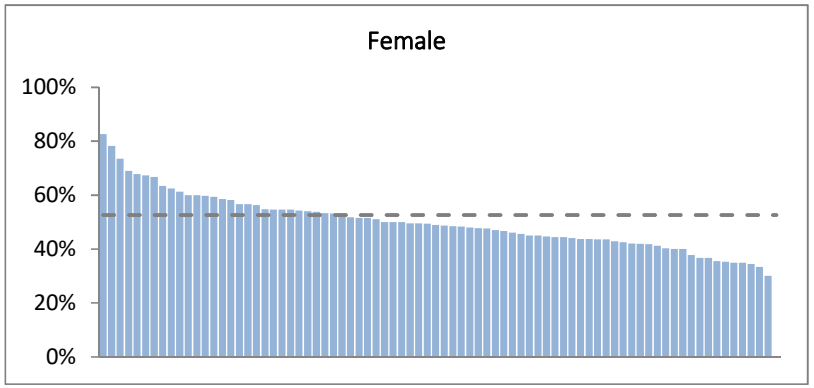


X-axis: All sites (Descending order)

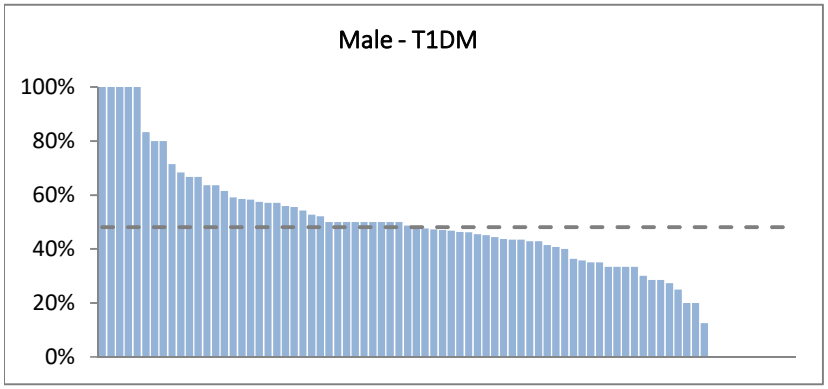
Gender by diabetes type

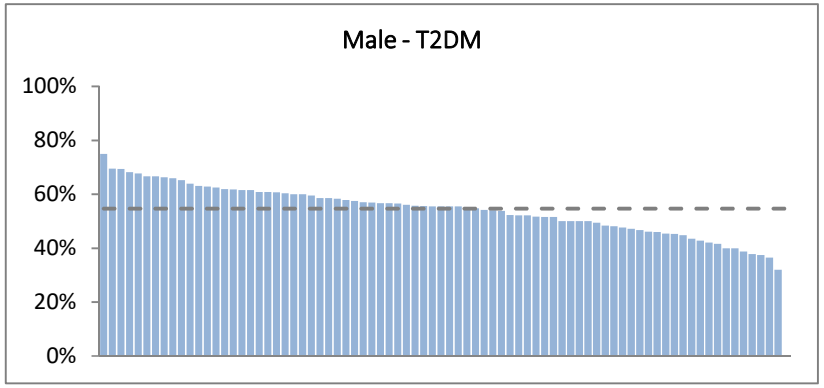
Diabetes type	Males			Females			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	826	48.1	26.0	891	51.9	28.0	**1717**	**27.0**
T2DM	2246	54.7	70.7	1861	45.3	58.5	**4107**	**64.6**
GDM	NA	NA	NA	320	100.0	10.1	**320**	**5.0**
Don't know	33	47.1	1.0	37	52.9	1.2	**70**	**1.1**
Other	66	53.7	2.1	57	46.3	1.8	**123**	**1.9**
Unstated	8	36.4	0.3	14	63.6	0.4	**22**	**0.3**
Total	**3179**	**50.0**		**3180**	**50.0**		6359	

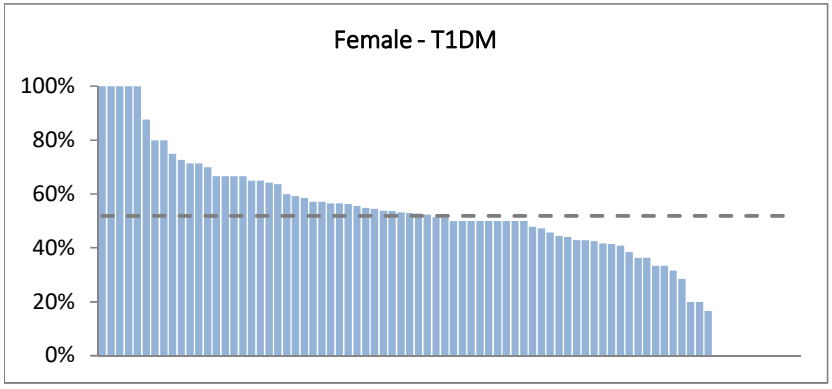


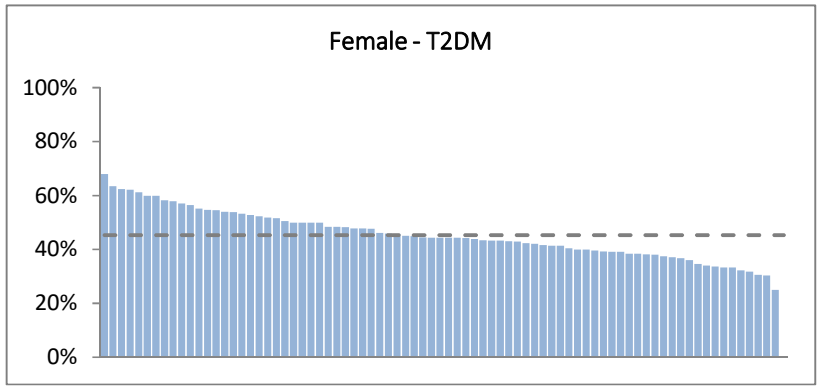


X-axis: All sites (Descending order)







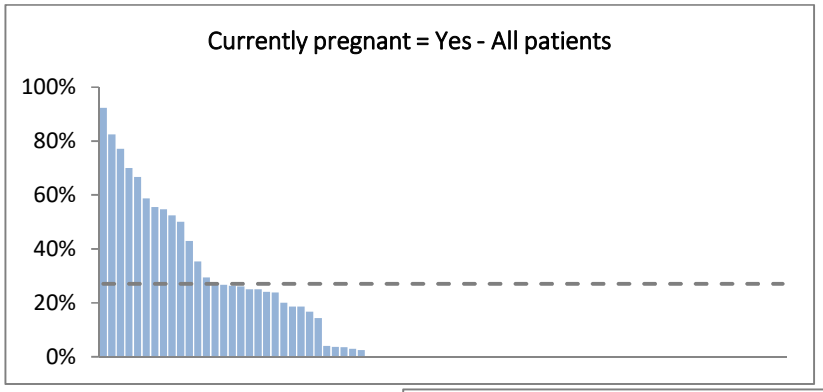


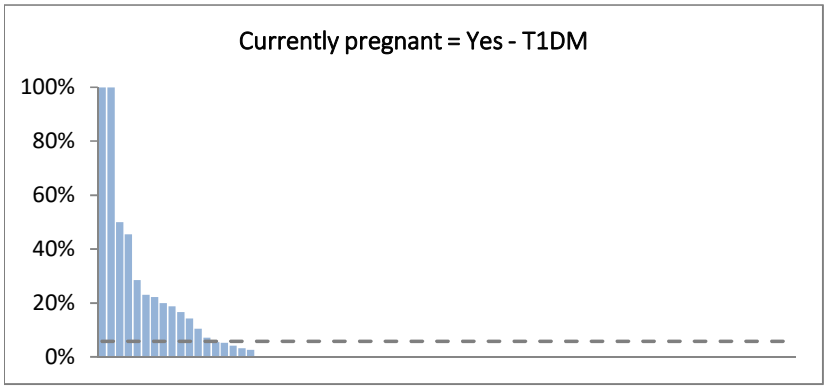
X-axis: All sites (Descending order)

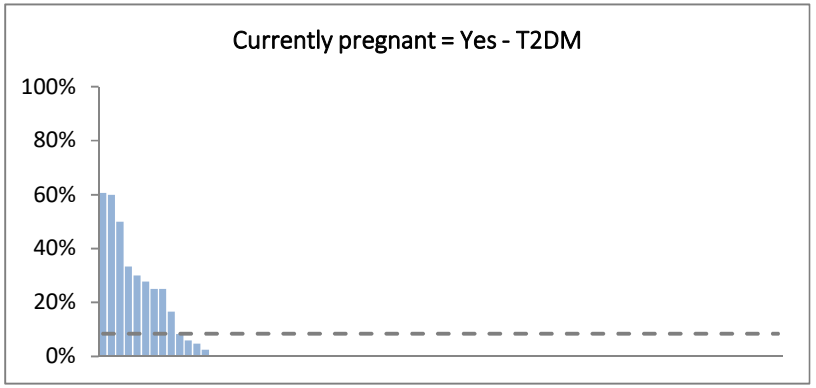
Currently pregnant* by diabetes type

Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	36	5.8	9.1	585	94.2	55.0	**621**	**42.6**
T2DM	40	8.4	10.1	437	91.6	41.1	**477**	**32.7**
GDM	317	99.4	80.3	2	0.6	0.2	**319**	**21.9**
Don't know	0	0.0	0.0	10	100.0	0.9	**10**	**0.7**
Other	1	3.7	0.3	26	96.3	2.4	**27**	**1.9**
Unstated	1	20.0	0.3	4	80.0	0.4	**5**	**0.3**
Total	**395**	**27.1**		**1064**	**72.9**		**1459**	

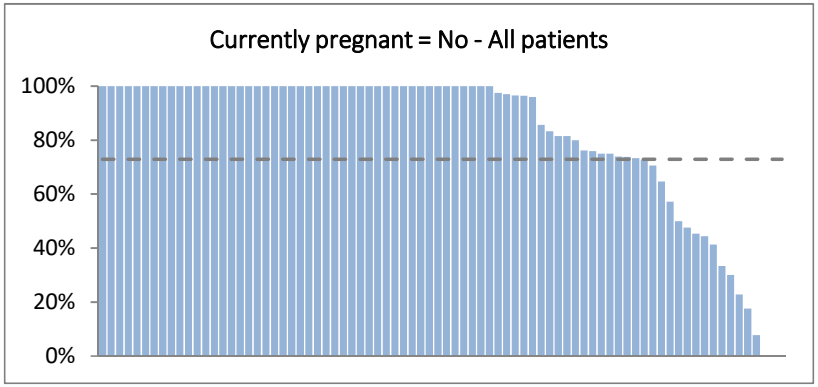
* females aged 18-55 years

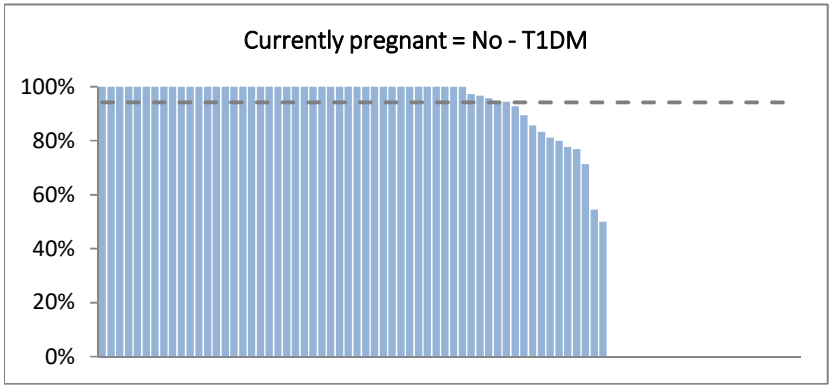


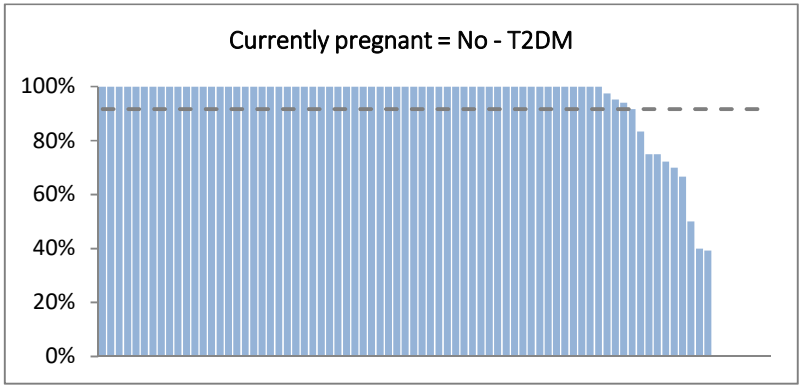




X-axis: All sites (Descending order)





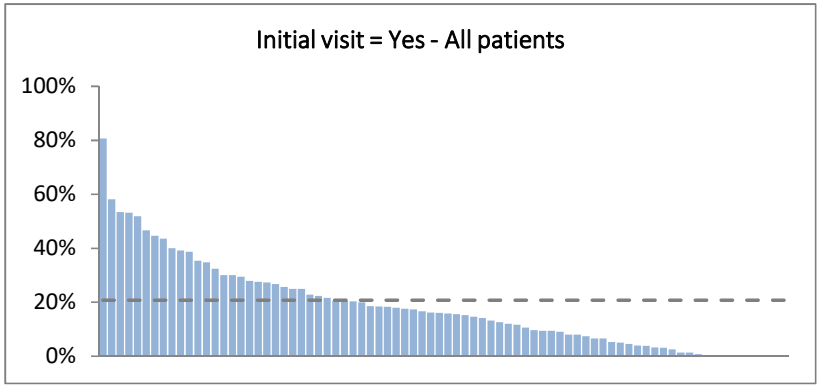


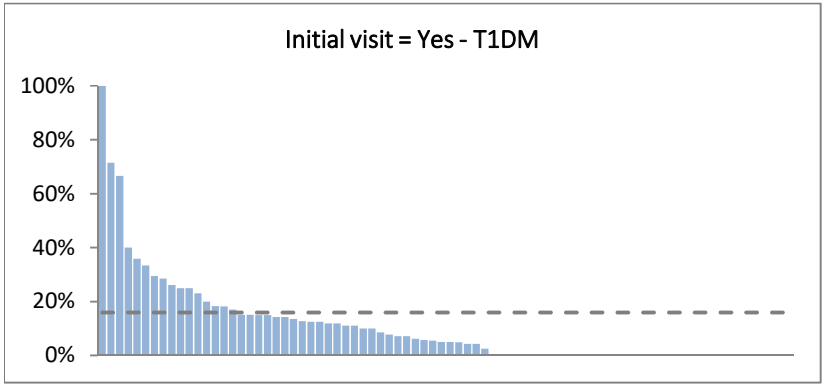
*Females aged 18-55 years

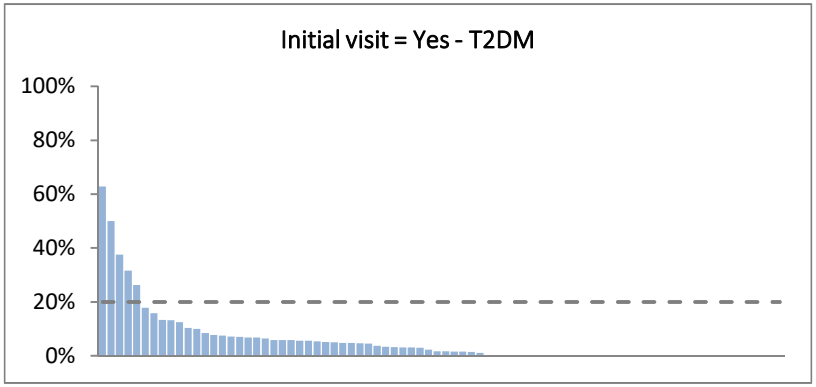
X-axis: All sites (Descending order)

Initial visit by diabetes type

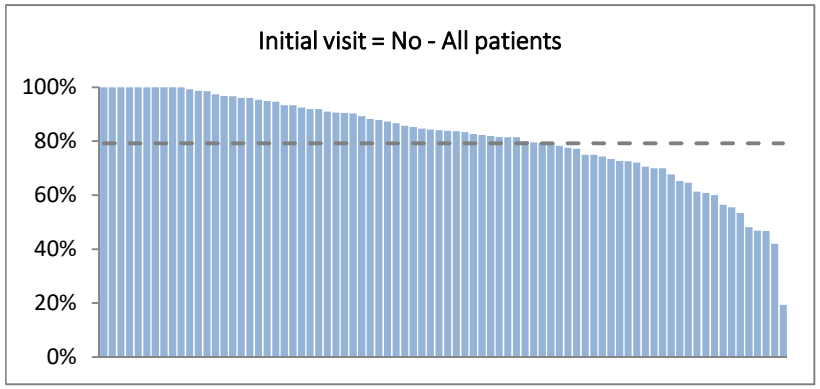
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	272	15.9	20.6	1434	84.1	28.5	1706	26.8
T2DM	817	20.0	61.9	3273	80.0	65.0	4090	64.4
GDM	131	40.9	9.9	189	59.1	3.8	320	5.0
Don't know	61	67.8	4.6	29	32.2	0.6	90	1.4
Other	27	22.1	2.0	95	77.9	1.9	122	1.9
Unstated	11	42.3	0.8	15	57.7	0.3	26	0.4
Total	**1319**	**20.8**		**5035**	**79.2**		6354	

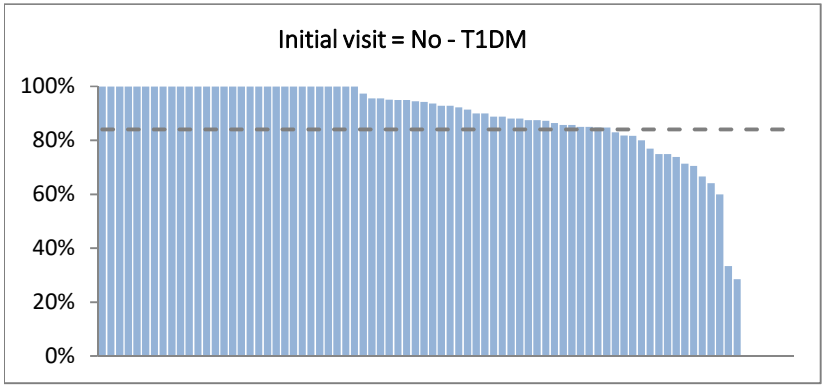


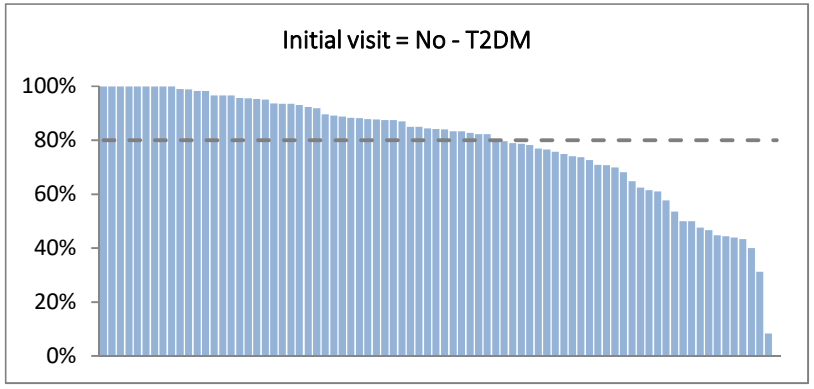




X-axis: All sites (Descending order)



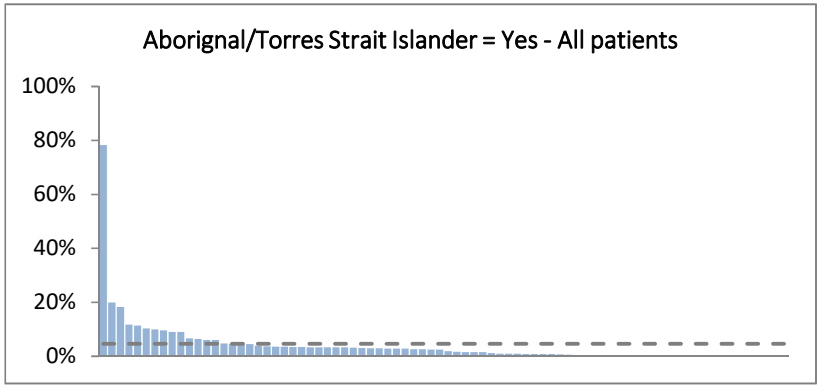


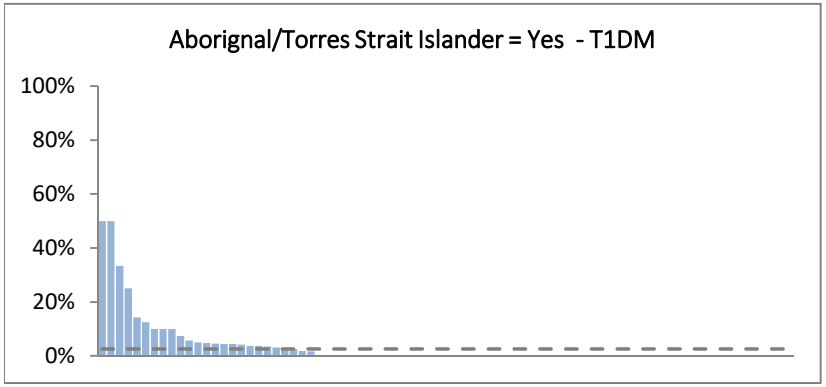


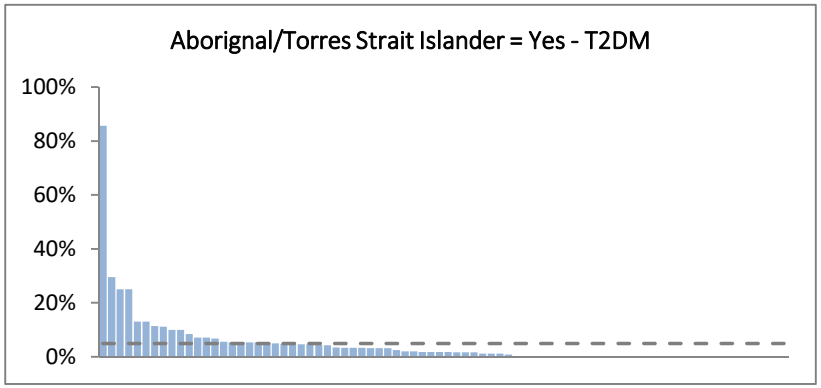
X-axis: All sites (Descending order)

Aborignal/Torres Strait Islander status by diabetes type

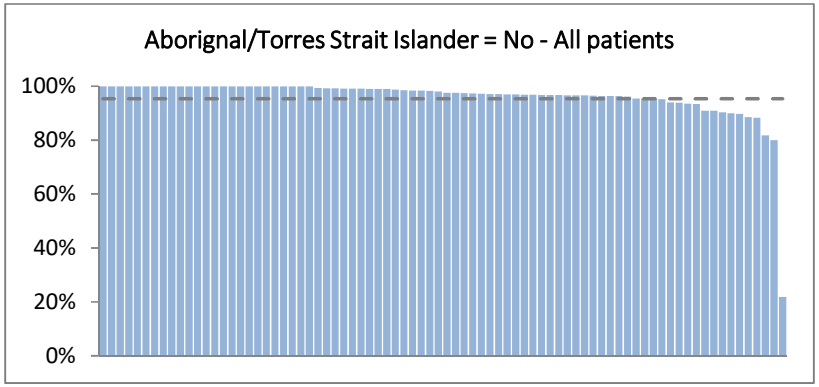
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	41	2.6	14.6	1555	97.4	27.0	**1596**	**26.4**
T2DM	195	4.9	69.4	3775	95.1	65.5	**3970**	**65.7**
GDM	41	12.9	14.6	278	87.1	4.8	**319**	**5.3**
Don't know	0	0.0	0.0	23	100.0	0.4	**23**	**0.4**
Other	3	2.6	1.1	112	97.4	1.9	**115**	**1.9**
Unstated	1	5.6	0.4	17	94.4	0.3	**18**	**0.3**
Total	**281**	**4.7**		**5760**	**95.3**		6041	

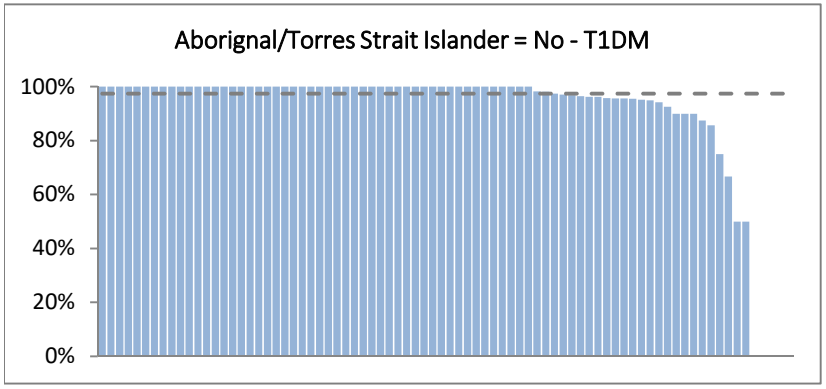


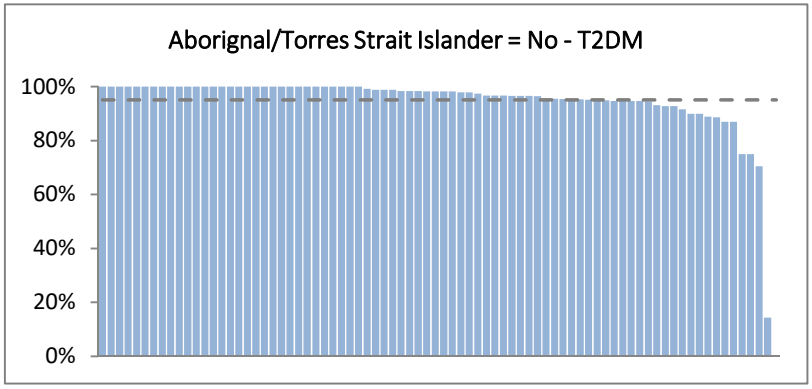




X-axis: All sites (Descending order)



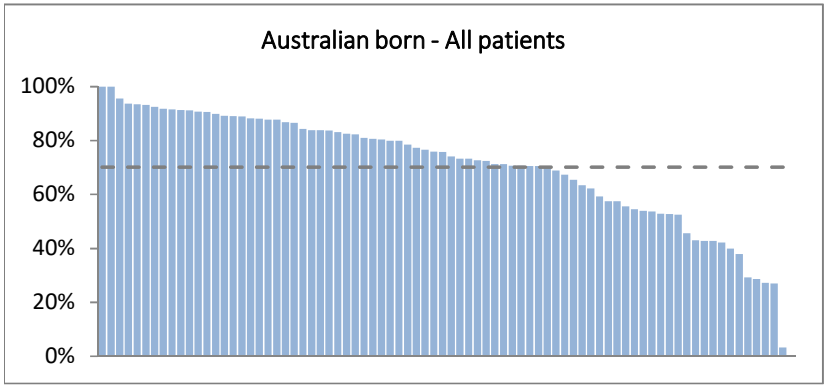


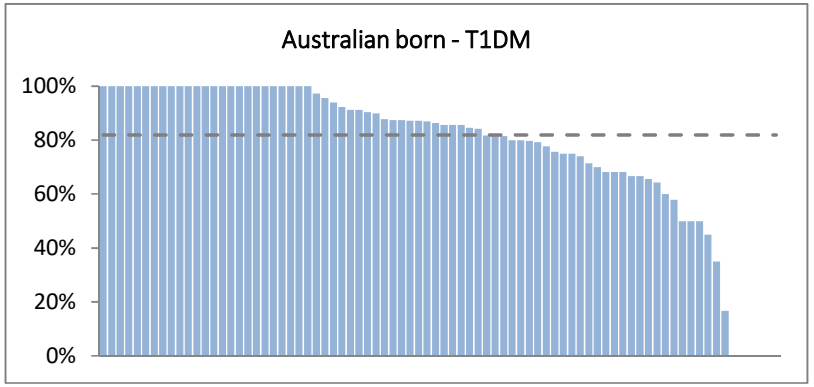


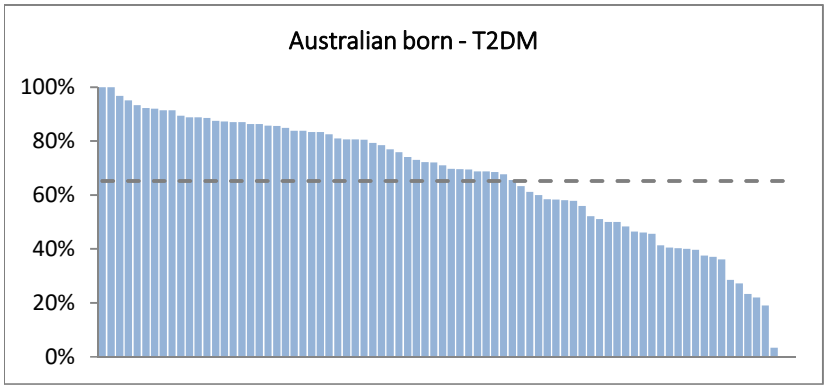
X-axis: All sites (Descending order)

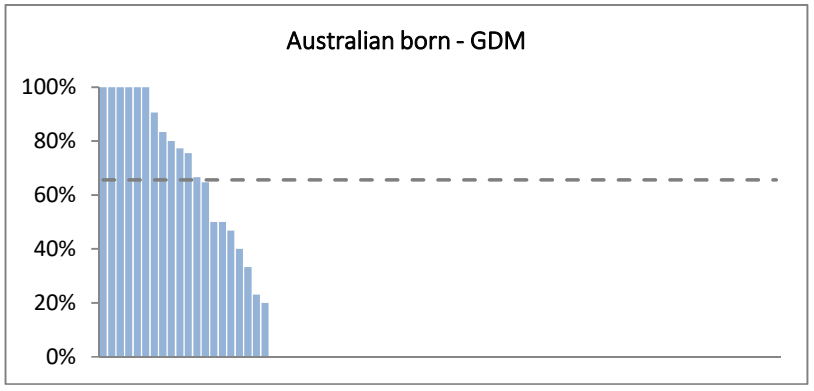
Australian born by diabetes type

Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	1367	81.9	31.7	302	18.1	16.4	**1669**	**27.1**
T2DM	2585	65.2	59.9	1380	34.8	75.0	**3965**	**64.4**
GDM	208	65.6	4.8	109	34.4	5.9	**317**	**5.1**
Don't know	52	85.2	1.2	9	14.8	0.5	**61**	**1.0**
Other	90	75.0	2.1	30	25.0	1.6	**120**	**1.9**
Unstated	15	62.5	0.3	9	37.5	0.5	**24**	**0.4**
Total	**4317**	**70.1**		**1839**	**29.9**		6156	





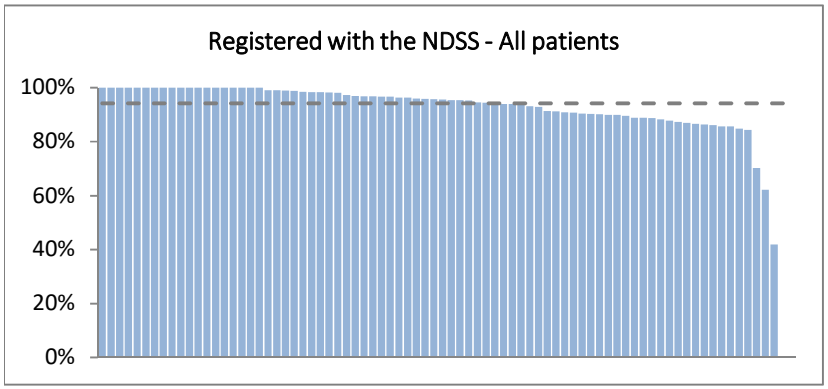


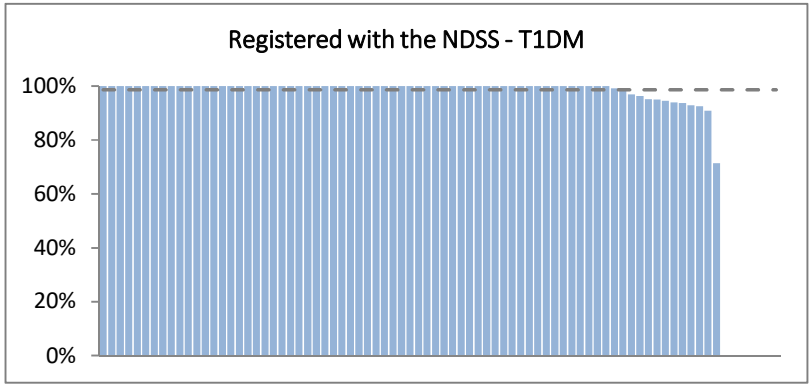


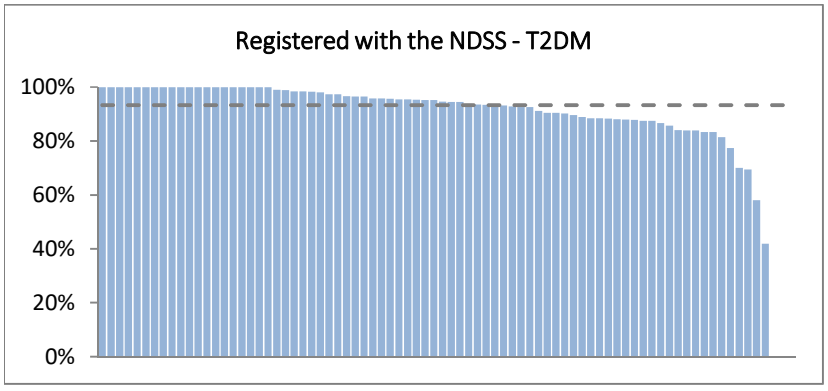
X-axis: All sites (Descending order)

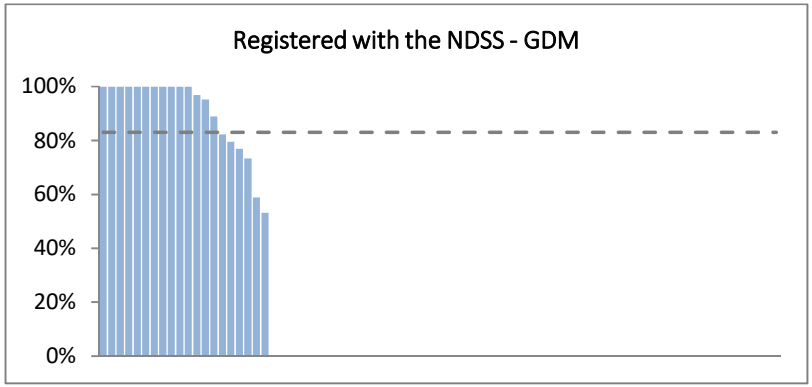
NDSS by diabetes type

Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	1542	98.6	28.1	22	1.4	6.5	**1564**	**26.9**
T2DM	3543	93.3	64.6	254	6.7	75.1	**3797**	**65.2**
GDM	264	83.0	4.8	54	17.0	16	**318**	**5.5**
Don't know	14	70.0	0.3	6	30.0	2	**20**	**0.3**
Other	106	98.1	1.9	2	1.9	0.6	**108**	**1.9**
Unstated	15	100.0	0.3	0	0.0	0	**15**	**0.3**
Total	**5484**	**94.2**		**338**	**5.8**		5822	







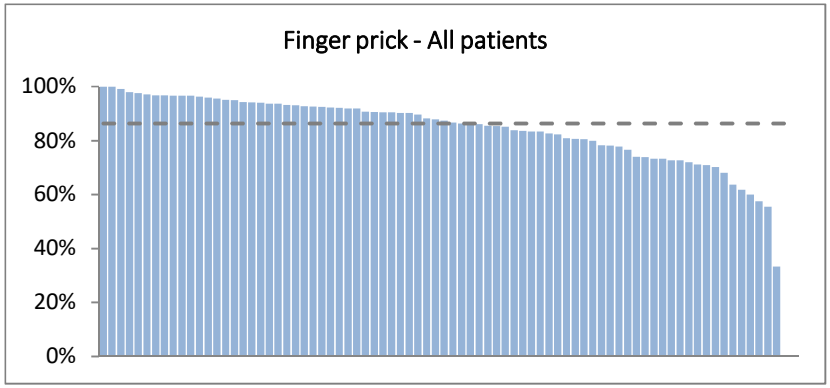


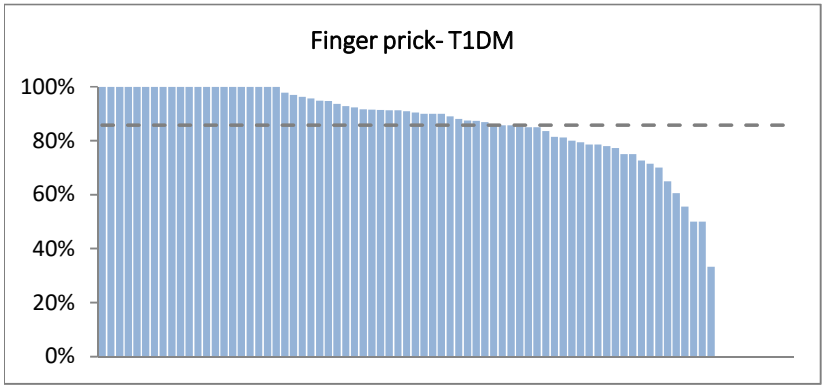
X-axis: All sites (Descending order)

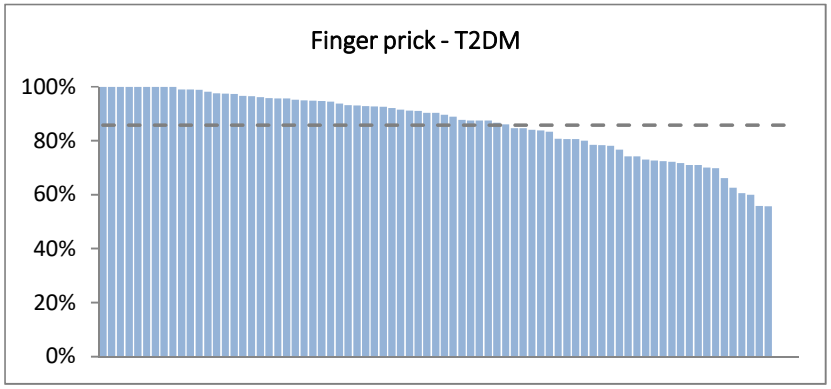
Methods of blood glucose monitoring*

Diabetes type	None			Finger prick			Continuous glucose monitoring			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	13	0.7	1.7	1361	75.7	26.5	423	23.5	87.2	**1797**	**29.4**
T2DM	444	11.5	58.1	3355	87.1	65.3	51	1.3	10.5	**3850**	**62.9**
GDM	26	8.1	3.4	292	91.3	5.7	2	0.6	0.4	**320**	**5.2**
Don't know	4	22.2	0.5	13	72.2	0.3	1	5.6	0.2	**18**	**0.3**
Other	4	3.5	0.5	103	89.6	2.0	8	7.0	1.6	**115**	**1.9**
Unstated	1	5.6	0.1	17	94.4	0.3	0	0.0	0.0	**18**	**0.3**
Total	**492**	**8.0**		**5141**	**84.0**		**485**	**7.9**		6118	

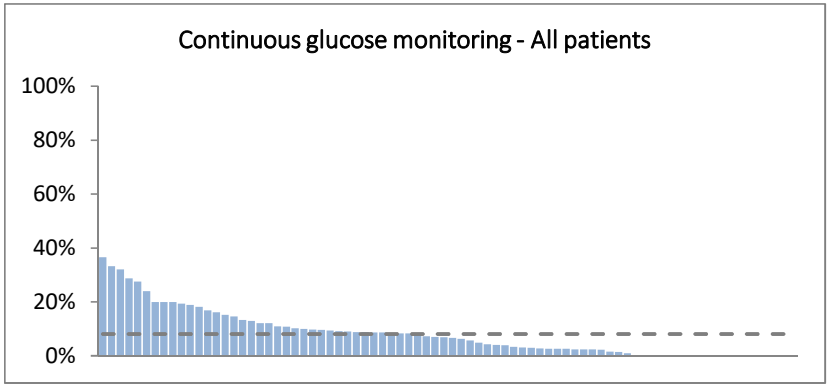
* multiple methods reported by some patients

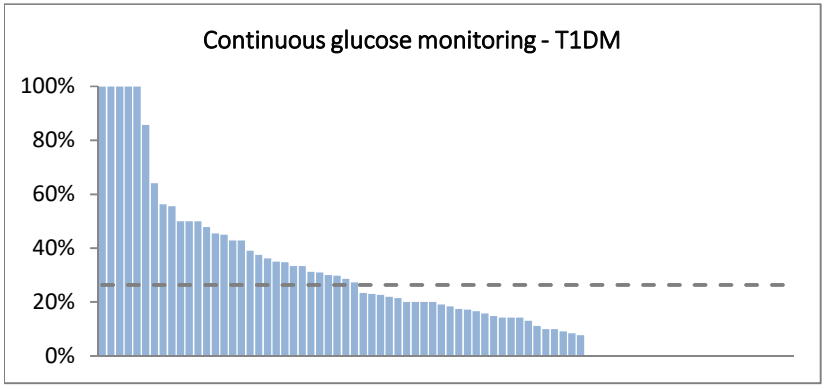


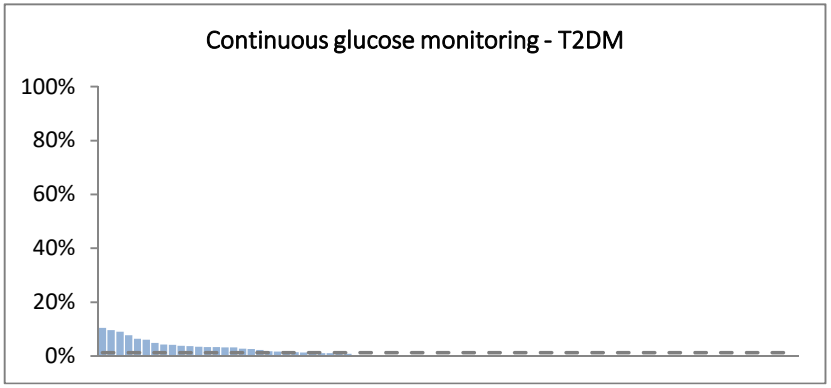




X-axis: All sites (Descending order)



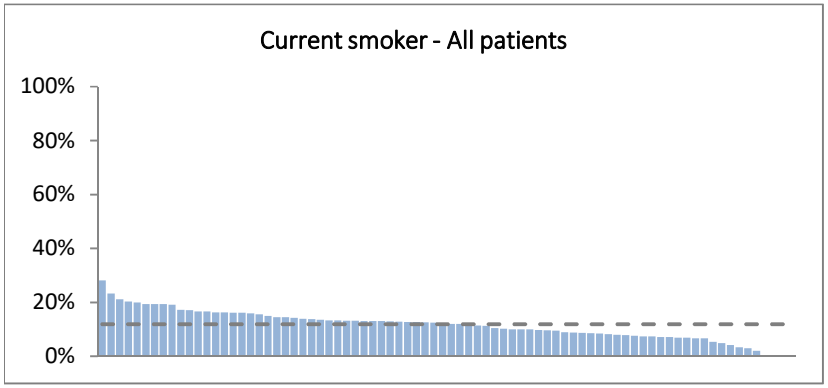


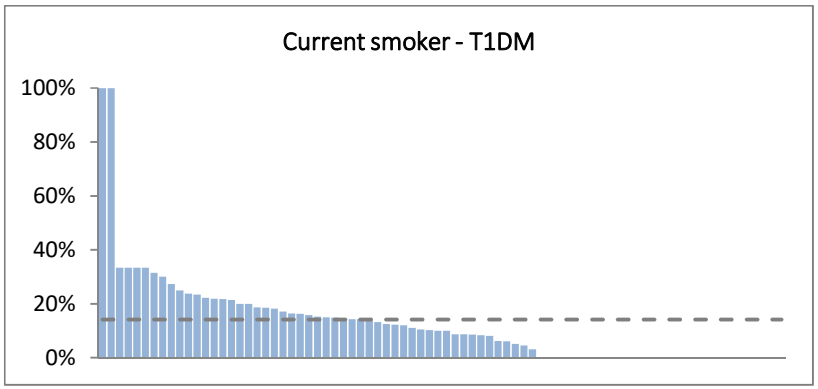


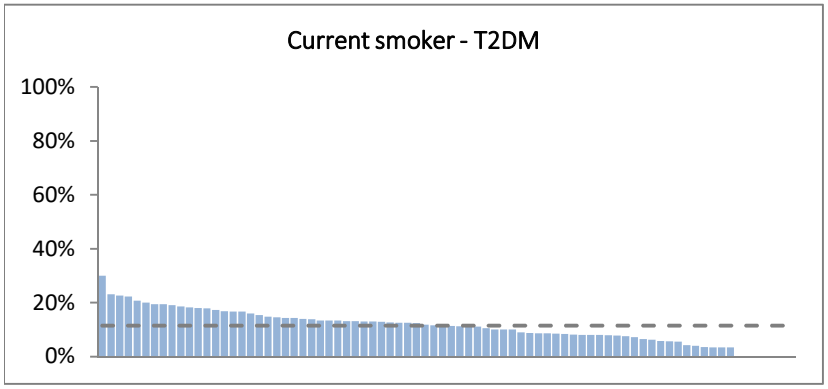
X-axis: All sites (Descending order)

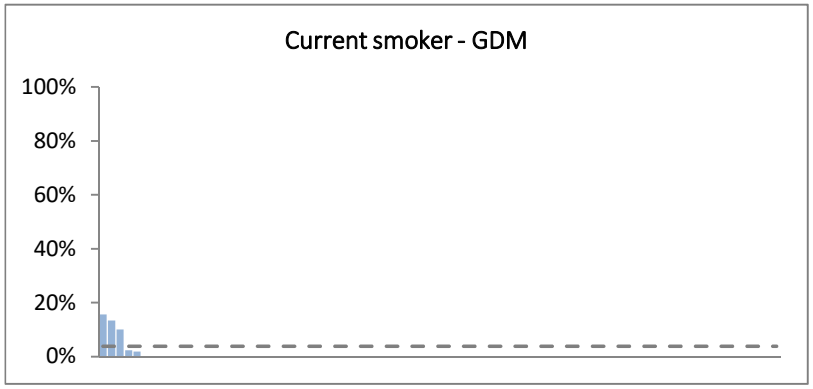
Smoking status by diabetes type

Diabetes type	Current smoker			Past smoker			Never smoked			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	234	14.1	32.1	367	22.2	19.5	1053	63.7	29.9	**1654**	**27.0**
T2DM	460	11.5	63.0	1434	35.8	76.0	2111	52.7	60.0	**4005**	**65.3**
GDM	12	3.8	1.6	38	12.1	2.0	264	84.1	7.5	**314**	**5.1**
Don't know	3	13.6	0.4	3	13.6	0.2	16	72.7	0.5	**22**	**0.4**
Other	20	16.7	2.7	37	30.8	2.0	63	52.5	1.8	**120**	**2.0**
Unstated	1	4.5	0.1	7	31.8	0.4	14	63.6	0.4	**22**	**0.4**
Total	**730**	**11.9**		**1886**	**30.7**		**3521**	**57.4**		6137	

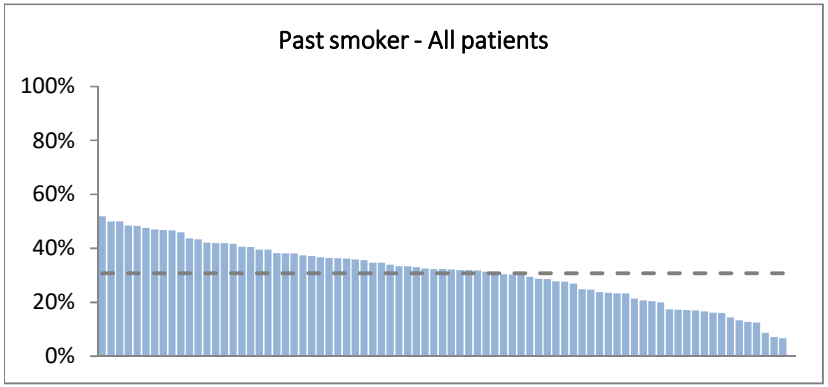


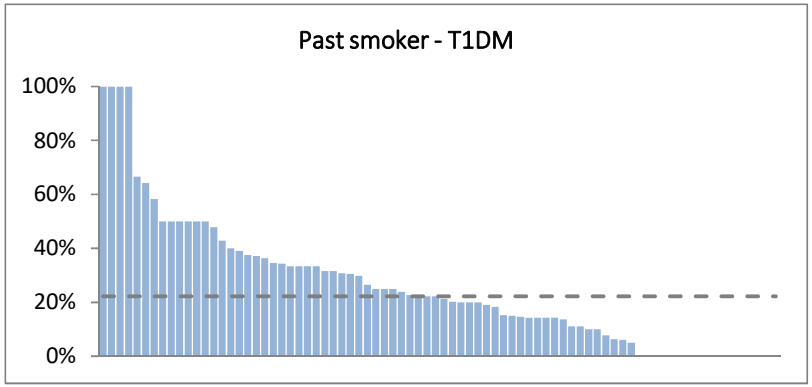


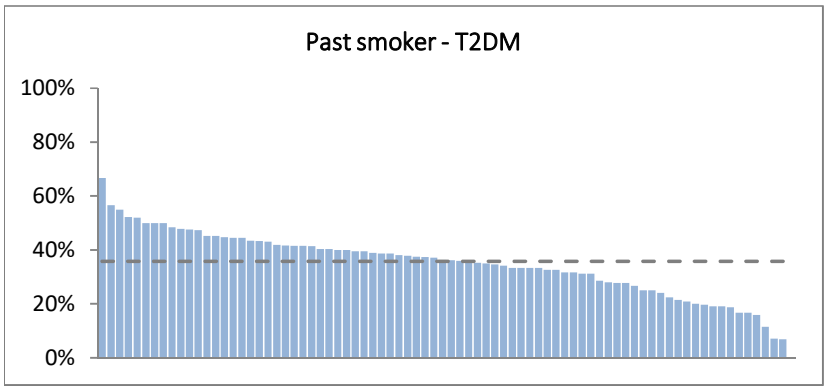


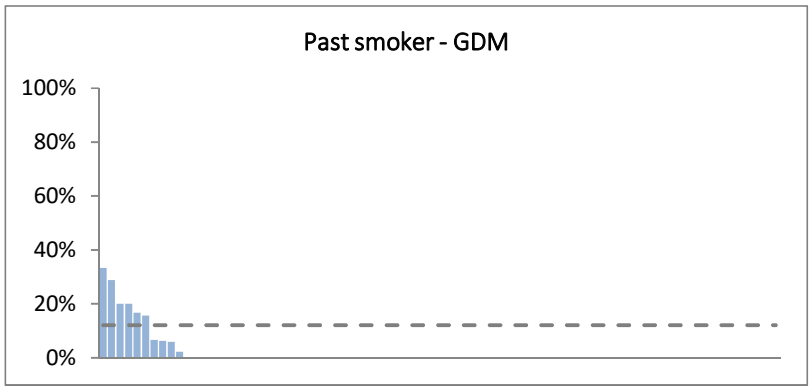


X-axis: All sites (Descending order)









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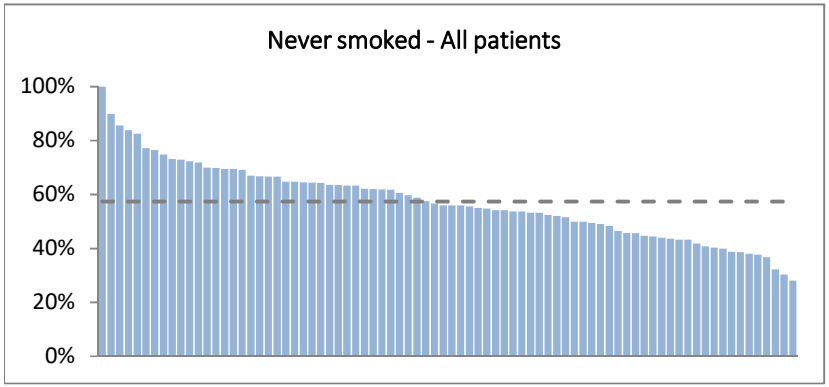
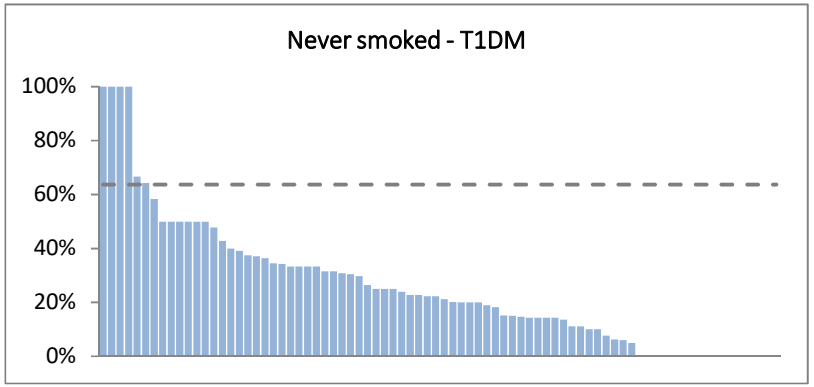
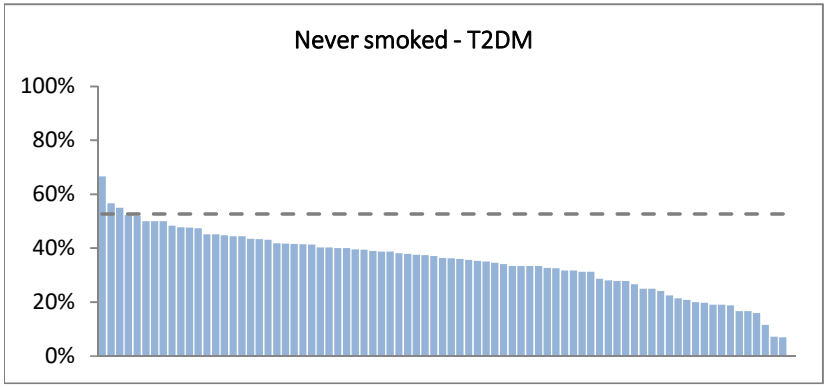
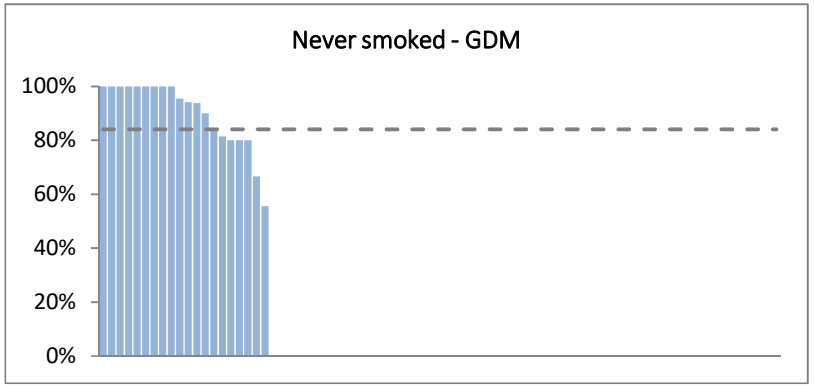






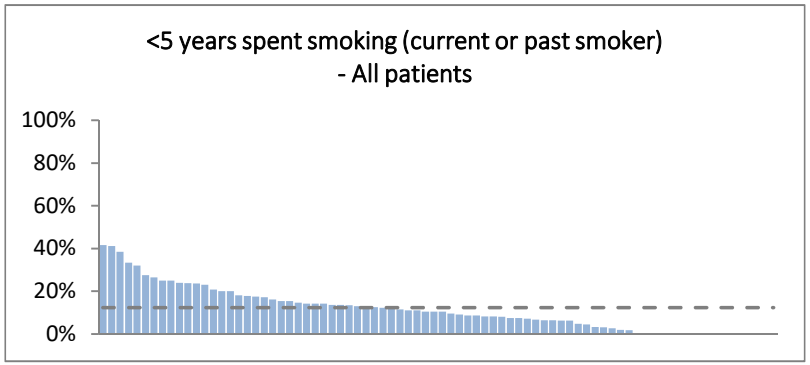


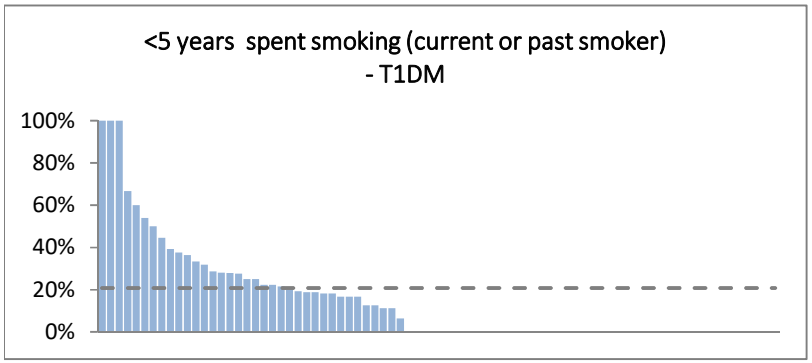
X-axis: All sites (Descending order)

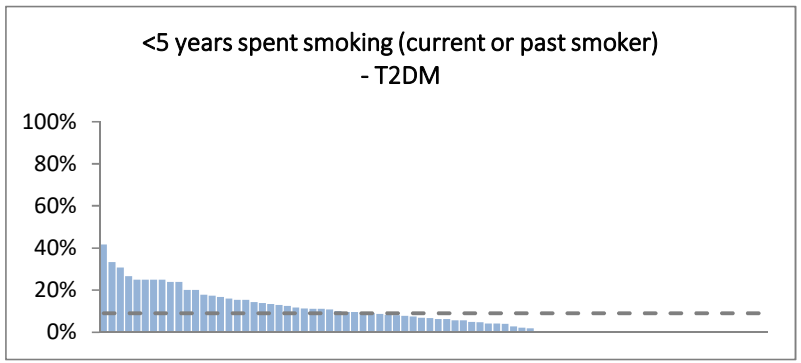
Number of years spent smoking (current or past smokers) by diabetes type

Diabetes type	<5 years			5-10 years			11-20 years			>20 years			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	117	20.8	38.7	122	21.7	30.5	142	25.3	24.5	181	32.2	15.6	**562**	**23.0**
T2DM	160	9.1	53.0	249	14.1	62.3	413	23.4	71.2	944	53.5	81.5	**1766**	**72.4**
GDM	16	32.0	5.3	21	42.0	5.3	13	26.0	2.2	0	0.0	0.0	**50**	**2.0**
Don't know	0	0.0	0.0	1	16.7	0.3	4	66.7	0.7	1	16.7	0.1	**6**	**0.2**
Other	9	17.0	3.0	6	11.3	1.5	7	13.2	1.2	31	58.5	2.7	**53**	**2.2**
Unstated	0	0.0	0.0	1	33.3	0.3	1	33.3	0.2	1	33.3	0.1	**3**	**0.1**
Total	**302**	**12.4**		**400**	**16.4**		**580**	**23.8**		**1158**	**47.5**		**2440**	

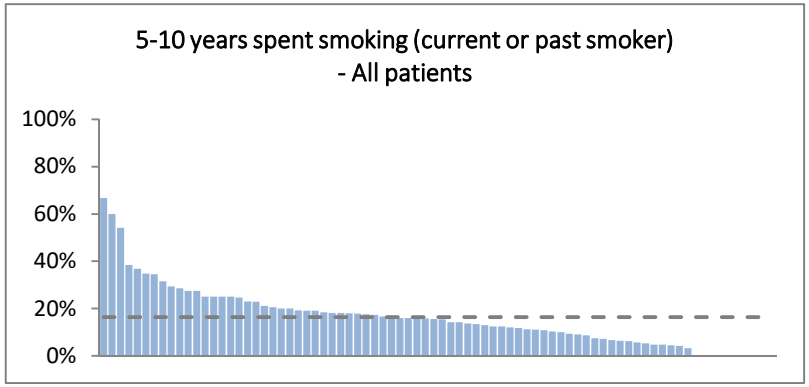
*of patients who are current and past smokers

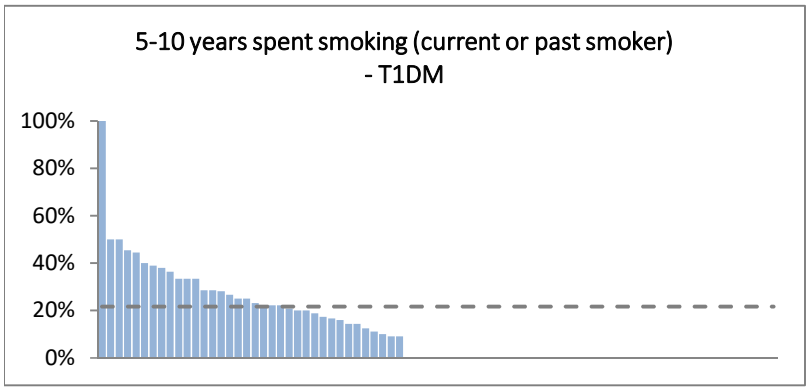


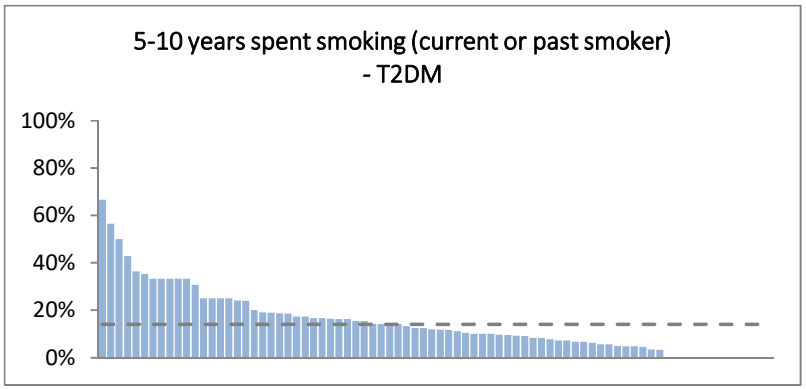




X-axis: All sites (Descending order)







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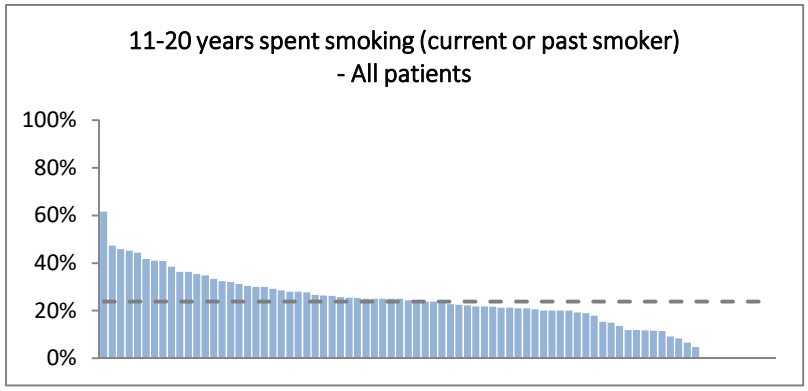

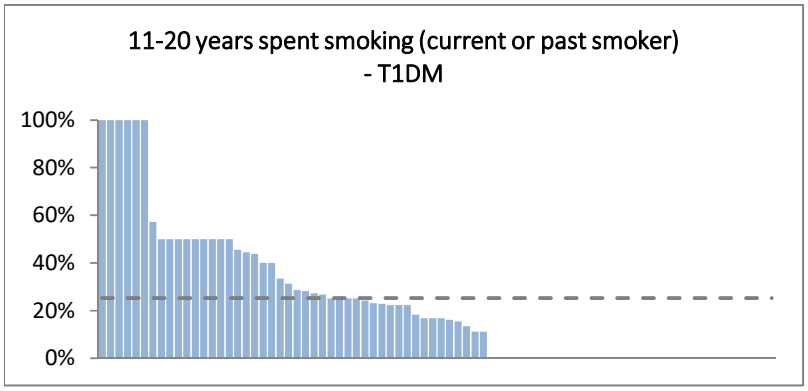

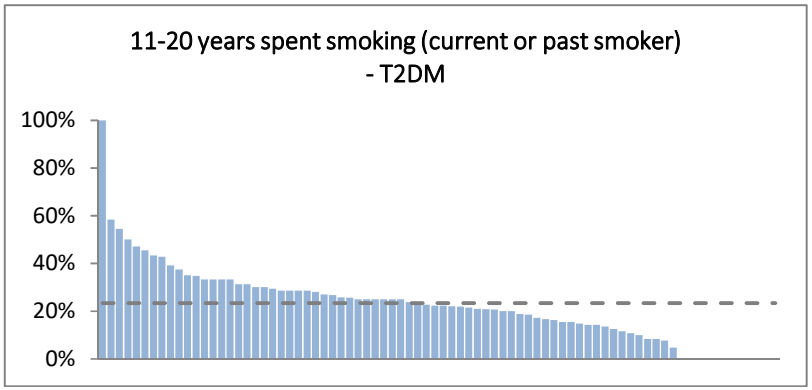

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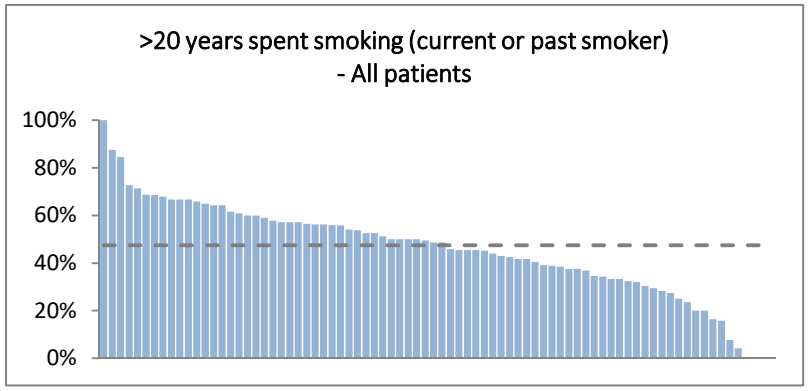
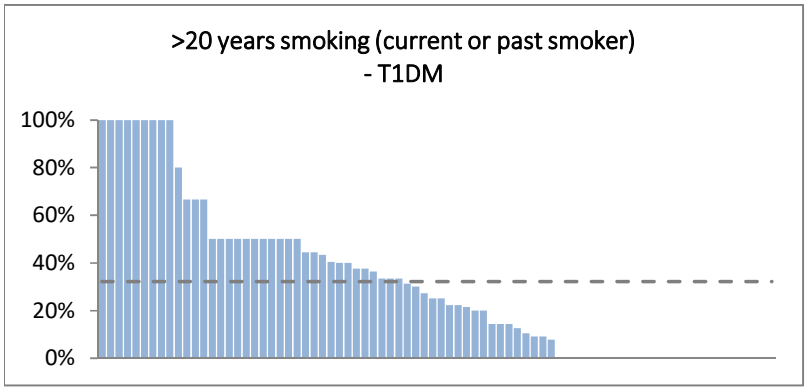
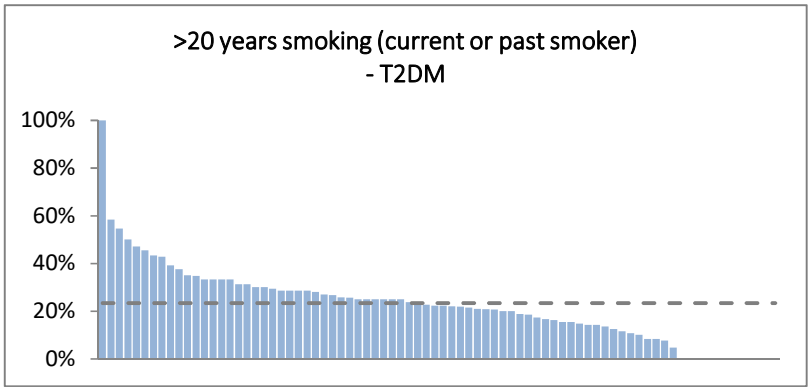


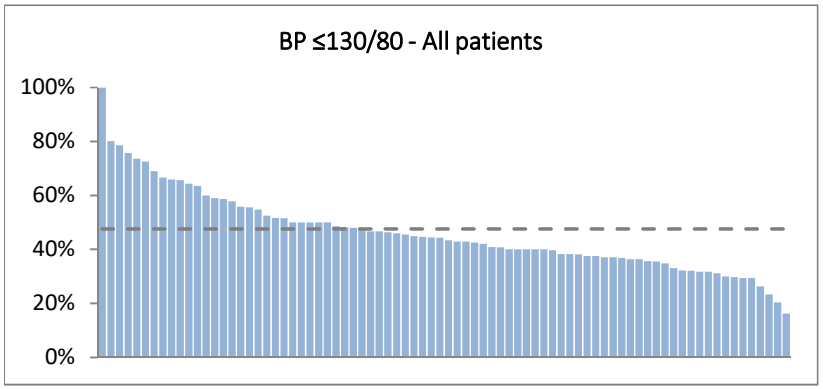


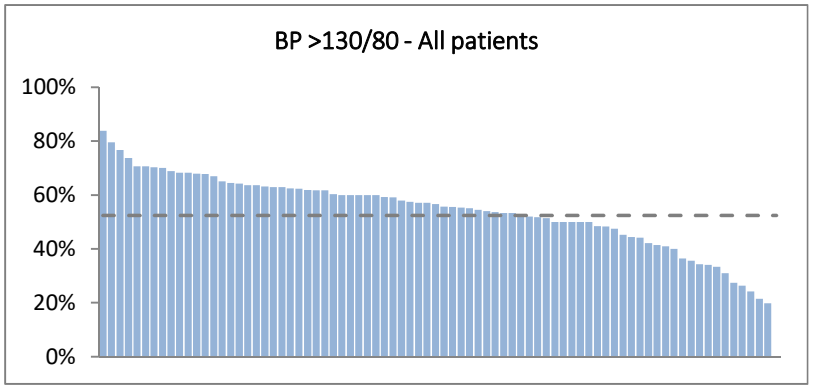


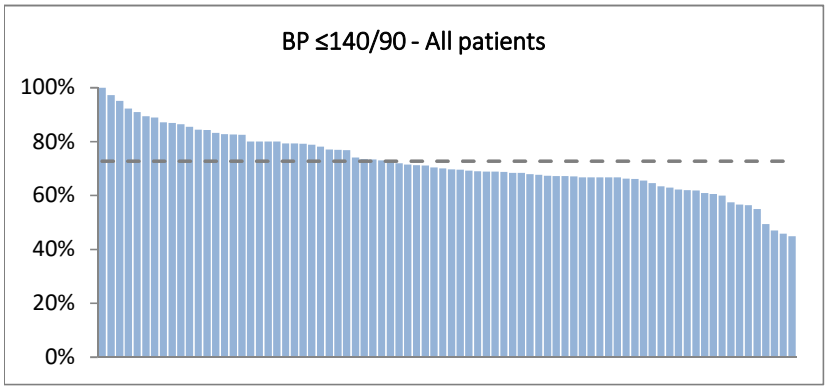
X-axis: All sites (Descending order)

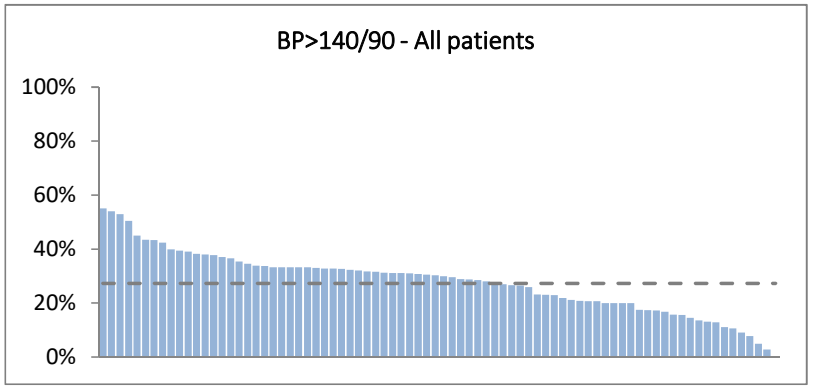
Age by blood pressure level

Age	≤130/80		>130/80		≤140/90		>140/90	
	n	C%	n	C%	n	C%	n	C%
≤60 years	1666	56.5	1525	46.9	2483	55.1	708	41.8
>60 years	1285	43.5	1724	53.1	2025	44.9	984	58.2
Total	**2951**		**3249**		**4508**		**1692**	









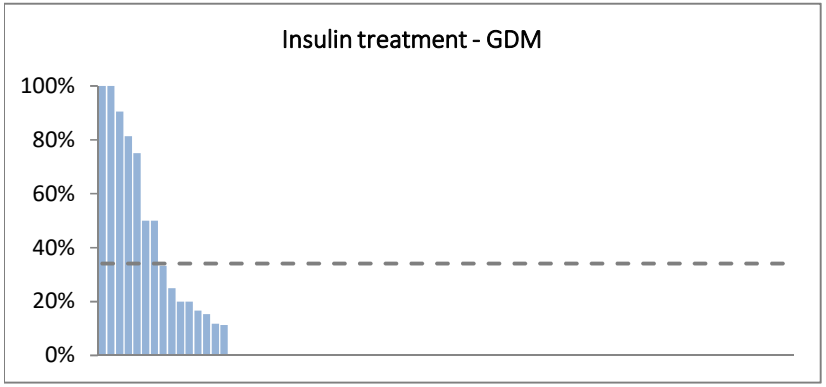
X-axis: All sites (Descending order)

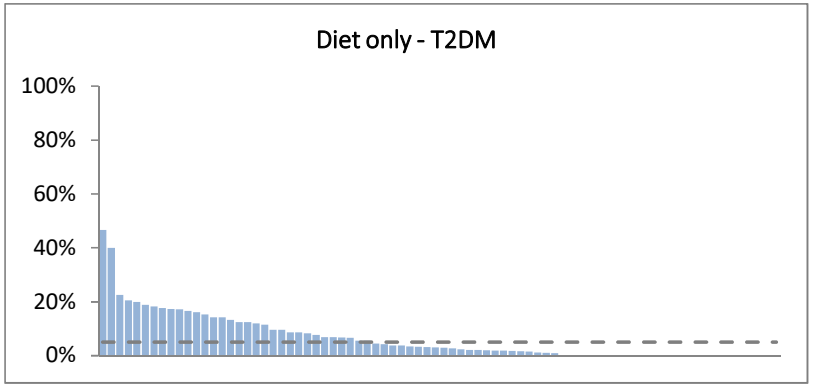
6.2 Diabetes Management

Treatment by diabetes type

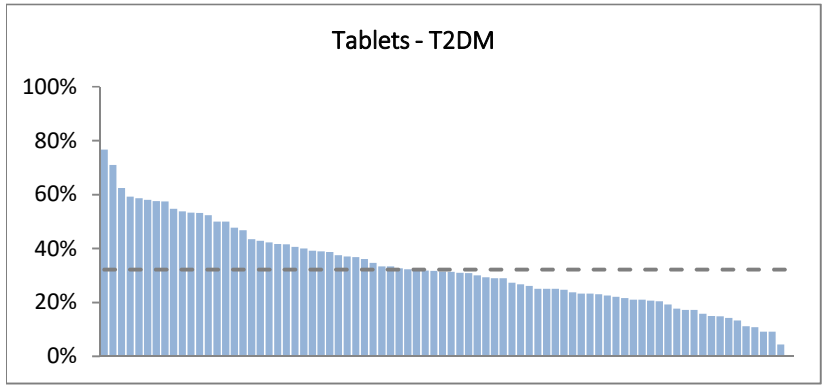
Diabetes type	Diet only			Tablets			Insulin			Insulin & tablets			Injectables		
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%
T1DM	0	0.0	0.0	0	0.0	0.0	1594	92.2	71.5	128	7.4	7.0	0	0.0	0.0
T2DM	208	5.0	51.4	1332	32.2	95.6	455	11.0	20.4	1629	39.3	89.3	6	0.1	100.0
GDM	186	58.1	45.9	24	7.5	1.7	98	30.6	4.4	11	3.4	0.6	0	0.0	0.0
Don't know	2	2.2	0.5	11	11.8	0.8	14	15.1	0.6	21	22.6	1.2	0	0.0	0.0
Other	7	5.6	1.7	16	12.8	1.1	64	51.2	2.9	34	27.2	1.9	0	0.0	0.0
Unstated	2	7.7	0.5	11	42.3	0.8	4	15.4	0.2	2	7.7	0.1	0	0.0	0.0
Total	**405**	**6.3**		**1394**	**21.7**		**2229**	**34.6**		**1825**	**28.4**		**6**	**0.1**	

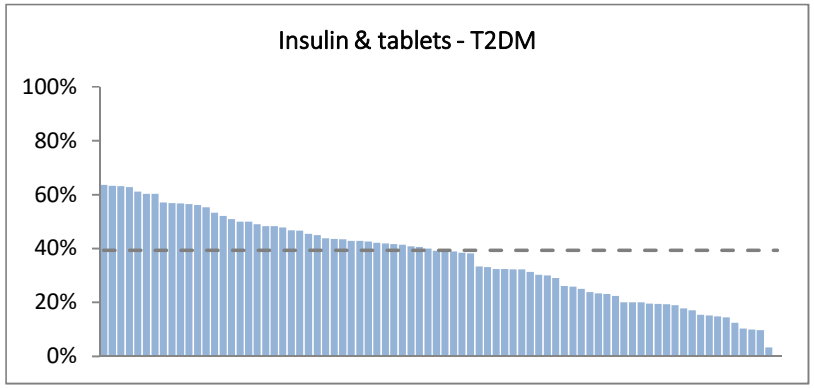
Diabetes type	Injectables & insulin (not graphed)			Injectables & tablets			Injectables, tablets & insulin			Unstated (not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	0	0.0	0.0	0	0.0	0.0	2	0.1	4.8	5	0.3	2.4	**1729**	**26.9**
T2DM	4	0.1	7.3	271	6.5	99.3	38	0.9	90.5	200	4.8	96.6	**4143**	**64.4**
GDM	0	0.0	0.0	1	0.3	0.4	0	0.0	0.0	0	0.0	0.0	**320**	**5.0**
Don't know	43	46.2	78.2	1	1.1	0.4	0	0.0	0.0	1	1.1	0.5	**93**	**1.4**
Other	2	1.6	3.6	0	0.0	0.0	1	0.8	2.4	1	0.8	0.5	**125**	**1.9**
Unstated	6	23.1	10.9	0	0.0	0.0	1	3.8	2.4	0	0.0	0.0	**26**	**0.4**
Total	**55**	**0.9**		**273**	**4.2**		**42**	**0.7**		**207**	**3.2**		**6436**	

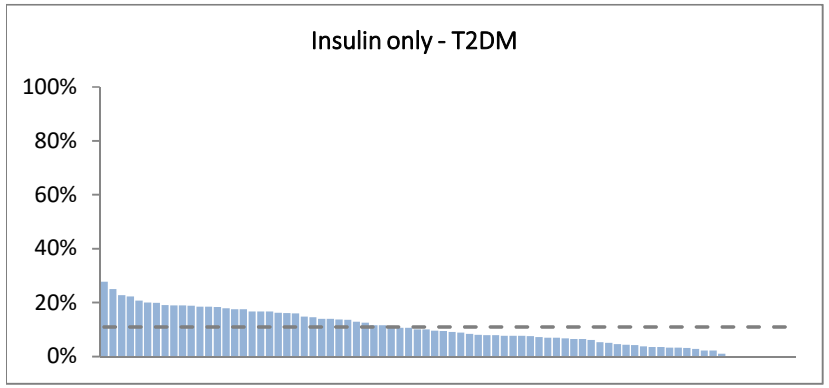


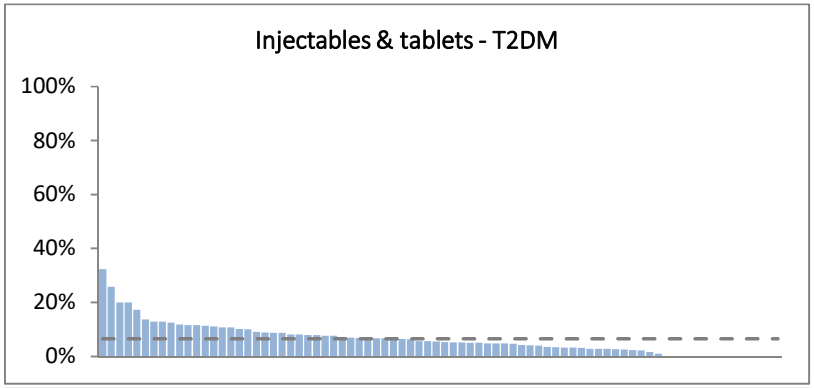


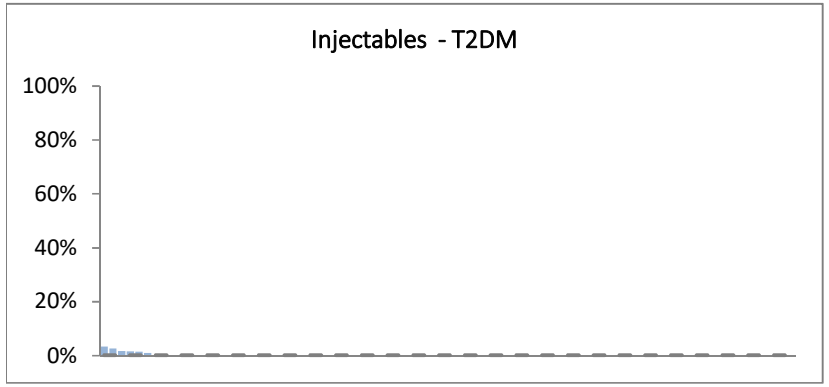
X-axis: All sites (Descending order)

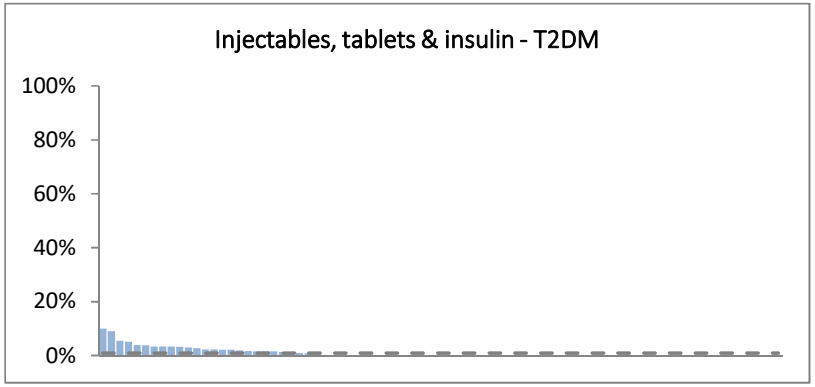










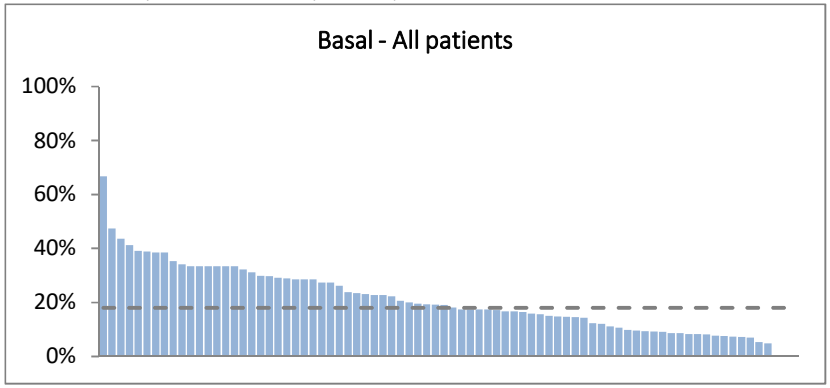


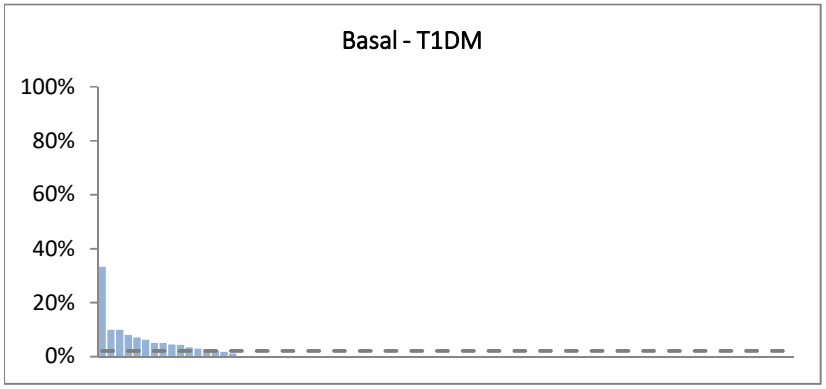
X-axis: All sites (Descending order)

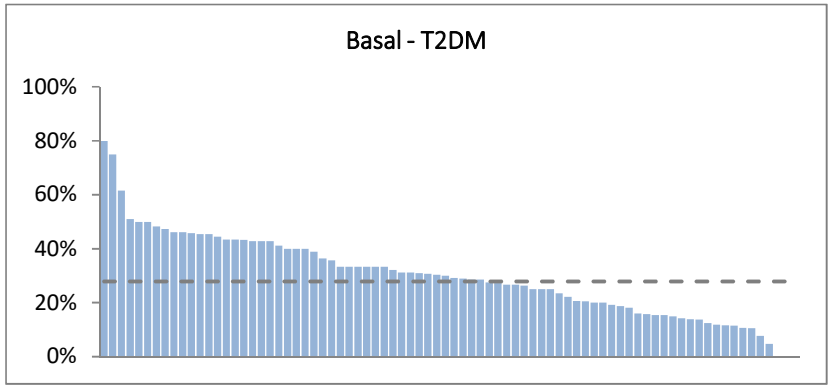
Modes of insulin by diabetes type*

Diabetes type	Basal			Basal bolus			Pump			Pre-mixed insulin			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	36	2.1	4.7	1151	66.8	56.2	482	28.0	97.2	51	3.0	5.5	**1722**	**40.6**
T2DM	633	27.8	82.9	788	34.7	38.5	8	0.4	1.6	842	37.0	91.0	**2273**	**53.6**
GDM	67	63.2	8.8	32	30.2	1.6	0	0.0	0.0	7	6.6	0.8	**106**	**2.5**
Don't know	8	23.5	1.0	14	41.2	0.7	3	8.8	0.6	9	26.5	1.0	**34**	**0.8**
Other	20	20.8	2.6	59	61.5	2.9	3	3.1	0.6	14	14.6	1.5	**96**	**2.3**
Unstated	0	0.0	0.0	4	66.7	0.2	0	0.0	0.0	2	33.3	0.2	**6**	**0.1**
Total	**764**	**18.0**		**2048**	**48.3**		**496**	**11.7**		**925**	**21.8**		**4237**	

* patients taking insulin (multiple modes of insulin were reported for some patients)







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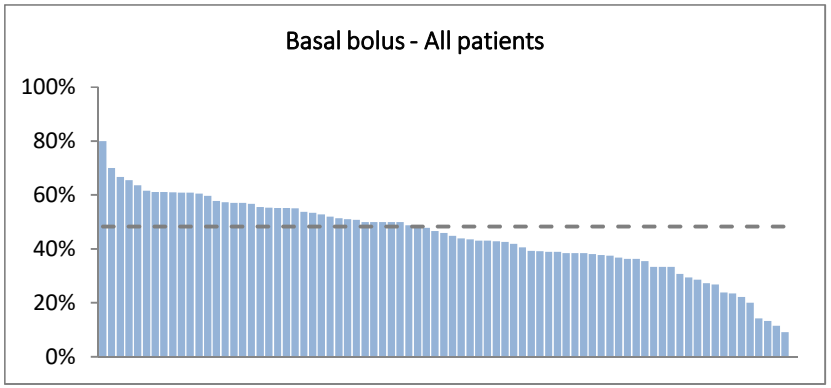

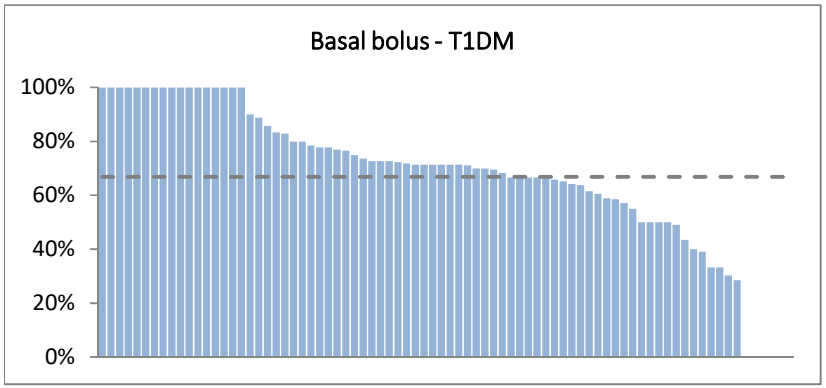

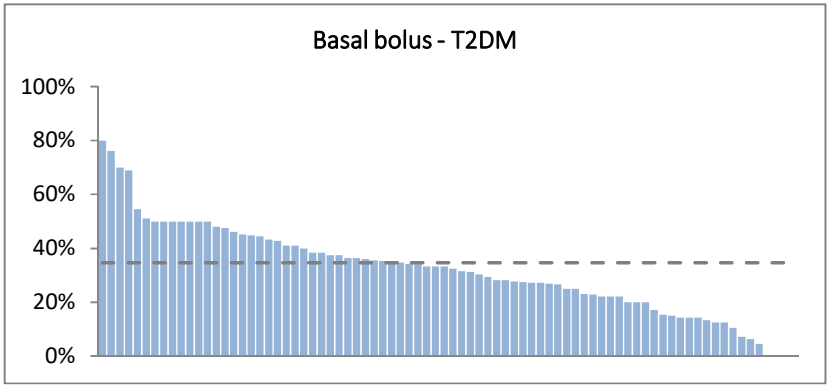

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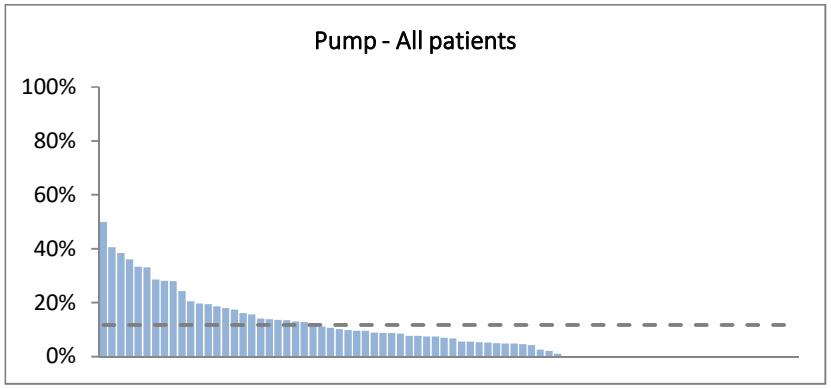
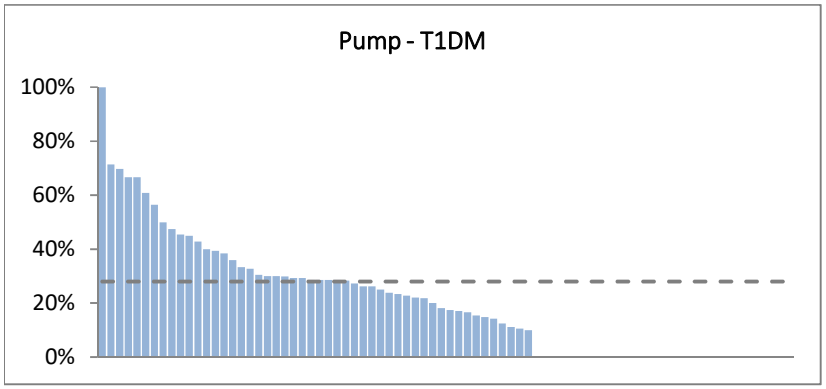
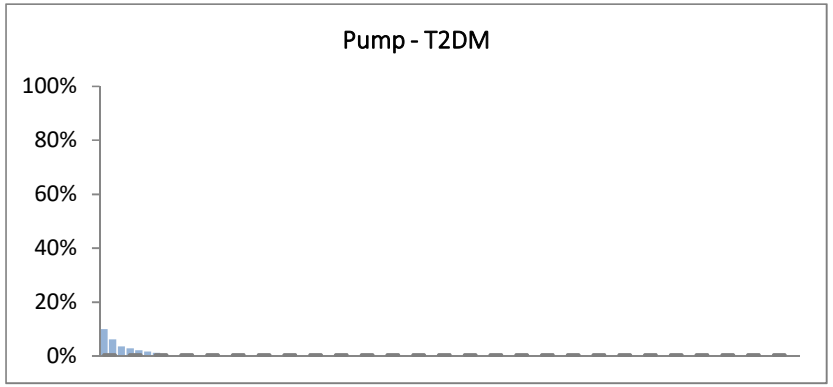
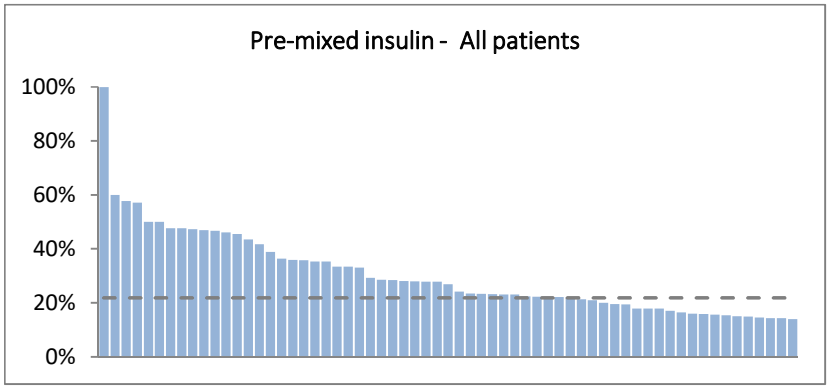
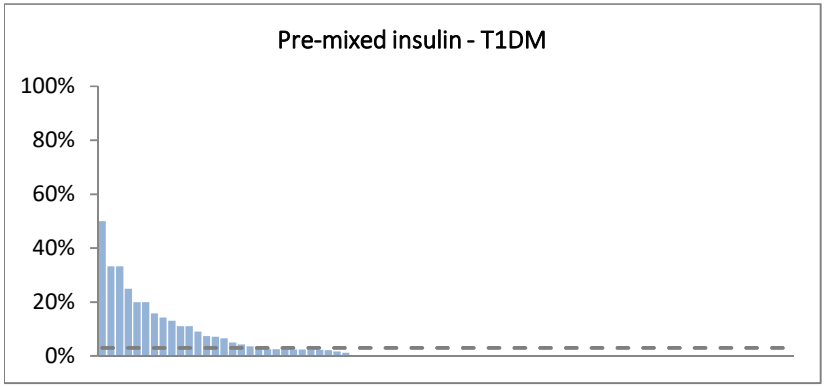


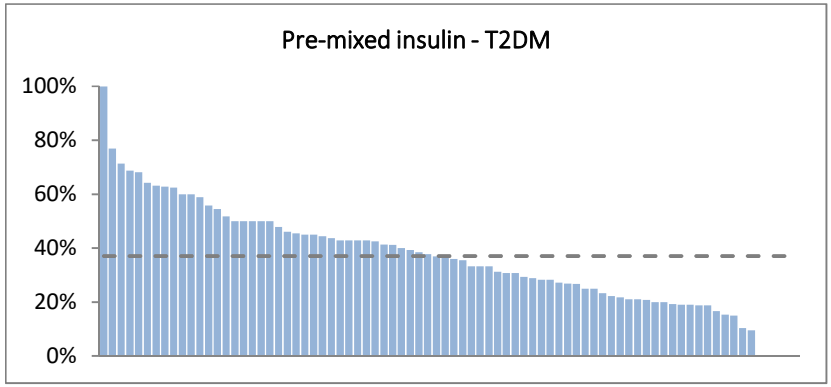




X-axis: All sites (Descending order)



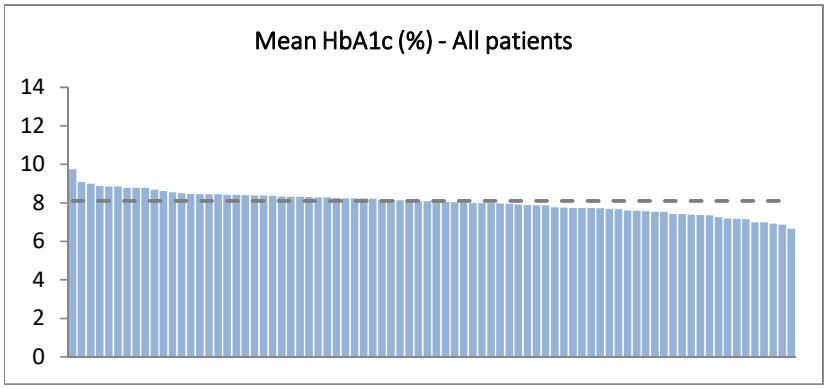


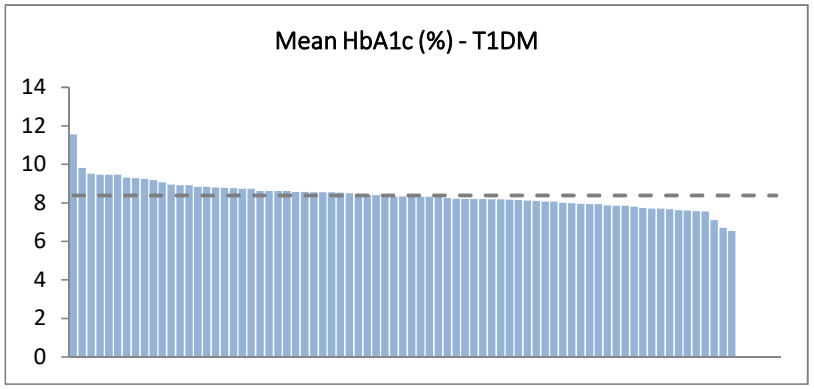


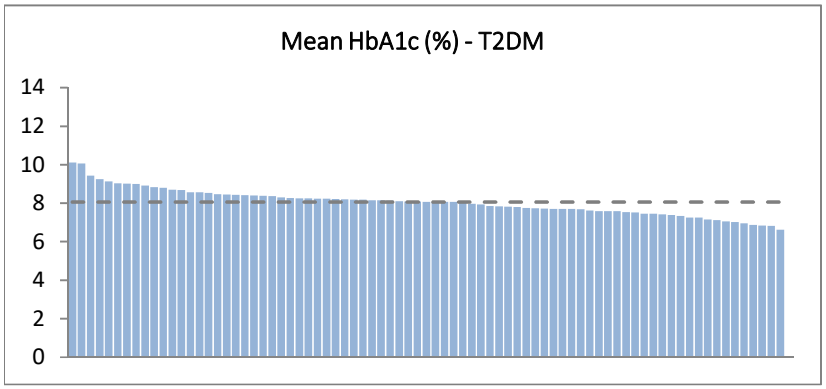
X-axis: All sites (Descending order)

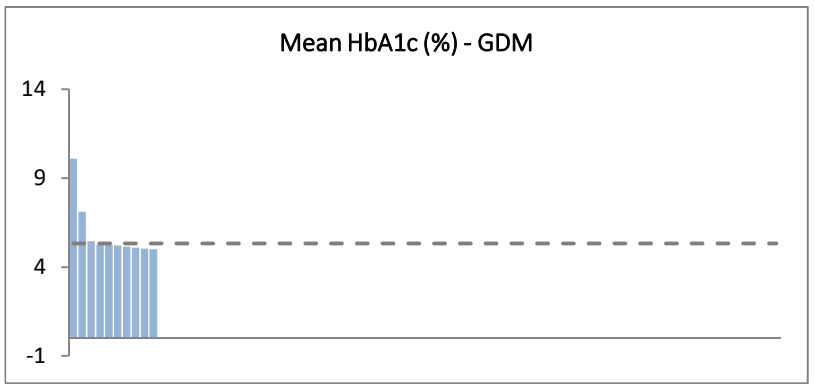
HbA1c (%) by diabetes type

Diabetes type	n	Mean	SD	Min	Max
T1DM	1616	8.4	1.7	4.6	17.7
T2DM	3903	8.1	1.8	4.4	19.9
GDM	92	5.3	0.8	4.1	10.1
Don't know	47	9.2	2.5	5.2	16.3
Other	114	7.6	1.9	4.9	13.8
Unstated	20	7.6	1.1	5.7	10.4
Total	**5792**	**8.1**	**1.8**	**4.1**	**19.9**





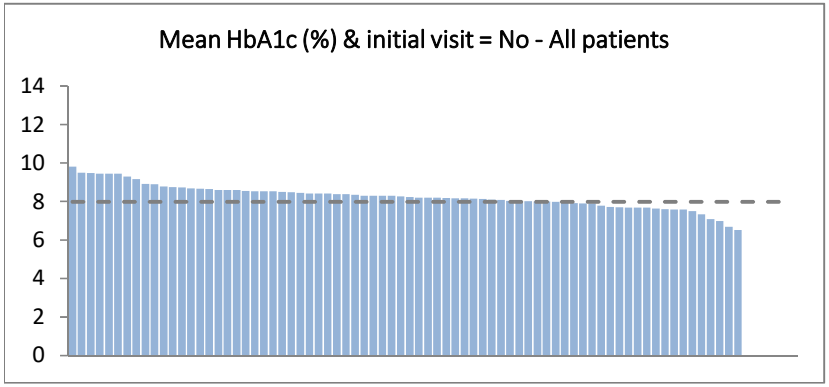


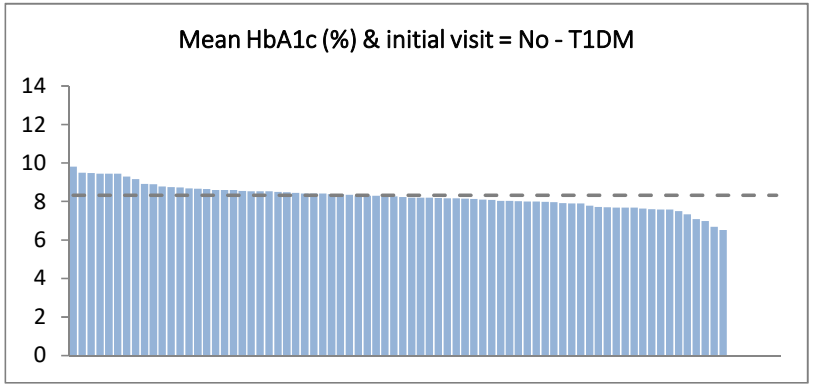


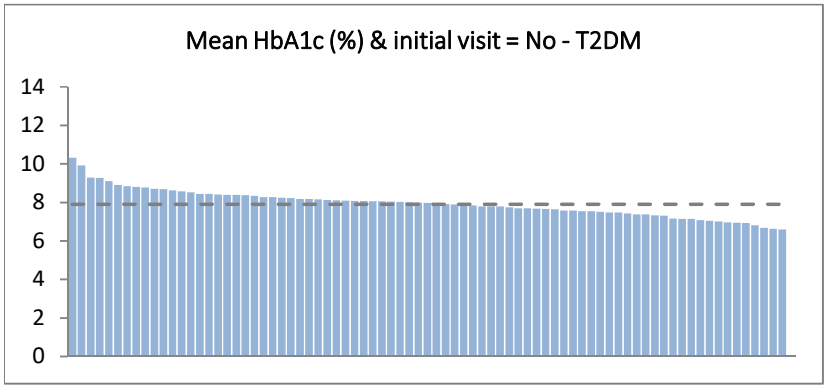
X-axis: All sites (Descending order)

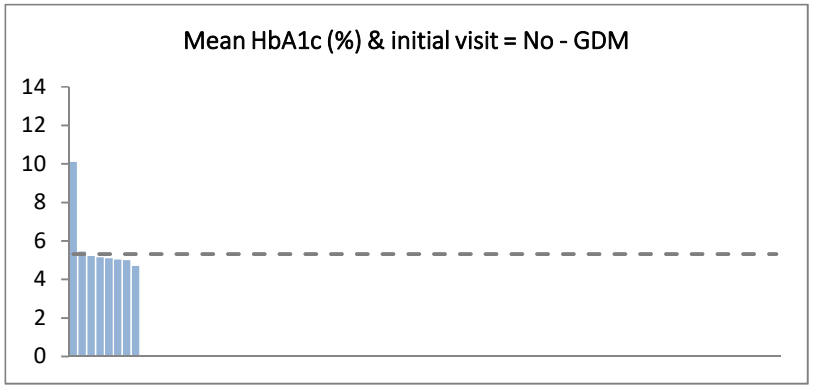
HbA1c (%) and initial visit by diabetes type

Diabetes type	HbA1c when initial visit = No				
	n	Mean	SD	Min	Max
T1DM	1376	8.3	1.6	4.8	16.1
T2DM	3147	7.9	1.7	4.4	19.8
GDM	63	5.3	0.8	4.1	10.1
Don't know	17	8.7	2.1	4.8	12.9
Other	89	7.6	1.6	4.8	13.8
Unstated	14	7.6	1.0	4.8	9.3
Total	**4706**	**8.0**	**1.7**	**4.1**	**19.8**







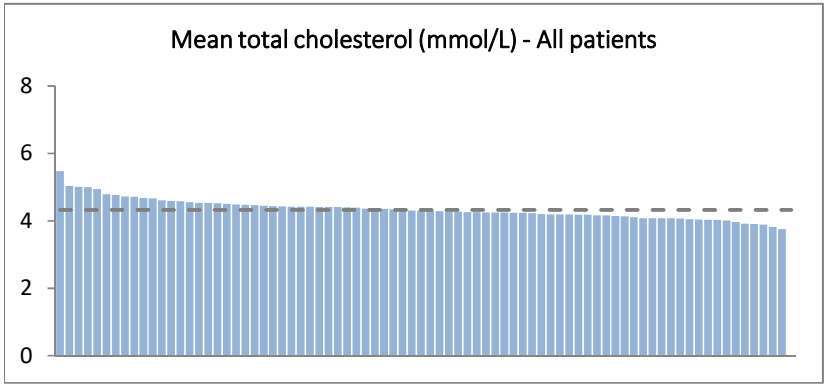


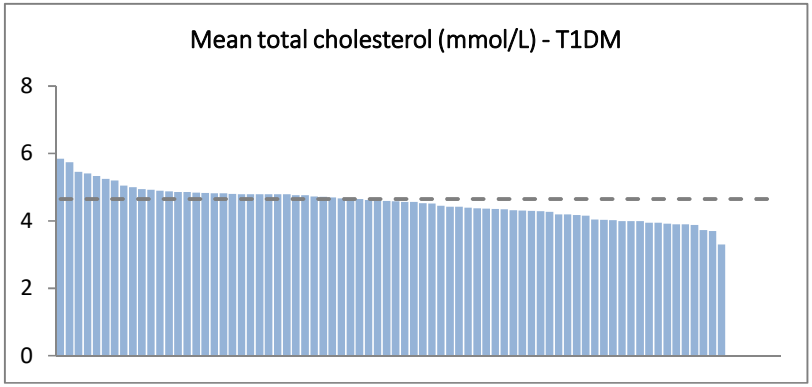
X-axis: All sites (Descending order)

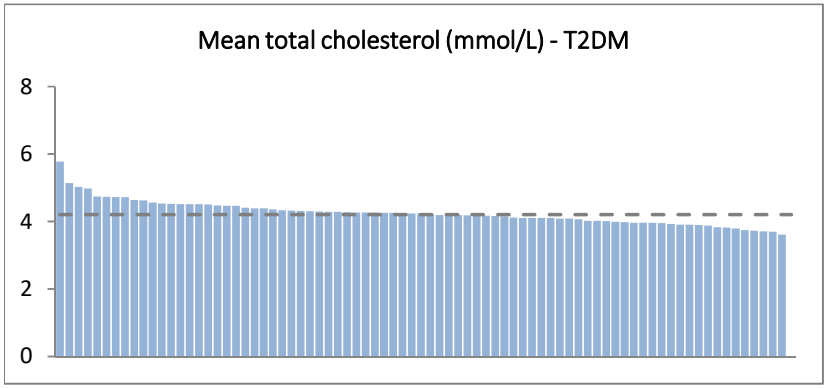
6.3 Lipids

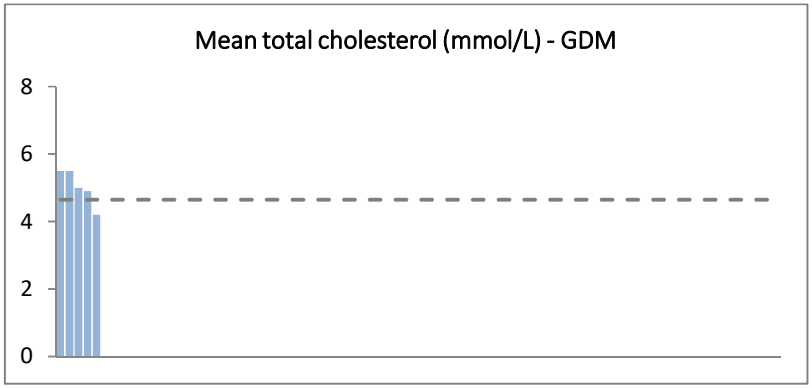
Mean total cholesterol, HDL cholesterol and triglycerides by diabetes type

Diabetes type	Total cholesterol					HDL					Triglycerides				
	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max
T1DM	1084	4.6	1.1	1.4	11.0	950	1.5	0.5	0.2	3.9	1039	1.3	1.0	0.2	10.0
T2DM	3143	4.2	1.2	1.2	20.8	2784	1.2	0.4	0.1	5.4	3071	2.2	2.2	0.4	48.0
GDM	5	5.0	0.5	4.2	5.5	4	1.4	0.2	1.1	1.7	4	1.7	0.5	1.0	2.1
Don't know	27	4.4	1.3	1.4	7.2	22	1.2	0.3	0.2	2.1	24	1.7	1.2	0.2	6.2
Other	76	4.5	1.6	1.4	10.1	66	1.4	0.5	0.2	4.0	72	2.4	3.4	0.2	18.7
Unstated	13	4.8	1.1	1.4	6.3	6	1.1	0.3	0.2	1.6	12	2.4	2.1	0.2	7.6
Total	**4348**	**4.3**	**1.2**	**1.2**	**20.8**	**3832**	**1.2**	**0.4**	**0.1**	**5.4**	**4222**	**2.0**	**2.1**	**0.2**	**48.0**

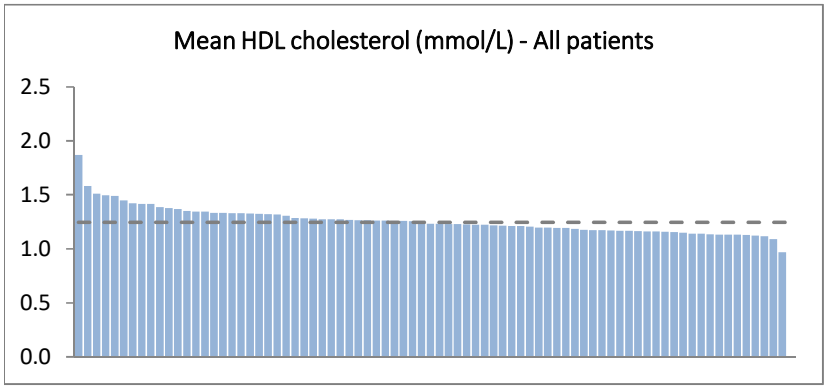


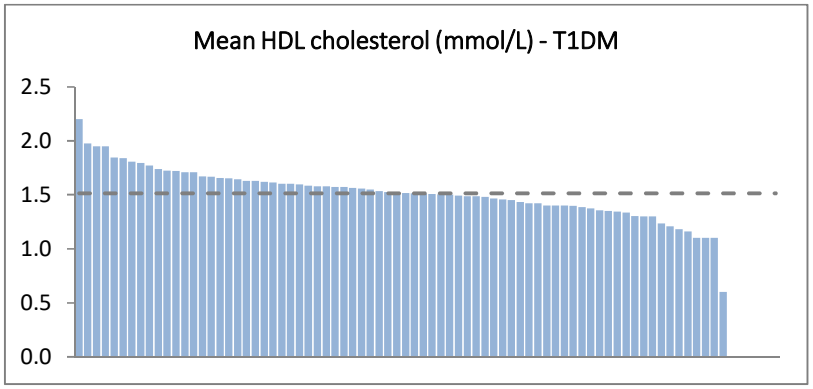


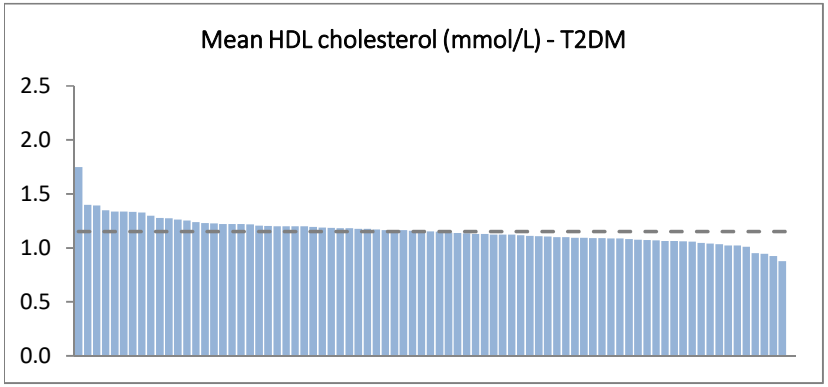


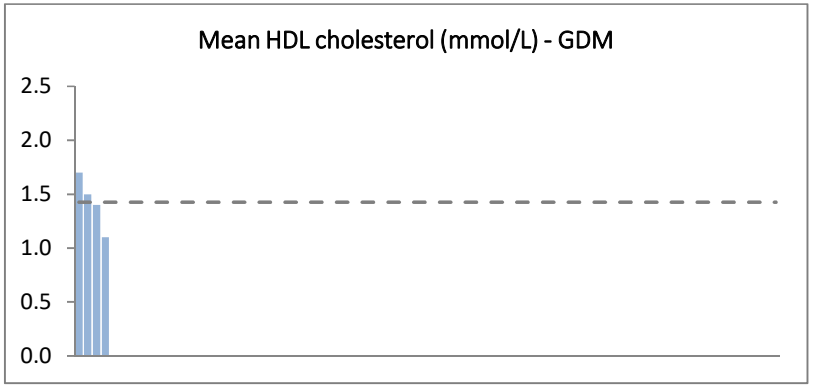


X-axis: All sites (Descending order)









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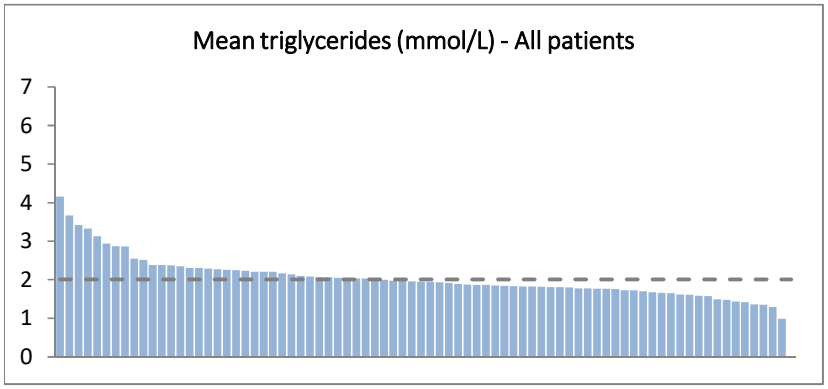
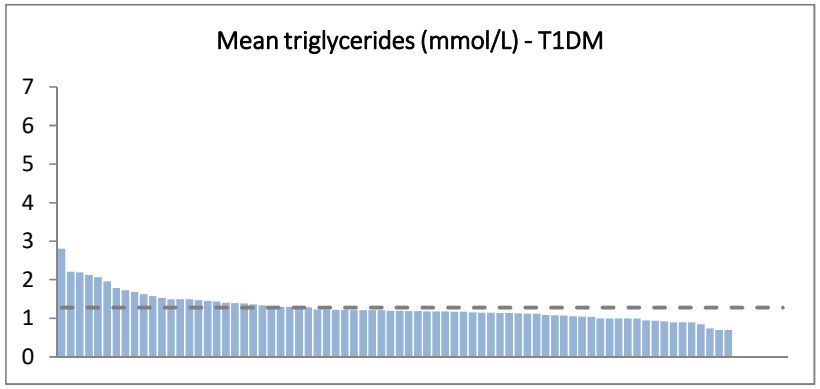
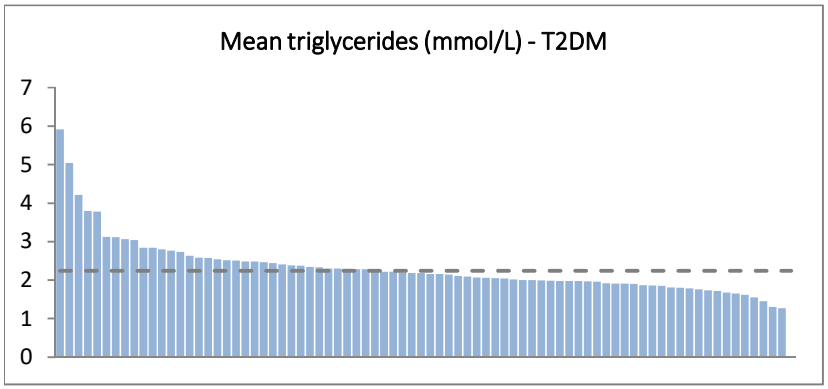
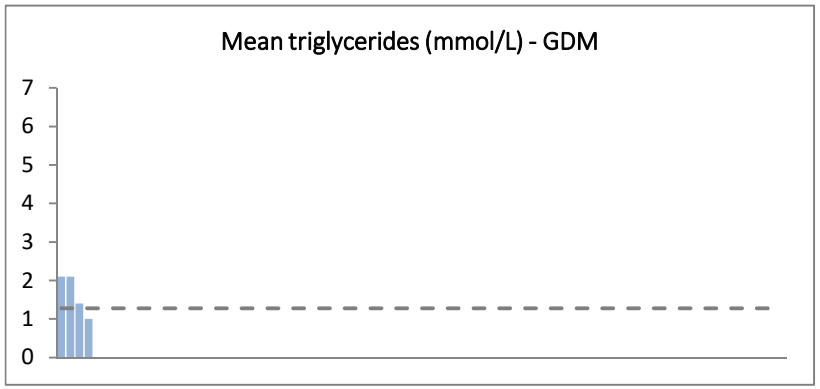




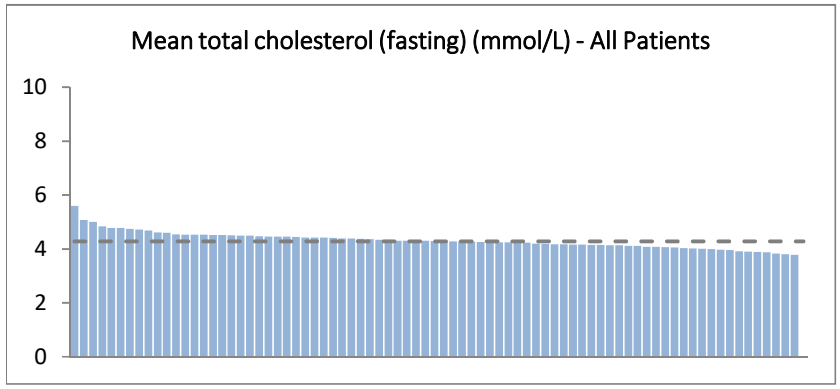


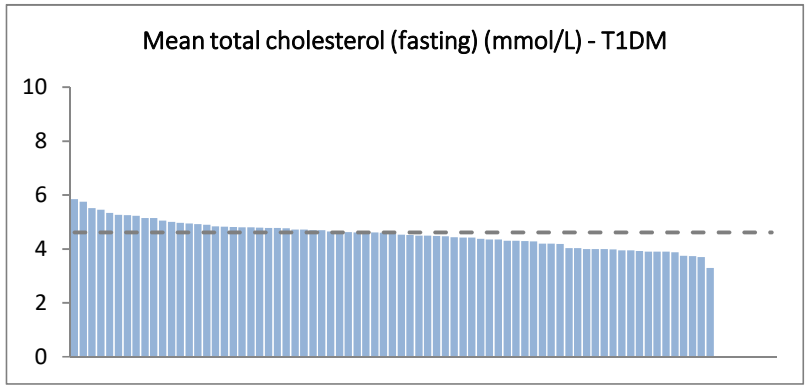


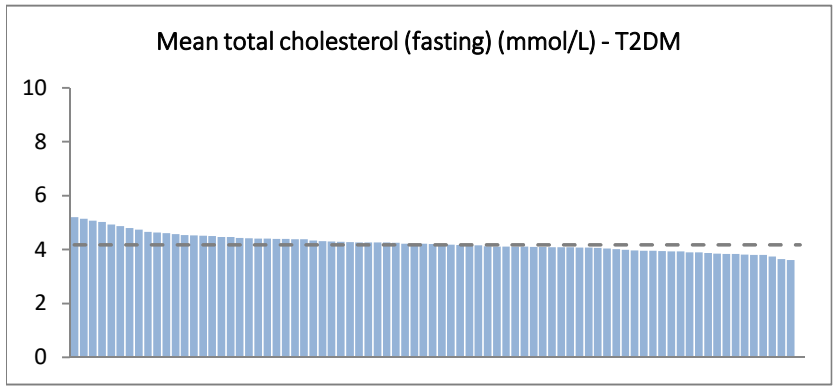
X-axis: All sites (Descending order)

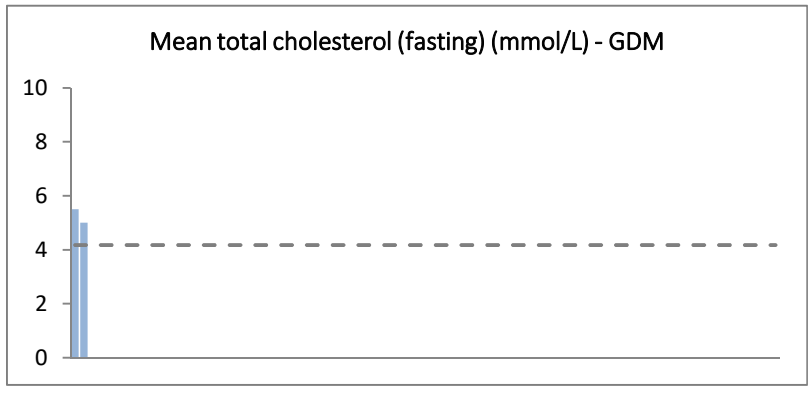
Mean total cholesterol, HDL cholesterol and triglycerides (fasting) by diabetes type

Diabetes type	Total cholesterol					HDL					Triglycerides				
	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max	n	Mean	SD	Min	Max
T1DM	823	4.6	1.1	1.4	11.0	753	1.5	0.5	0.2	3.9	800	1.3	1.1	0.2	10.0
T2DM	2759	4.2	1.2	1.2	20.8	2507	1.1	0.4	0.1	5.4	2715	2.2	2.0	0.4	48.0
GDM	2	5.3	0.4	5.0	5.5	2	1.6	0.1	1.5	1.7	2	2.1	0.0	2.1	2.1
Don't know	23	4.3	1.4	2.6	7.2	19	1.2	0.3	0.7	1.9	21	1.6	1.2	0.6	6.2
Other	67	4.5	1.6	2.1	10.1	59	1.4	0.5	0.6	4.0	63	2.2	3.2	0.5	18.7
Unstated	6	4.8	1.3	2.9	6.3	5	1.0	0.2	0.8	1.4	6	3.0	2.7	0.8	7.6
Total	**3680**	**4.3**	**1.2**	**1.2**	**20.8**	**3345**	**1.2**	**0.4**	**0.1**	**5.4**	**3607**	**2.0**	**1.9**	**0.2**	**48.0**

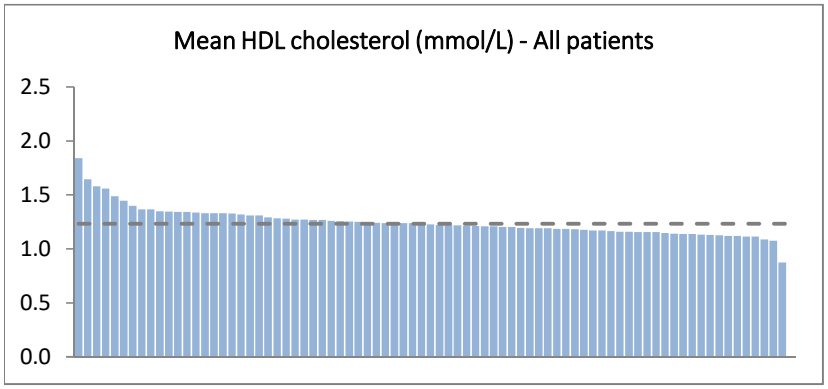


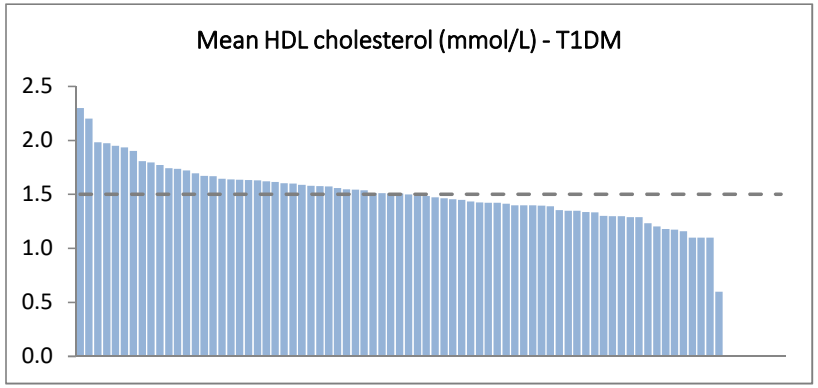


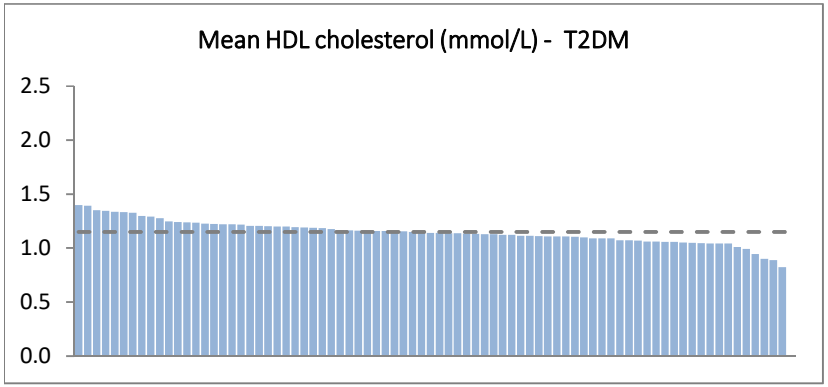


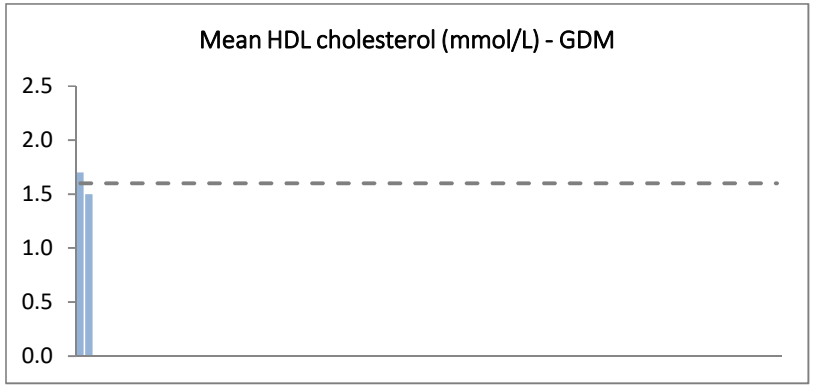


X-axis: All sites (Descending order)









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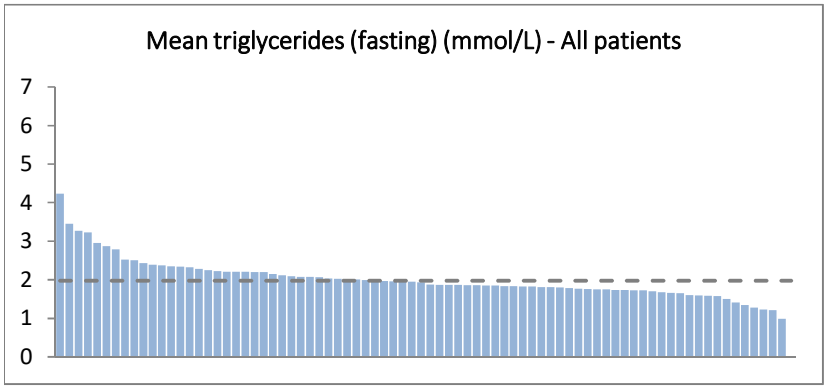
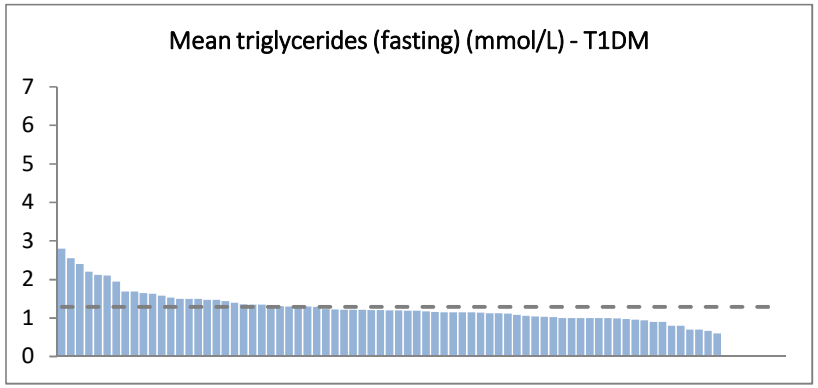
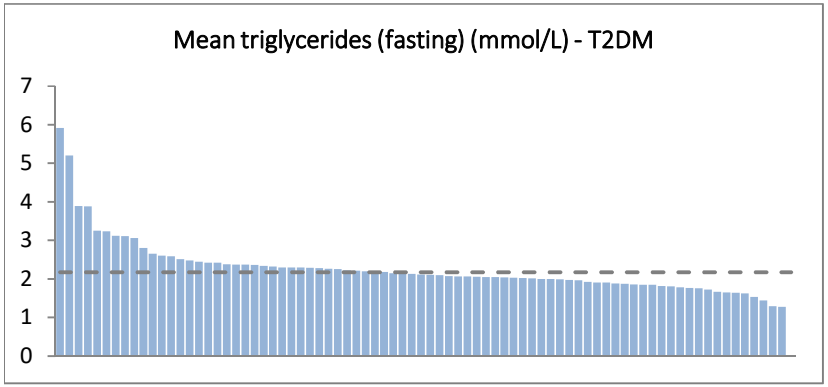
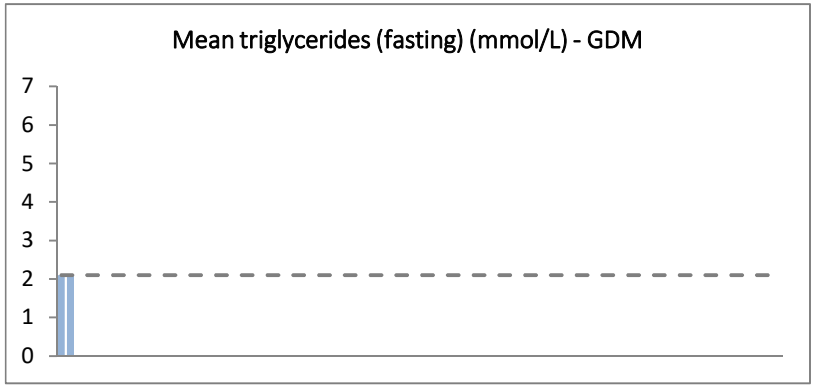




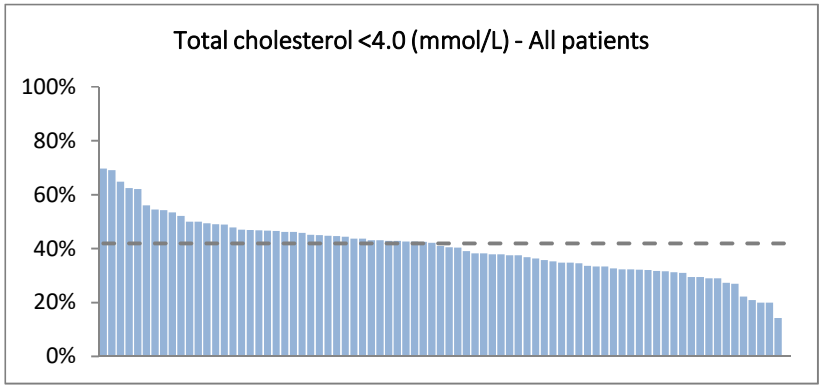


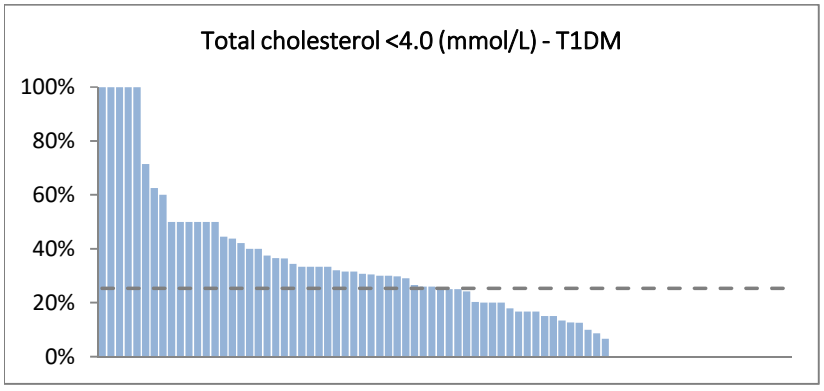


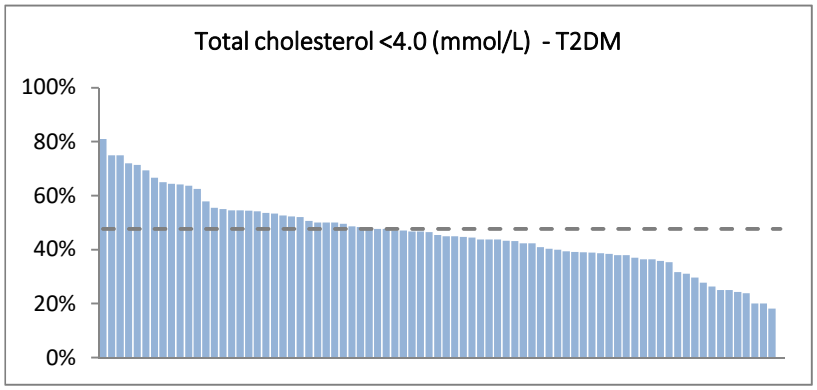
X-axis: All sites (Descending order)

Total cholesterol by diabetes type

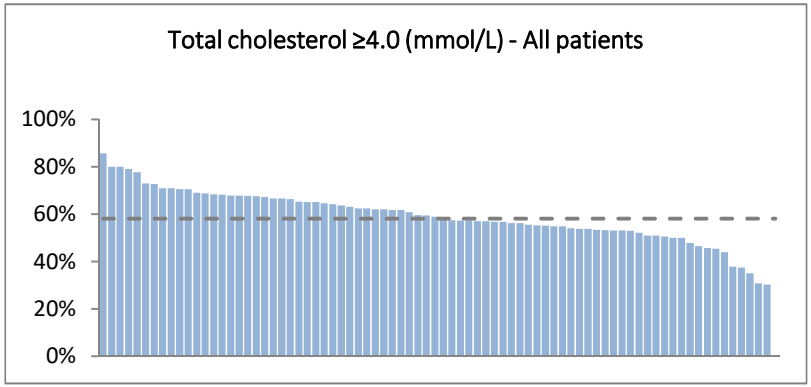
Diabetes type	<4.0 (mmol/L)			≥4.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	275	25.4	15.1	809	74.6	32.0	**1084**	**24.9**
T2DM	1500	47.7	82.3	1643	52.3	65.0	**3143**	**72.3**
GDM	0	0.0	0.0	5	100.0	0.2	**5**	**0.1**
Don't know	12	44.4	0.7	15	55.6	0.6	**27**	**0.6**
Other	32	42.1	1.8	44	57.9	1.7	**76**	**1.7**
Unstated	3	23.1	0.2	10	76.9	0.4	**13**	**0.3**
Total	**1822**	**41.9**		**2526**	**58.1**		**4348**	

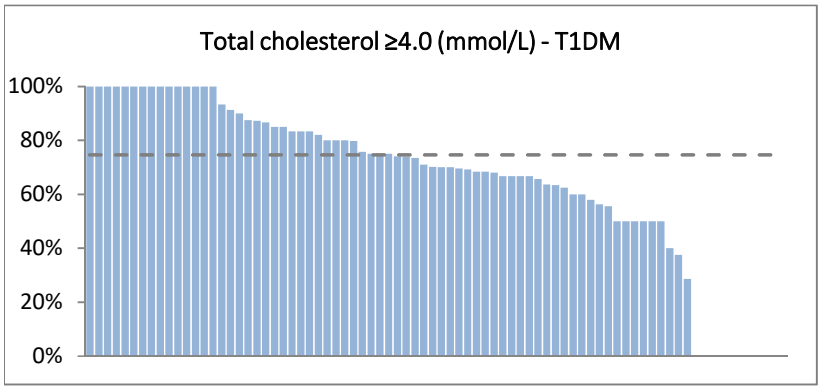


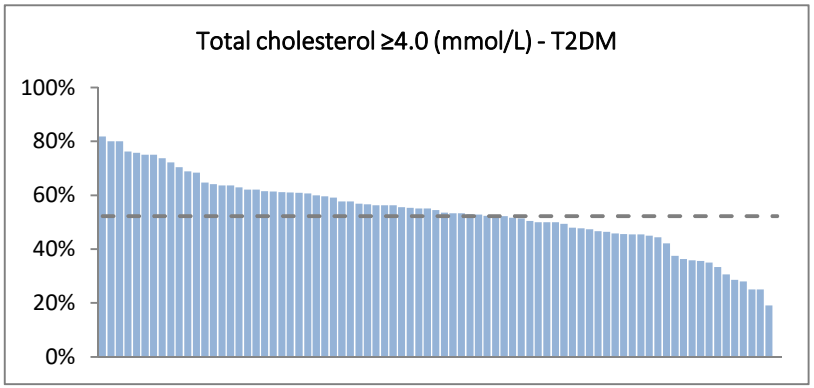




X-axis: All sites (Descending order)



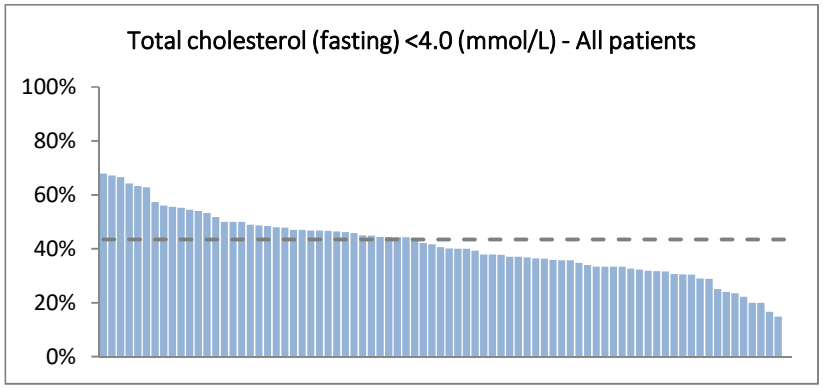


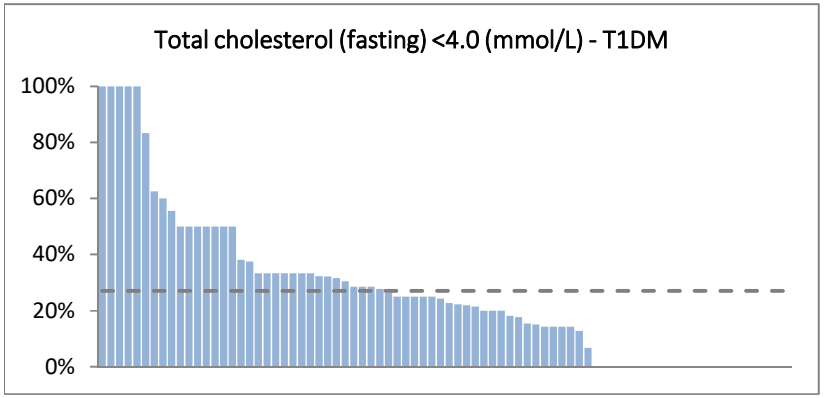


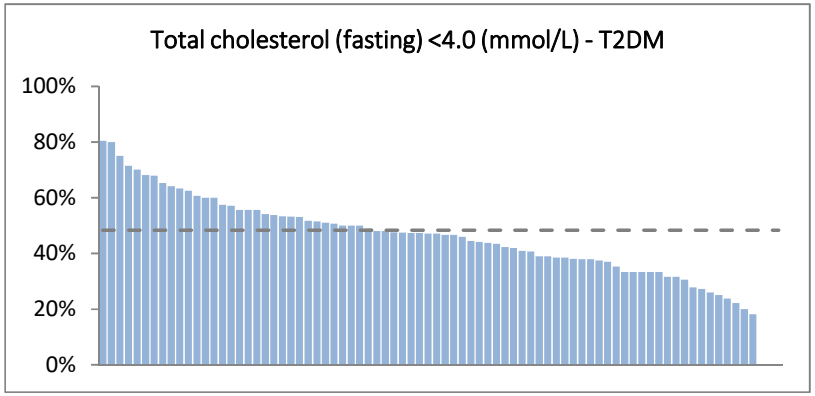
X-axis: All sites (Descending order)

Total cholesterol (fasting) by diabetes type

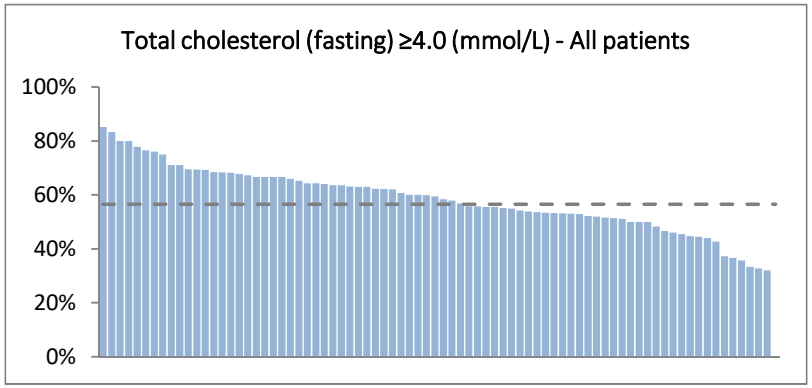
Diabetes type	<4.0 (mmol/L)			≥4.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	223	27.1	13.9	600	72.9	28.8	**823**	**22.4**
T2DM	1334	48.4	83.4	1425	51.6	68.5	**2759**	**75.0**
GDM	0	0.0	0.0	2	100.0	0.1	**2**	**0.1**
Don't know	11	47.8	0.7	12	52.2	0.6	**23**	**0.6**
Other	31	46.3	1.9	36	53.7	1.7	**67**	**1.8**
Unstated	1	16.7	0.1	5	83.3	0.2	**6**	**0.2**
Total	**1600**	**43.5**		**2080**	**56.5**		3680	

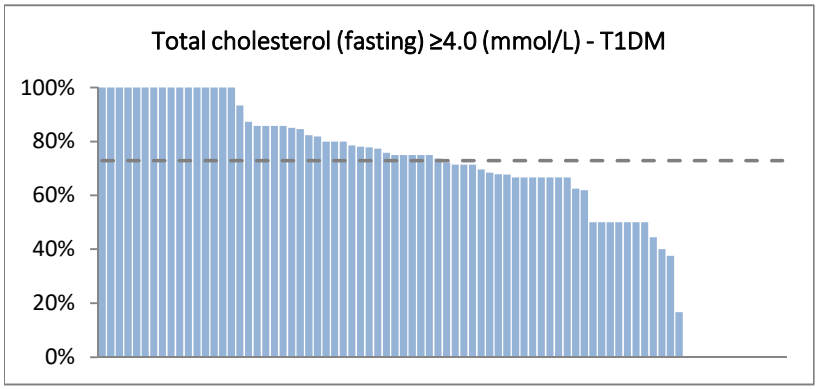


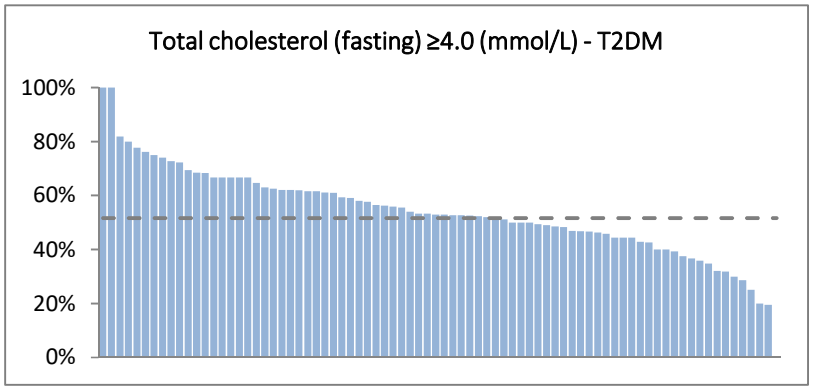




X-axis: All sites (Descending order)



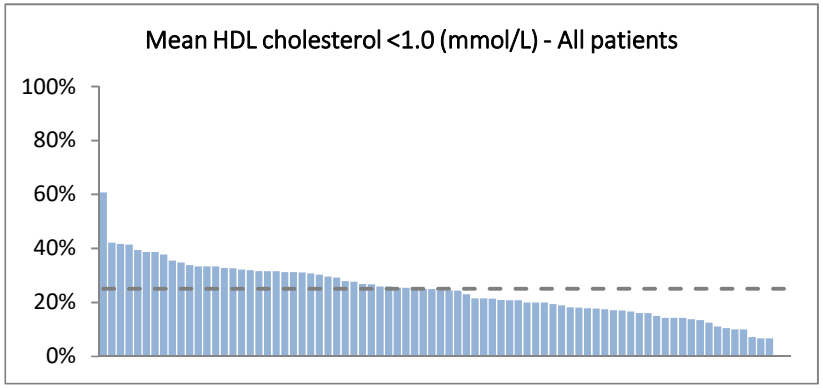


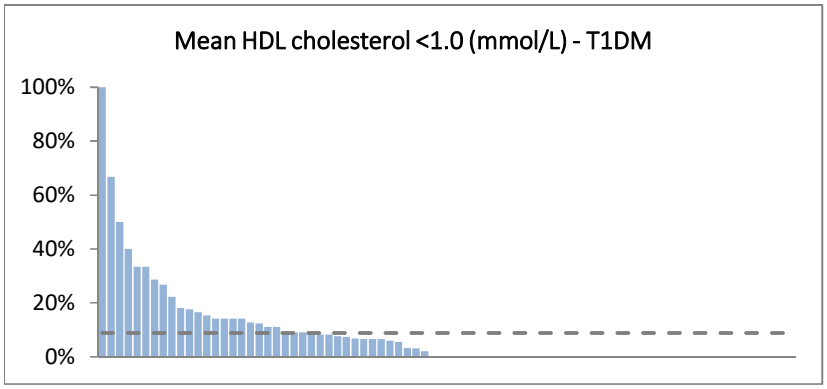


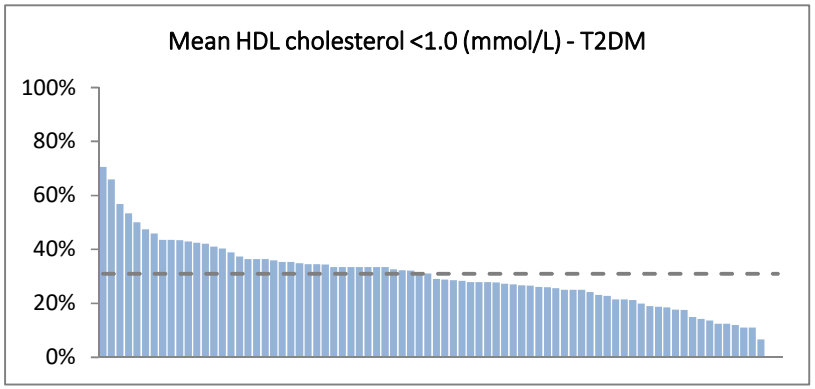
X-axis: All sites (Descending order)

HDL cholesterol by diabetes type

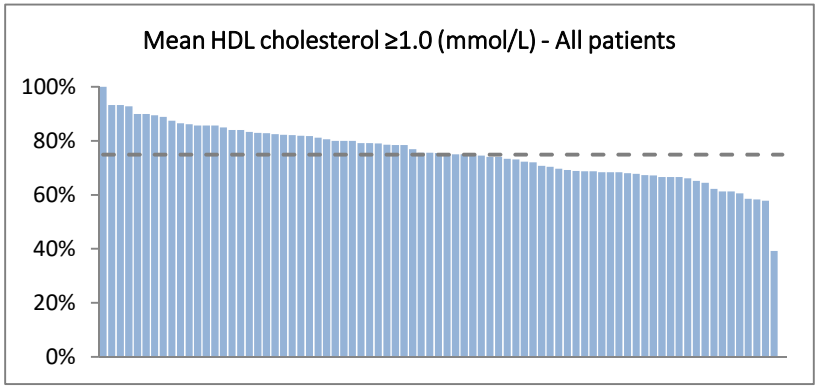
Diabetes type	<1.0 (mmol/L)			≥1.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	84	8.8	8.7	866	91.2	30.2	**950**	**24.8**
T2DM	861	30.9	89.6	1923	69.1	67.0	**2784**	**72.7**
GDM	0	0.0	0.0	4	100.0	0.1	**4**	**0.1**
Don't know	6	27.3	0.6	16	72.7	0.6	**22**	**0.6**
Other	7	10.6	0.7	59	89.4	2.1	**66**	**1.7**
Unstated	3	50.0	0.3	3	50.0	0.1	**6**	**0.2**
Total	**961**	**25.1**		**2871**	**74.9**		**3832**	

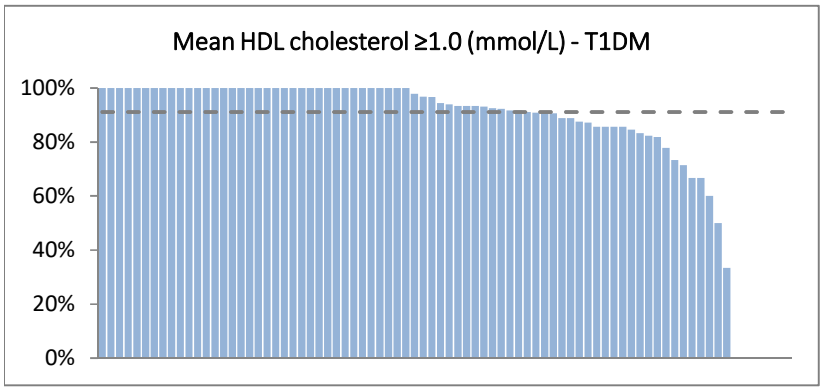


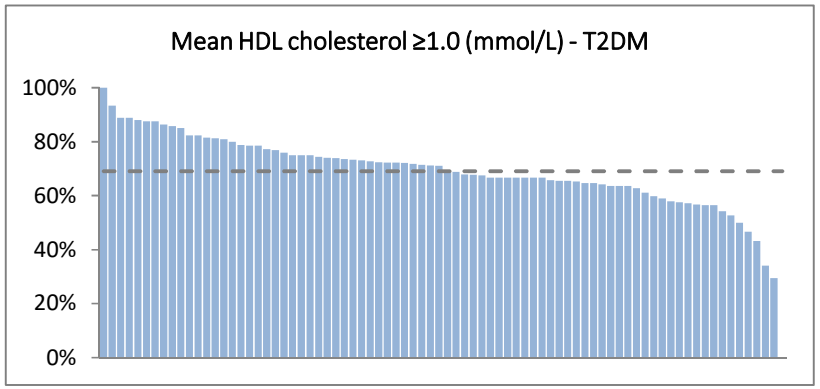




X-axis: All sites (Descending order)



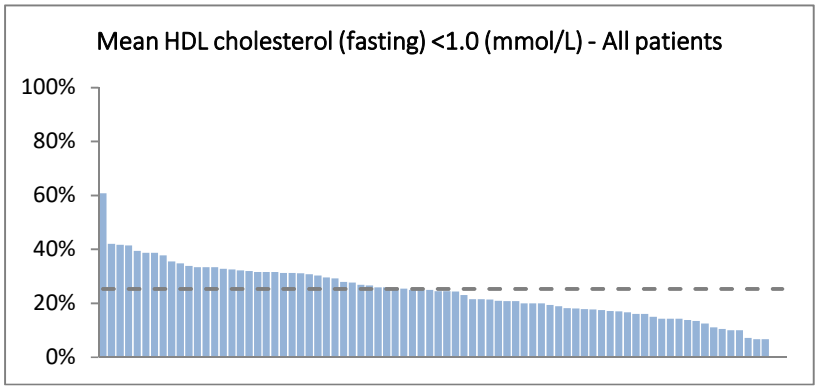


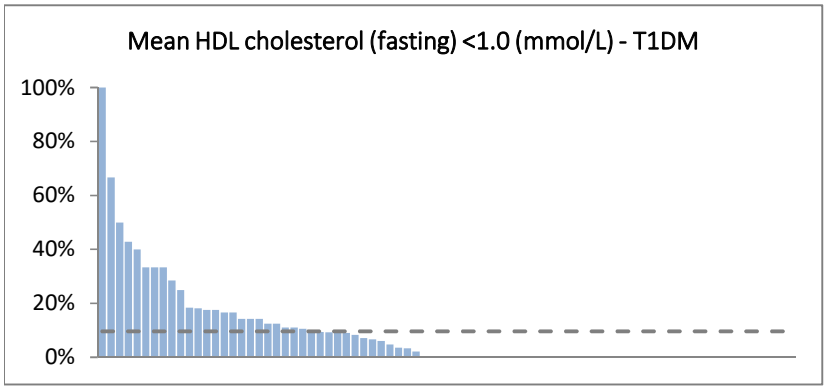


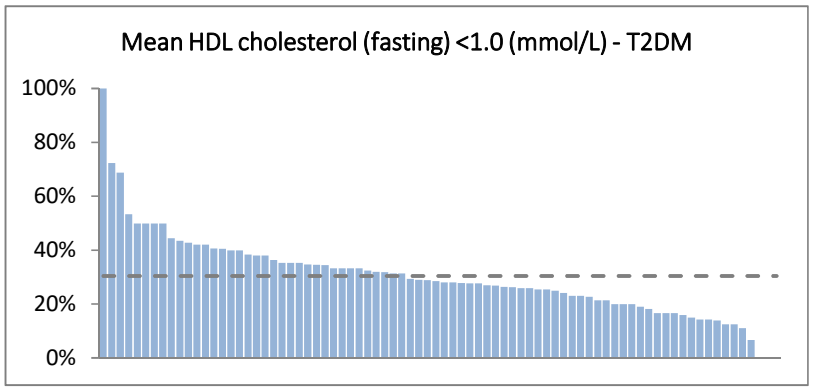
X-axis: All sites (Descending order)

HDL cholesterol (fasting) by diabetes type

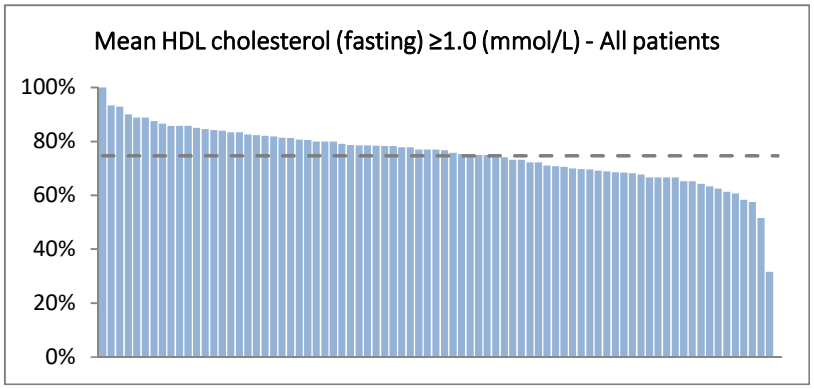
Diabetes type	<1.0 (mmol/L)			≥1.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	72	9.6	8.5	681	90.4	27.3	**753**	**22.5**
T2DM	763	30.4	90.0	1744	69.6	69.8	**2507**	**74.9**
GDM	0	0.0	0.0	2	100.0	0.1	**2**	**0.1**
Don't know	5	26.3	0.6	14	73.7	0.6	**19**	**0.6**
Other	5	8.5	0.6	54	91.5	2.2	**59**	**1.8**
Unstated	3	60.0	0.4	2	40.0	0.1	**5**	**0.1**
Total	**848**	**25.4**		**2497**	**74.6**		3345	

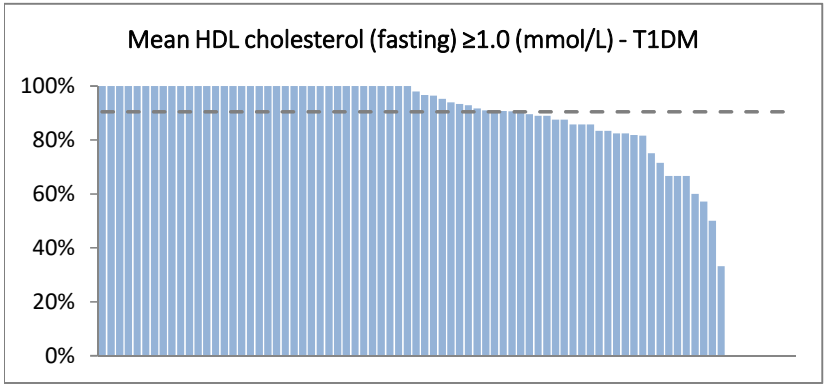


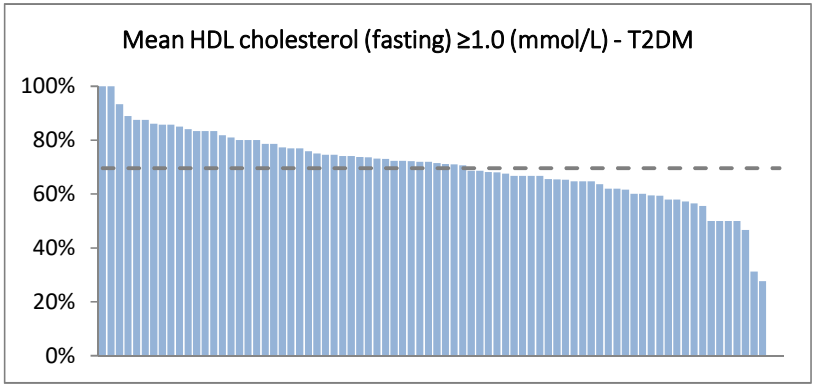




X-axis: All sites (Descending order)



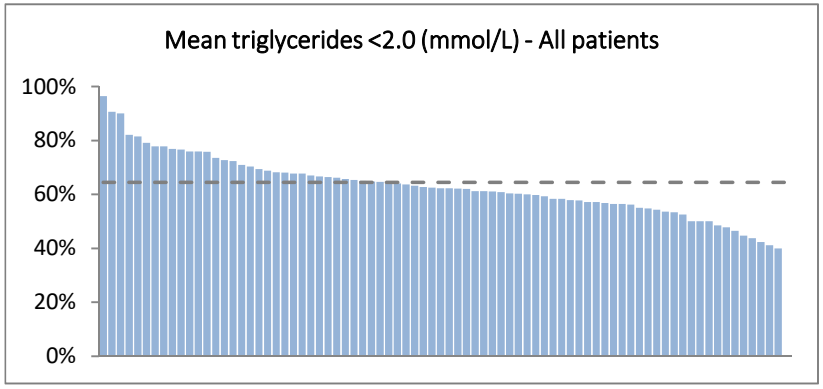


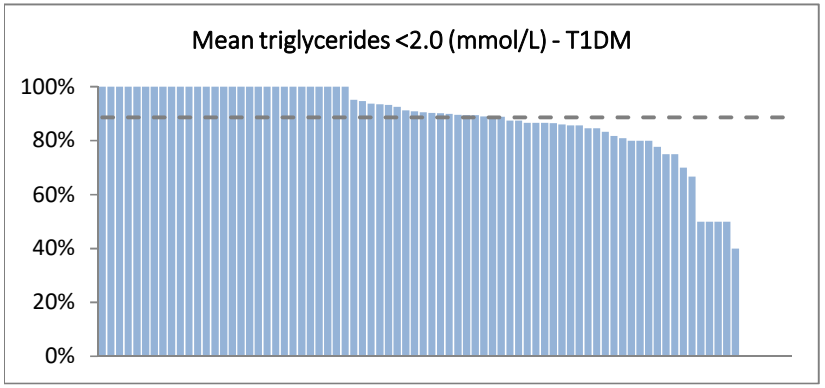


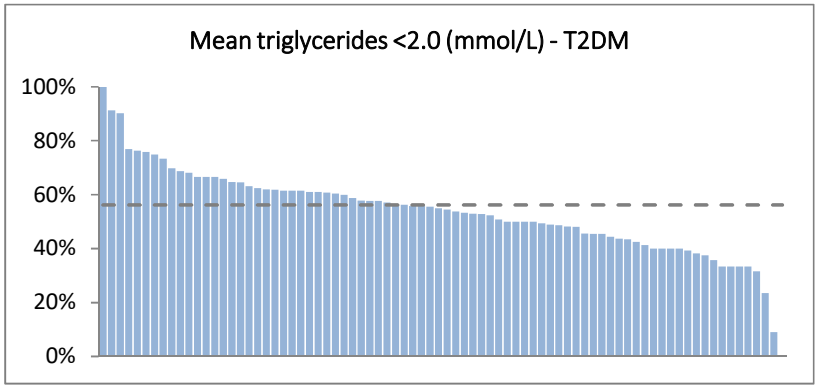
X-axis: All sites (Descending order)

Triglycerides by diabetes type

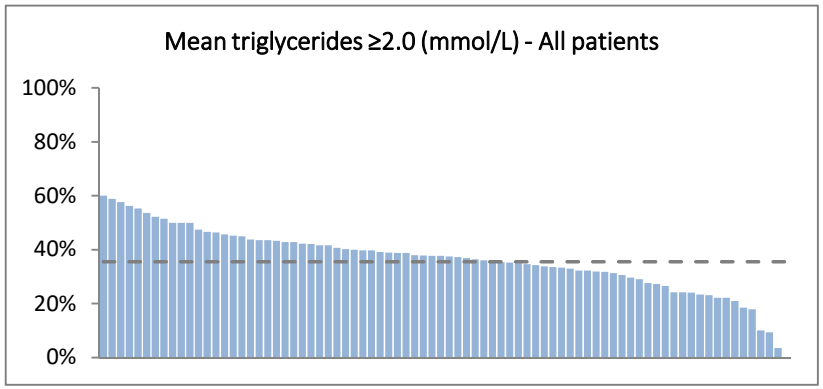
Diabetes type	<2.0 (mmol/L)			≥2.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	921	88.6	33.8	118	11.4	7.9	**1039**	**24.6**
T2DM	1725	56.2	63.4	1346	43.8	89.7	**3071**	**72.7**
GDM	2	50.0	0.1	2	50.0	0.1	**4**	**0.1**
Don't know	18	75.0	0.7	6	25.0	0.4	**24**	**0.6**
Other	49	68.1	1.8	23	31.9	1.5	**72**	**1.7**
Unstated	7	58.3	0.3	5	41.7	0.3	**12**	**0.3**
Total	**2722**	**64.5**		**1500**	**35.5**		4222	

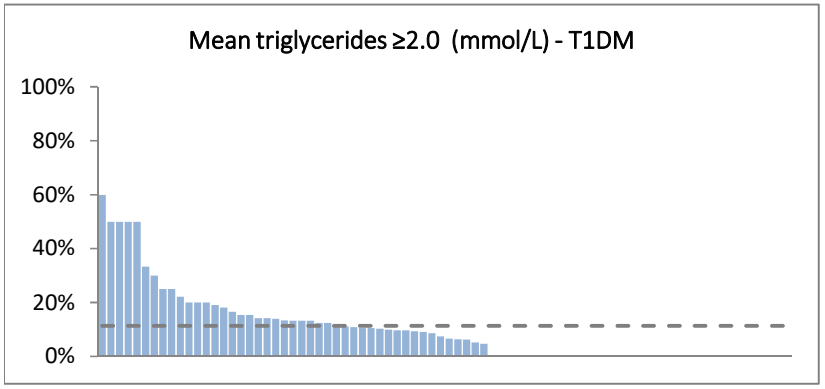


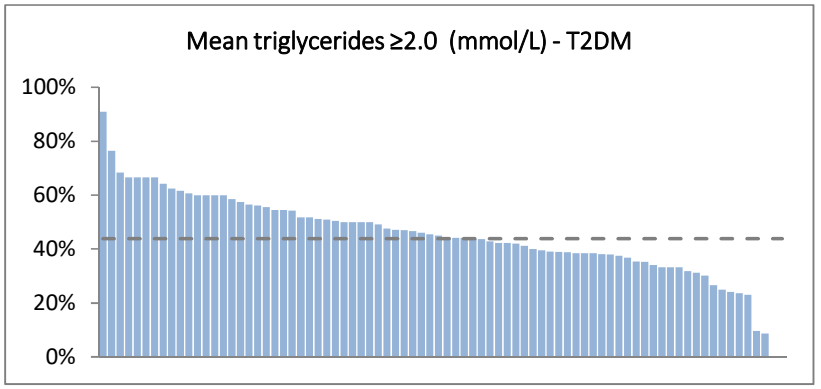




X-axis: All sites (Descending order)



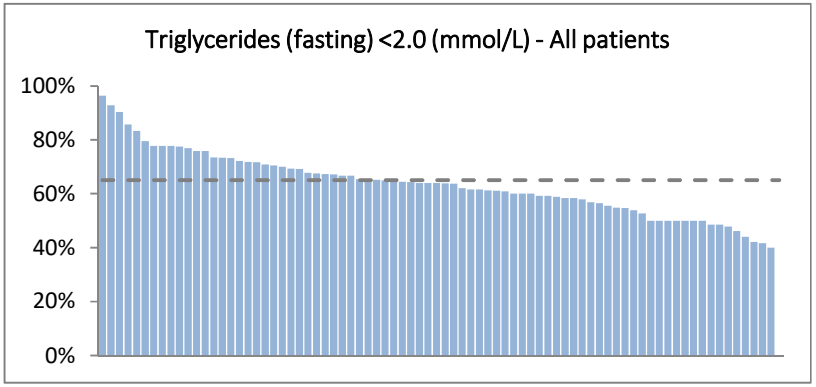


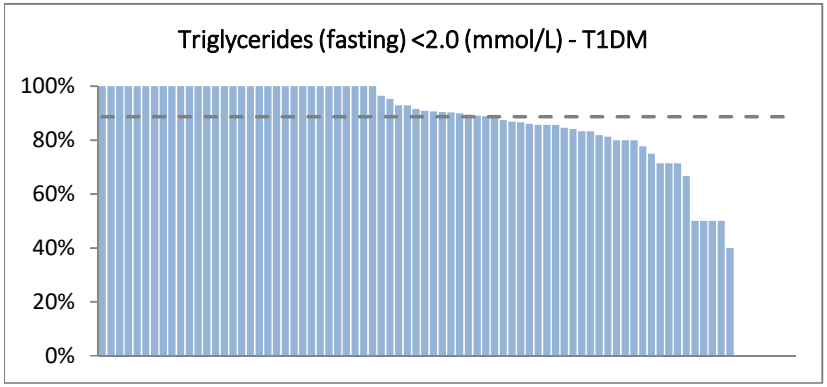


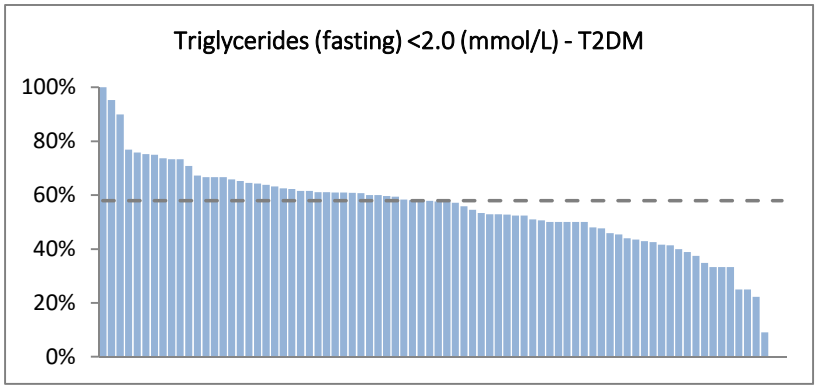
X-axis: All sites (Descending order)

Triglycerides (fasting) by diabetes type

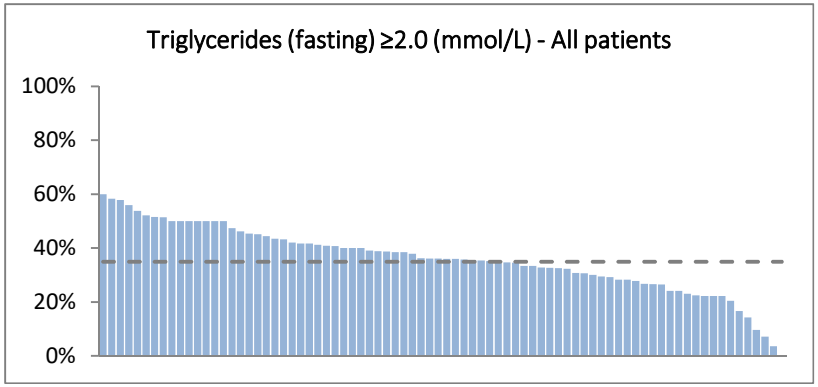
Diabetes type	<2.0 (mmol/L)			≥2.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	709	88.6	30.2	91	11.4	7.2	**800**	**22.2**
T2DM	1572	57.9	67.0	1143	42.1	90.7	**2715**	**75.3**
GDM	0	0.0	0.0	2	100.0	0.2	**2**	**0.1**
Don't know	16	76.2	0.7	5	23.8	0.4	**21**	**0.6**
Other	46	73.0	2.0	17	27.0	1.3	**63**	**1.7**
Unstated	4	66.7	0.2	2	33.3	0.2	**6**	**0.2**
Total	**2347**	**65.1**		**1260**	**34.9**		3607	

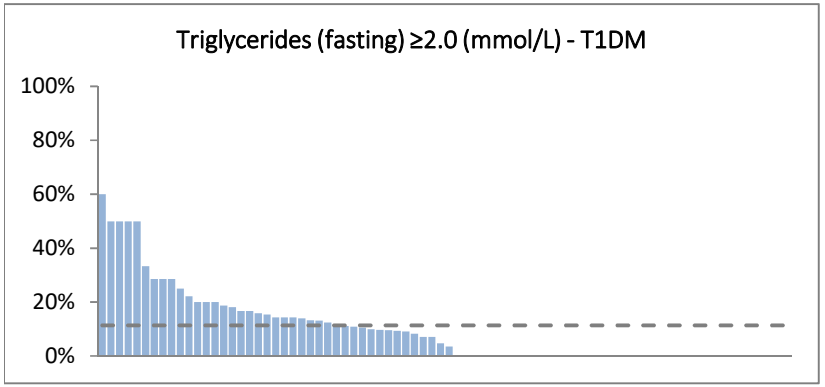


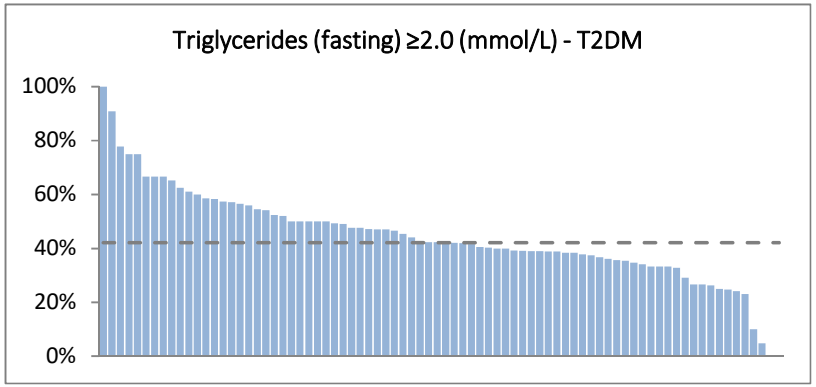




X-axis: All sites (Descending order)



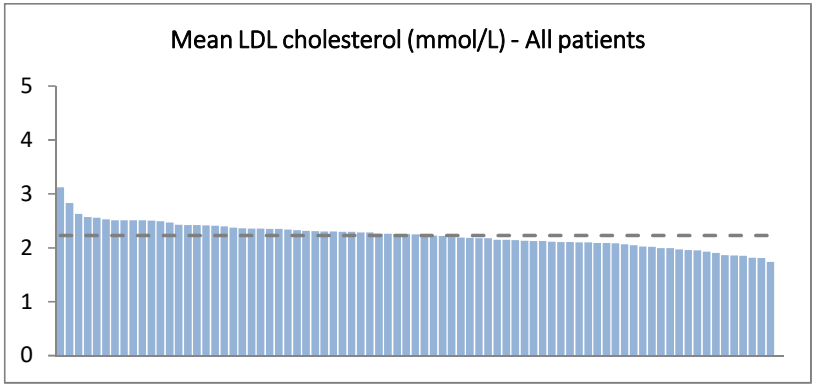


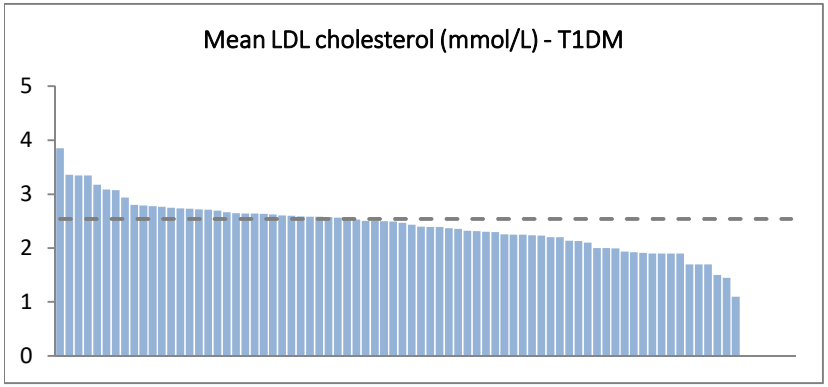


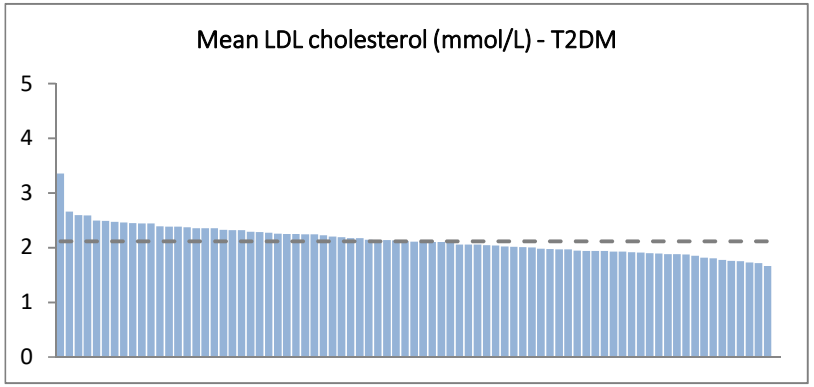
X-axis: All sites (Descending order)

Mean LDL cholesterol by diabetes type

Diabetes type	LDL				
	n	Mean	SD	Min	Max
T1DM	931	2.5	0.9	0.5	7.6
T2DM	2697	2.1	0.9	0.0	6.7
GDM	4	2.5	0.5	1.9	2.9
Don't know	21	2.4	1.0	0.5	4.4
Other	63	2.3	1.0	0.5	5.3
Unstated	5	3.0	1.0	0.5	4.5
Total	**3721**	**2.2**	**0.9**	**0.0**	**7.6**



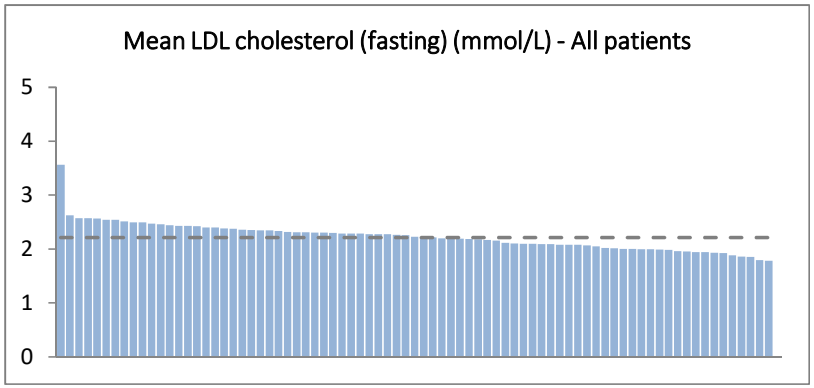


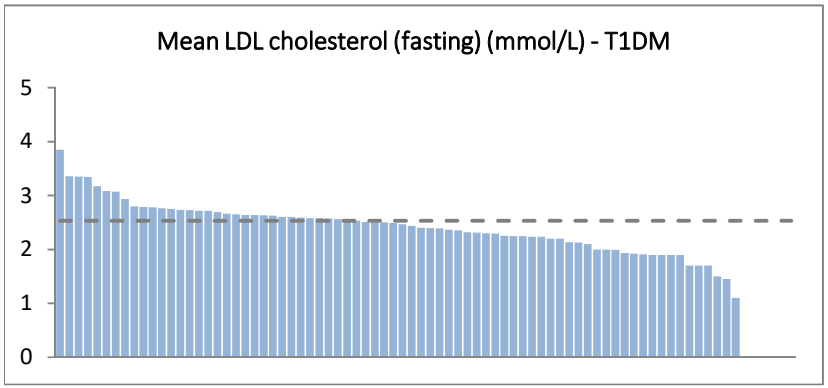


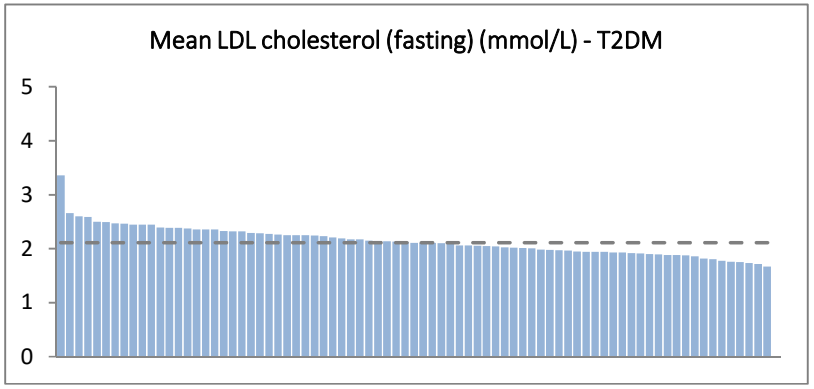
X-axis: All sites (Descending order)

Mean LDL cholesterol (fasting) by diabetes type

Diabetes type	LDL				
	n	Mean	SD	Min	Max
T1DM	744	2.5	0.9	0.5	7.6
T2DM	2445	2.1	0.9	0.0	6.6
GDM	2	2.7	0.2	2.5	2.8
Don't know	18	2.2	0.9	1.1	4.4
Other	57	2.3	1.0	0.3	5.3
Unstated	4	2.9	1.2	1.7	4.5
Total	**3270**	**2.2**	**0.9**	**0.0**	**7.6**



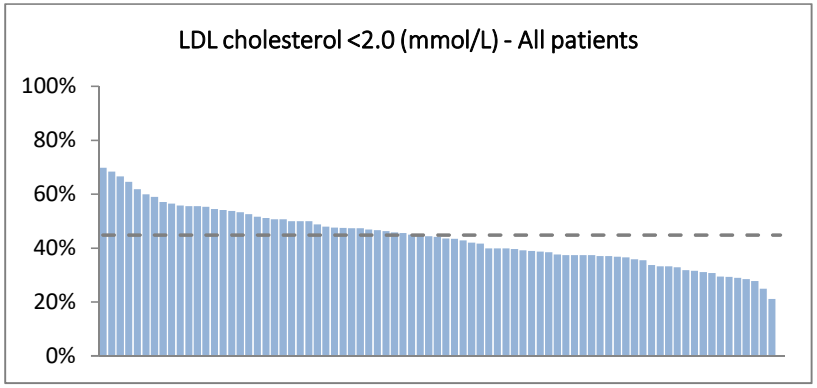


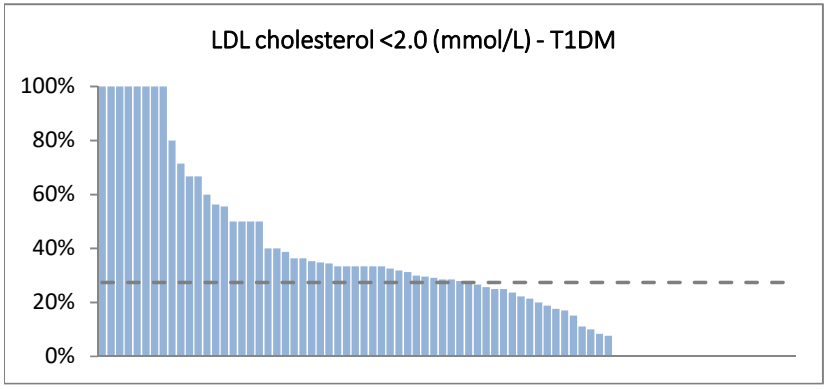


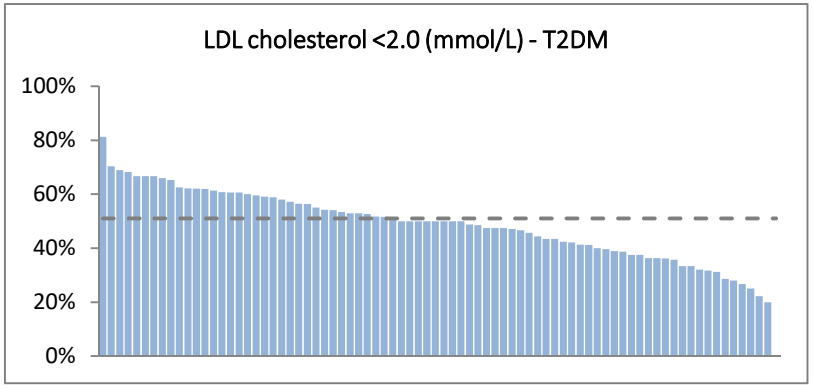
X-axis: All sites (Descending order)

LDL cholesterol by diabetes type

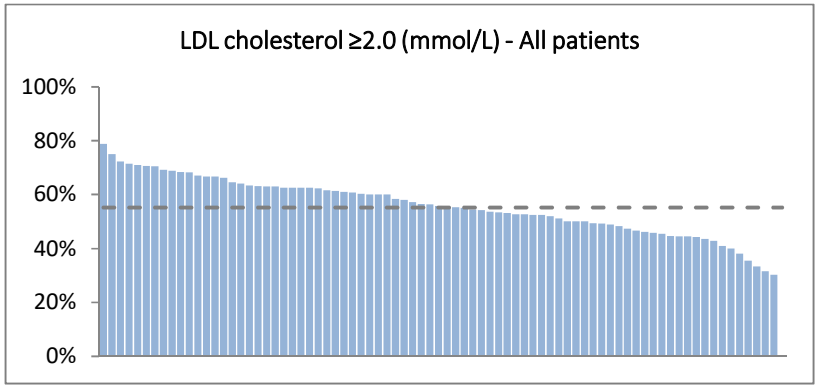
Diabetes type	<2.0 (mmol/L)			≥2.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	255	27.4	15.3	676	72.6	32.9	**931**	**25.0**
T2DM	1375	51.0	82.4	1322	49.0	64.4	**2697**	**72.5**
GDM	1	25.0	0.1	3	75.0	0.1	**4**	**0.1**
Don't know	9	42.9	0.5	12	57.1	0.6	**21**	**0.6**
Other	27	42.9	1.6	36	57.1	1.8	**63**	**1.7**
Unstated	1	20.0	0.1	4	80.0	0.2	**5**	**0.1**
Total	**1668**	**44.8**		**2053**	**55.2**		**3721**	

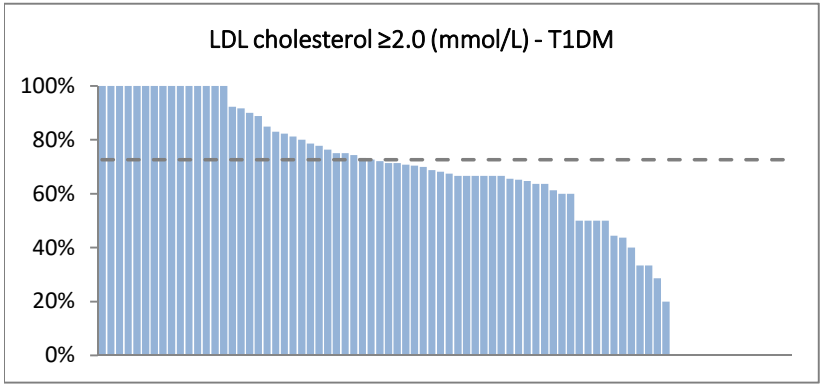


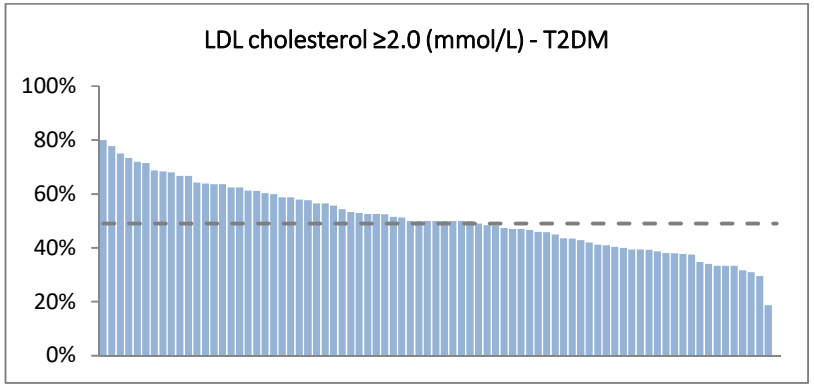




X-axis: All sites (Descending order)



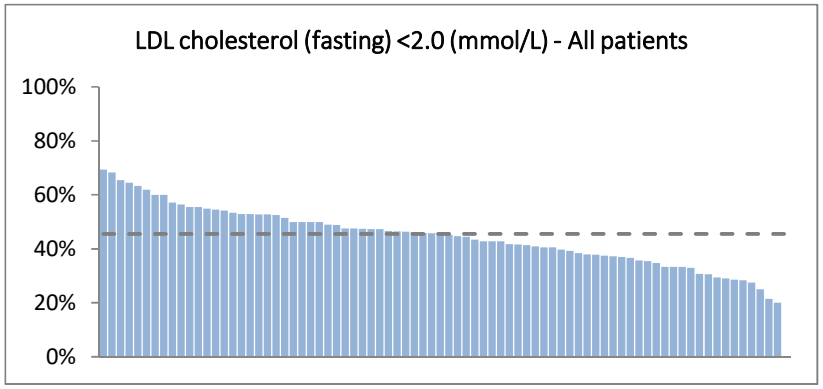


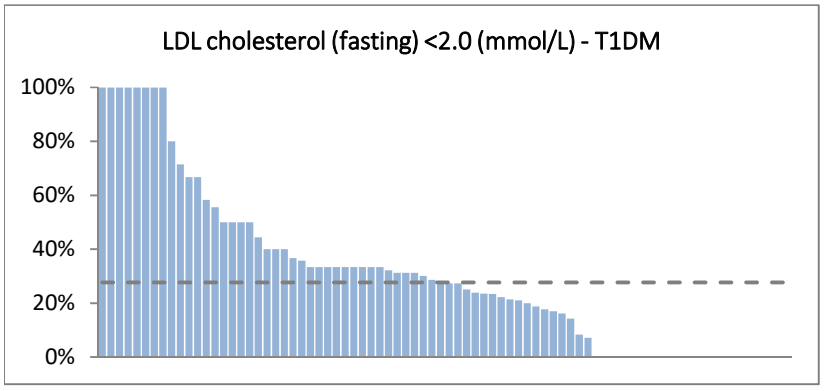


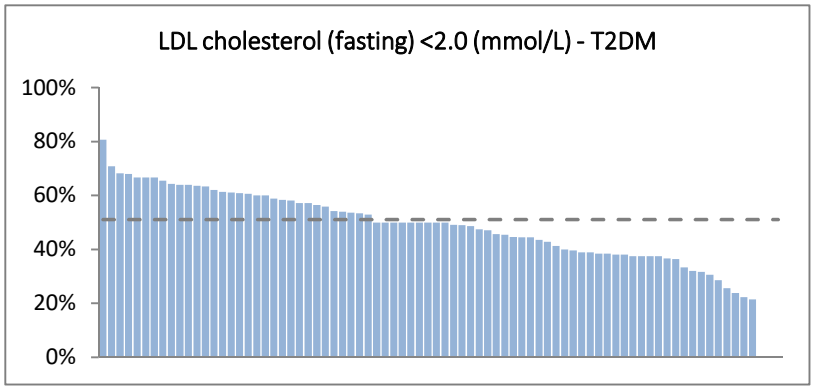
X-axis: All sites (Descending order)

LDL cholesterol (fasting) by diabetes type

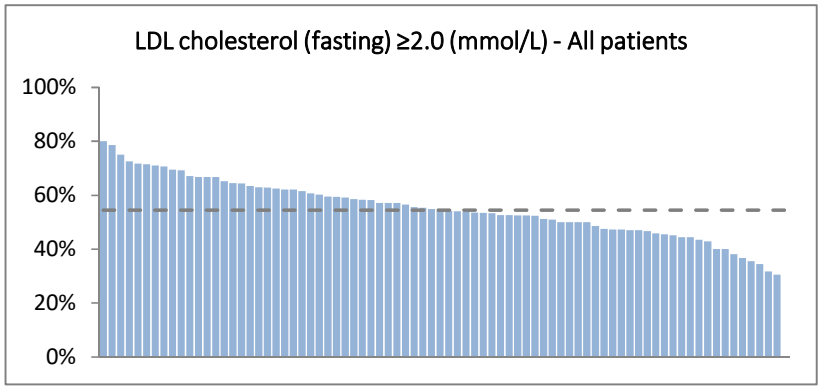
Diabetes type	<2.0 (mmol/L)			≥2.0 (mmol/L)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	206	27.7	13.8	538	72.3	30.2	**744**	**22.8**
T2DM	1248	51.0	83.9	1197	49.0	67.2	**2445**	**74.8**
GDM	0	0.0	0.0	2	100.0	0.1	**2**	**0.1**
Don't know	9	50.0	0.6	9	50.0	0.5	**18**	**0.6**
Other	24	42.1	1.6	33	57.9	1.9	**57**	**1.7**
Unstated	1	25.0	0.1	3	75.0	0.2	**4**	**0.1**
Total	**1488**	**45.5**		**1782**	**54.5**		3270	

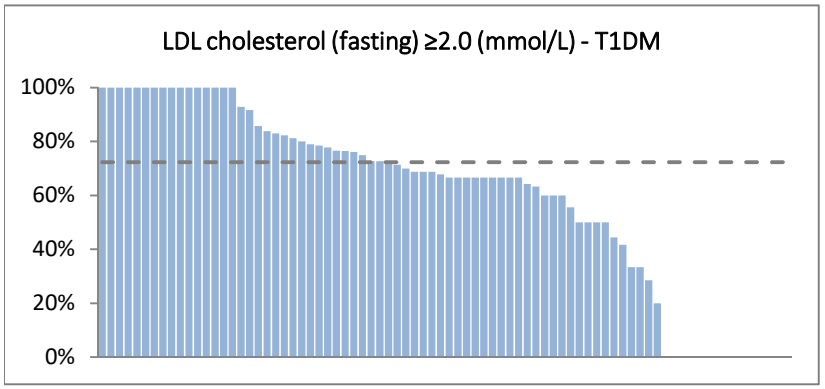


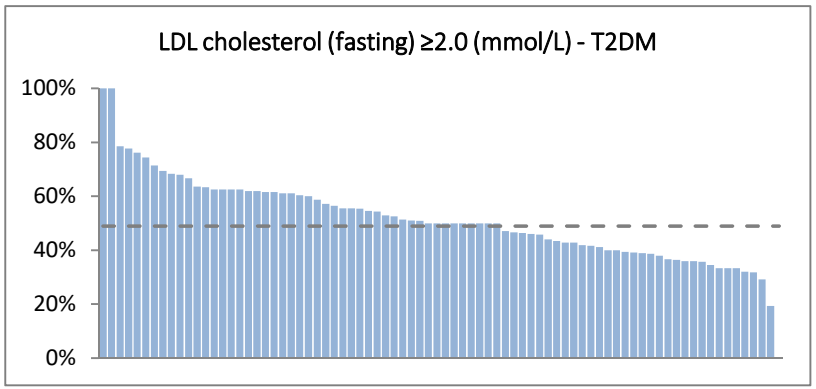




X-axis: All sites (Descending order)





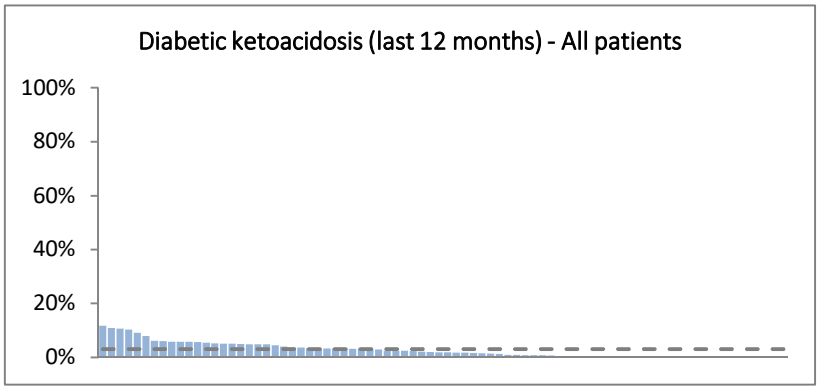


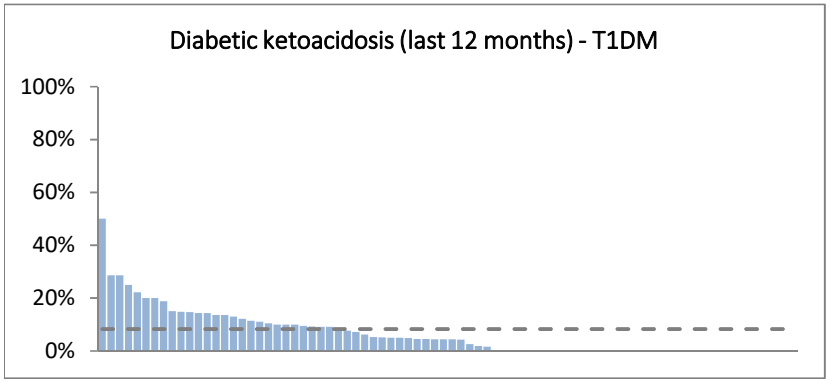
X-axis: All sites (Descending order)

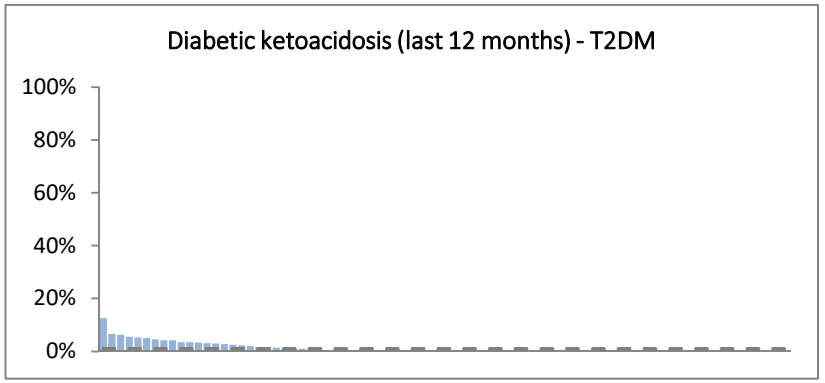
6.4 Diabetic Emergencies

Diabetic ketoacidosis (last 12 months) by diabetes type

Diabetes type	Yes			No (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	143	8.3	73.7	1580	91.7	25.7	**1723**	**26.9**
T2DM	40	1.0	20.6	4006	99.0	65.3	**4046**	**63.1**
GDM	1	0.3	0.5	319	99.7	5.2	**320**	**5.0**
Don't know	2	2.2	1.0	91	97.8	1.5	**93**	**1.4**
Other	8	6.5	4.1	115	93.5	1.9	**123**	**1.9**
Unstated	0	0.0	0.0	26	100.0	0.4	**26**	**0.4**
Total	**194**	**3.1**		**6137**	**96.9**		6331	



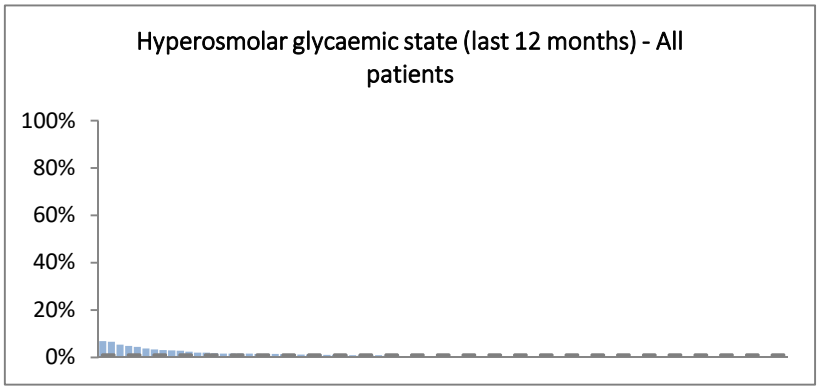


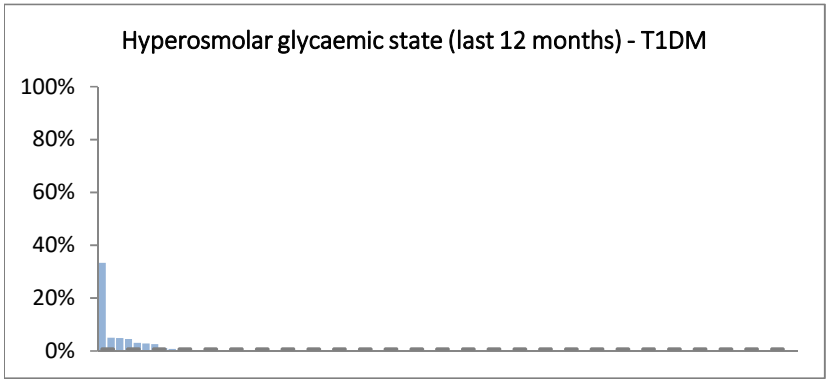


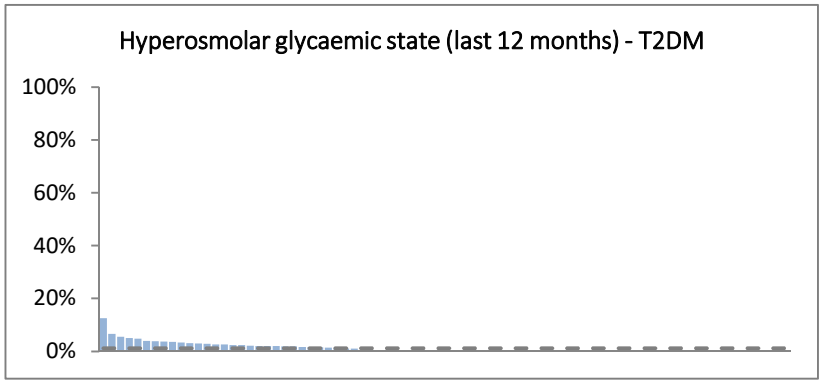
X-axis: All sites (Descending order)

Hyperosmolar hyperglycaemic state (last 12 months) by diabetes type

Diabetes type	Yes			No (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	12	0.7	19.4	1710	99.3	27.3	**1722**	**26.8**
T2DM	47	1.2	75.8	3996	98.8	63.8	**4043**	**63.0**
GDM	0	0.0	0.0	320	100.0	5.1	**320**	**5.0**
Don't know	0	0.0	0.0	93	100.0	1.5	**93**	**1.4**
Other	3	2.4	4.8	120	97.6	1.9	**123**	**1.9**
Unstated	0	0.0	0.0	26	100.0	0.4	**26**	**0.4**
Total	**62**	**1.0**		**6265**	**99.0**		6327	



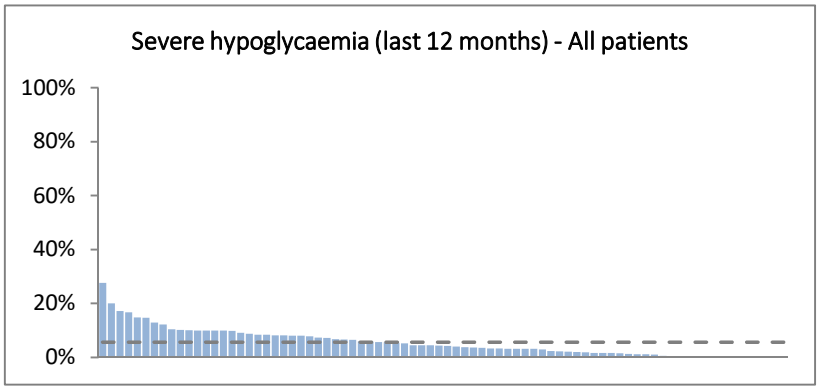


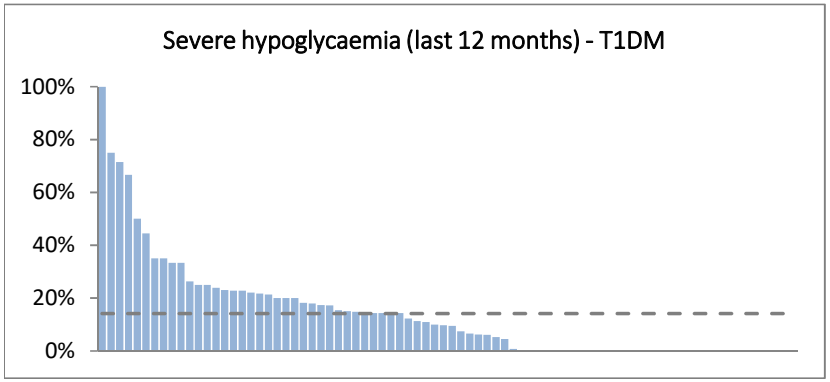


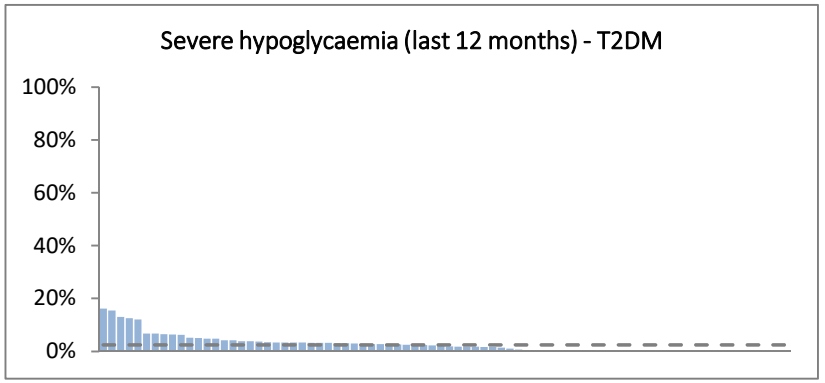
X-axis: All sites (Descending order)

Severe hypoglycaemia (last 12 months) by diabetes type

Diabetes type	Yes			No (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	243	14.2	68.5	1474	85.8	24.8	**1717**	**26.8**
T2DM	100	2.5	28.2	3933	97.5	66.0	**4033**	**62.9**
GDM	2	0.6	0.6	317	99.4	5.3	**319**	**5.0**
Don't know	2	2.2	0.6	91	97.8	1.5	**93**	**1.4**
Other	8	6.6	2.3	114	93.4	1.9	**122**	**1.9**
Unstated	0	0.0	0.0	26	100.0	0.4	**26**	**0.4**
Total	**355**	**5.6**		**5955**	**94.4**		6310	





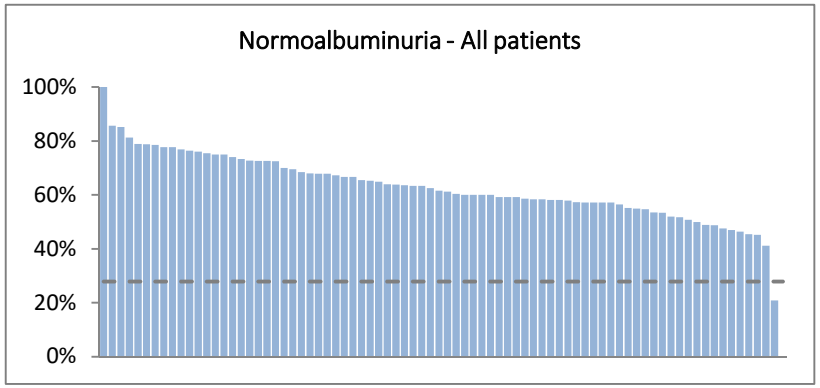


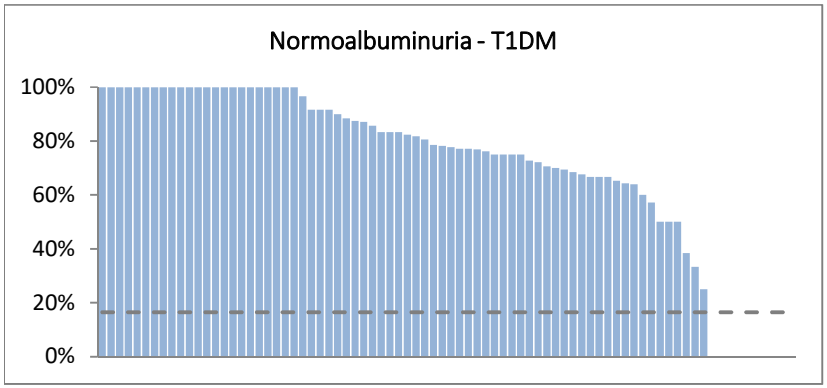
X-axis: All sites (Descending order)

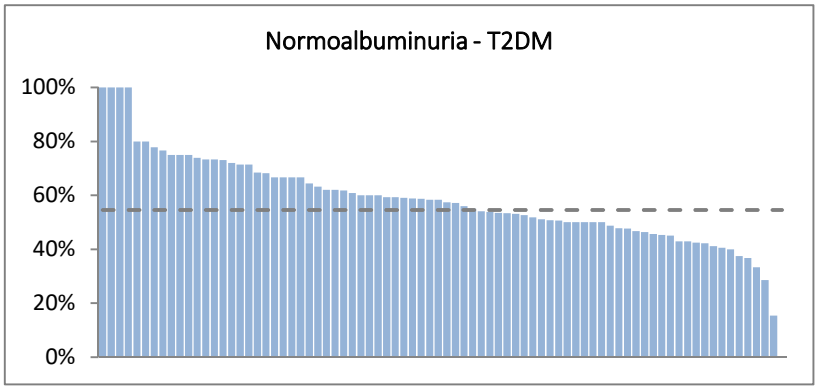
6.5 Complications

Urinary albumin by diabetes type

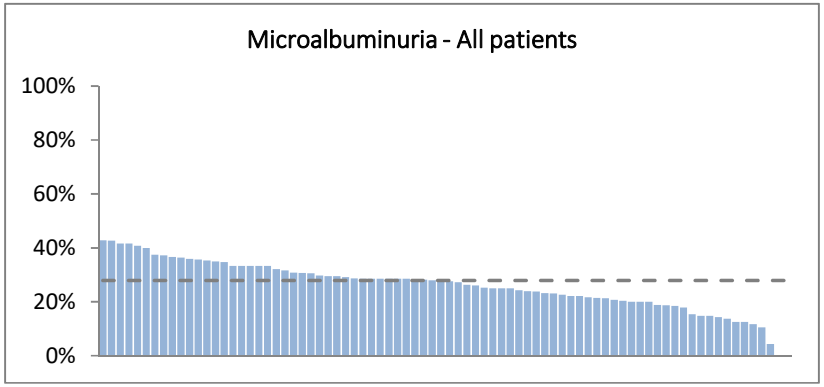
Diabetes type	Normoalbuminuria			Microalbuminuria			Macroalbuminuria			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	779	77.3	74.3	166	16.5	38.6	63	6.3	NA	1008	26.8
T2DM	1428	54.6	136.1	837	32.0	194.7	351	13.4	NA	2616	69.6
GDM	15	41.7	1.4	17	47.2	4.0	4	11.1	NA	36	1.0
Don't know	11	50.0	1.0	8	36.4	1.9	3	13.6	NA	22	0.6
Other	42	61.8	4.0	18	26.5	4.2	8	11.8	NA	68	1.8
Unstated	7	63.6	0.7	1	9.1	0.2	1	9.1	NA	11	0.3
Total	**1049**	**27.9**		**430**	**11.4**		**0**	**0.0**		3761	

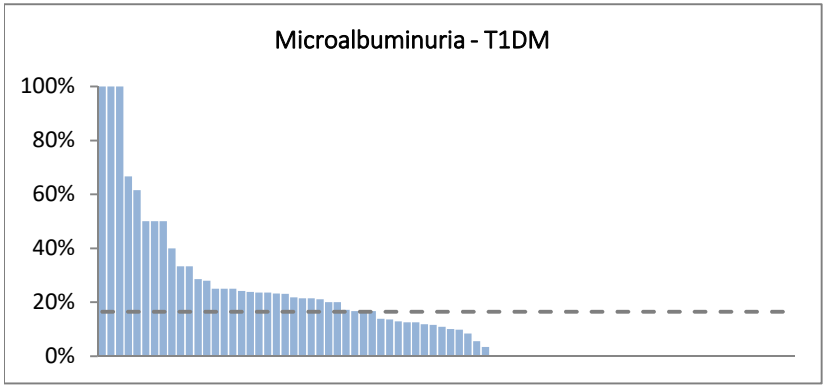


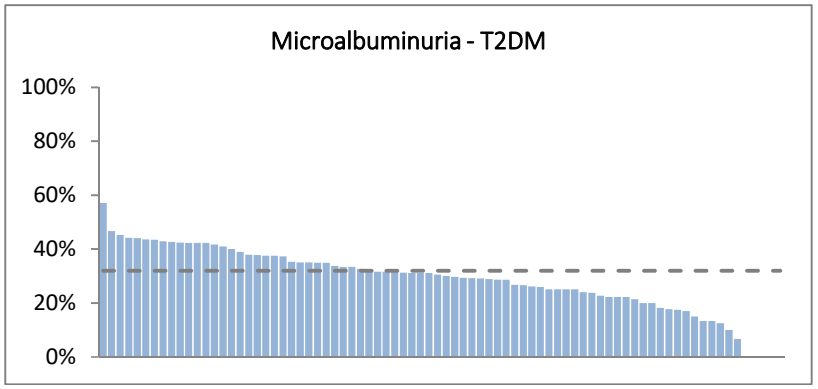




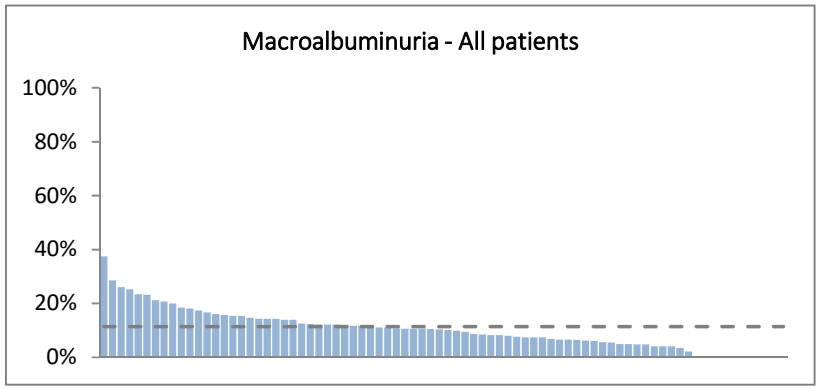
X-axis: All sites (Descending order)

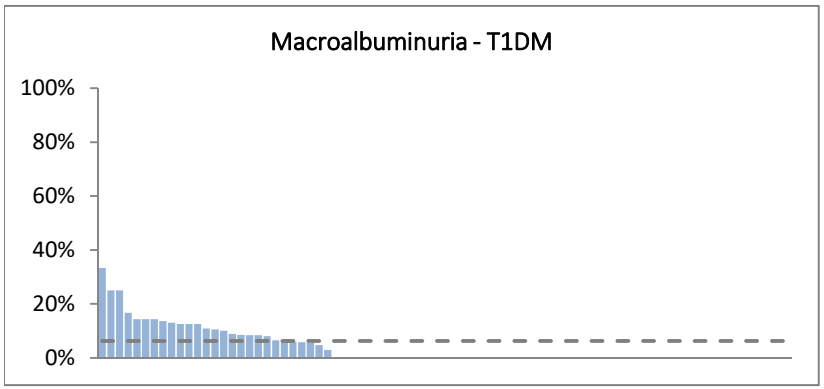


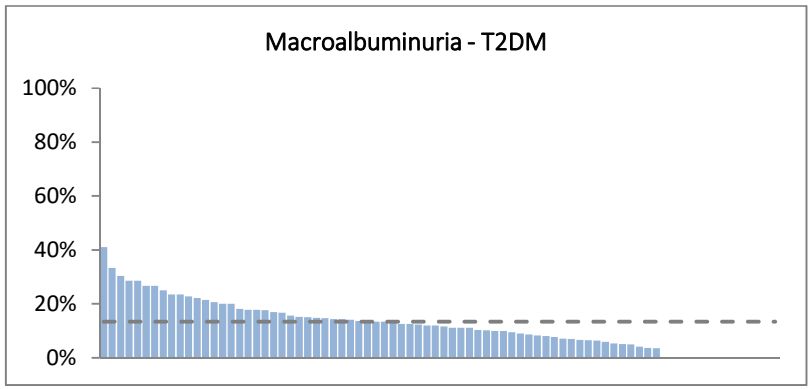




X-axis: All sites (Descending order)



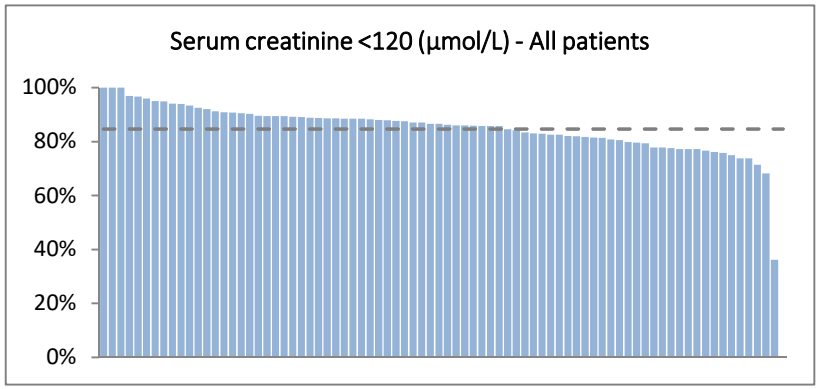


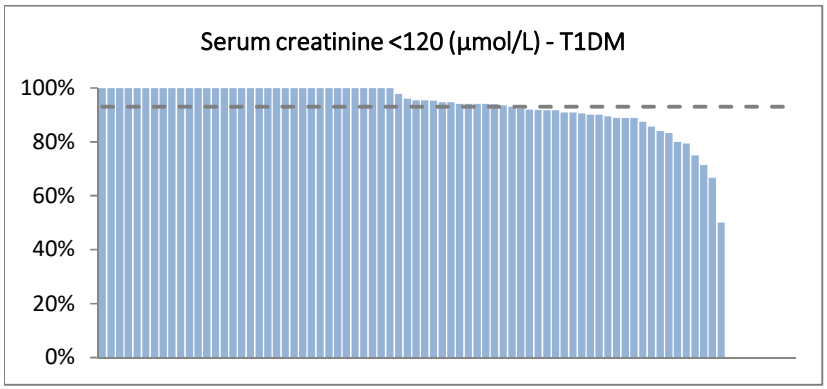


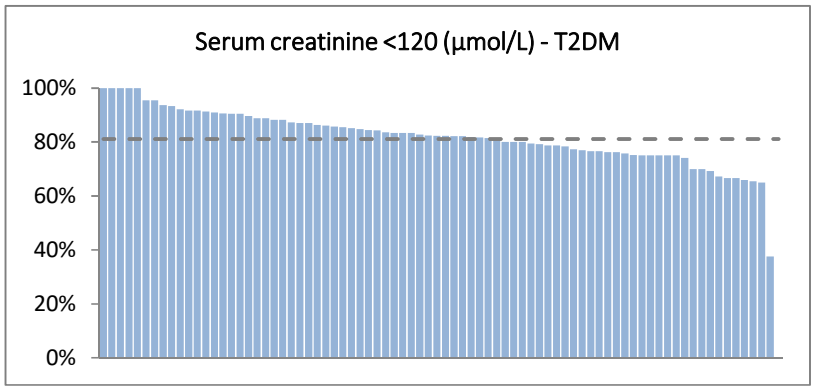
X-axis: All sites (Descending order)

Serum creatinine levels by diabetes type

Diabetes type	<120 (µmol/L)			≥120 - ≤500 (µmol/L)			>500 (µmol/L)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	1284	93.0	28.8	90	6.5	12.3	6	0.4	7.6	**1380**	**26.2**
T2DM	2948	81.1	66.2	616	17.0	84.5	69	1.9	87.3	**3633**	**69.0**
GDM	79	100.0	1.8	0	0.0	0.0	0	0.0	0.0	**79**	**1.5**
Don't know	43	78.2	1.0	11	20.0	1.5	1	1.8	1.3	**55**	**1.0**
Other	88	87.1	2.0	10	9.9	1.4	3	3.0	3.8	**101**	**1.9**
Unstated	14	87.5	0.3	2	12.5	0.3	0	0.0	0.0	**16**	**0.3**
Total	**4456**	**84.7**		**729**	**13.8**		**79**	**1.5**		5264	







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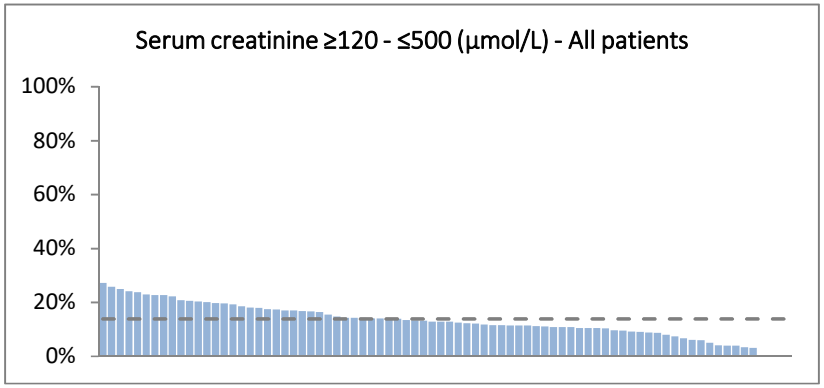
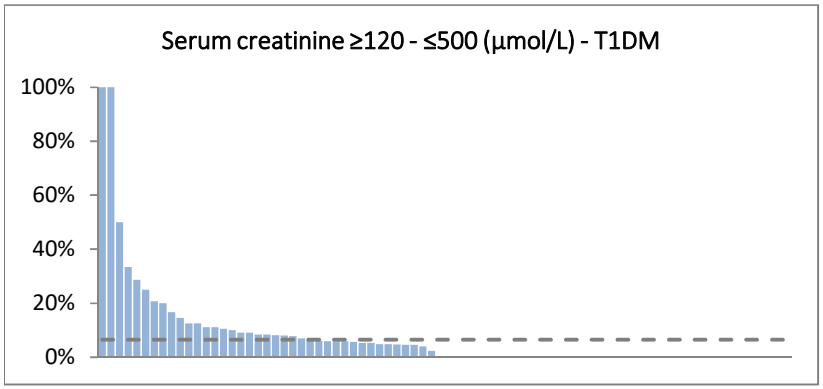
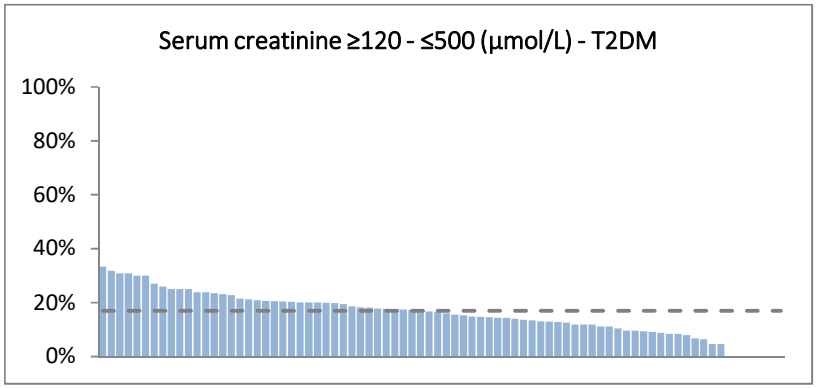
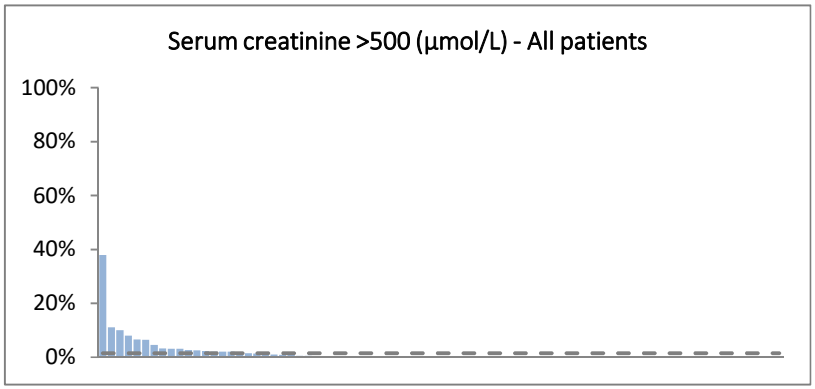
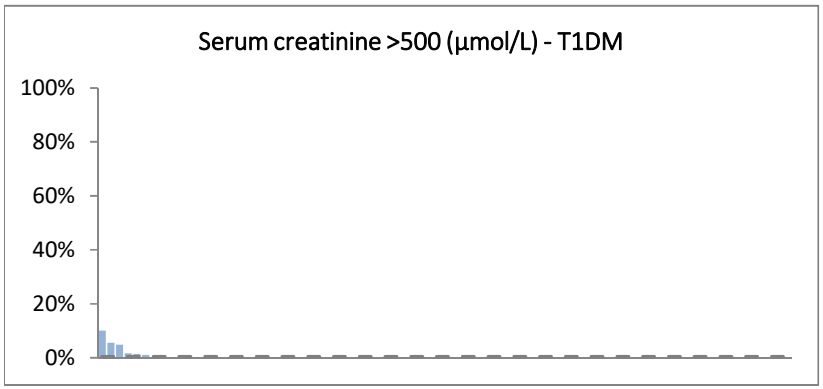


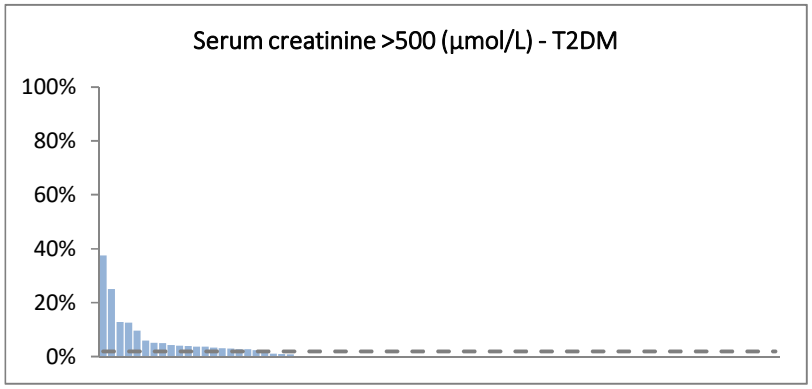




X-axis: All sites (Descending order)



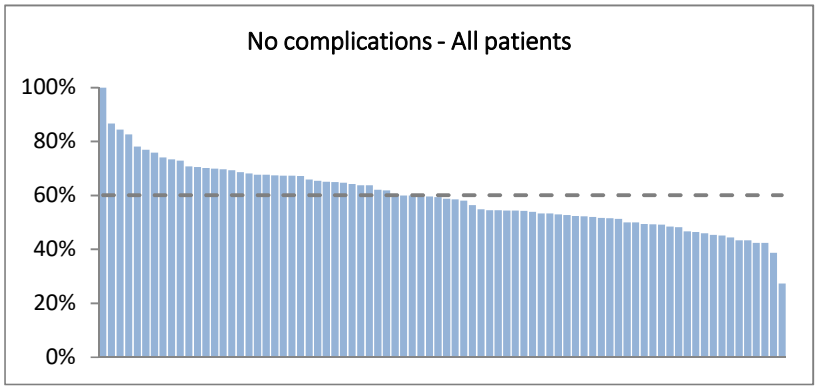


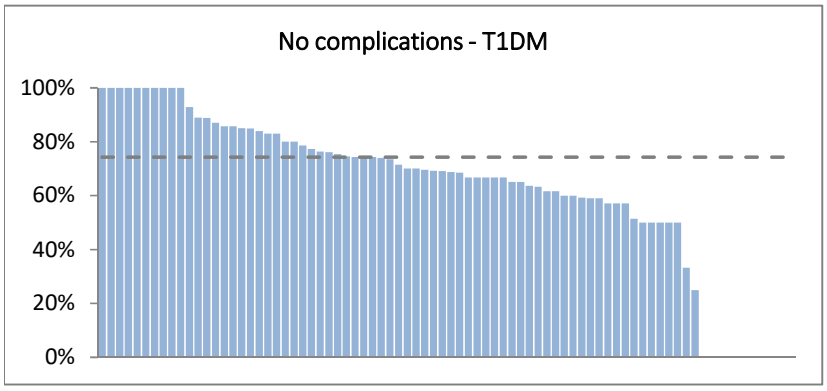


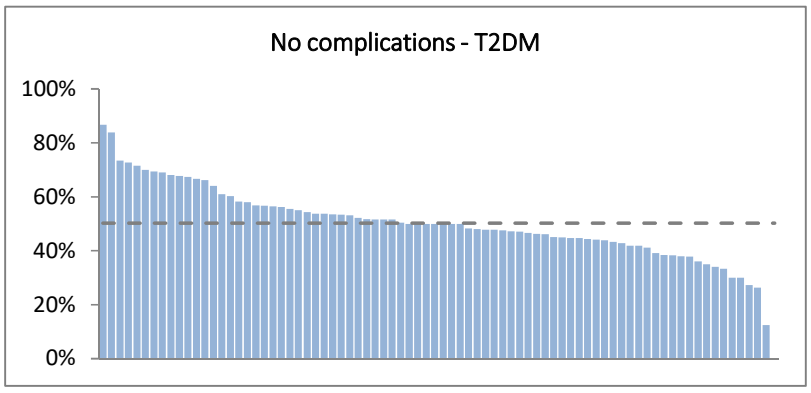
X-axis: All sites (Descending order)

Number of complications by diabetes type

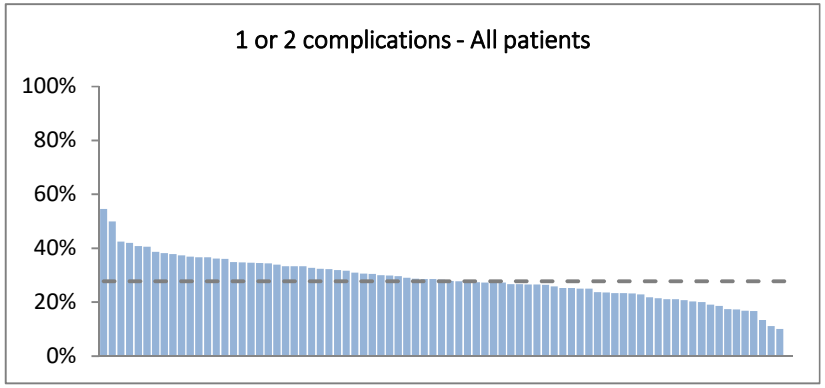
Diabetes type	0			1-2			≥3			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	1284	99.4	8.2	445	0.6	0.1	0	0.0	NA	1729	5.0
T2DM	2081	50.2	53.8	2062	49.8	80.4	NA	NA	NA	4143	64.4
GDM	318	99.4	8.2	2	0.6	0.1	0	0.0	NA	320	5.0
Don't know	83	89.2	2.1	10	10.8	0.4	0	0.0	NA	93	1.4
Other	86	68.8	2.2	39	31.2	1.5	0	0.0	NA	125	1.9
Unstated	18	69.2	0.5	8	30.8	0.3	0	0.0	NA	26	0.4
Total	**3870**	**60.1**		**2566**	**39.9**		**0**	**0.0**		6436	

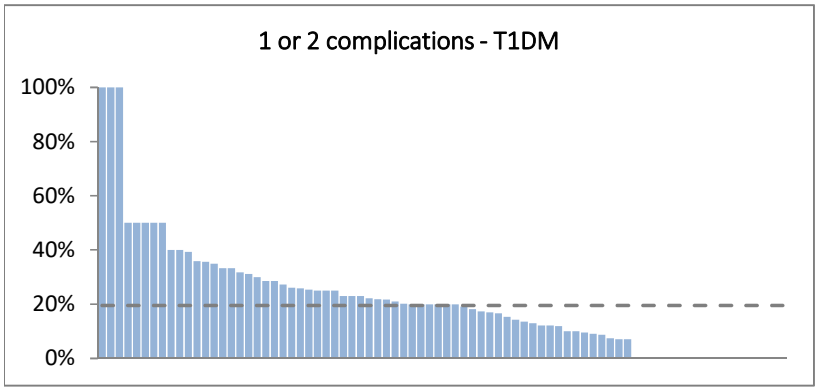


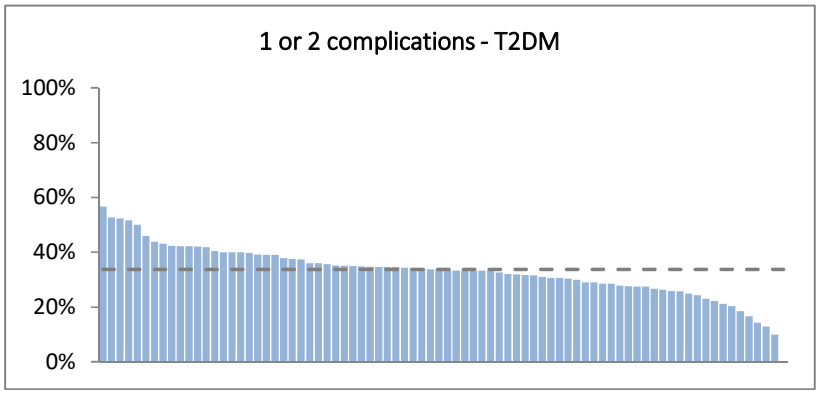




X-axis: All sites (Descending order)







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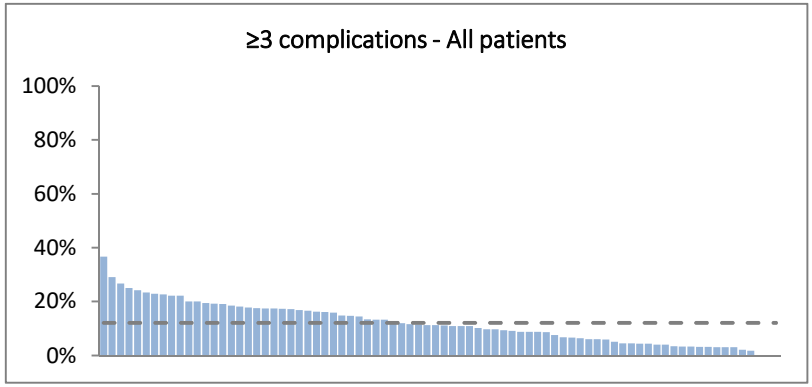
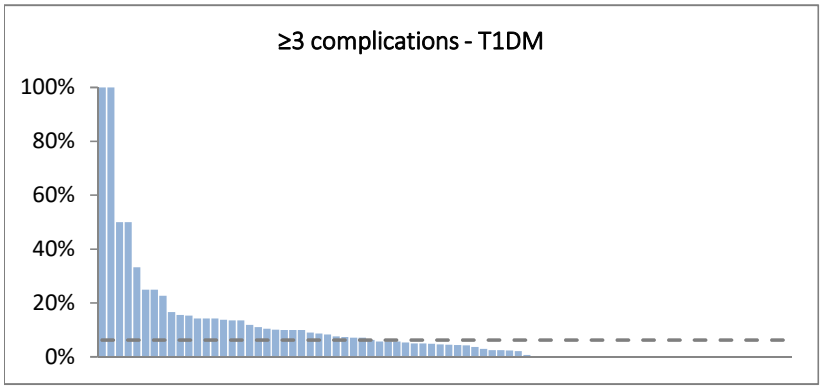
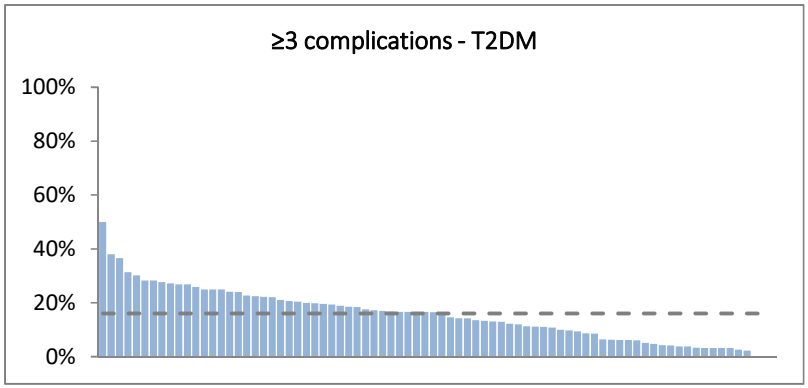




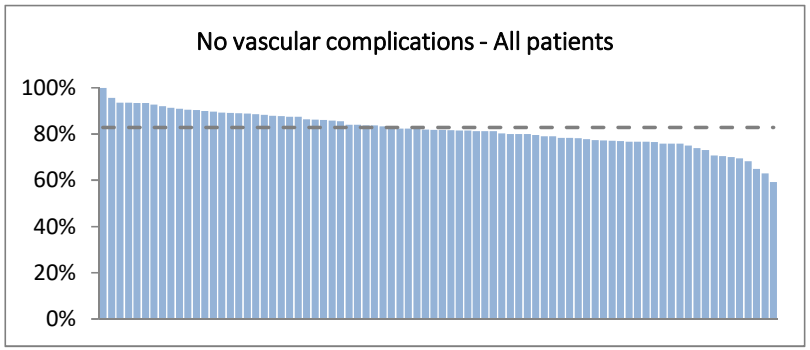


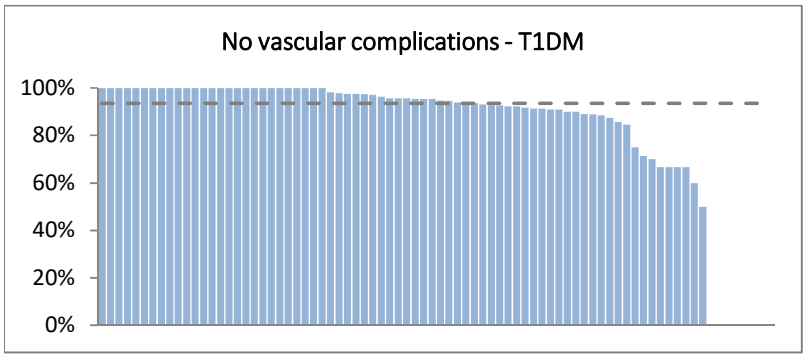
X-axis: All sites (Descending order)

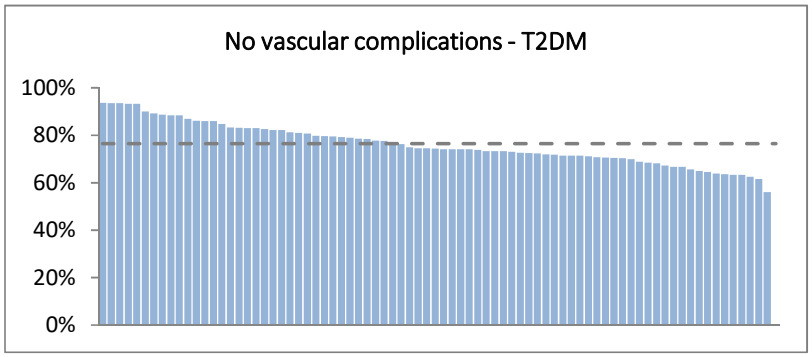
Number of vascular complications* by diabetes type

Diabetes type	0			1-2			≥3			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	1617	93.5	30.3	107	6.2	10.3	5	0.3	7.1	**1729**	**26.9**
T2DM	3167	76.4	59.4	911	22.0	88.1	65	1.6	92.9	**4143**	**64.4**
GDM	319	99.7	6.0	1	0.3	0.1	0	0.0	0.0	**320**	**5.0**
Don't know	89	95.7	1.7	4	4.3	0.4	0	0.0	0.0	**93**	**1.4**
Other	116	92.8	2.2	9	7.2	0.9	0	0.0	0.0	**125**	**1.9**
Unstated	24	92.3	0.5	2	7.7	0.2	0	0.0	0.0	**26**	**0.4**
Total	**5332**	**82.8**		**1034**	**16.1**		**70**	**1.1**		6436	

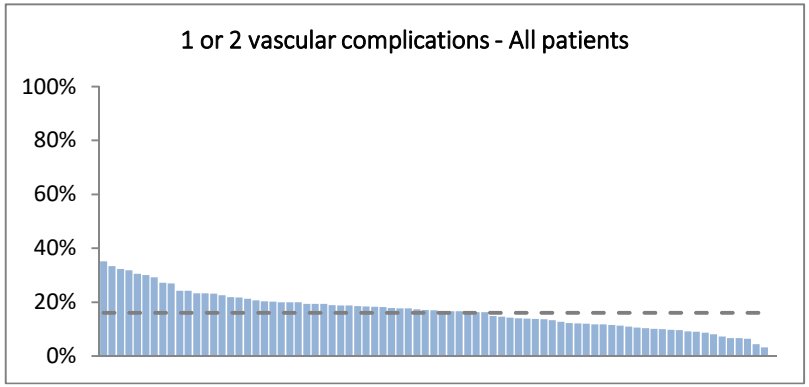
*possible complications include macrovascular/microvascular complications. Occurrence of a complication, both in the past 12 months and previously, is counted only once.

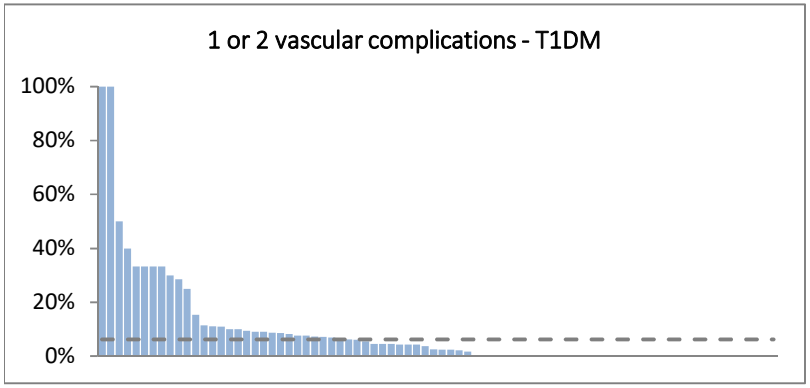


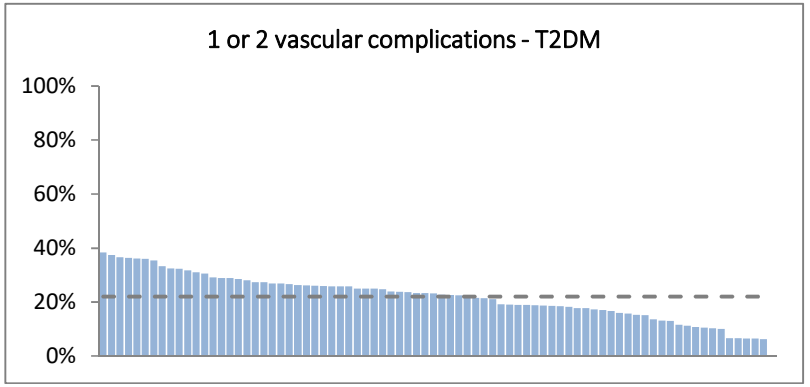




X-axis: All sites (Descending order)







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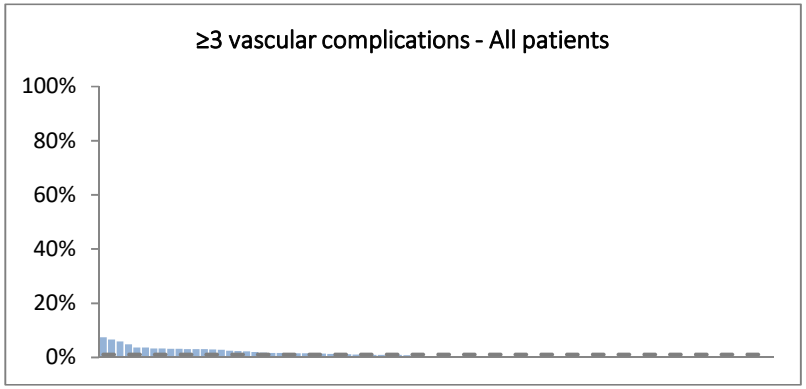
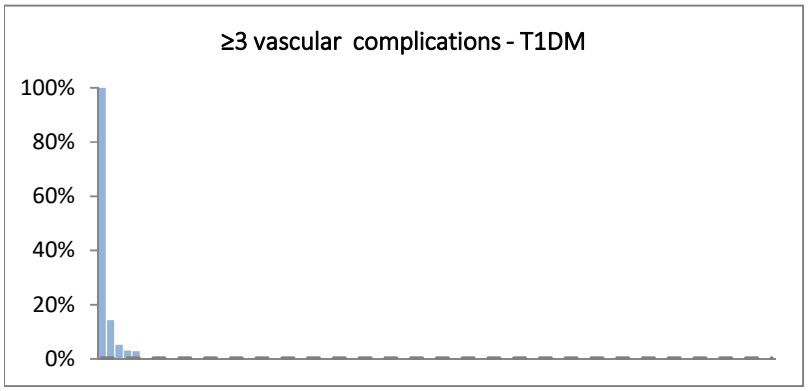
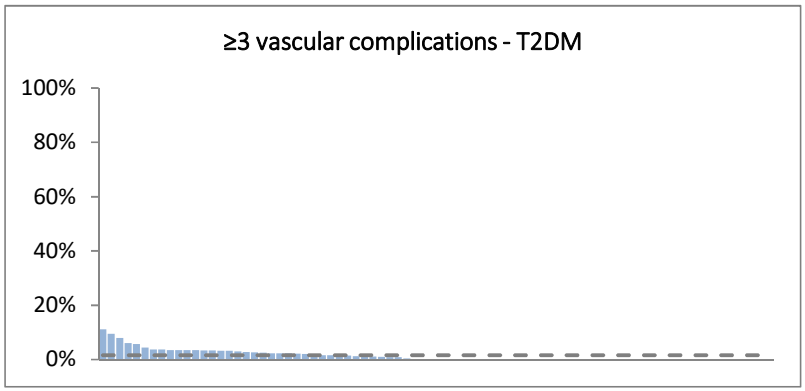




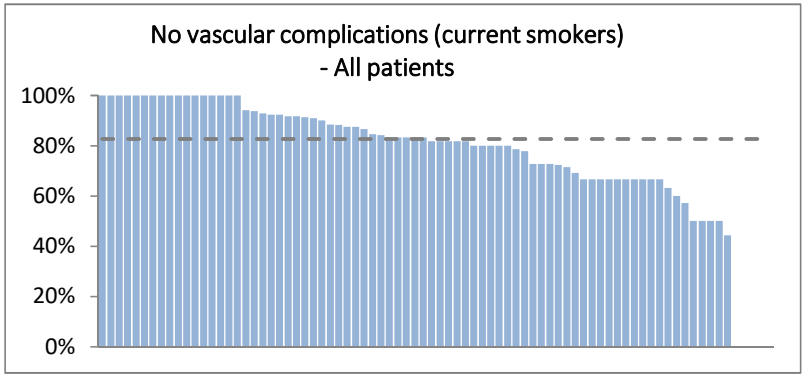


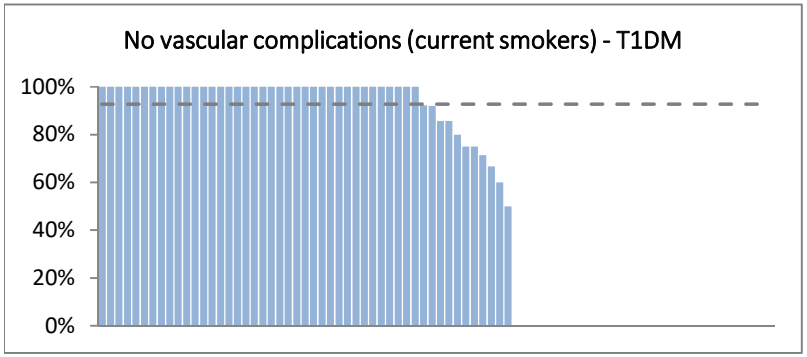
X-axis: All sites (Descending order)

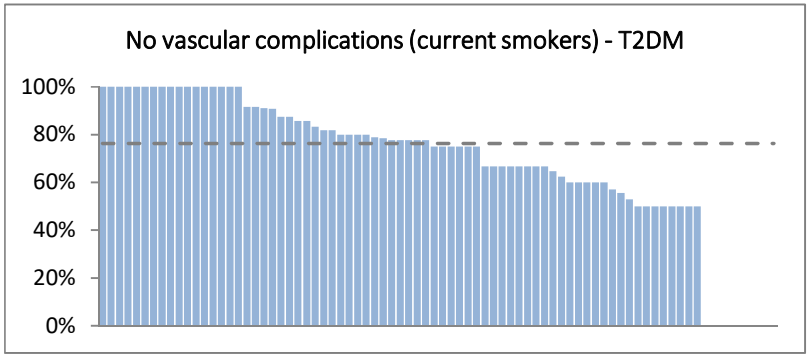
Number of vascular complications* (current smokers) by diabetes type

Diabetes type	0			1-2			≥3			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	217	92.7	35.9	16	6.8	13.7	1	0.4	11.1	234	32.1
T2DM	351	76.3	58.1	101	22.0	86.3	8	1.7	88.9	460	63.0
GDM	12	100.0	2.0	0	0.0	0.0	0	0.0	0.0	12	1.6
Don't know	3	100.0	0.5	0	0.0	0.0	0	0.0	0.0	3	0.4
Other	20	100.0	3.3	0	0.0	0.0	0	0.0	0.0	20	2.7
Unstated	1	100.0	0.2	0	0.0	0.0	0	0.0	0.0	1	0.1
Total	**604**	**82.7**		**117**	**16.0**		**9**	**1.2**		730	

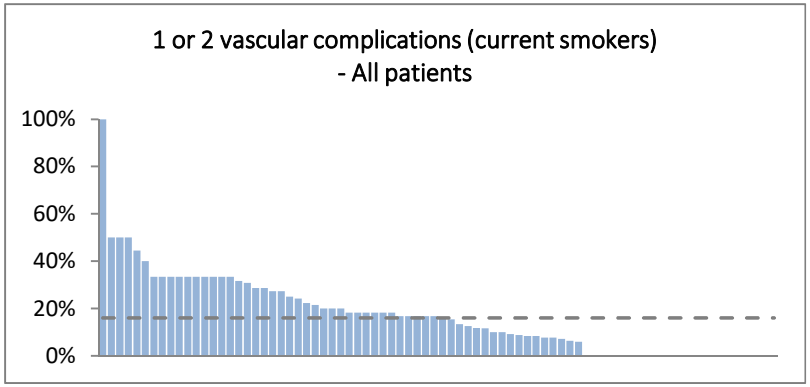
*possible complications include macrovascular/microvascular complications. Occurrence of a complication, both in the past 12 months and previously, is counted only once.

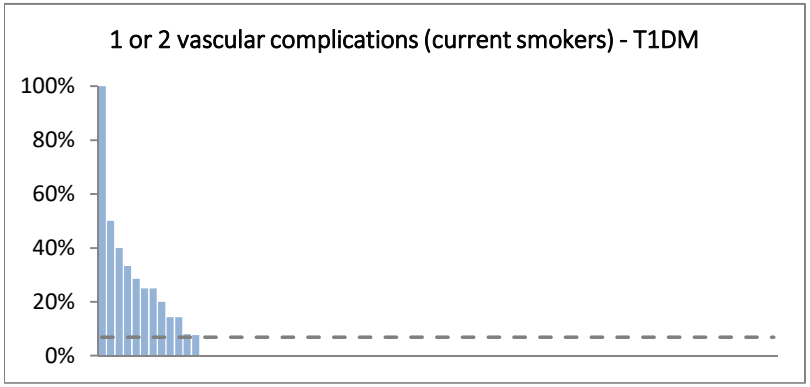


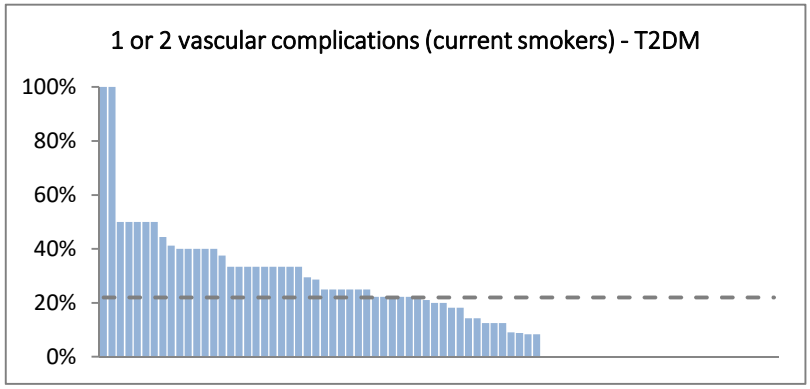




X-axis: All sites (Descending order)







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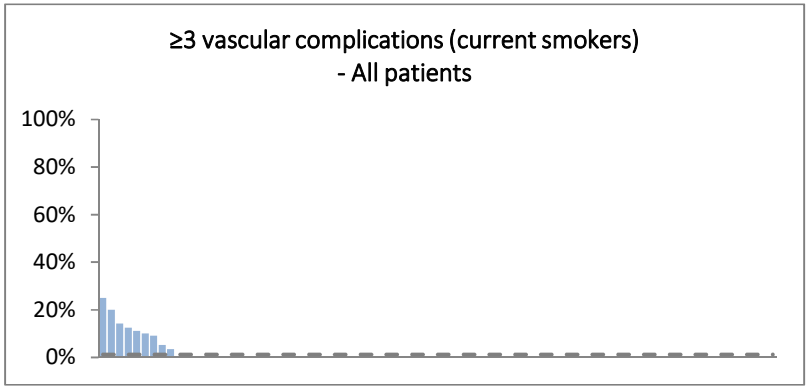
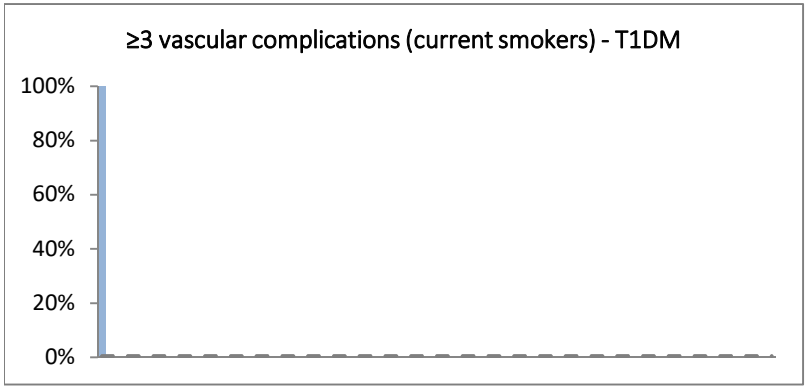
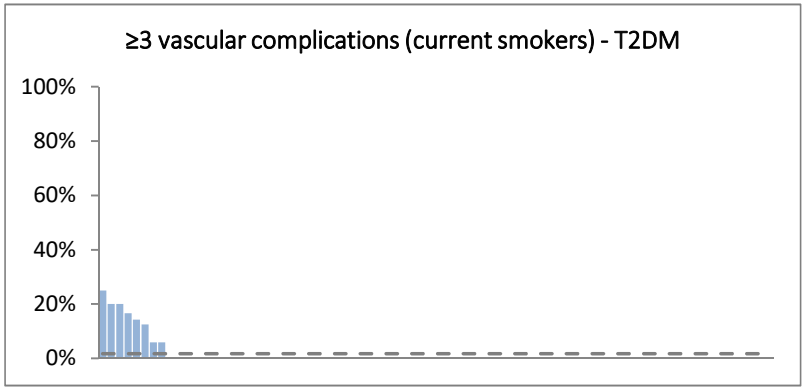




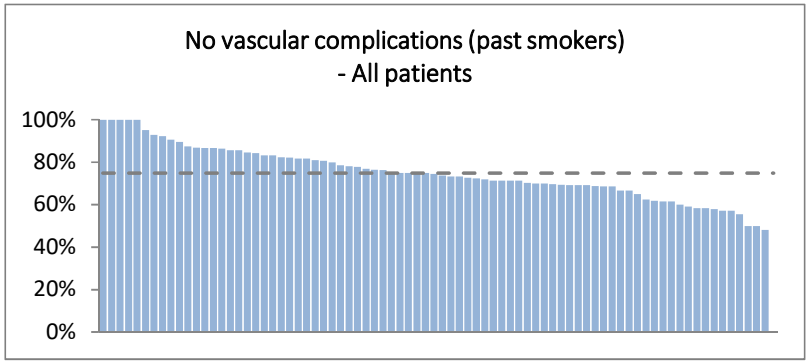


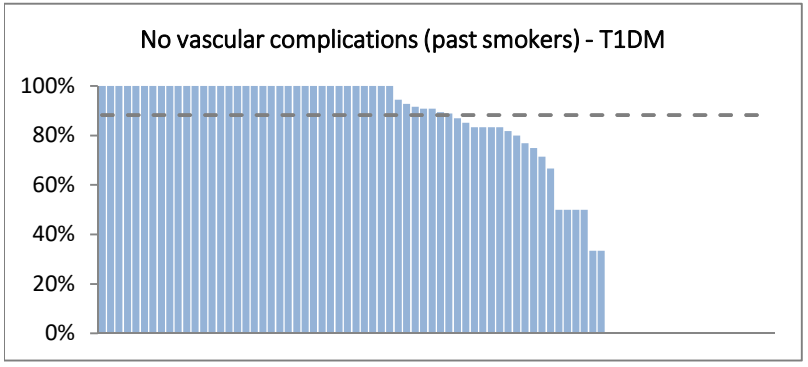
X-axis: All sites (Descending order)

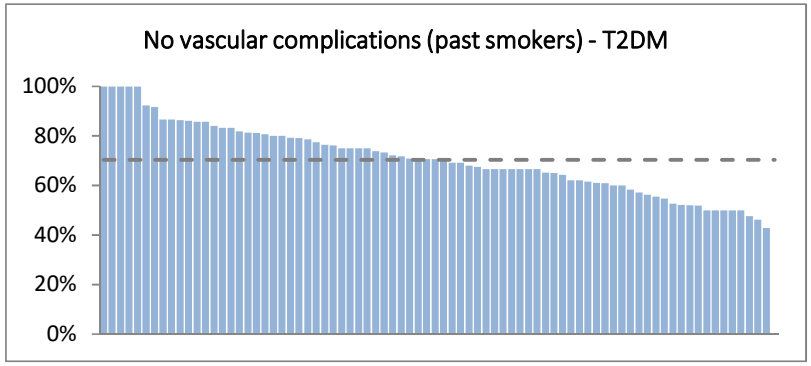
Number of vascular complications* (past smokers) by diabetes type

Diabetes type	0			1-2			≥3			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	324	88.3	23.0	40	10.9	9.1	3	0.8	8.6	**367**	**19.5**
T2DM	1009	70.4	71.5	393	27.4	89.3	32	2.2	91.4	**1434**	**76.0**
GDM	38	100.0	2.7	0	0.0	0.0	0	0.0	0.0	**38**	**2.0**
Don't know	3	100.0	0.2	NA	NA	NA	0	0.0	0.0	**3**	**0.2**
Other	31	83.8	2.2	6	16.2	1.4	0	0.0	0.0	**37**	**2.0**
Unstated	6	85.7	0.4	1	14.3	0.2	0	0.0	0.0	**7**	**0.4**
Total	**1411**	**74.8**		**440**	**23.3**		**35**	**1.9**		**1886**	

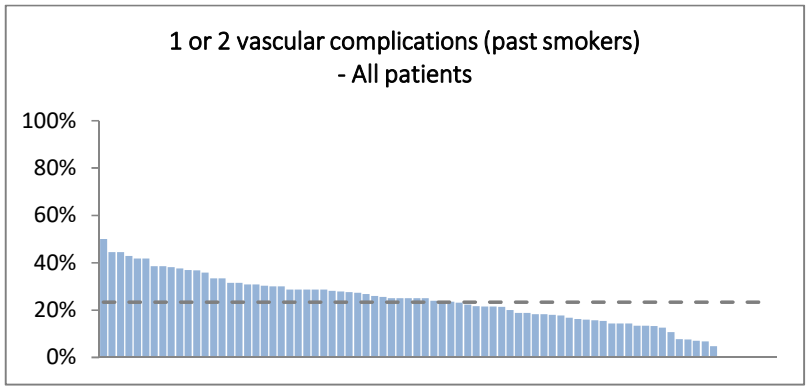
*possible complications include macrovascular/microvascular complications. Occurrence of a complication, both in the past 12 months and previously, is counted only once.

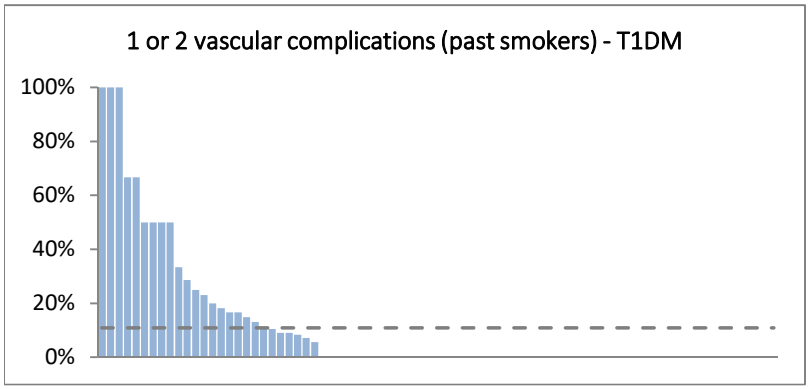


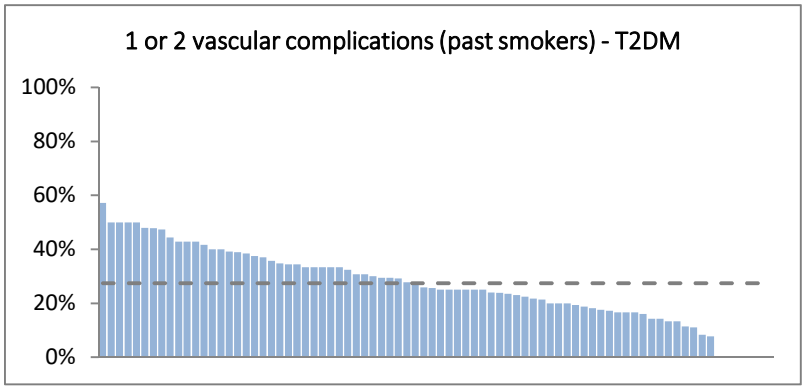




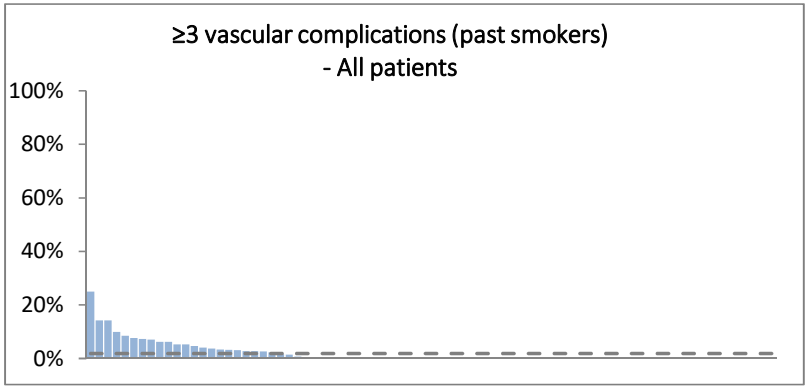
X-axis: All sites (Descending order)

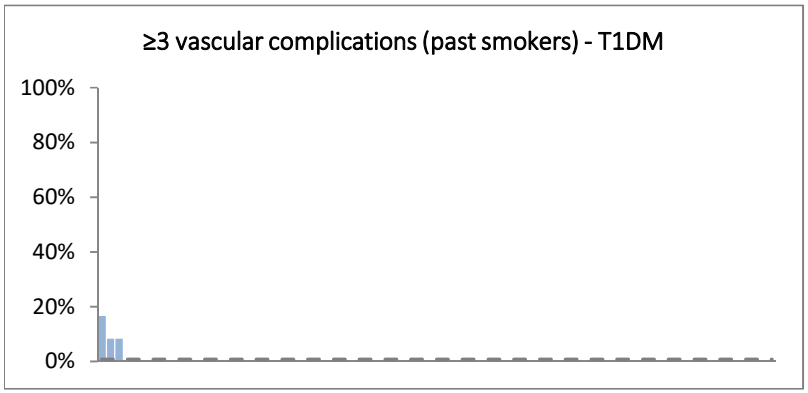


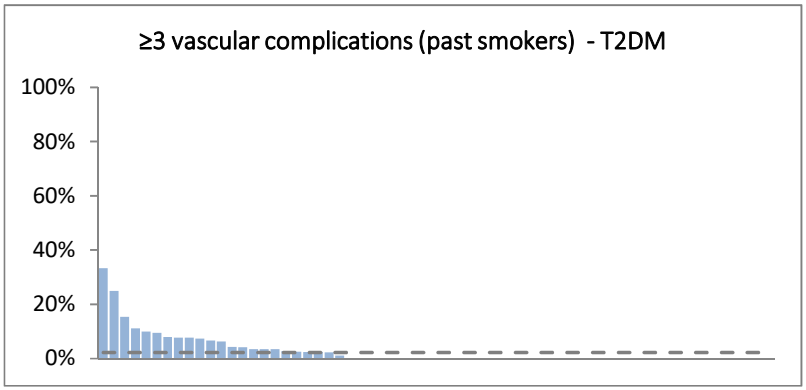




X-axis: All sites (Descending order)





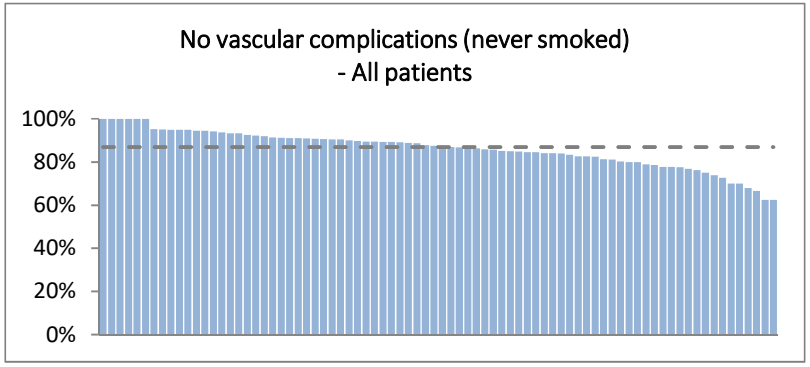


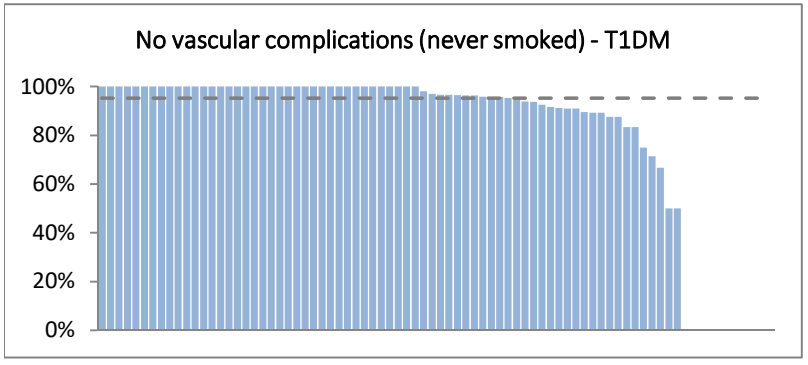
X-axis: All sites (Descending order)

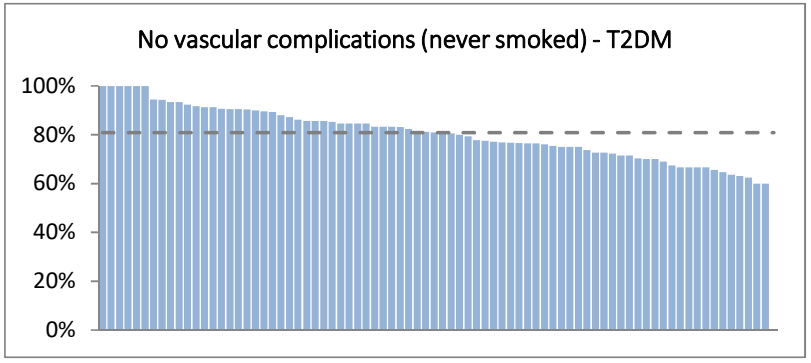
Number of vascular complications* (never smoked) by diabetes type

Diabetes type	0			1-2			≥3			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	1003	95.3	32.8	49	4.7	11.2	1	0.1	4.0	**1053**	**29.9**
T2DM	1707	80.9	55.8	380	18.0	87.2	24	1.1	96.0	**2111**	**60.0**
GDM	263	99.6	8.6	1	0.4	0.2	0	0.0	0.0	**264**	**7.5**
Don't know	14	87.5	0.5	2	12.5	0.5	0	0.0	0.0	**16**	**0.5**
Other	60	95.2	2.0	3	4.8	0.7	0	0.0	0.0	**63**	**1.8**
Unstated	13	92.9	0.4	1	7.1	0.2	0	0.0	0.0	**14**	**0.4**
Total	**3060**	**86.9**		**436**	**12.4**		**25**	**0.7**		3521	

*possible complications include macrovascular/microvascular complications. Occurrence of a complication, both in the past 12 months and previously, is counted only once.







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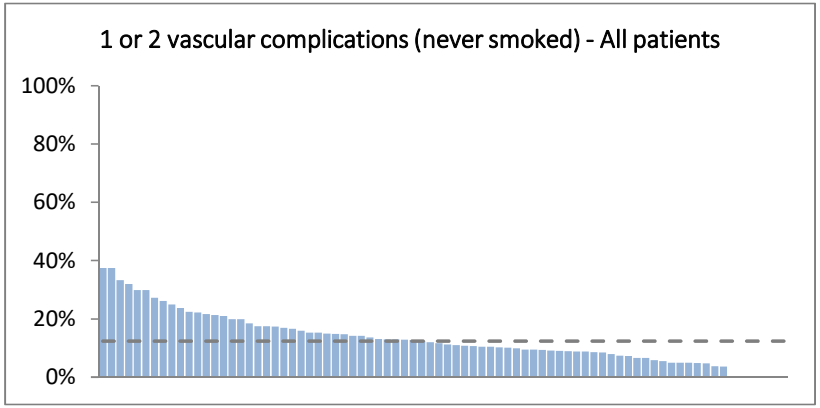
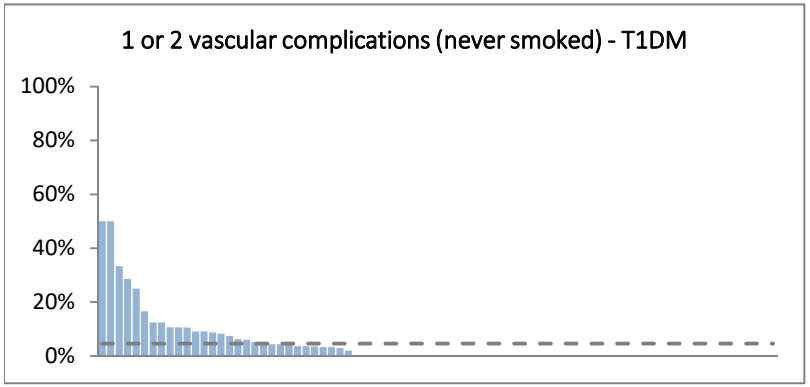
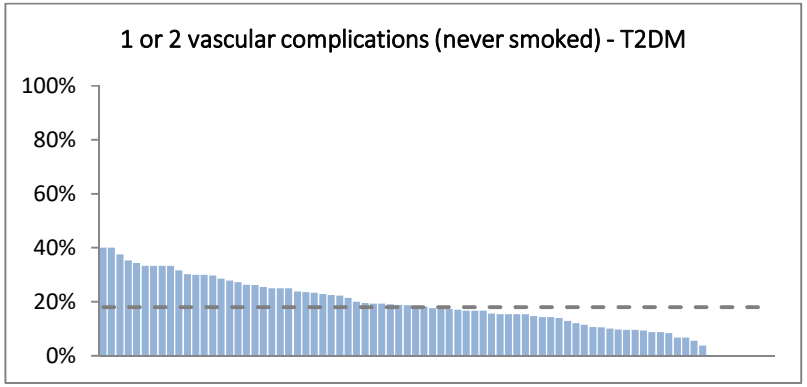
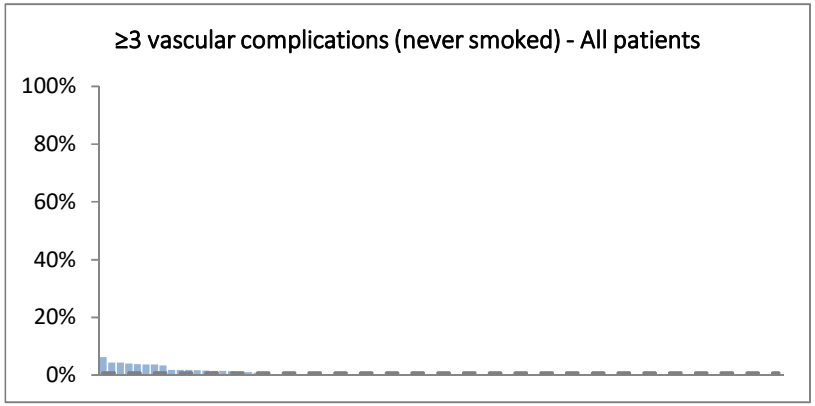
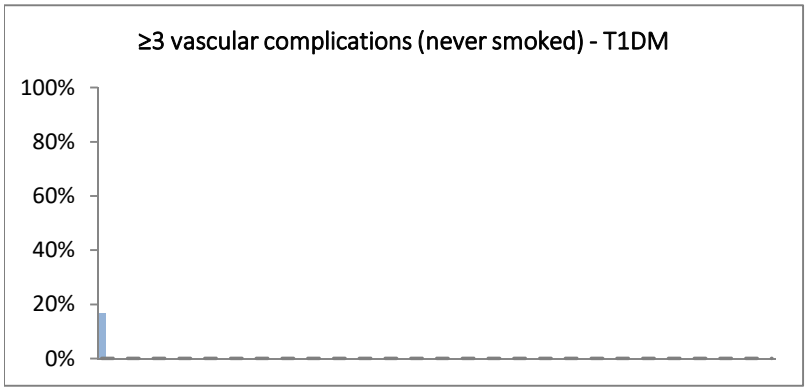


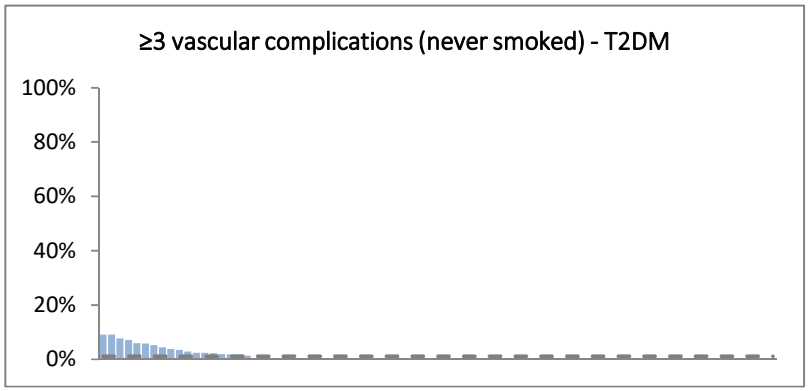




X-axis: All sites (Descending order)





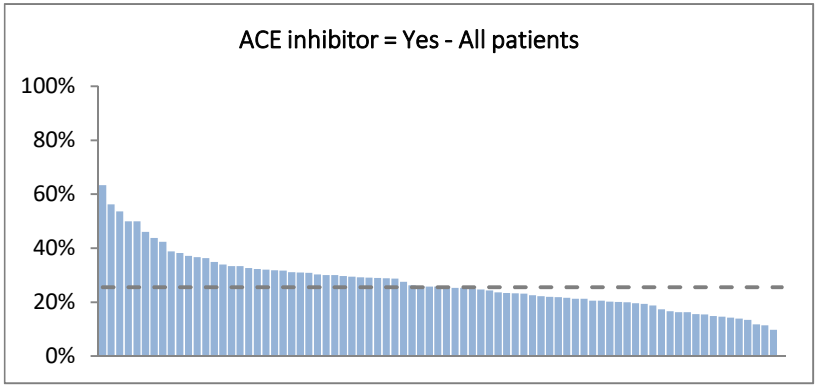


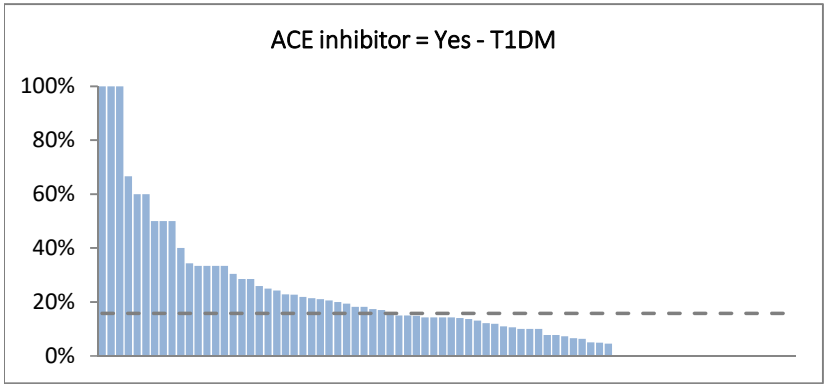
X-axis: All sites (Descending order)

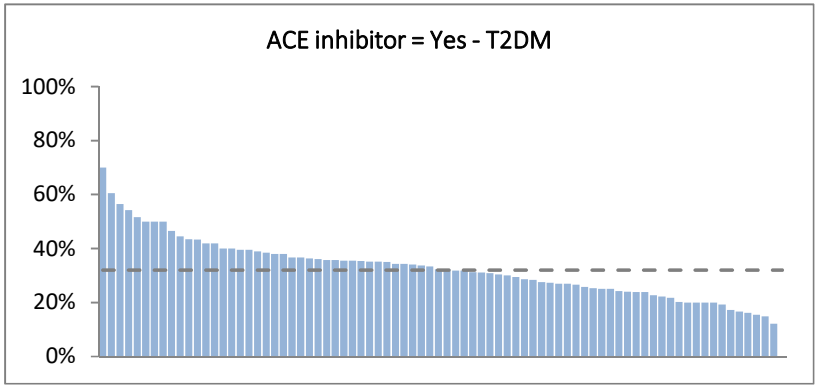
6.6 Medications

ACE inhibitor use by diabetes type

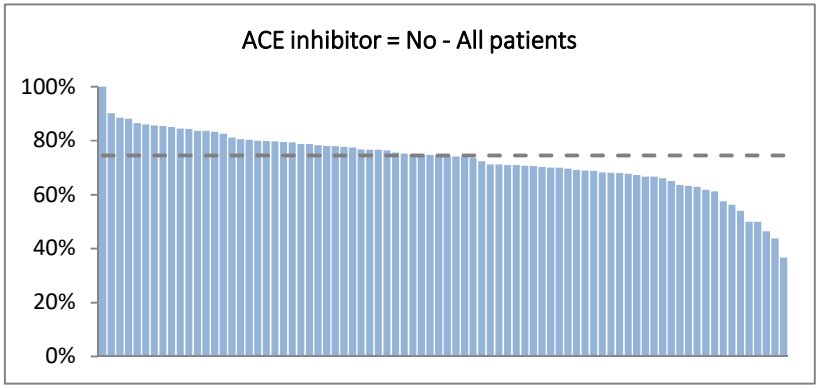
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	273	15.8	16.6	1456	84.2	30.4	1729	26.9
T2DM	1326	32.0	80.8	2817	68.0	58.8	4143	64.4
GDM	0	0.0	0.0	320	100.0	6.7	320	5.0
Don't know	11	11.8	0.7	82	88.2	1.7	93	1.4
Other	29	23.2	1.8	96	76.8	2.0	125	1.9
Unstated	3	11.5	0.2	23	88.5	0.5	26	0.4
Total	**1642**	**25.5**		**4794**	**74.5**		6436	

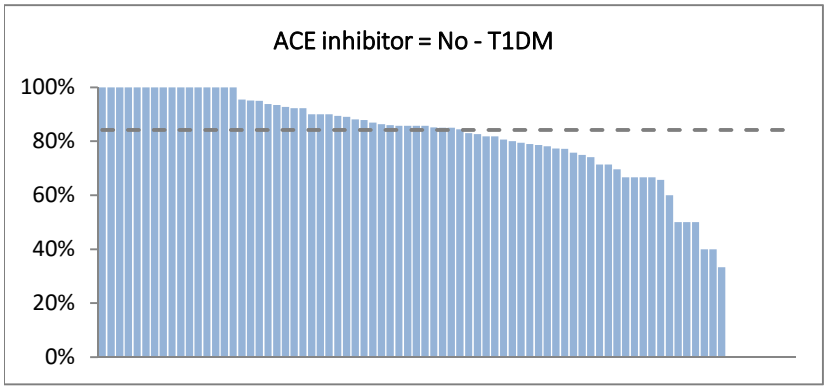


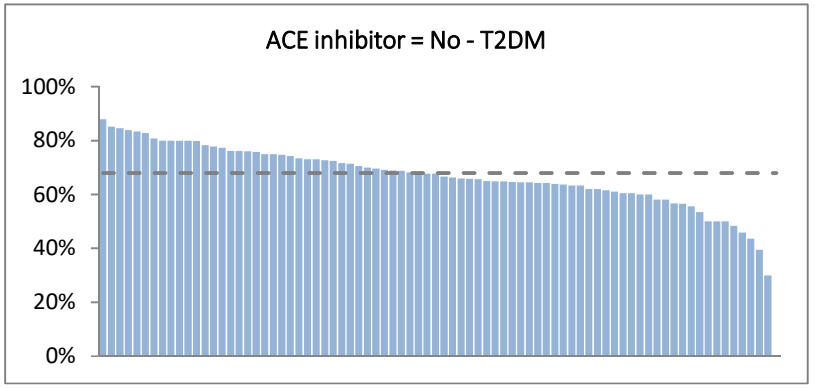




X-axis: All sites (Descending order)



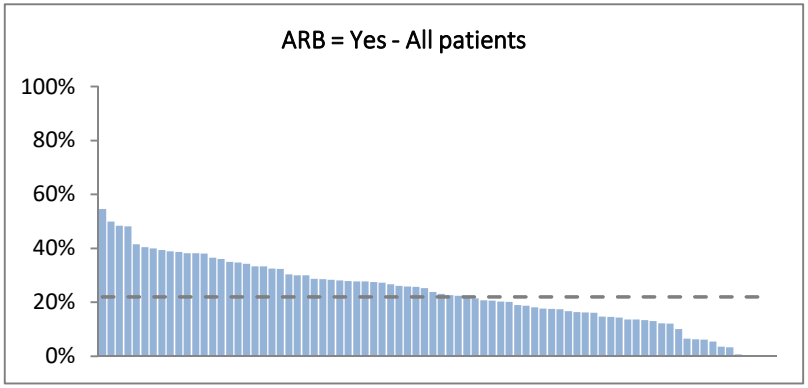


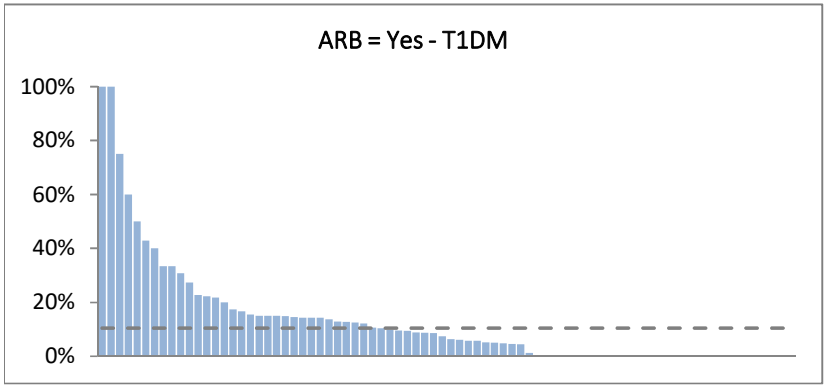


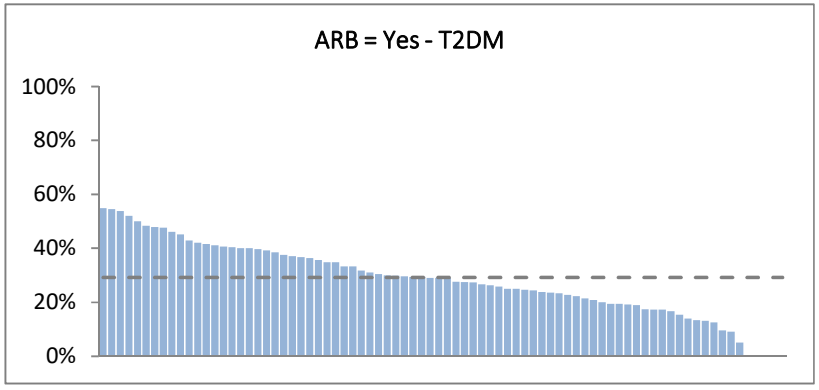
X-axis: All sites (Descending order)

ARB use by diabetes type

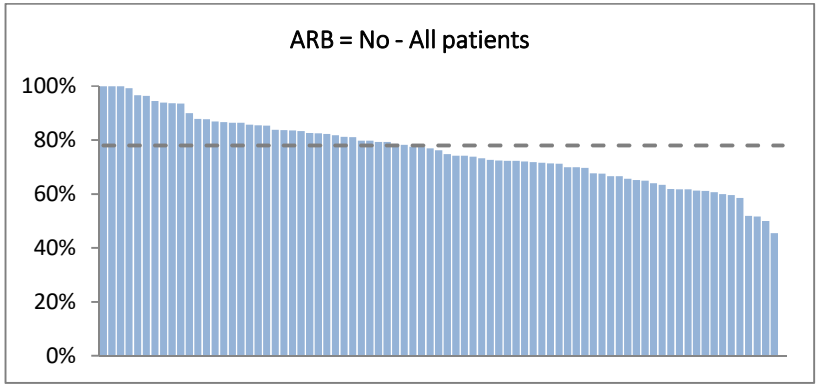
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	180	10.4	12.7	1546	89.6	30.8	**1726**	**26.8**
T2DM	1210	29.2	85.5	2933	70.8	58.5	**4143**	**64.4**
GDM	0	0.0	0.0	320	100.0	6.4	**320**	**5.0**
Don't know	9	9.7	0.6	84	90.3	1.7	**93**	**1.4**
Other	13	10.4	0.9	112	89.6	2.2	**125**	**1.9**
Unstated	4	15.4	0.3	22	84.6	0.4	**26**	**0.4**
Total	**1416**	**22.0**		**5017**	**78.0**		**6433**	

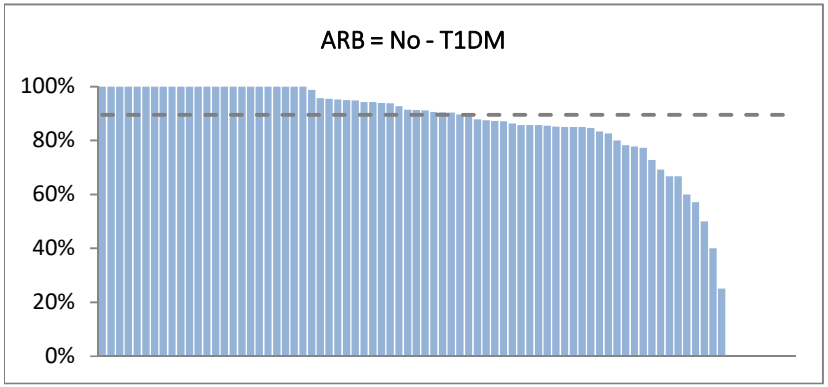


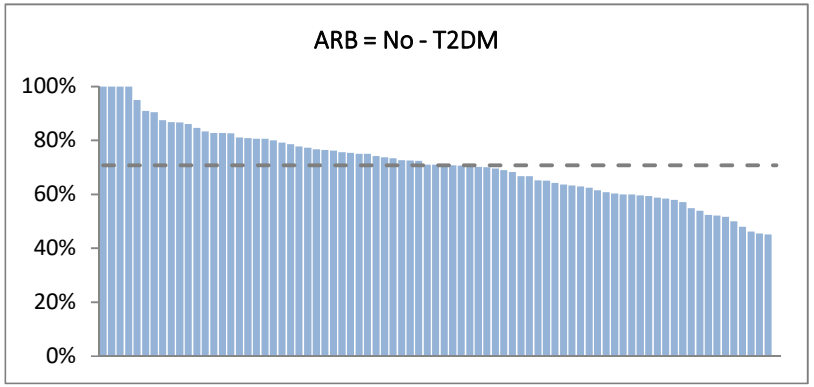




X-axis: All sites (Descending order)



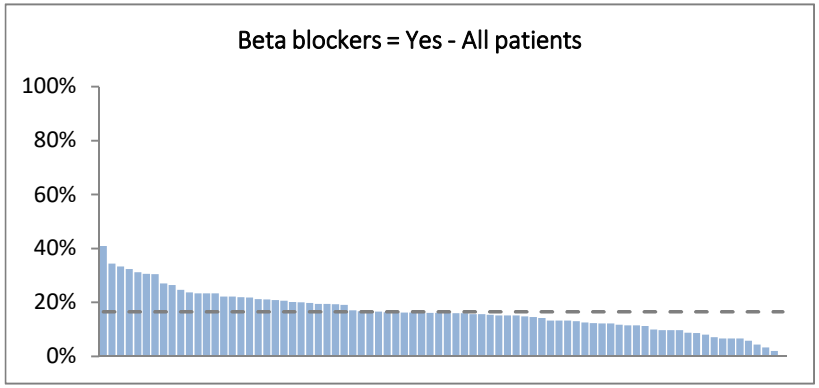


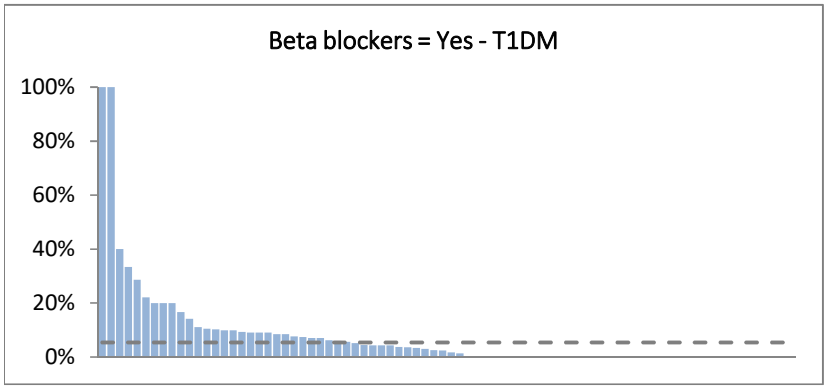


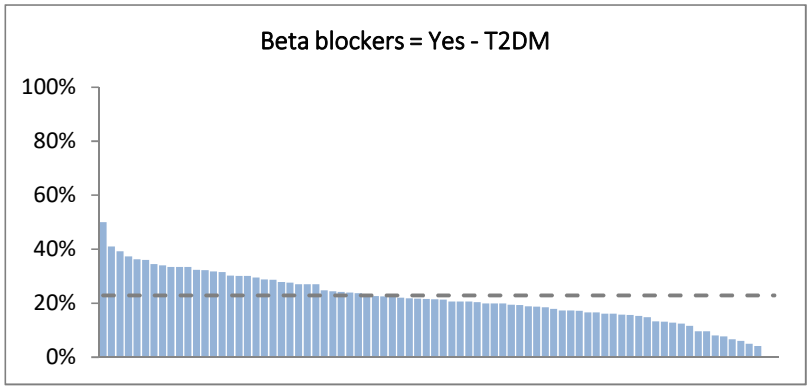
X-axis: All sites (Descending order)

Beta blocker use by diabetes type

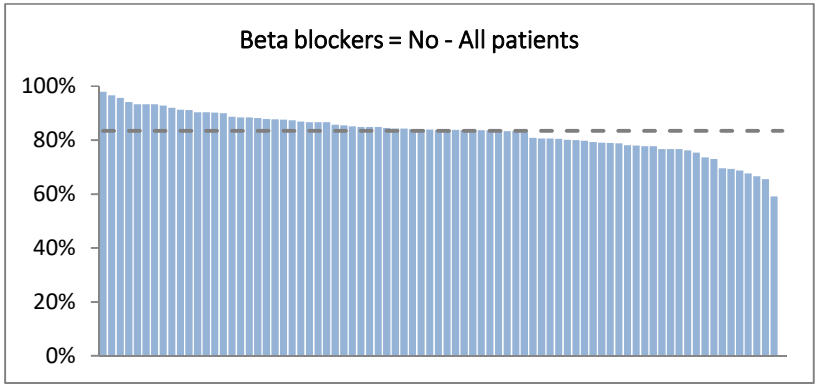
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	93	5.4	8.7	1633	94.6	30.4	**1726**	**26.8**
T2DM	947	22.9	89.0	3196	77.1	59.5	**4143**	**64.4**
GDM	6	1.9	0.6	314	98.1	5.8	**320**	**5.0**
Don't know	3	3.2	0.3	90	96.8	1.7	**93**	**1.4**
Other	12	9.6	1.1	113	90.4	2.1	**125**	**1.9**
Unstated	3	11.5	0.3	23	88.5	0.4	**26**	**0.4**
Total	**1064**	**16.5**		**5369**	**83.5**		**6433**	

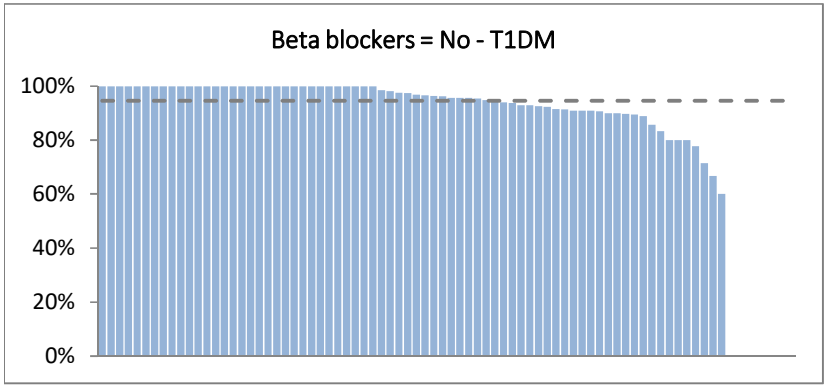


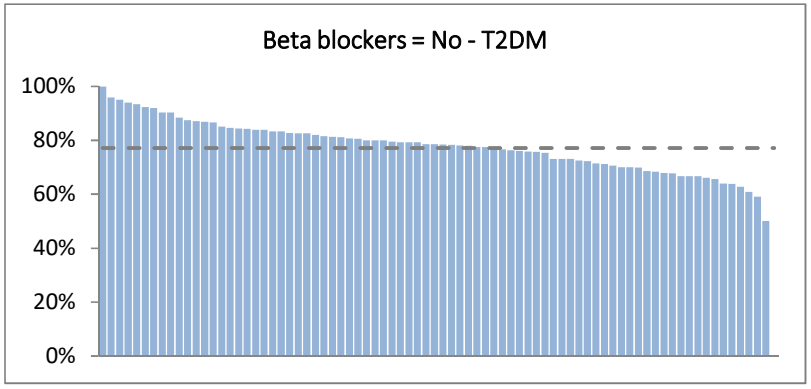




X-axis: All sites (Descending order)



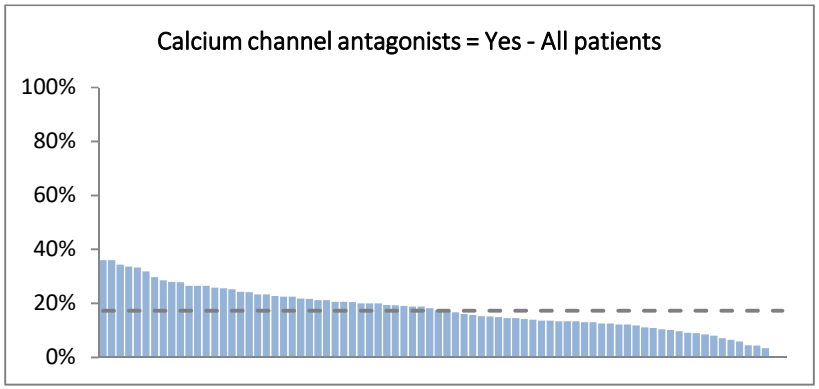


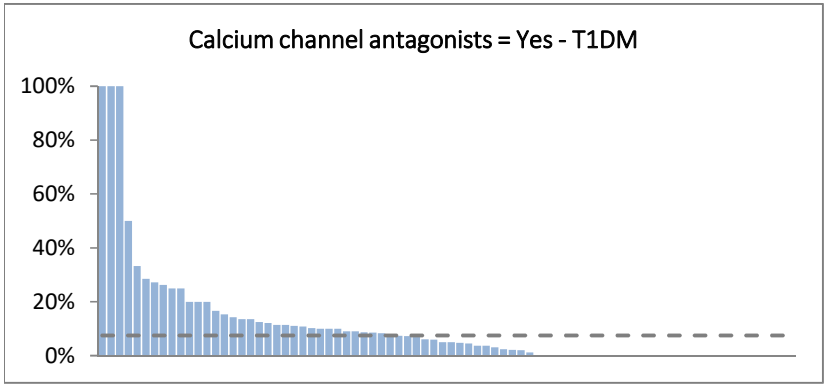


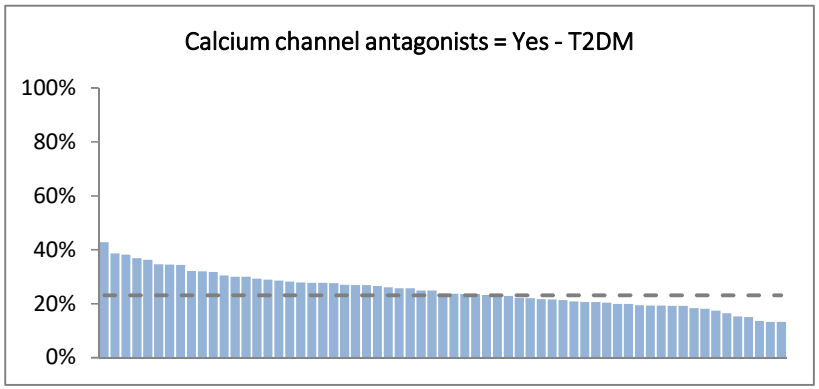
X-axis: All sites (Descending order)

Calcium channel antagonist use by diabetes type

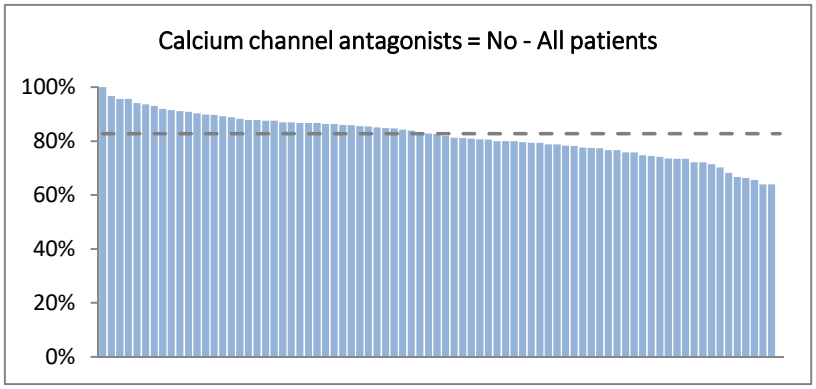
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	129	7.5	11.6	1597	92.5	30.0	**1726**	**26.8**
T2DM	958	23.1	86.2	3185	76.9	59.9	**4143**	**64.4**
GDM	0	0.0	0.0	320	100.0	6.0	**320**	**5.0**
Don't know	4	4.3	0.4	89	95.7	1.7	**93**	**1.4**
Other	20	16.0	1.8	105	84.0	2.0	**125**	**1.9**
Unstated	1	3.8	0.1	25	96.2	0.5	**26**	**0.4**
Total	**1112**	**17.3**		**5321**	**82.7**		**6433**	

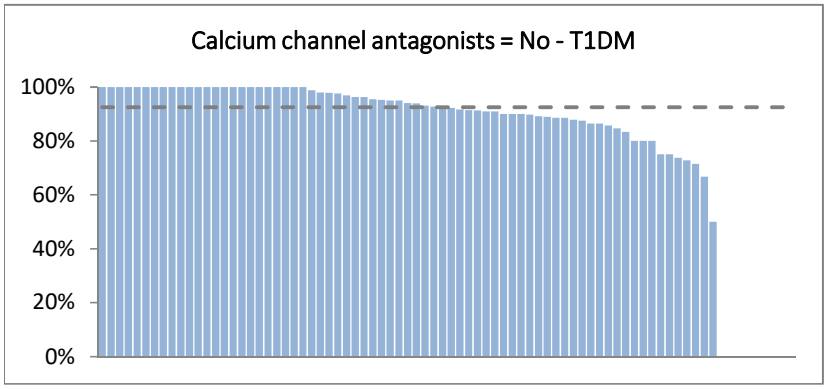


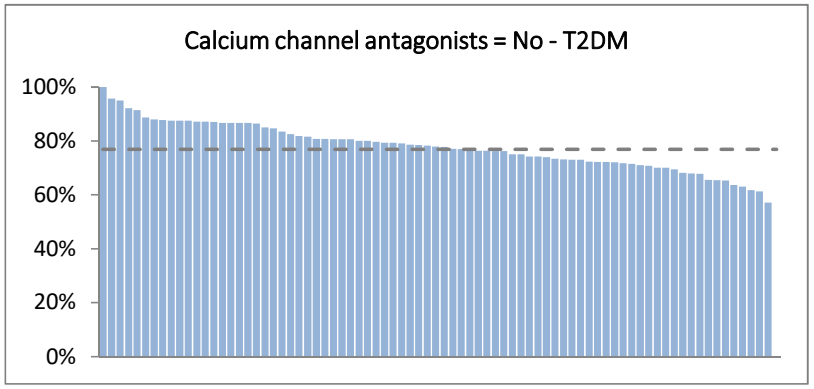




X-axis: All sites (Descending order)



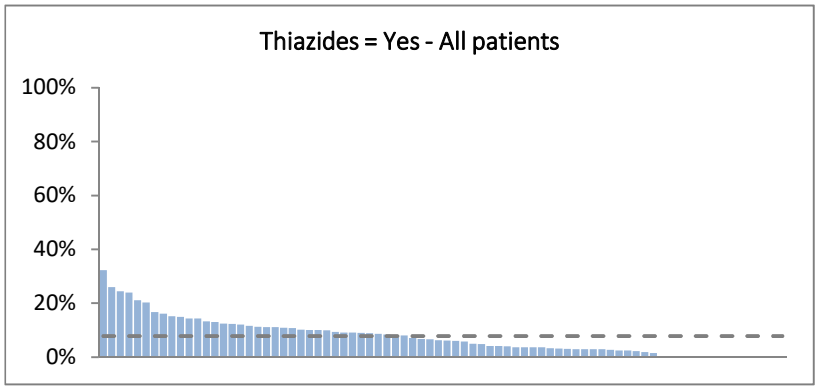


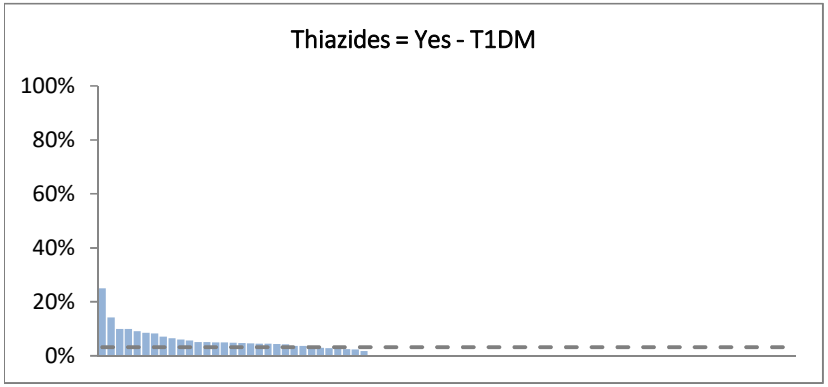


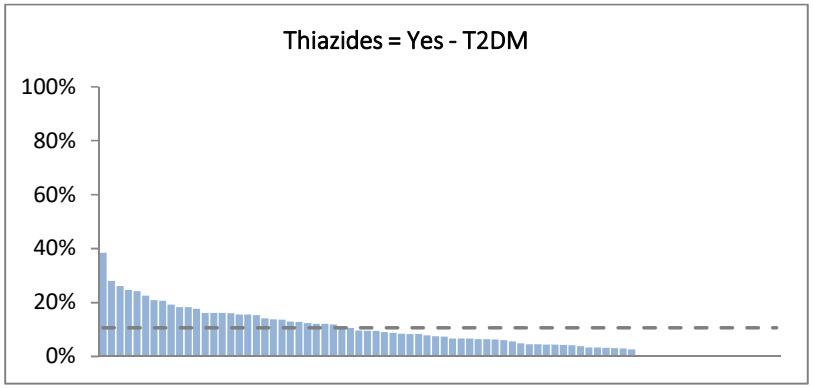
X-axis: All sites (Descending order)

Thiazide use by diabetes type

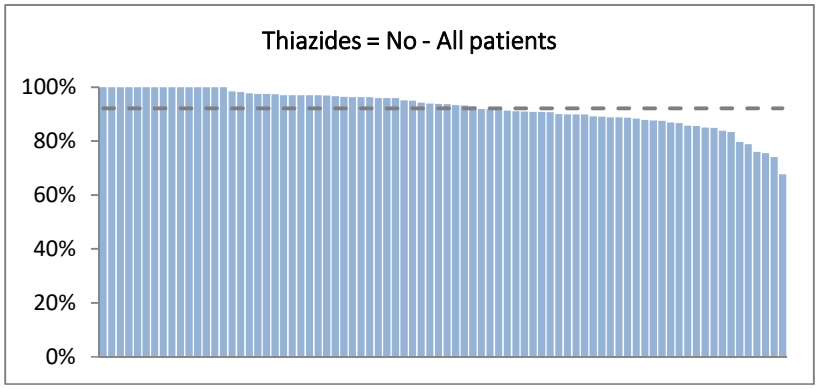
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	55	3.2	10.9	1674	96.8	28.2	**1729**	**26.9**
T2DM	440	10.6	87.3	3703	89.4	62.4	**4143**	**64.4**
GDM	0	0.0	0.0	320	100.0	5.4	**320**	**5.0**
Don't know	2	2.2	0.4	91	97.8	1.5	**93**	**1.4**
Other	5	4.0	1.0	120	96.0	2.0	**125**	**1.9**
Unstated	2	7.7	0.4	24	92.3	0.4	**26**	**0.4**
Total	**504**	**7.8**		**5932**	**92.2**		6436	

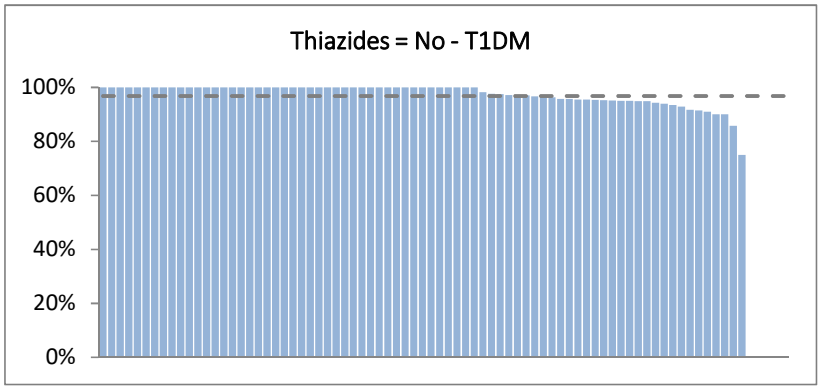


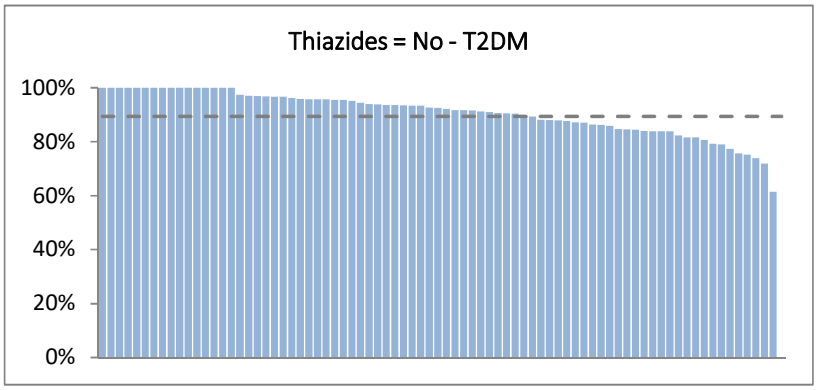




X-axis: All sites (Descending order)



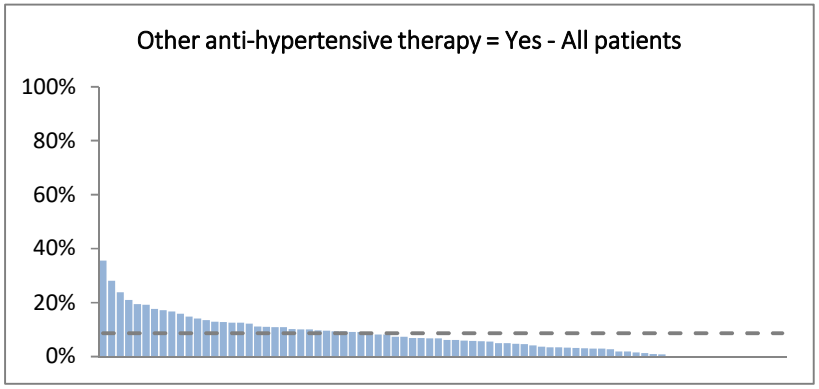


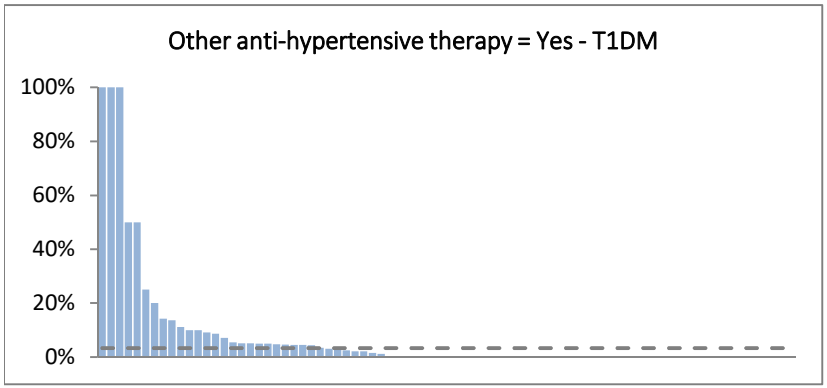


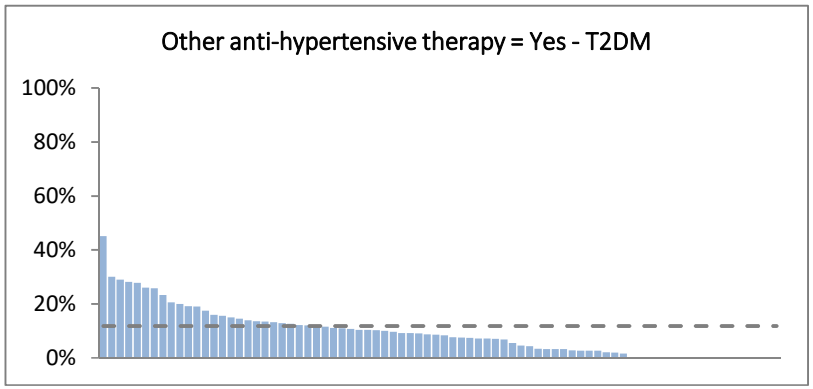
X-axis: All sites (Descending order)

Other anti-hypertensive therapy by diabetes type

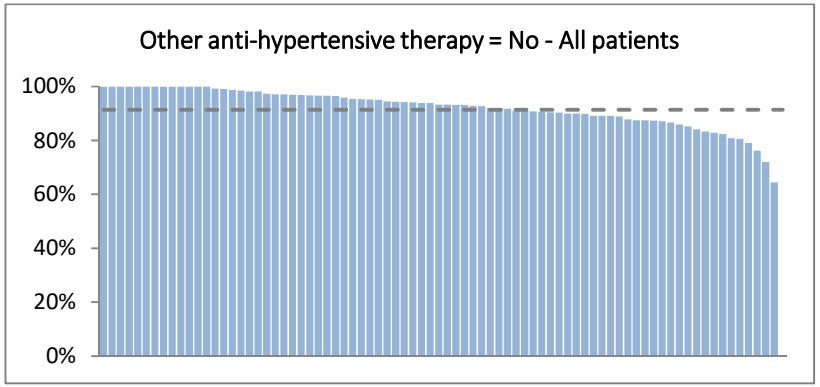
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	57	3.3	10.3	1669	96.7	28.4	**1726**	**26.8**
T2DM	488	11.8	87.9	3654	88.2	62.2	**4142**	**64.4**
GDM	2	0.6	0.4	318	99.4	5.4	**320**	**5.0**
Don't know	3	3.2	0.5	90	96.8	1.5	**93**	**1.4**
Other	4	3.2	0.7	121	96.8	2.1	**125**	**1.9**
Unstated	1	3.8	0.2	25	96.2	0.4	**26**	**0.4**
Total	**555**	**8.6**		**5877**	**91.4**		6432	

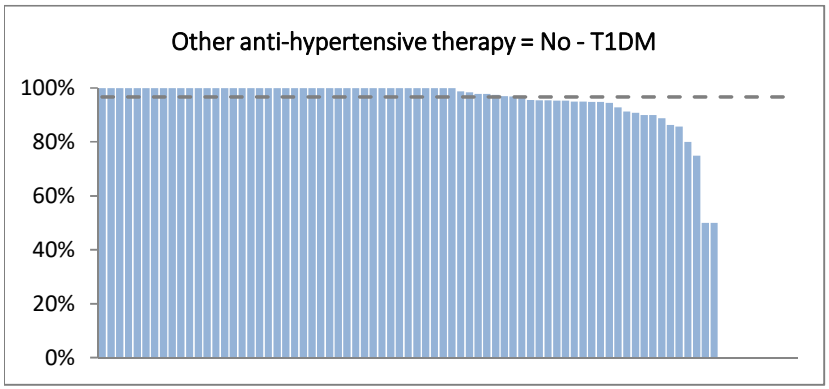


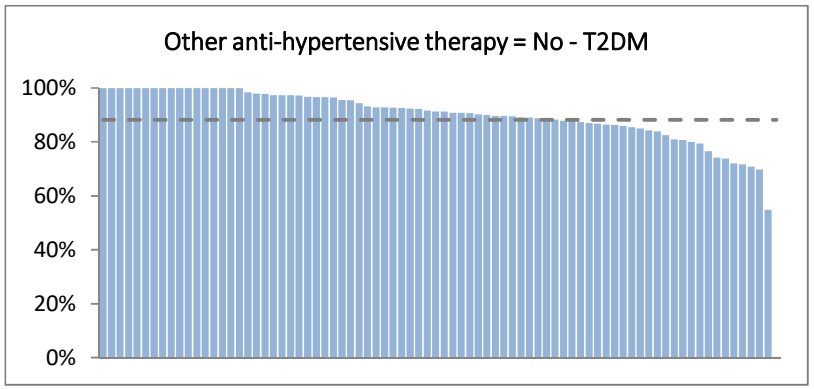




X-axis: All sites (Descending order)



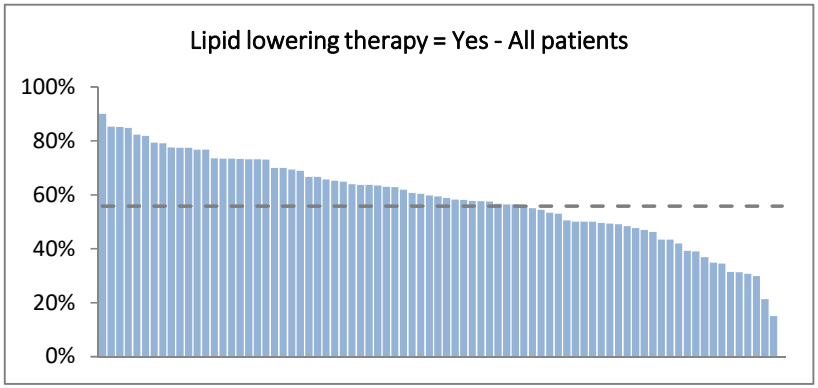


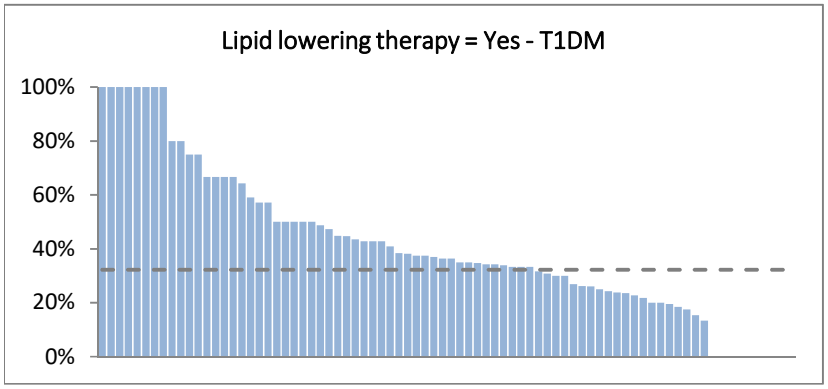


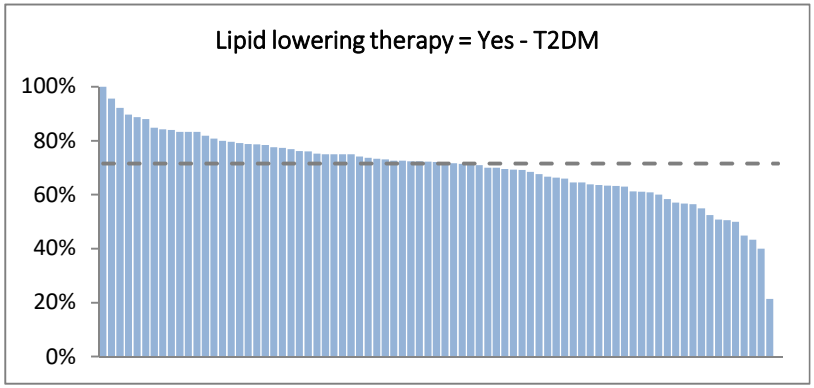
X-axis: All sites (Descending order)

Lipid lowering therapy by diabetes type

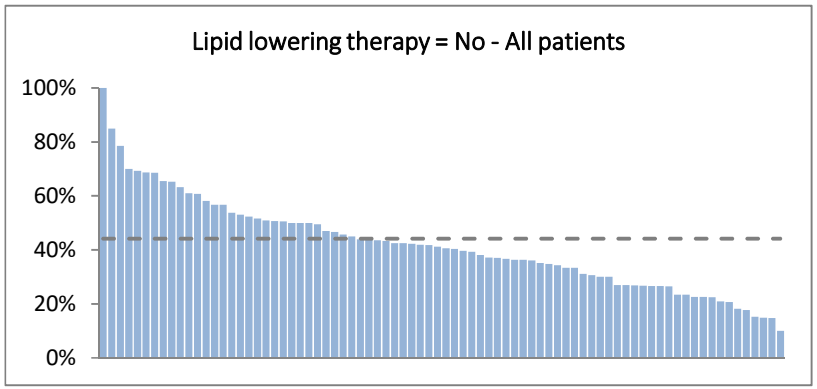
Diabetes type	Yes			No			Total	
	n	R%	C%	n	R%	C%	n	%
T1DM	555	32.2	15.5	1168	67.8	41.2	**1723**	**26.8**
T2DM	2955	71.5	82.4	1178	28.5	41.6	**4133**	**64.4**
GDM	2	0.6	0.1	318	99.4	11.2	**320**	**5.0**
Don't know	16	17.2	0.4	77	82.8	2.7	**93**	**1.4**
Other	46	36.8	1.3	79	63.2	2.8	**125**	**1.9**
Unstated	11	42.3	0.3	15	57.7	0.5	**26**	**0.4**
Total	**3585**	**55.8**		**2835**	**44.2**		6420	

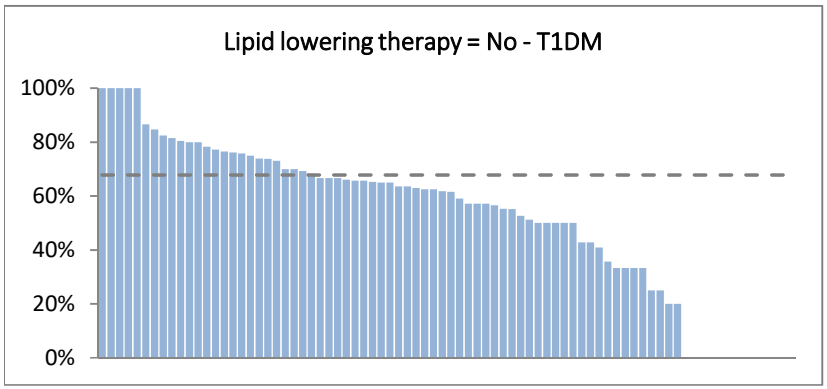


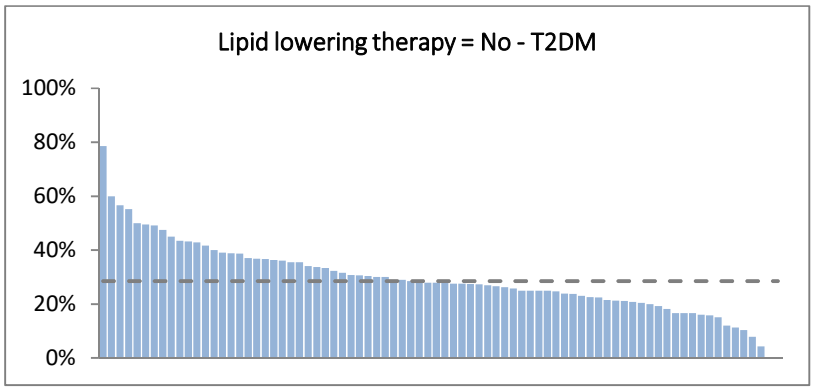




X-axis: All sites (Descending order)





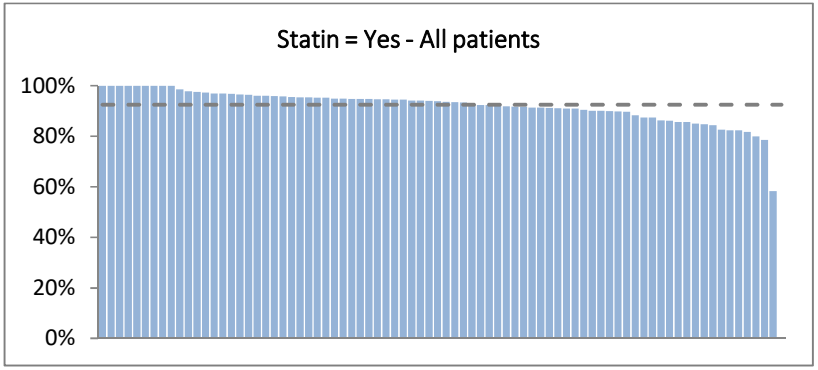


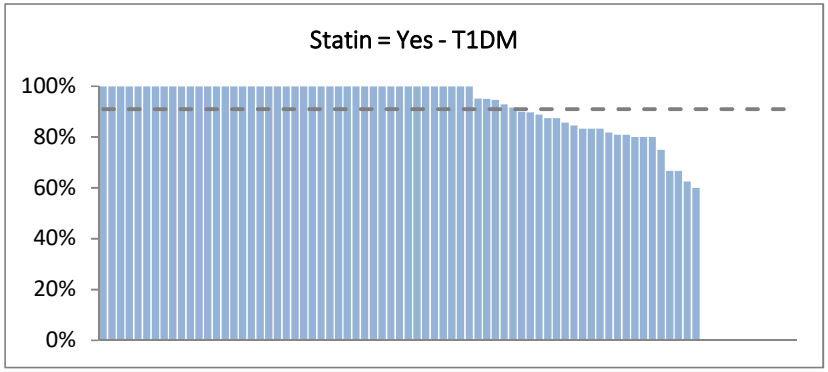
X-axis: All sites (Descending order)

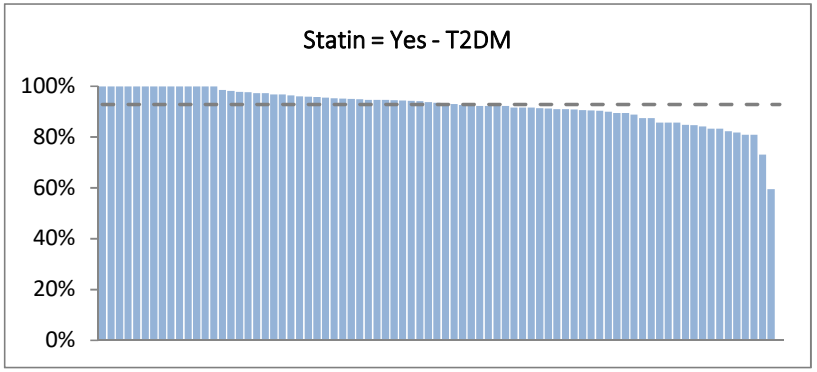
Statin* use by diabetes type

Diabetes type	Yes			No			Contraindicated (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	504	91.0	15.2	46	8.3	18.6	4	0.7	17.4	**554**	**15.5**
T2DM	2740	92.8	82.8	194	6.6	78.5	17	0.6	73.9	**2951**	**82.4**
GDM	1	50.0	0.0	1	50.0	0.4	0	0.0	0.0	**2**	**0.1**
Don't know	16	100.0	0.5	0	0.0	0.0	0	0.0	0.0	**16**	**0.4**
Other	39	86.7	1.2	6	13.3	2.4	1	2.2	4.3	**45**	**1.3**
Unstated	10	100.0	0.3	0	0.0	0.0	1	10.0	4.3	**10**	**0.3**
Total	**3310**	**92.5**		**247**	**6.9**		**23**	**0.6**		3580	

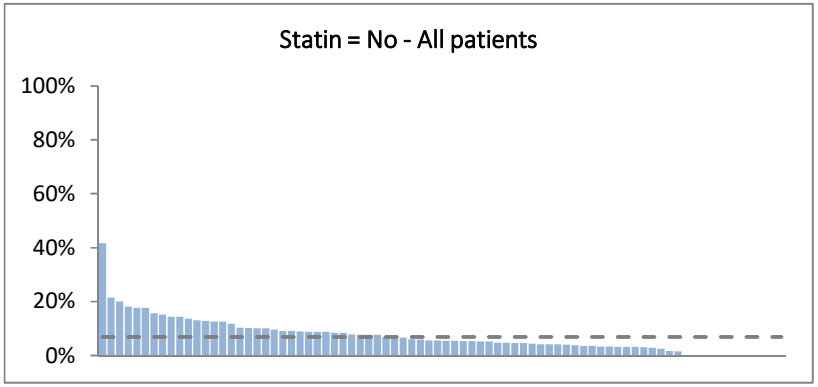
*of patients who take lipid lowering therapy

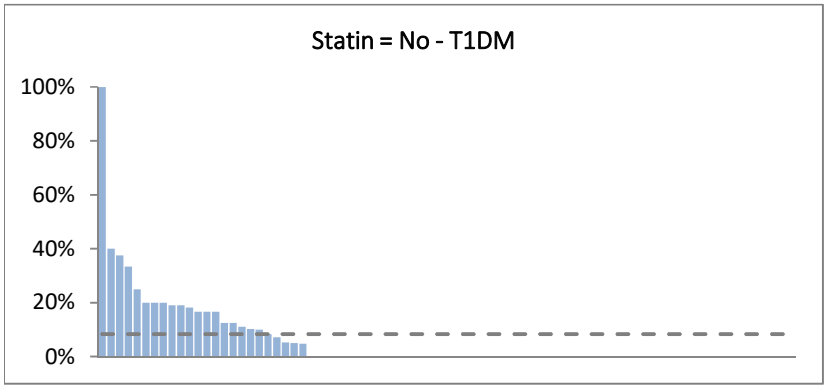


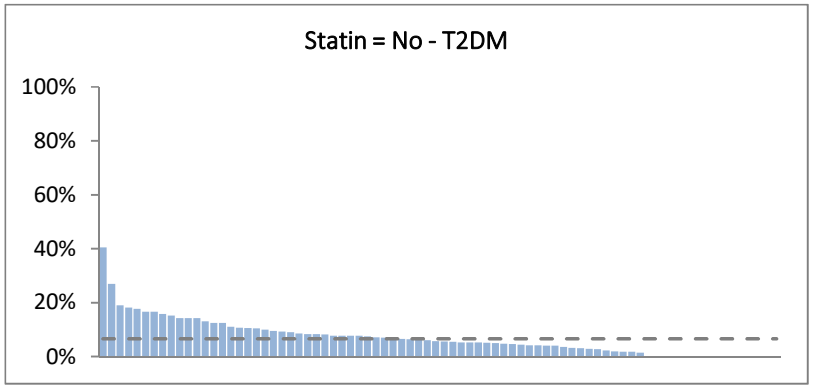




X-axis: All sites (Descending order)





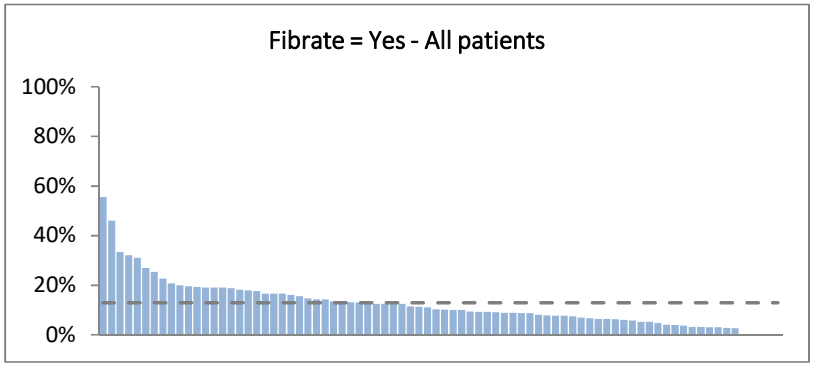


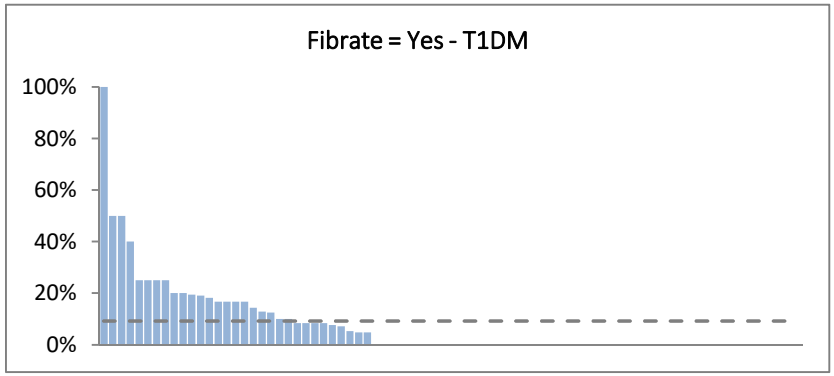
X-axis: All sites (Descending order)

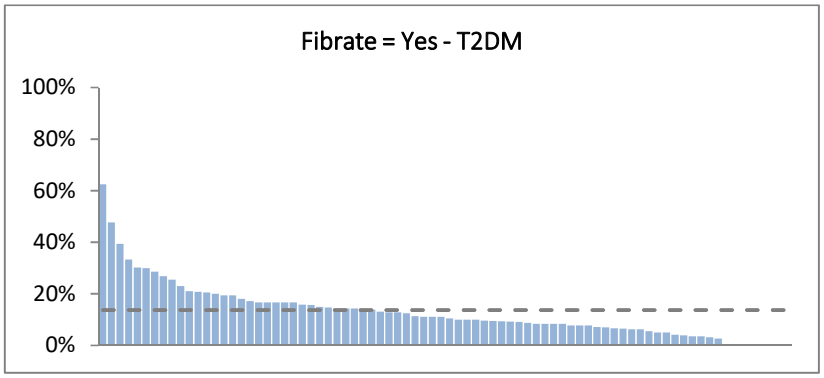
Fibrate* use by diabetes type

Diabetes type	Yes			No			Contraindicated (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	50	9.2	11.0	493	90.6	16.1	1	0.2	11.1	544	15.4
T2DM	399	13.7	87.7	2507	86.1	81.8	7	0.2	77.8	2913	82.5
GDM	0	0.0	0.0	2	100.0	0.1	0	0.0	0.0	2	0.1
Don't know	0	0.0	0.0	16	100.0	0.5	0	0.0	0.0	16	0.5
Other	6	13.3	1.3	38	84.4	1.2	1	2.2	11.1	45	1.3
Unstated	0	0.0	0.0	10	100.0	0.3	0	0.0	0.0	10	0.3
Total	**455**	**12.9**		**3066**	**86.9**		**9**	**0.3**		3530	

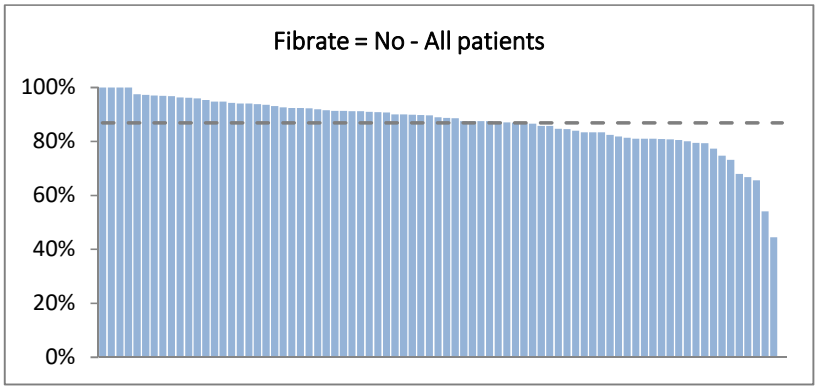
*of patients who take lipid lowering therapy

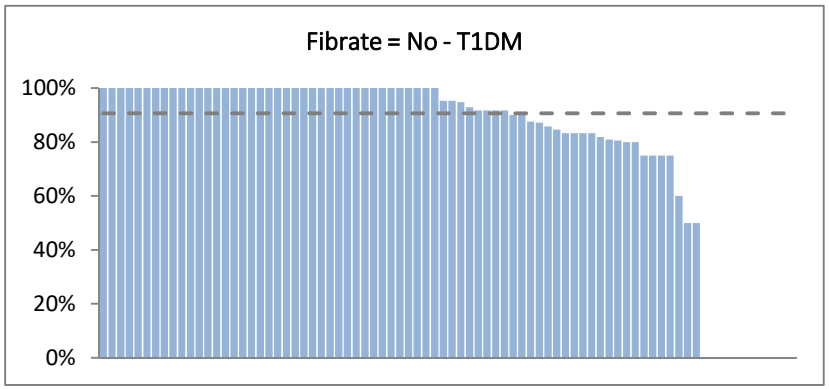


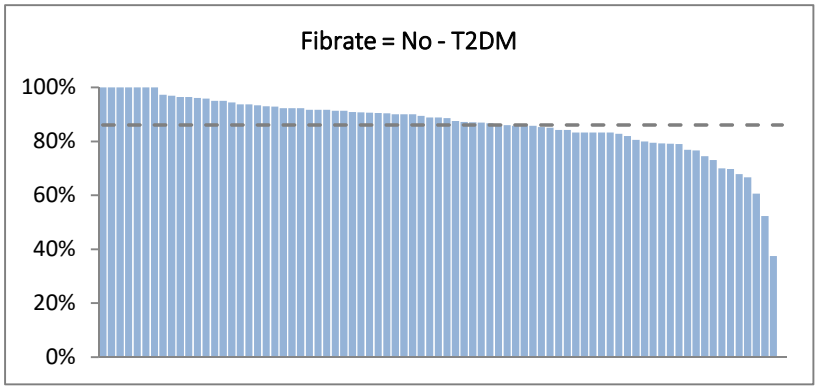




X-axis: All sites (Descending order)





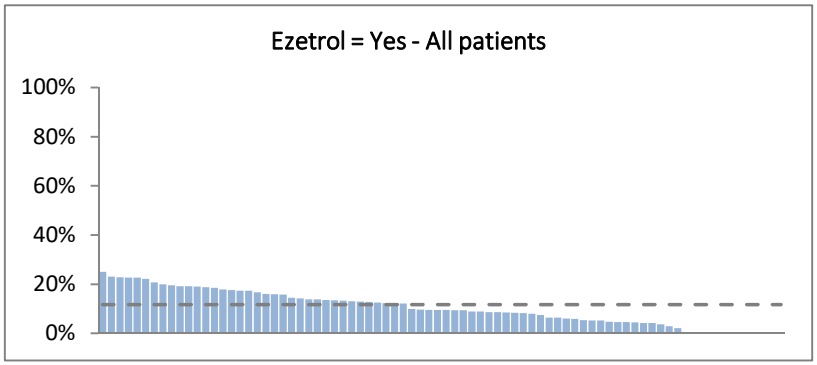


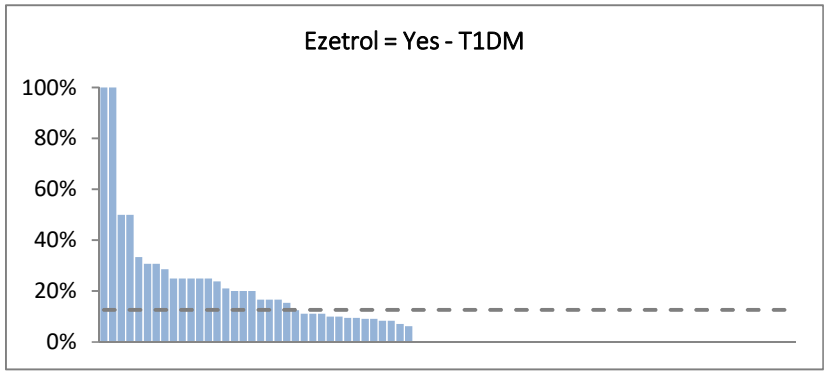
X-axis: All sites (Descending order)

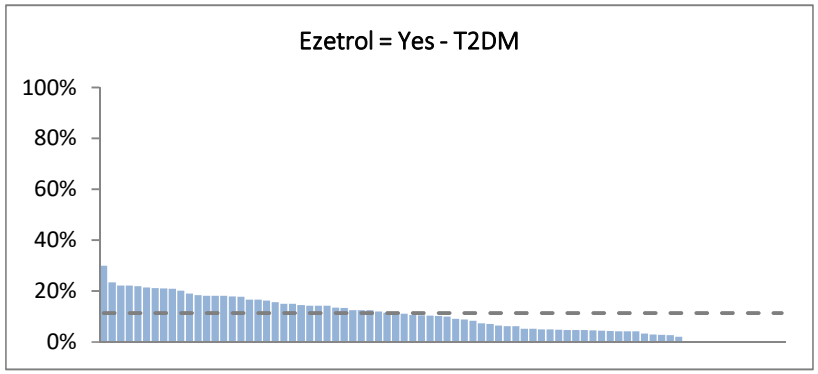
Ezetrol* use by diabetes type

Diabetes type	Yes			No			Contraindicated (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	69	12.7	16.7	474	87.0	15.3	2	0.4	28.6	**545**	**15.4**
T2DM	332	11.4	80.4	2572	88.4	82.8	4	0.1	57.1	**2908**	**82.4**
GDM	0	0.0	0.0	2	100.0	0.1	0	0.0	0.0	**2**	**0.1**
Don't know	3	18.8	0.7	13	81.3	0.4	0	0.0	0.0	**16**	**0.5**
Other	6	13.3	1.5	38	84.4	1.2	1	2.2	14.3	**45**	**1.3**
Unstated	3	27.3	0.7	8	72.7	0.3	0	0.0	0.0	**11**	**0.3**
Total	**413**	**11.7**		**3107**	**88.1**		**7**	**0.2**		3527	

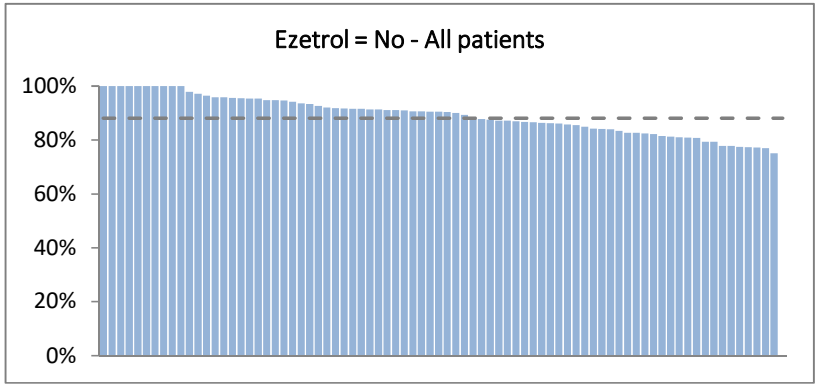
*of patients who take lipid lowering therapy

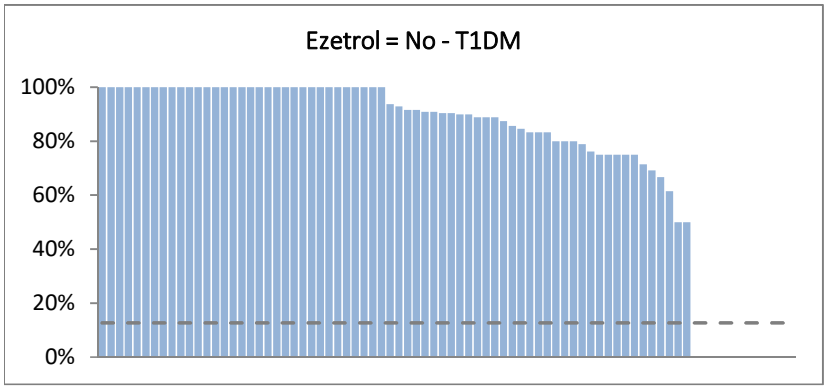


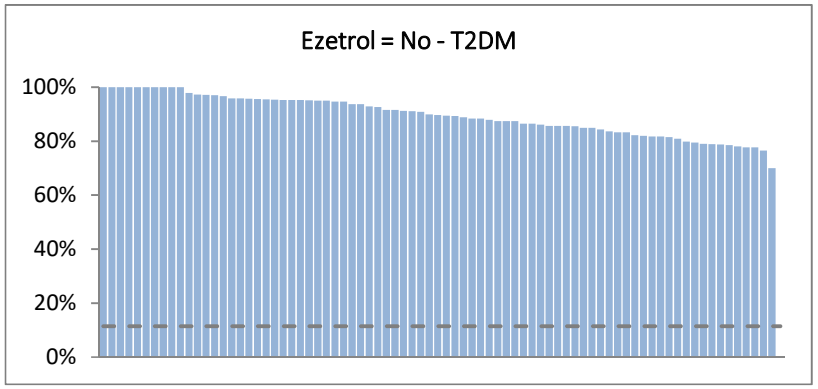




X-axis: All sites (Descending order)





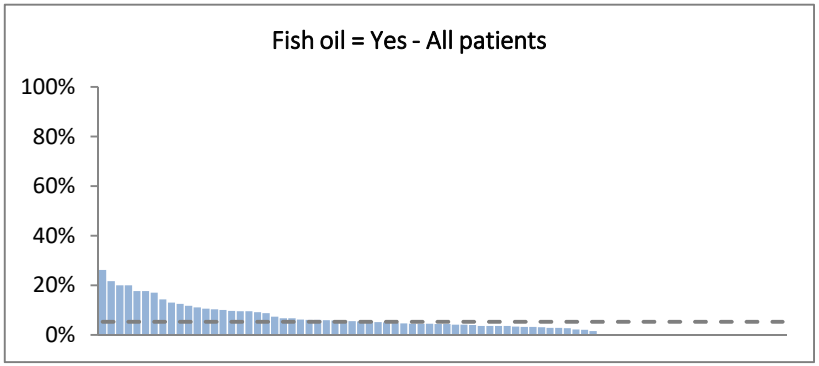


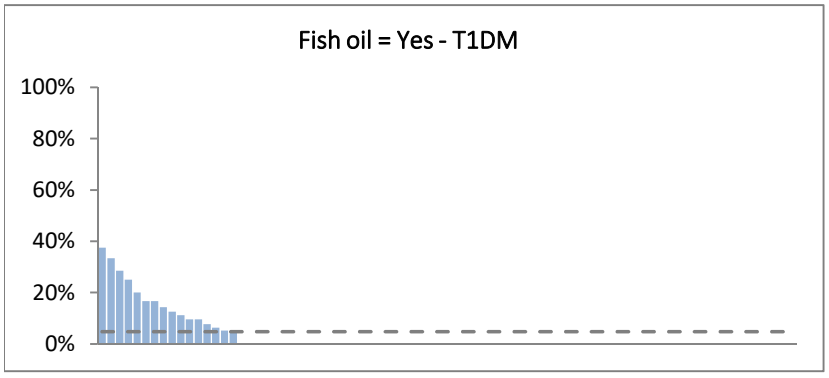
X-axis: All sites (Descending order)

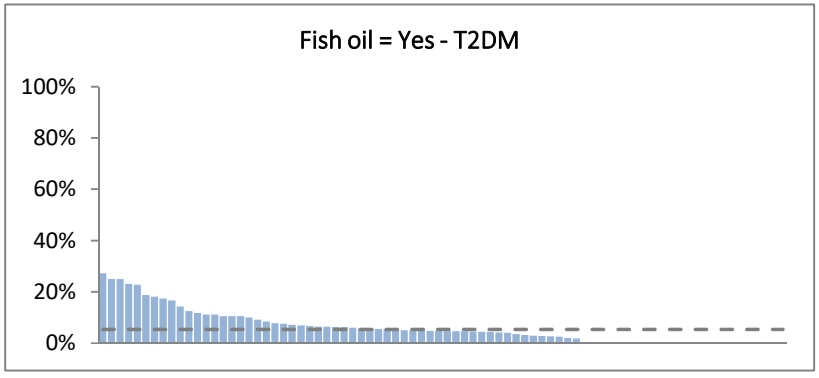
Fish oil* use by diabetes type

Diabetes type	Yes			No			Contraindicated (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	26	4.8	14.1	518	95.2	15.5	0	0.0	0.0	544	15.4
T2DM	156	5.4	84.3	2747	94.6	82.4	2	0.1	66.7	2905	82.3
GDM	1	50.0	0.5	1	50.0	0.0	0	0.0	0.0	2	0.1
Don't know	1	6.3	0.5	15	93.8	0.4	0	0.0	0.0	16	0.5
Other	1	2.2	0.5	43	95.6	1.3	1	2.2	33.3	45	1.3
Unstated	0	0.0	0.0	10	100.0	0.3	0	0.0	0.0	10	0.3
Total	**185**	**5.3**		**3334**	**94.7**		**3**	**0.1**		3522	

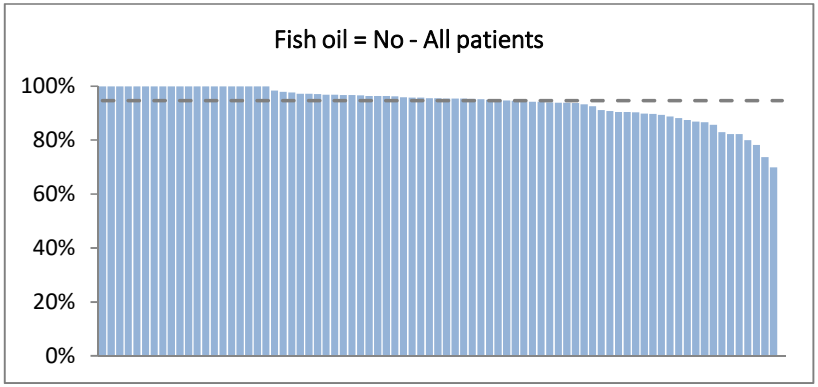
*of patients who take lipid lowering therapy

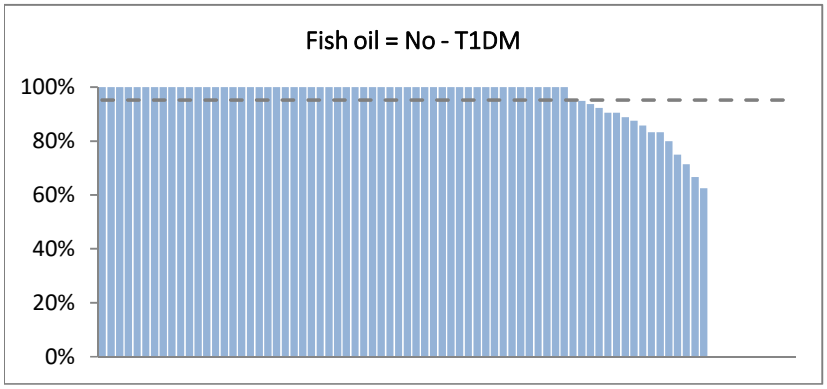


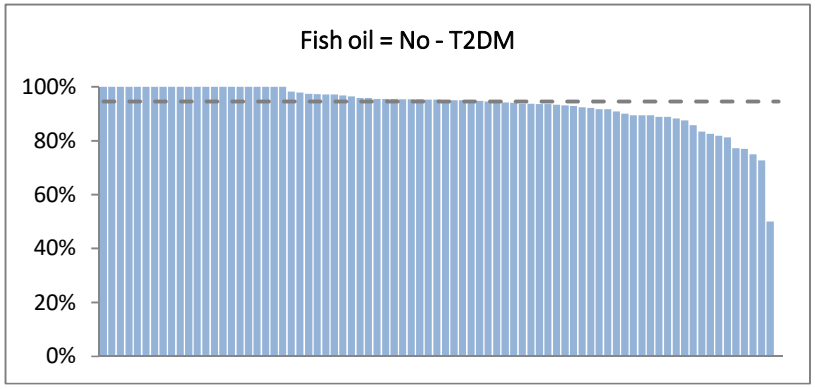




X-axis: All sites (Descending order)



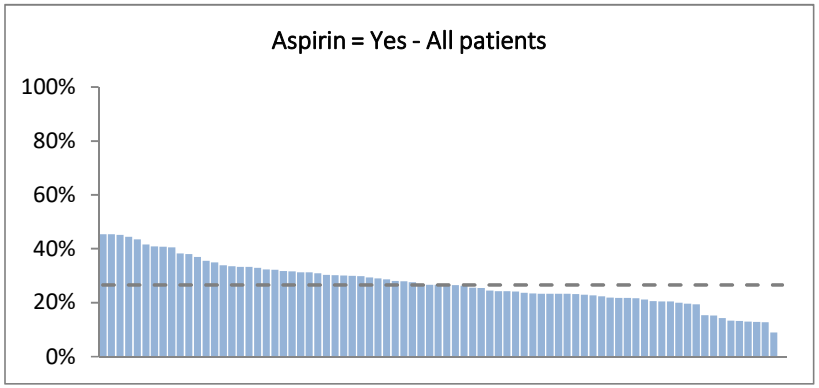


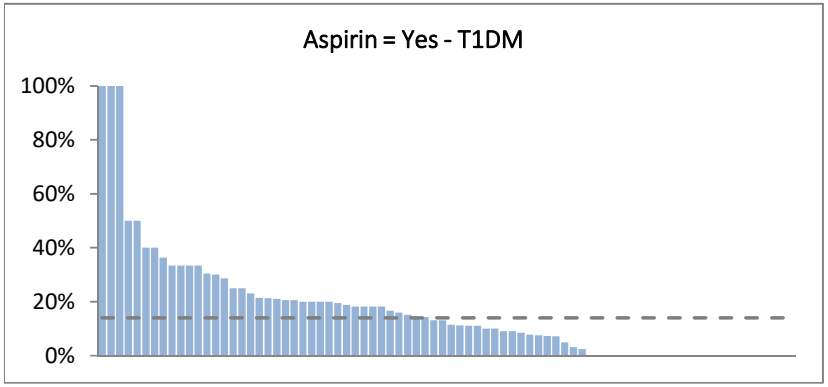


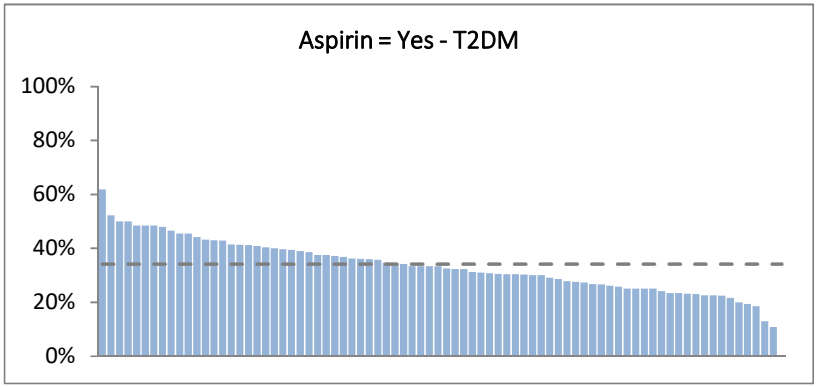
X-axis: All sites (Descending order)

Aspirin use by diabetes type

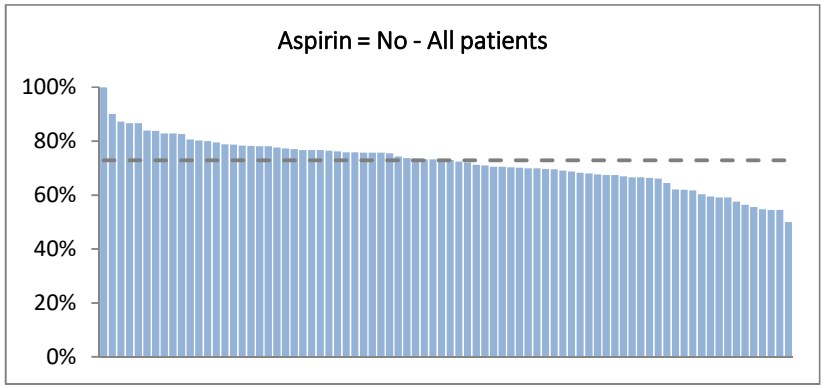
Diabetes type	Yes			No			Contraindicated			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	242	14.0	14.2	1477	85.6	31.6	7	0.4	18.9	**1726**	**26.9**
T2DM	1411	34.1	82.7	2692	65.2	57.5	29	0.7	78.4	**4132**	**64.3**
GDM	17	5.3	1.0	303	94.7	6.5	0	0.0	0.0	**320**	**5.0**
Don't know	7	7.5	0.4	86	92.5	1.8	0	0.0	0.0	**93**	**1.4**
Other	23	18.4	1.3	101	80.8	2.2	1	0.8	2.7	**125**	**1.9**
Unstated	6	23.1	0.4	20	76.9	0.4	0	0.0	0.0	**26**	**0.4**
Total	**1706**	**26.6**		**4679**	**72.9**		**37**	**0.6**		6422	

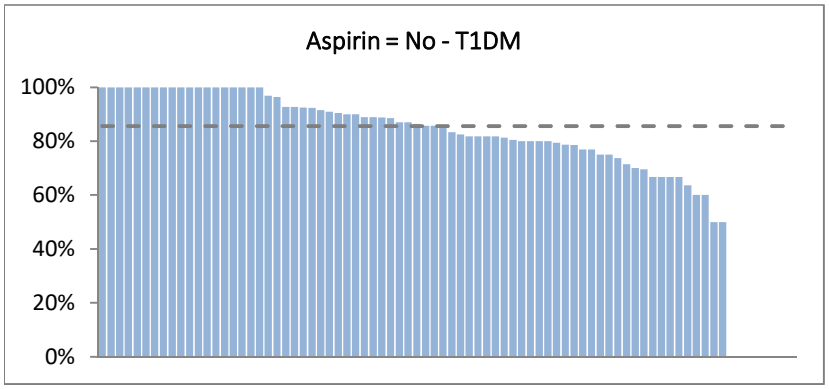


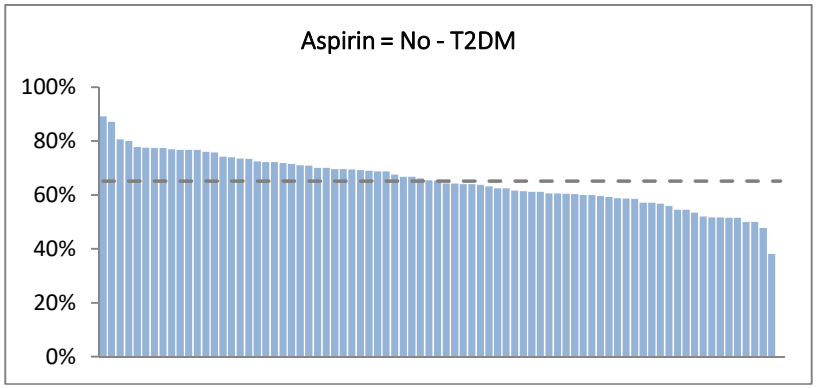




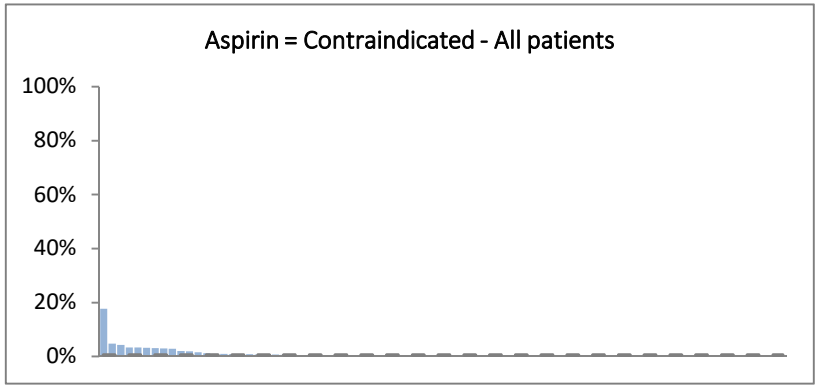
X-axis: All sites (Descending order)

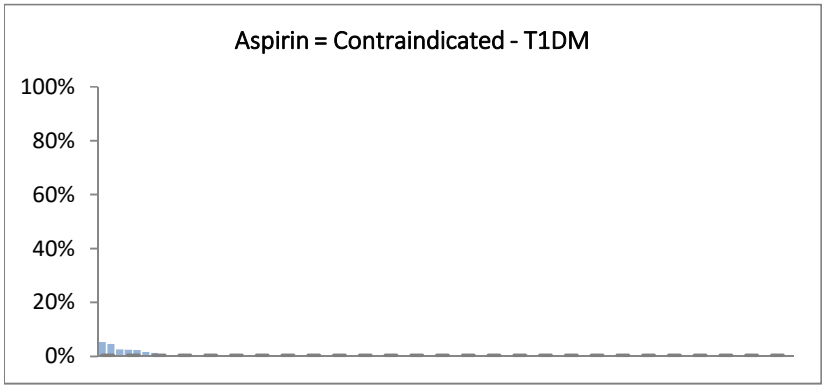


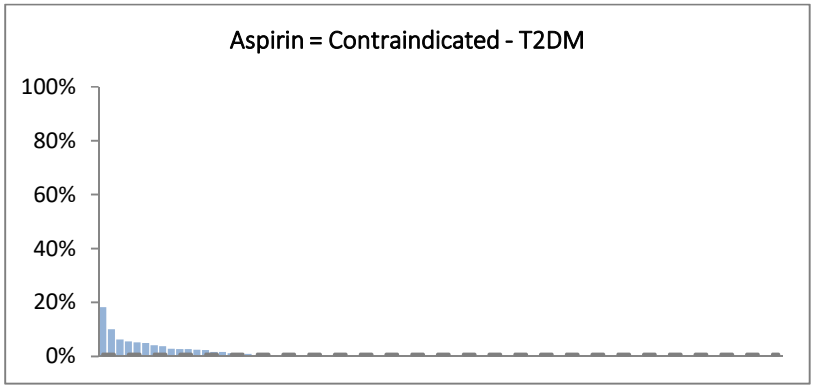




X-axis: All sites (Descending order)



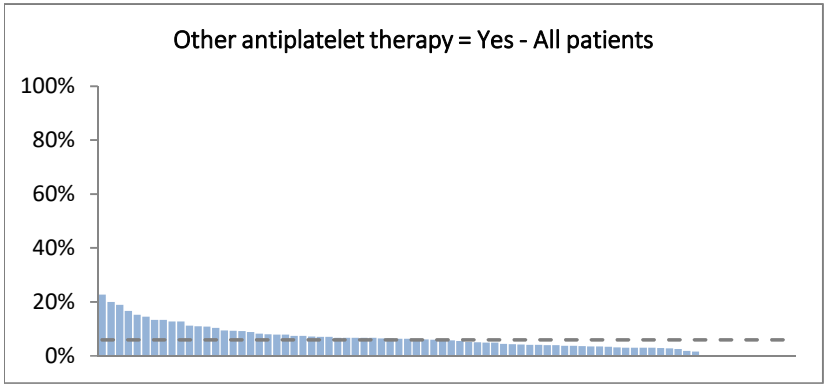


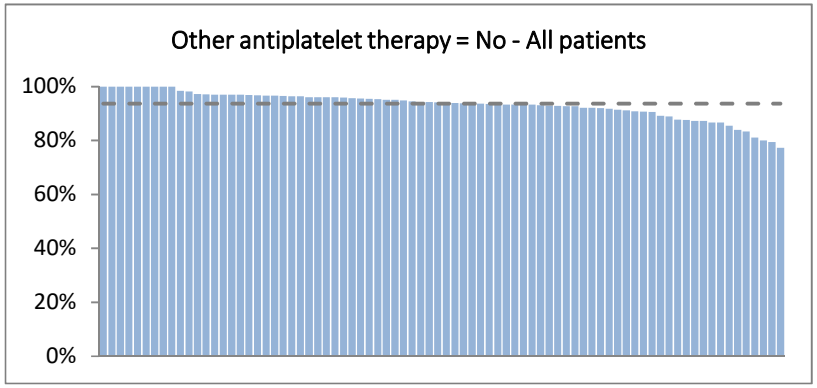


X-axis: All sites (Descending order)

Other antiplatelet therapy by diabetes type

Diabetes type	Yes			No			Contraindicated (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	37	2.1	9.7	1682	97.6	28.0	5	0.3	23.8	**1724**	**26.9**
T2DM	341	8.3	89.3	3771	91.4	62.7	15	0.4	71.4	**4127**	**64.3**
GDM	0	0.0	0.0	320	100.0	5.3	0	0.0	0.0	**320**	**5.0**
Don't know	4	4.3	1.0	89	95.7	1.5	0	0.0	0.0	**93**	**1.4**
Other	0	0.0	0.0	124	99.2	2.1	1	0.8	4.8	**125**	**1.9**
Unstated	0	0.0	0.0	26	100.0	0.4	0	0.0	0.0	**26**	**0.4**
Total	**382**	**6.0**		**6012**	**93.7**		**21**	**0.3**		6415	

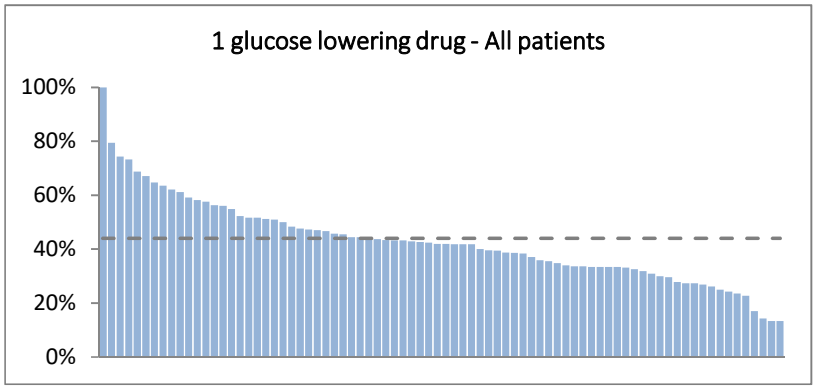




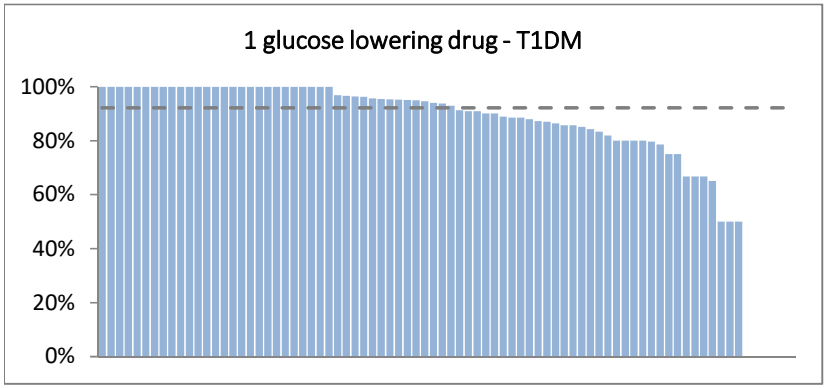
X-axis: All sites (Descending order)

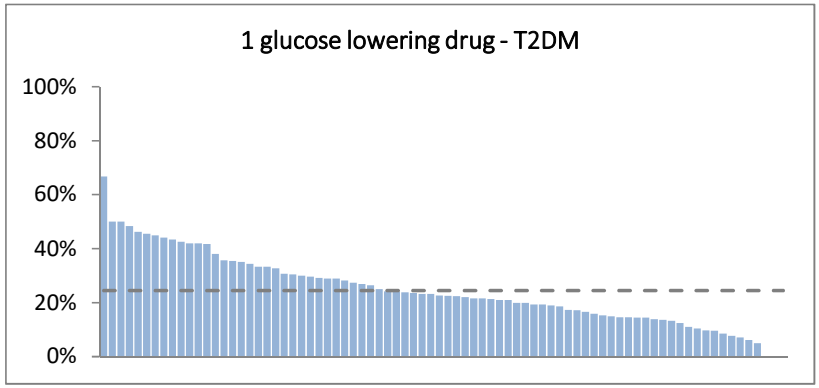
Number of glucose lowering drugs by diabetes type

Diabetes type	0 (Not graphed)			1			2			3			≥4 (Not graphed)		
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%
T1DM	0	0.0	0.0	1594	92.2	56.3	121	7.0	8.4	13	0.8	1.0	1	0.1	0.3
T2DM	212	5.1	46.1	1013	24.5	35.8	1257	30.3	87.3	1289	31.1	97.1	372	9.0	98.9
GDM	186	58.1	40.4	122	38.1	4.3	11	3.4	0.8	1	0.3	0.1	0	0.0	0.0
Don't know	45	48.4	9.8	21	22.6	0.7	18	19.4	1.3	9	9.7	0.7	0	0.0	0.0
Other	9	7.2	2.0	74	59.2	2.6	26	20.8	1.8	13	10.4	1.0	3	2.4	0.8
Unstated	8	30.8	1.7	8	30.8	0.3	7	26.9	0.5	3	11.5	0.2	0	0.0	0.0
Total	**460**	**7.1**		**2832**	**44.0**		**1440**	**22.4**		**1328**	**20.6**		**376**	**5.8**	

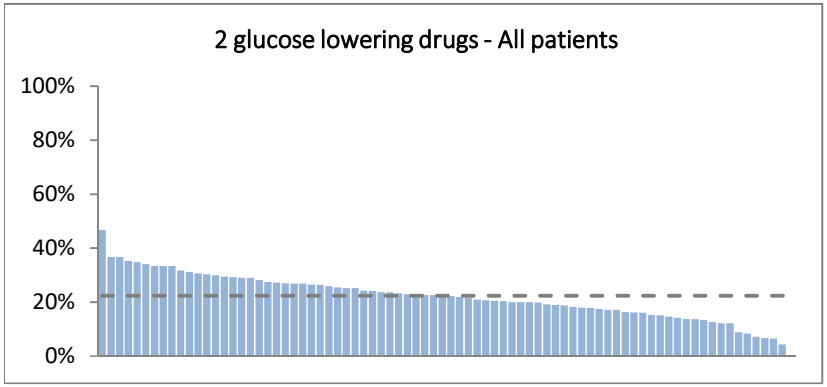


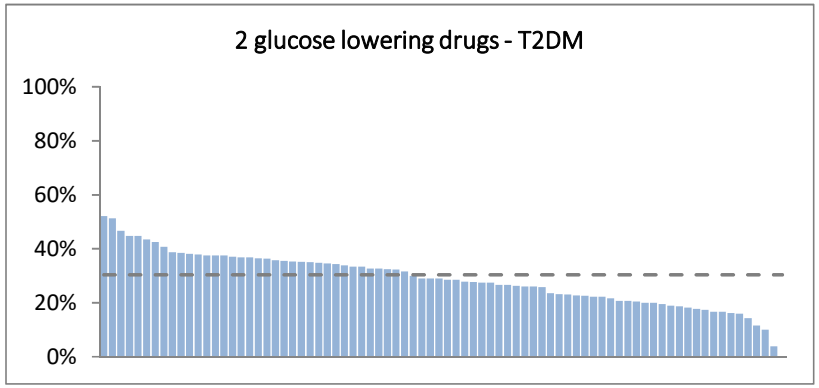
Diabetes Type	Total	
	n	%
T1DM	1729	26.9
T2DM	4143	64.4
GDM	320	5.0
Don't know	93	1.4
Other	125	1.9
Unstated	26	0.4
Total	6436	

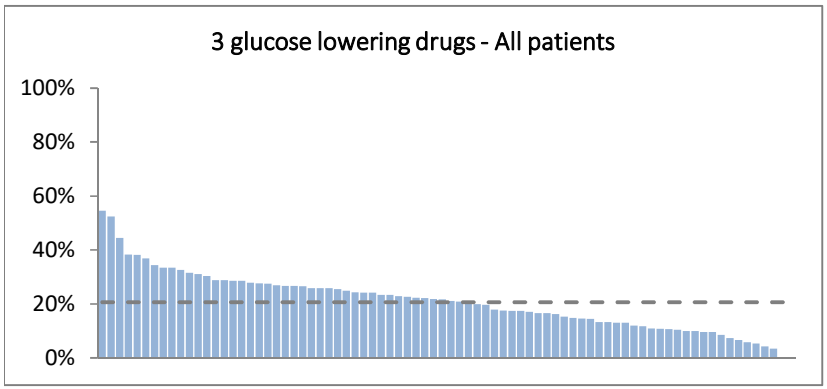


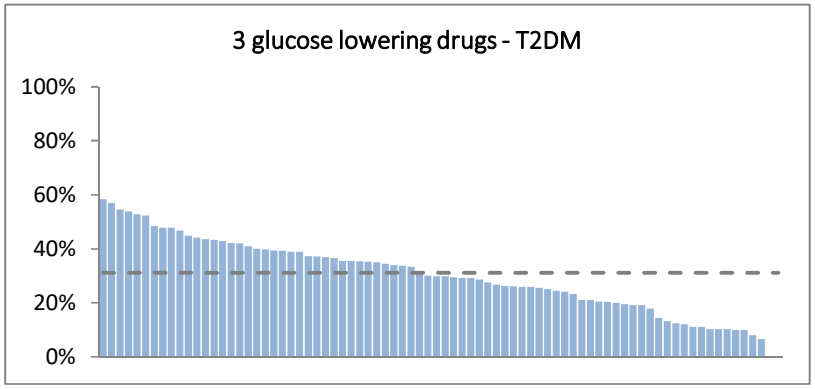


X-axis: All sites (Descending order)







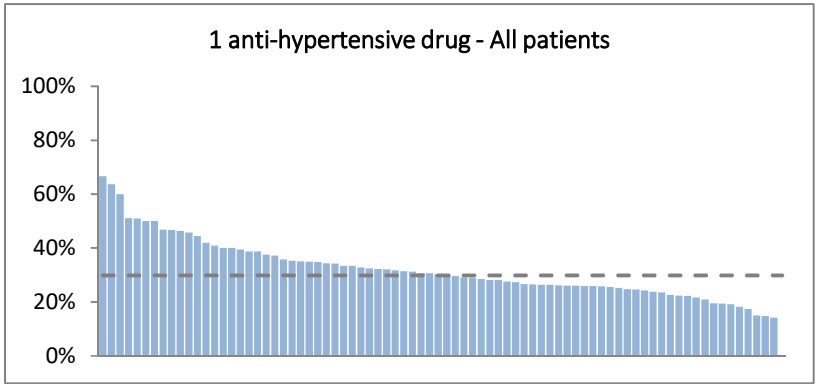


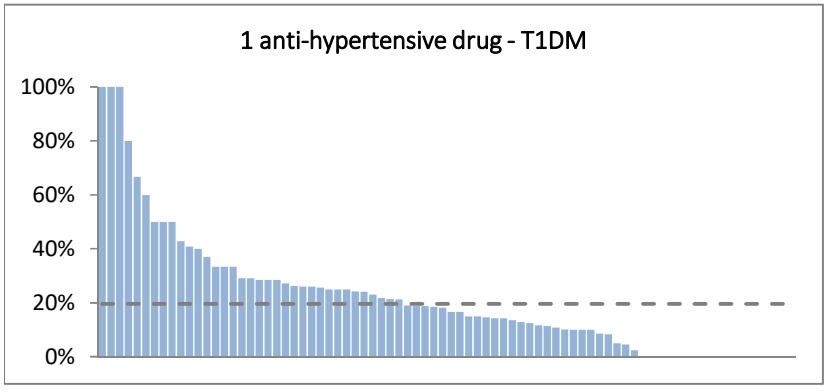
X-axis: All sites (Descending order)

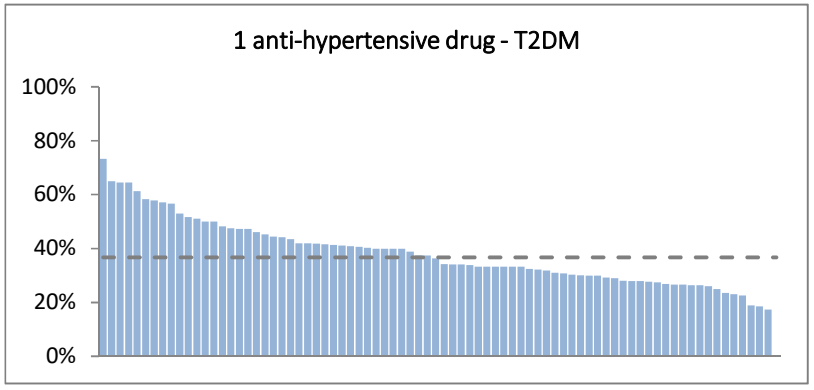
Number of anti-hypertensive drugs by diabetes type

Diabetes type	1			2			3			≥4 (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	339	19.6	17.6	122	7.1	10.8	46	2.7	9.6	16	9.7	9.7	**1729**	**26.9**
T2DM	1520	36.7	79.1	984	23.8	87.4	424	10.2	88.5	147	3.5	89.1	**4143**	**64.4**
GDM	8	2.5	0.4	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	**320**	**5.0**
Don't know	12	12.9	0.6	5	5.4	0.4	2	2.2	0.4	1	1.1	0.6	**93**	**1.4**
Other	35	28.0	1.8	13	10.4	1.2	6	4.8	1.3	1	0.8	0.6	**125**	**1.9**
Unstated	7	26.9	0.4	2	7.7	0.2	1	3.8	0.2	0	0.0	0.0	**26**	**0.4**
Total	**1921**	**29.8**		**1126**	**17.5**		**479**	**7.4**		**165**	**2.6**		**6436**	

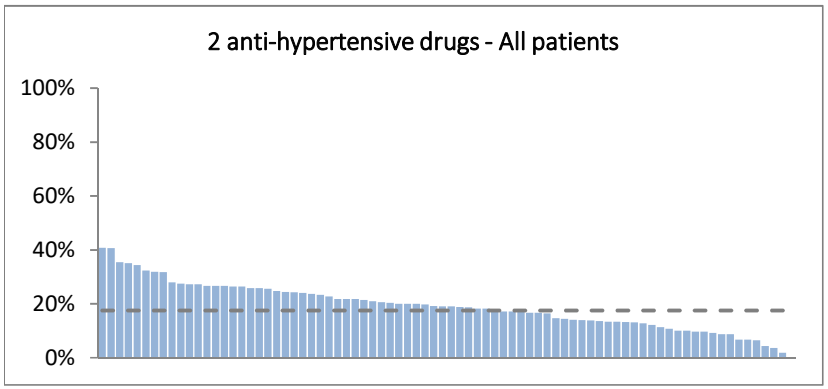
* of patients who take anti-hypertensive therapy

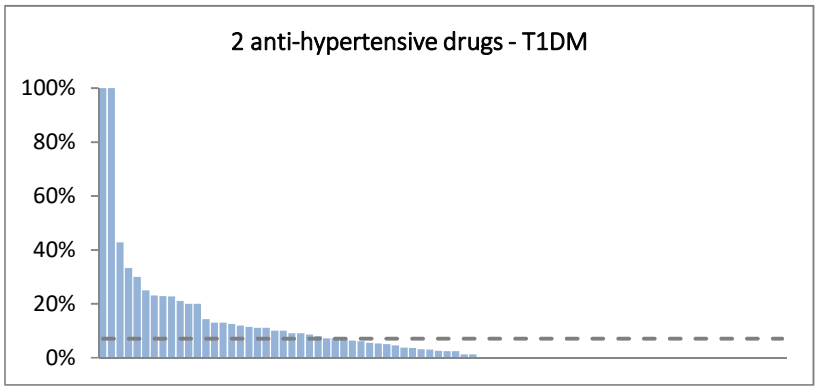


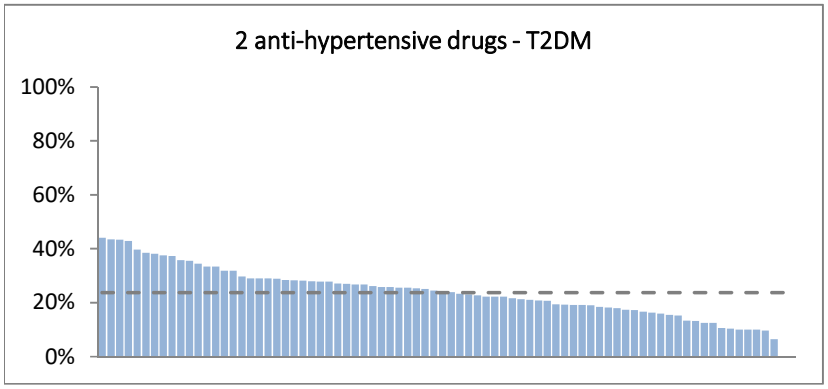


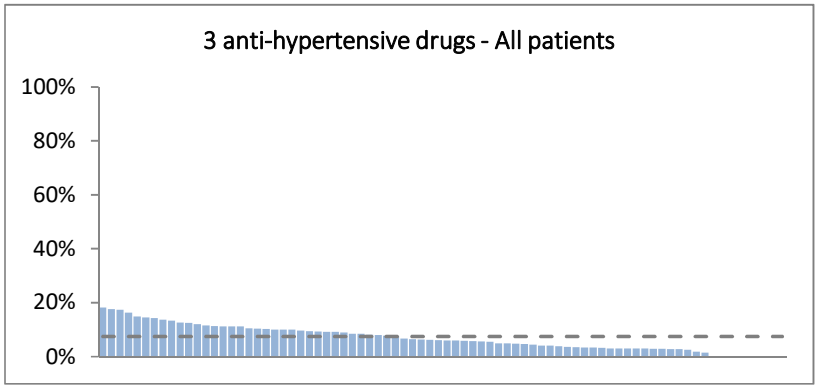


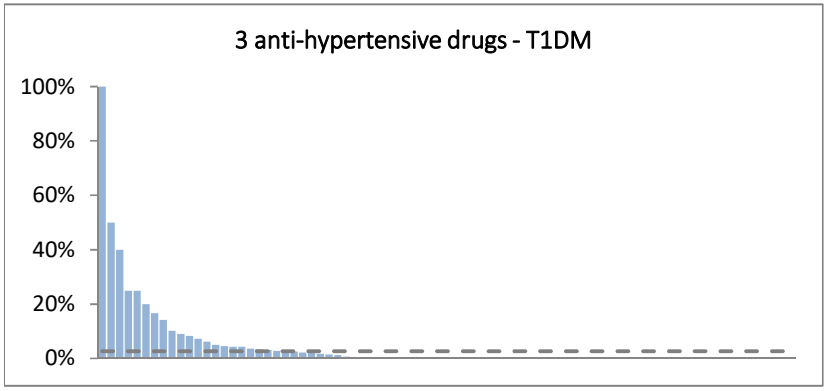
X-axis: All sites (Descending order)

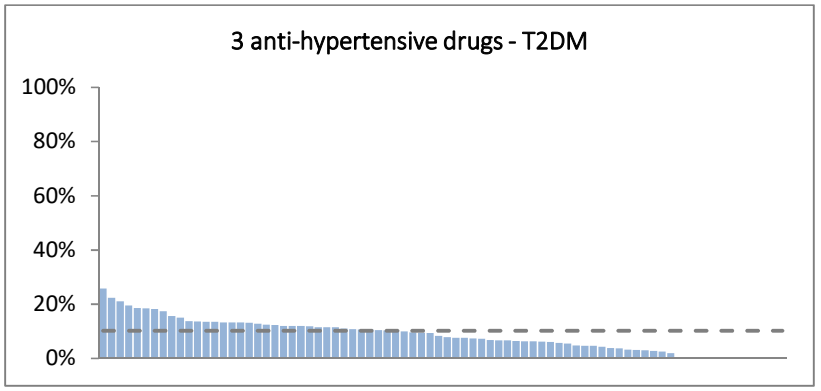










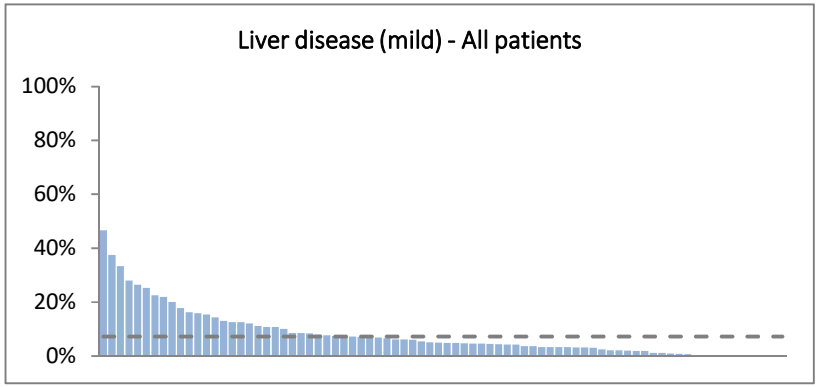


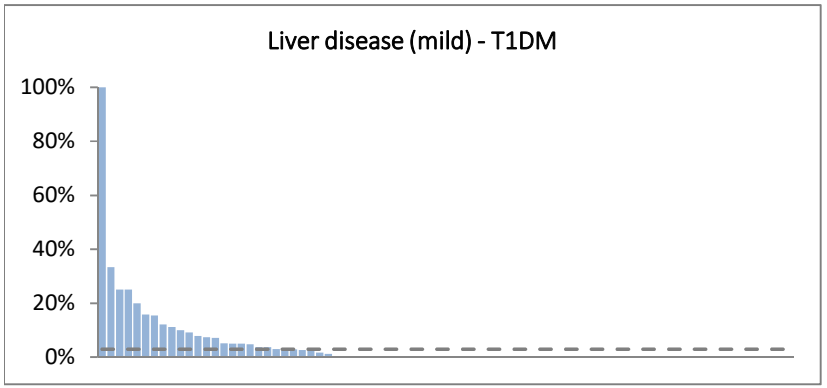
X-axis: All sites (Descending order)

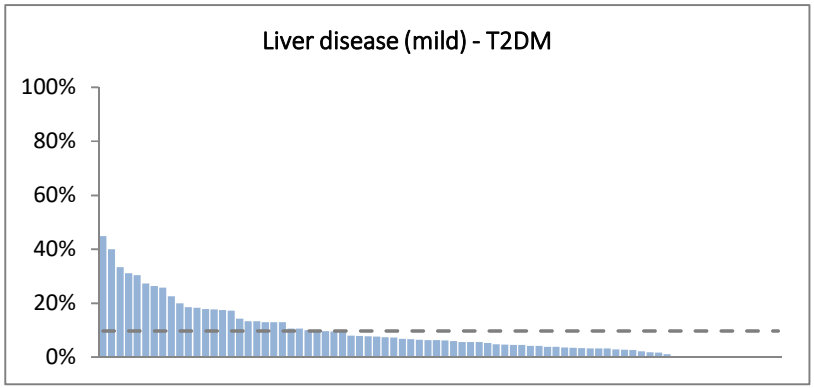
6.7 Comorbidities

Liver disease by diabetes type

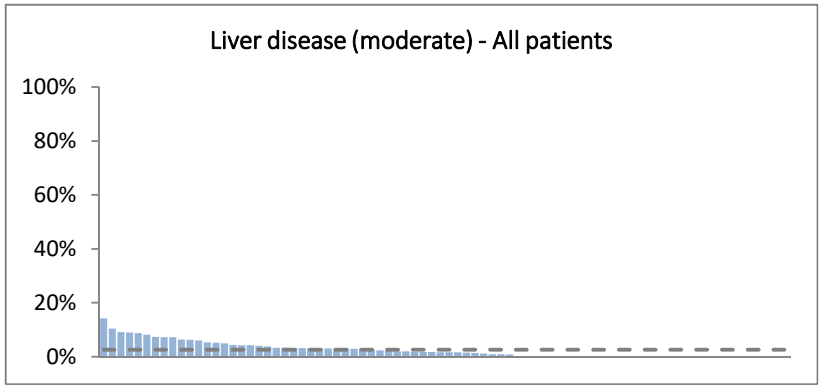
Diabetes type	Mild			Moderate			Nil (Not graphed)			Total	
	n	R%	C%	n	R%	C%	n	R%	C%	n	%
T1DM	45	2.9	10.6	15	1.0	9.6	1501	96.2	28.5	**1561**	**26.7**
T2DM	369	9.7	87.2	132	3.5	84.6	3319	86.9	63.0	**3820**	**65.4**
GDM	2	0.6	0.5	1	0.3	0.6	316	99.1	6.0	**319**	**5.5**
Don't know	2	11.1	0.5	0	0.0	0.0	16	88.9	0.3	**18**	**0.3**
Other	5	4.6	1.2	7	6.5	4.5	96	88.9	1.8	**108**	**1.8**
Unstated	0	0.0	0.0	1	5.6	0.6	17	94.4	0.3	**18**	**0.3**
Total	**423**	**7.2**		**156**	**2.7**		**5265**	**90.1**		5844	

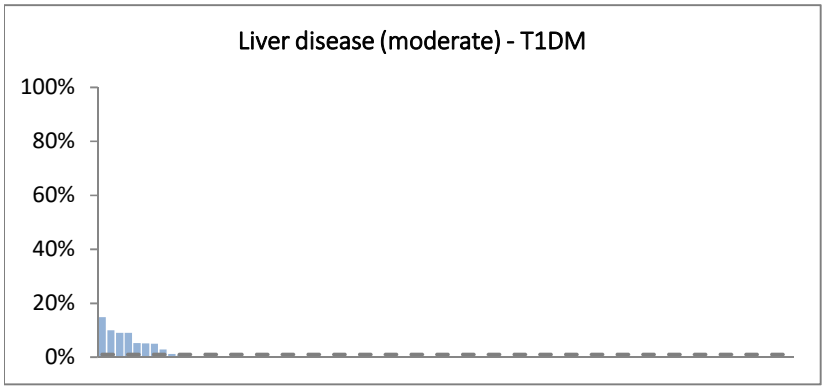


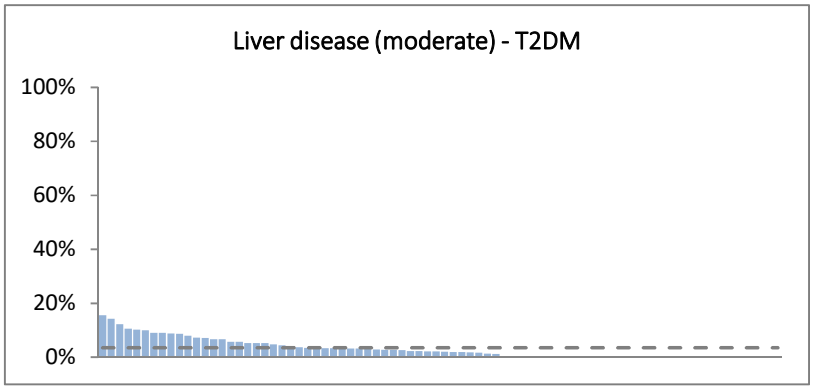




X-axis: All sites (Descending order)







X-axis: All sites (Descending order)

7. Historical Comparison of Pooled Data

Table 7.1 Demographic data

Category	2019	2017	2015	2013
Number of sites	80	63	50	30
Number of patients	6436	5719	5183	3843
Mean age (years)	56.0 ± 17.7	55.4 ± 17.8	55.9 ± 17.4	57.1 ± 17.1
Mean diabetes duration (years)	14.5 ± 11.7	14.6 ± 11.8	14.1 ± 11.3	14.3 ± 11.0
Sex (%) (male)	50.0	51.2	50.3	52.3
Pregnant (%) (females 18-55 years)	27.1	26.3	25.1	19.2
Diabetes type (%)				
T1DM	27.0	25.5	23.0	21.1
T2DM	64.6	67.1	68.5	72.8
GDM	5.0	5.0	4.4	2.9
Don't know	1.5	0.8	2.5	0.5
Other	2.0	1.6	1.6	2.7
Unstated	0.4	0.3	1.5	1.5
Initial visit (%)	20.8	15.5	16.5	16.5
Aboriginal/Torres Strait Islander (%)	4.7	4.2	4.7	6.1
DVA patient (%)	1.1	1.2	1.3	NA
NDSS member (%)	94.2	91.8	92.7	NA

Table 7.2 Overall mean data

Fields	2019 (Mean + SD)	2017 (Mean + SD)	2015 (Mean + SD)	2013 (Mean + SD)
BMI (kg/m^2)	31.7 ± 9.3	31.4 ± 7.6	31.5 ± 7.7	31.1 ± 7.3
Systolic BP (mmHg)	131 ± 18	130 ± 17	130 ± 19	129 ± 18
Diastolic BP (mmHg)	76 ± 11	75 ± 11	74 ± 11	74 ± 11
HbA_{1c} (%)	8.1 ± 1.8	8.1 ± 1.8	8.2 ± 1.9	8.2 ± 1.9
HbA_{1c} (mmol/mol)	64.9 ± 20.0	65.0 ± 19.1	64.4 ± 19.5	64.4 ± 19.5
Total cholesterol (mmol/L)*	4.3 ± 1.2	4.4 ± 1.3	4.3 ± 1.2	4.3 ± 1.6
HDL cholesterol (mmol/L)*	1.2 ± 0.4	1.3 ± 0.5	1.2 ± 0.4	1.2 ± 0.4
Triglyceride (mmol/L)*	2.0 ± 2.1	2.1 ± 2.2	2.1 ± 1.9	2.0 ± 2.3
LDL cholesterol (mmol/L)*	2.2 ± 0.9	2.3 ± 1.0	2.2 ± 1.2	2.2 ± 1.4

* Irrespective of fasting status

Table 7.3 Complications

Complications	2019 (%)	2017 (%)	2015 (%)	2013 (%)
Foot ulceration	4.9	5.6	3.4	2.8
Peripheral vascular disease	7.3	7.8	9.9	9.6
Peripheral neuropathy	18.9	20.6	22.5	22.3
Lower limb amputation	2.7	1.7	1.0	1.1
Microalbuminuria	27.9	30.1	33.8	39.8
Macroalbuminuria	11.4	10.2	17.0	13.8
Proteinuria >300mg/24hr	16.7	33.3	27.3	46.4
eGFR <90 (ml/min/1.73m^2)	60.0	44.7	57.7	76.9
eGFR <60 (ml/min/1.73m^2)	24.0	17.8	23.4	33.1

Table 7.4 Risk factor data

Risk factors	2019 (%)	2017 (%)	2015 (%)	2013 (%)
Current smoker	11.9	12.7	13.8	11.4
Past smoker	30.7	31.8	31.8	26.3
On anti-hypertensive therapy	57.7	58.6	60.7	61.1
On lipid lowering therapy	55.8	59.0	58.0	63.2
BP >130/80	52.4	49.9	45.5	44.3
Raised total cholesterol ≥4.0 mmol/L	58.1	60.4	58.3	56.7
Raised LDL cholesterol ≥2.0 mmol/L	55.2	57.6	55.1	55.5
Reduced HDL cholesterol <1.0 mmol/L	25.1	25.1	28.6	27.4
Raised triglycerides ≥2.0 mmol/L	35.5	36.3	36.8	34.2
Overweight/obese ≥25 kg/m^2	81.7	80.2	81.1	80.9

Table 7.5 Complication/event in the last 12 months

Complication/event	2019 (%)	2017 (%)	2015 (%)	2013 (%)
Myocardial infarction	2.3	2.7	3.8	4.8
CABG/angioplasty/stent	2.3	3.1	2.7	3.1
Cerebral stroke	1.4	1.5	1.4	2.2
Congestive cardiac failure	4.3	4.3	3.9	NA
End stage renal disease	3.9	3.8	3.6	4.5
Blindness	1.3	1.0	1.0	1.2
Sexual dysfunction	11.5	NA	NA	NA
Severe hypoglycaemia	5.6	6.5	5.4	6.1

Table 7.6 Complication/event (prior to the last 12 months)

Complication/event	2019 (%)	2017 (%)	2015 (%)	2013 (%)
Myocardial infarction	9.1	9.0	11.0	11.7
CABG/angioplasty/stent	9.4	10.3	10.9	10.4
Cerebral stroke	4.2	4.8	5.5	5.2
Congestive cardiac failure	5.0	4.7	5.0	NA
End stage renal disease	4.6	4.0	4.5	5.3
Blindness	1.6	1.2	1.4	1.3
Sexual dysfunction	11.0	NA	NA	NA
Severe hypoglycaemia	9.6	9.8	NA	NA

Table 7.7 Any complication/event (during or prior to the last 12 months)

Complication/event	2019 (%)	2017 (%)	2015 (%)	2013 (%)
Myocardial infarct	10.2	10.0	12.4	12.3
CABG/angioplasty/stent	10.6	11.9	11.4	10.8
Cerebral stroke	5.1	5.4	5.7	5.5
Congestive cardiac failure	5.9	5.4	5.9	NA
End stage renal disease	4.8	4.8	4.9	4.7
Blindness	1.4	1.4	1.6	1..3
Sexual dysfunction	12.5	NA	NA	NA
Severe hypoglycaemia	11.6	11.6	NA	NA

Table 7.8 Blood glucose control, BMI, age and diabetes duration

Category	2019 (Mean + SD)	2017 (Mean + SD)	2015 (Mean + SD)	2013 (Mean + SD)
Blood Glucose Control (%)				
Mean HbA_{1c} T1DM	8.4 ± 1.7	8.5 ± 1.8	8.5 ± 1.8	8.5 ± 1.8
Mean HbA_{1c} T2DM	8.1 ± 1.8	8.1 ± 1.7	8.2 ± 1.8	8.0 ± 1.8
Mean HbA_{1c} T2DM diet only	6.5 ± 1.3	6.5 ± 1.3	6.5 ± 1.2	6.7 ± 1.6
Mean HbA_{1c} T2DM tablets only	8.1 ± 1.8	8.1 ± 1.7	8.3 ± 1.8	7.5 ± 1.6
Mean HbA_{1c} T2DM insulin only	8.5 ± 1.9	8.4 ± 1.7	8.6 ± 1.8	8.3 ± 1.7
Mean HbA_{1c} T2DM insulin & tablets	8.6 ± 1.8	8.5 ± 1.7	8.7 ± 1.8	8.5 ± 1.7
BMI (kg/m^2)				
Mean BMI T1DM	26.6 ± 5.3	26.6 ± 5.3	26.6 ± 5.3	26.6 ± 5.7
Mean BMI T2DM	32.6 ± 7.2	32.6 ± 7.2	32.6 ± 7.2	32.5 ± 7.2
Mean BMI T2DM diet only	31.3 ± 6.4	31.8 ± 6.1	31.9 ± 6.7	30.2 ± 5.9
Mean BMI T2DM tablets only	33.6 ± 8.3	33.3 ± 7.4	33.4 ± 7.6	31.8 ± 7.0
Mean BMI T2DM insulin only	33.7 ± 7.9	33.6 ± 7.5	33.7 ± 7.6	32.3 ± 7.4
Mean BMI T2DM insulin & tablets	34.1 ± 8.0	34.0 ± 7.4	34.3 ± 7.7	33.7 ± 7.3
Age (years)				
Mean age T1DM	43.0 ± 16.9	40.3 ± 16.6	40.0 ± 16.7	40.7 ± 17.0
Mean age T2DM	63.5 ± 13.3	63.1 ± 12.9	62.9 ± 12.5	62.7 ± 13.0
Mean age T2DM diet only	65.7 ± 15.9	65.7 ± 14.4	61.5 ± 13.8	65.0 ± 15.7

Category	2019 (Mean + SD)	2017 (Mean + SD)	2015 (Mean + SD)	2013 (Mean + SD)
Mean age T2DM tablets only	63.0 ± 12.9	62.6 ± 12.7	62.4 ± 12.2	61.2 ± 13.7
Mean age T2DM insulin only	64.1 ± 12.8	63.9 ± 12.4	63.5 ± 12.1	65.2 ± 12.8
Mean age T2DM insulin & tablets	63.7 ± 12.4	63.4 ± 12.2	62.8 ± 11.7	62.9 ± 12.8
Duration of diabetes (years)				
Mean duration T1DM	20.3 ± 14.2	19.6 ± 14.3	19.2 ± 14.4	18.3 ± 13.5
Mean duration T2DM	13.4 ± 9.5	13.9 ± 10.0	13.5 ± 9.4	13.6 ± 9.8
Mean duration T2DM diet only	6.5 ± 6.2	6.2 ± 7.3	5.5 ± 6.4	5.1 ± 6.0
Mean duration T2DM tablets only	13.3 ± 9.3	13.6 ± 9.6	13.0 ± 8.9	9.6 ± 7.7
Mean duration T2DM insulin only	16.6 ± 9.5	16.9 ± 10.0	16.2 ± 9.3	18.5 ± 10.5
Mean duration T2DM insulin & tablets	16.4 ± 9.3	16.6 ± 9.6	15.6 ± 8.8	15.4 ± 8.7

Table 7.9 Treatment of cardiovascular risk factors

Treatment	2019 (%)	2017 (%)	2015 (%)	2013 (%)
On anti-hypertensive therapy	57.7	58.6	60.7	61.1
On lipid lowering therapy	55.8	59.0	58.0	63.2
On anti-platelet therapy	29.2	32.4	36.2	40.5

Participating sites were asked to complete the first of two questionnaires at the completion of the data collection phase, to assess the participating sites' satisfaction with the overall process of data collection. The second questionnaire was forwarded with their site report, to assess their response on the individual site report. Free text responses to questions and to other items are reviewed individually and utilised to refine the data collection instrument and reporting process to assist in running future audits.

Table 7.10 shows the results of the feedback (the Likert Scale responses) from participating sites to the specific questions related to the data collection. Both the number of responses and the results improved in 2019 compared to previous years. This may be due in part to the increased number of participating sites and the introduction of the web-based electronic data capture in the clinical audit.

Table 7.10 Questionnaire results

Questionnaire category	Likert Scale: 1 = Poor, 3 = Midpoint, 5 = Good			
	2019 (n=68) (Mean + SD)	2017 (n=43) (Mean + SD)	2015 (n=37) (Mean + SD)	2013 (n=20) (Mean + SD)
Information package/letters	4.4 ± 0.7	4.1 ± 0.7	4.3 ± 0.7	4.1 ± 1.1
Data definitions form	4.3 ± 0.7	4.0 ± 0.8	4.0 ± 0.7	3.9 ± 1.1
Format (layout of data items)	4.0 ± 1.0	3.7 ± 1.0	3.8 ± 0.9	3.6 ± 0.9
Ease of form completion	3.7 ± 1.0	3.4 ± 1.2	3.7 ± 1.1	3.5 ± 1.2
Time to complete the form	3.1 ± 1.1	2.6 ± 1.7	3.1 ± 1.0	2.8 ± 1.5

The results in Table 7.11, from 68 respondents, showed that there was general approval of the 'Process' including the information provided, data definitions form and overall format. These findings are similar to previous collections, and encouraging given some of the participating sites in 2019

were new to the audit. The ease and time needed to complete the data collection form remains of concern to participating sites.

Table 7.11 Questionnaire 1 – Response by data collection method

Questionnaire category	Likert Scale - 1= Poor, 3= Midpoint, 5= Good		
	Paper-based (n=46) (Mean ± SD)	Web-based (n=20) (Mean ± SD)	Data extraction (n=2) (Mean ± SD)
Information package/letters	4.5 ± 0.7	4.2 ± 0.7	4.0 ± 1.4
Data Definitions form	4.5 ± 0.7	4.1 ± 0.7	4.5 ± 0.7
Format (layout of data items)	4.1 ± 0.8	4.0 ± 0.9	NA
Ease of completion	3.6 ± 0.9	3.9 ± 0.9	NA
Time to complete the form	3.1 ± 1.1	3.2 ± 1.0	NA

Diabetes Publications & Resource List 2019

There are many resources available nationally that provide evidence based guidelines on how care should be provided and what outcomes should be achieved for people living with diabetes.

The following is a list of commonly used resources in Australia. The list also includes health care organisations involved in the provision of diabetes care. These links have been divided into topics. Please click on the topic of interest.

Contents

Title	Description / Link
Prevention, Prediabetes & Diagnostics	
National Evidence Based Guideline for Case Detection and Diagnosis of Type 2 Diabetes	To read or download your copy, please click here
National Evidence Based Guideline for the Primary Prevention of Type 2 Diabetes	To read or download your copy, please click here
The Australian Diabetes Educators Association (ADEA) and the Australian Diabetes Society (ADS) Position Statement on Prediabetes	To read or download your copy, please click here
Australian Diabetes Society Position Statement: **The Prevention and Management of Type 2 Diabetes in the Context of Psychotic Disorders**	To read or download your copy, please click here
Life! Program	The Life! program is a free Victorian lifestyle modification program aimed at type 2 diabetes and cardiovascular disease risk reduction. Run by expert health professionals, the program is delivered as a group course or a telephone health coaching service. Find out more HERE
Hospital Guidelines	
ADS Guidelines for Routine Glucose Control in Hospital	To read or download your copy, please click here
ADS Peri-Operative Diabetes Management Guidelines	These guidelines are primarily intended to provide assistance for those practitioners whose primary focus is not diabetes or who do not have the support of local diabetes expertise in their management of patients with diabetes undergoing surgical procedures. To read or download your copy, please click here
Obesity Management	
Australian Obesity Management Algorithm	This statement has been developed by a working group with representatives from the Australian Diabetes Society, the Australian and New Zealand Obesity Society and the Obesity Surgery Society of Australian and New Zealand. The aims of the document are to: 1) Assist general practitioners (GPs) in treatment decisions for non-pregnant adults with obesity 2) Provide a practical clinical tool to guide the implementation of existing guidelines for the treatment of obesity in the primary care setting in Australia. To read or download your copy, please click here (Posted: October, 2016)
Metabolic Surgery in the Treatment Algorithm for Type 2 Diabetes: A Joint Statement by International Diabetes Organizations	The ADS has recently endorsed international guidelines that recommend metabolic surgery for patients with type 2 diabetes and class III (BMI ≥40 kg/m2) obesity and patients with type 2 diabetes with class II (BMI 35.0–39.9 kg/m2) obesity who have had inadequate glycaemic control with lifestyle and pharmacotherapy. To read or download your copy, please click here (Posted: June, 2016)
Type 1 Diabetes	

Alcohol and type 1 diabetes	To view or download your copy, please click here
Diabetes in Pregnancy booklet for women with type 1 – Having a Healthy Baby	To view or download your copy, please click here
Drug use and type 1 diabetes	To view or download your copy, please click here
Guidelines for Sick Day Management for People with Diabetes	Provides readily accessible information recommending strategies for managing sick days in diabetes. To view the technical document for health professional, please click here To view the sick day management of adults with type 1 diabetes consumer resources, please click here
NDSS Pregnancy and Diabetes Website	Information for women with type 1 or type diabetes planning a pregnancy now or in the future To view this website, please click here
National Evidence Based Clinical Care Guidelines for Type 1 Diabetes in Children, Adolescents and Adults	To view or download your copy, please click here
Travelling and type 1 diabetes	To view or download your copy, please click here
Understanding Hypoglycaemia	The International Hypoglycaemia Study Group (IHSG) has launched a website providing information about hypoglycaemia in diabetes. It includes statements and guidelines, practice tools for health professionals and much more. To view this website, please click here
Type 2 Diabetes	
ADS Position Statement on A New Blood Glucose Management Algorithm for Type 2 Diabetes	This position statement developed by the Australian Diabetes Society outlines the risks, benefits and costs of the available therapies and suggests a treatment algorithm incorporating the older and newer agents. Summary of this ADS Position Statement is as follows: To read or download the full version of the ADS A New Blood Glucose Management Algorithm for Type 2 Diabetes Position Statement please click here (Updated: December, 2016)
T2D Treatment Website (A New Blood Glucose Management Algorithm for Type 2 Diabetes)	The blood glucose management algorithm for type 2 diabetes outlines the risks, benefits and costs of available therapies and provides an approach for how to incorporate older and newer agents. To view the algorithm and associated resources, including case studies please click here
Diabetes Management in General Practice 2016/18	General practitioners continue to provide most of the medical support to people with type 2 diabetes. This guide plays an important role in providing a readable summary of current guidelines and recommendations from various sources on the management of type 2 diabetes in the general practice setting. To read or download your copy, please click here
Australian Diabetes Society Position Statement: **The Prevention and Management of Type 2**	To read or download your copy, please click here

Diabetes in the Context of Psychotic Disorders	
Guidelines for Sick Day Management for People with Diabetes	Provides readily accessible information recommending strategies for managing sick days in diabetes. To view the technical document for health professional, please click here To view the sick day management of adults with type 2 diabetes consumer resources, please - **TBA**
Metabolic Surgery in the Treatment Algorithm for Type 2 Diabetes: A Joint Statement by International Diabetes Organisations	The ADS has recently endorsed international guidelines that recommend metabolic surgery for patients with type 2 diabetes and class III (BMI ≥40 kg/m2) obesity and patients with type 2 diabetes with class II (BMI 35.0–39.9 kg/m2) obesity who have had inadequate glycaemic control with lifestyle and pharmacotherapy. To read or download the full version of the 'Metabolic Surgery in the Treatment Algorithm for Type 2 Diabetes: A Joint Statement by International Diabetes Organizations' Guidelines please click here (Posted: June, 2016)
National Evidence Based Guideline for Blood Glucose Control in Type 2 Diabetes	To read or download your copy, please click here
National Evidence Based Guideline for Diagnosis, Prevention and Management of Chronic Kidney Disease in Type 2 Diabetes	To read or download your copy, please click here
National Evidence Based Guidelines for the Management of Type 2 Diabetes	These guidelines comprise a suite of Type 2 Diabetes Guidelines developed in 2009 under a funding agreement between the Department of Health and Ageing and the Diabetes Australia Guideline Development Consortium. The five Guidelines in the series, when combined, present a comprehensive set of evidence-based guidelines for the prevention, diagnosis and management of Type 2 Diabetes. To read or download your copy, please- **TBA**
Understanding Hypoglycaemia	The International Hypoglycaemia Study Group (IHSG) has launched a website providing information about hypoglycaemia in diabetes. It includes statements and guidelines, practice tools for health professionals and much more. To view this website, please click here
Elderly / Aged Care / End of Life	
Glucose Lowering Medicines and Older People with Diabetes: Information for Personal Care Workers	This is the links to the Q-Med project resources which are available on the Australian Disease Management Association (ADMA) Online Clearinghouse site. To read or download the information please click here
Glucose Lowering Medicines and Older People with Diabetes: Information for Registered and Enrolled Nurses	This is the links to the Q-Med project resources which are available on the Australian Disease Management Association (ADMA) Online Clearinghouse site. To read or download the information please click here
Glucose Lowering Medicines: Information for Older People with Diabetes and their Family Members	This is the links to the Q-Med project resources which are available on the Australian Disease Management Association (ADMA) Online Clearinghouse site. To read or download the information please click here
Aged Care Diabetes Care Checklist	This is a checklist to assist in the management of diabetes care for the aged. To read or download your copy please click here

Diabetes Management in Aged Care: A practical handbook	This is an updated version of the resource developed in 2012 and is aimed at care staff. To read or download your copy of the E-book, please click here To read or download your PDF copy, please click here
Diabetes Management in Aged Care: Fact sheets for care workers	The diabetes management in aged care fast facts for care workers is a booklet of quick reference sheets that aim to give care staff basic information on how to manage diabetes in a residential care setting: To read or download your copy of the E-book, please click here To read or download your PDF copy, please click here
Guidelines for the Management and Care of Diabetes in the Elderly	Focuses on the 'healthy' person over 65 years of age. Provides readily accessible information about diabetes prevention, diagnosis, treatment and long term management option for elderly people at risk of or living with diabetes. To view or download your full copy, please click here.
Guidelines for Managing Diabetes at the End of Life	These guidelines were developed in 2014 to assist with the management of Diabetes at the End of Life. To access these guidelines, search for these on the ADMA website. To access the ADMA website please click here
Older People – Healthy Eating Guide	To read or download your copy, please click here
Older People – Managing Diabetes as You Age	To read or download your copy, please click here
Older People – You and your Health Care Team	To read or download your copy, please click here
The McKellar guidelines for Managing Older people with Diabetes in Residential and Other Care Settings	These Guidelines were developed in 2014 to assist with the management of Diabetes in Residential Care Facilities. To access these guidelines, search for these on the ADMA website. To access the ADMA website please click here
Consulting / Diabetes Education	
A new language for diabetes – Improving communications with and about people with diabetes	Diabetes Australia has released an updated version (May 2016) of their position statement on language around diabetes. To view or download your copy, please click here
The use of Language in Diabetes Care and Education	Article from The American Association of Diabetes Educators (AADE) and American Diabetes Association on the use of language in Diabetes Care and Education. To view or download your copy, please click here
Enhancing your consulting skills	"Enhancing Your Consulting Skills" was developed by the ADS for the NDSS. It is now available in electronic format through the ADS website. Please click here to access this. It can be downloaded free of charge for individual use. Please note that you will be required to submit a request for download and obtain your password prior to receiving the download link. Hard copies of the resource are available from the ADS Secretariat.
National Evidenced Based Guideline for Patient Education in Type 2 Diabetes	This document provides minimum standards for development and facilitation of diabetes education programs. To view or download your copy, please click here
Outcomes and Indicators for Diabetes Education: National Consensus Position Information and Education for People with Diabetes: a 'Best Practice' Strategy	This report details a systematically derived framework of nationally agreed goals, outcomes and indicators for diabetes education. It provides a benchmark and policy platform for refining and evaluating the consistency, quality and effectiveness of diabetes education

	services which can be applied nationally and/or at a regional or local service level. To view or download your copy, please click here
Person Centred Care & Health Literacy ADEA project	In 2013-2014 ADEA completed a revision of the information sheet '*Person Centred Care for people with diabetes'* and developed an information sheet on *Health literacy for people with diabetes. To view or download your copy, please* - **TBA**
Management of Diabetes in the General Care Setting Update	ASM 2014 Presentation by Giuliana Murfet can be viewed at - **TBA**
Renal Information	
National Evidence Based Guideline for Diagnosis, Prevention and Management of Chronic Kidney Disease in Type 2 Diabetes	To view or download your copy, please click here
Foot Care	
• Australasian Podiatry Council • Limbs 4 Life • Diabetic Foot Australia	
National Evidence Based Guidelines on Prevention, Identification and Management of Foot Complications in Diabetes	Approved by the NHMRC, the full guideline, clinical guide, consumer guides and technical report can be downloaded here
Standards for High Risk Foot Services (HRFS) in NSW	To view or download your copy, please click here
Promoting Optimal Diabetes Foot Care	"Promoting Optimal Diabetes Foot Care" is a set of audio-visual resources based on national and international guidelines. The resources have been designed to help health professionals develop the clinical skills required to deliver high quality foot care to people with diabetes. The set is comprised of three learning modules: 1. The Foot Examination 2. Preventative Foot Care 3. Managing basic diabetes foot complications
Wound Institute of Australia	The Wound Healing Institute of Australia has developed a comprehensive set of modules on wound care, including specific modules on foot ulcers and leg ulcers. Find out more about these modules at: https://www.whia.com.au/product-category/online-learning/
NADC Foot Network	2017 ASM Presentation by Stephen Twigg and Leanne Mullan – Slides can be viewed, HERE (part 1), HERE (part 2)
Eye Care	
• Optometrists Association of Australia	
Eye care for diabetes: an Indigenous Perspective	ASM 2014 Presentation by Hugh Taylor can be viewed at nadc.net.au/video/2/
Diabetes Educators	
National Core Competencies for Credentialled Diabetes Educators	Provides a reference and a framework for guiding policy on the training and credentialling of diabetes educators. To view or download your

	copy, please click here
National Standards of Practice for Diabetes Educators	One of the strategies developed by ADEA to promote a quality professional diabetes education practice. To view or download your copy, please click here
The Credentialled Diabetes Educator in Australia – Role and Scope of Practice	Reflects the position of their unique and integral role in enabling people with diabetes manage their condition and as part of the multidisciplinary diabetes care team. To view or download your copy, please click here
The Role of Credentialled Diabetes Educators and Accredited Practising Dietitians in the Delivery of Diabetes Self-Management and Nutrition Services for People with Diabetes	To view or download your copy, please click here

Fact Sheets / Patient Resources

Baker IDI Fact Sheets	These materials have been developed by Baker IDI experts for use by clients and health professionals for patient education. The Institute is committed to providing credible, evidence-based health information regarding optimum approaches to the prevention and management of disease. To view or download these resources, please click here
Diabetes Australia patient information and resources	To view or download these resources, please click here
National Diabetes Services Scheme (NDSS) resources including fact sheets	35 facts sheets including those in other languages are available through the NDSS website. To view or download these resources, please click here
Diabetes and Emotional Health Handbook and Toolkit	'Diabetes and Emotional Health' is a handbook and toolkit developed as part of the National Diabetes Services Scheme Mental Health and Diabetes National Development Programme. The handbook has been designed as an evidence-based, practical resource to enable health professionals to identify, address, and communicate about emotional problems during consultations with adults with diabetes. A related toolkit contains resources to complement the handbook, including summary cards of several chapters, questionnaires for routine clinical use, and related 'factsheets' for people with diabetes. The latter provide information about the psychological topics covered in the chapters of the handbook, tips about what people with diabetes can do when they experience this problem and where they can get further support. Both the handbook and the toolkit can be accessed electronically via the Health Professionals tab of the NDSS website (ndss.com.au). The direct link is www.ndss.com.au/online-resources-for-health-professionals (you will need to 'sign up' to view it). The 'factsheets' are also available directly to people with diabetes electronically via the NDSS website. The direct link is https://www.ndss.com.au/diabetes-and-emotional-health.

Nutrition / Diet

- Dietitians Association of Australia (DAA)
- Food Standards Australia New Zealand (FSANZ)
- Glycemic Index Ltd
- Nutrition Australia
- Coeliac Australia
- Diabetes Australia recipes

Healthy Eating Guide for Older Australians with Diabetes	To view or download your copy, please click here
Diabetes and Ramadan	To assist health professionals, religious leaders and people with diabetes who fast during Ramadan, the Australian Diabetes Society, in conjunction with the International Diabetes Federation and Diabetes and Ramadan International Alliance, has endorsed the following brochures: ● Diabetes during Ramadan: Patient Guide ● Ramadan and Diabetes: Guidance Sheet for Imam ● Management of Diabetes During Ramadan: Quick Reference Guide for Health Professionals In February 2017 the NADC joined representatives from the ADS and the Diabetes and Ramadan (DaR) International Alliance at the first-ever Diabetes and Ramadan Symposium at Concord Repatriation General Hospital. The event promoted the new IDF-DaR Diabetes and Ramadan Practical Guidelines, which aim to support healthcare professionals to better support patients during this important religious period. A copy of the guidelines can be downloaded from the IDF website at http://www.idf.org/guidelines/diabetes-in-ramadan and presentations from the event can be viewed here: http://nadc.net.au/video/ or via the NADC YouTube channel - NADC Australia. Diabetes and Ramadan Overview Diabetes and Ramadan Symposium Introduction - Dr Sof Andrikopoulos Diabetes and Ramadan Dr Marwan Obaid Diabetes and Ramadan 2 Case Studies Dr Elif Ekinci Ramadan, Diabetes and Pregnancy Dr Sarah Abdo IDF DAR Practical Guidelines Dr Mohamed Hassanein

Pregnancy

- The Australasian Diabetes in Pregnancy Society (ADIPS)
- Pregnancy and Diabetes

Diabetes in Pregnancy booklet for women with type 1 – Having a Healthy Baby	To view or download your copy, please click here for the e-book Click here for the PDF
Diabetes in Pregnancy booklet for women with type 2 – Having a Healthy Baby	To view or download your copy, please click here Click here for the PDF
Gestational Diabetes - Caring for Yourself and Your Baby	To view or download your copy, please click here
Life after Gestational Diabetes	To view or download your copy, please click here
NDSS Understanding Gestational Diabetes Factsheet	To view or download your copy, please click here Also available in 10 different languages, to view or download translated factsheets, please click here

NDSS Pregnancy and Diabetes Website	Information for women with type 1 or type diabetes planning a pregnancy now or in the future To view this website, please click here
NDSS Pregnancy Planning Checklist	To view or download your copy, please click here
NDSS Pregnancy and Diabetes Factsheet	To view or download your copy, please click here Also available in 10 different languages, to view or download translated factsheets, please click here

Aboriginal and Torres Strait Islander

- HealthInfoNet

Aboriginal and Torres Strait Islander Resources – NDSS	To view or download resources, please click here
Aboriginal and Torres Strait Islander Resources – Diabetes Australia State Branches	Diabetes Victoria - https://www.diabetesvic.org.au/ATSI-resources Diabetes Queensland - https://www.diabetesqld.org.au/managing-diabetes/aboriginal-and-torres-strait-islander.aspx https://www.diabetesqld.org.au/managing-diabetes/aboriginal-and-torres-strait-islander/diabetes-and-me.aspx Diabetes Western Australia - https://diabeteswa.com.au/manage-your-diabetes/resources/aboriginal-health-resources/ Diabetes Tasmania - https://www.diabetestas.org.au/News-and-Resources/Resources/Aboriginal-and-Torres-Strait-Islander-NDSS-Resources Diabetes NSW and ACT - https://diabetesnsw.com.au/useful-tools/information-sheets/indigenous-information-sheets/ Feltman Training - http://www.aboriginalhealthdiabeteswa.com.au/health-professionals/feltman-training/ http://www.diabetessa.com.au/resources/feltman-diabetes-education-resource.html
Online Diabetes Education Training Manual for Aboriginal Health Workers	An online training manual has been developed to increase diabetes knowledge among Aboriginal Health Workers to better support Aboriginal and Torres Strait Islander peoples with diabetes and assist them in self-managing their diabetes. This training is targeted to Aboriginal and Torres Strait Islander Health Practitioners and Aboriginal and Torres Strait Islander Health Workers who have completed a minimum of Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care (Community Care) or (Practice). This course is available through the ADEA Learning Management System at: learning.adea.com.au

Your guide to Medicare for Indigenous health services	The department of Human Services have updated the newly launched education resource, ***"Your guide to Medicare for Indigenous health services"*** to incorporate the important 1 July 2018 Medicare changes. To find more **Indigenous health education** resources please visit Human Services. - **TBA**
Eye care for diabetes: An Indigenous Perspective	ASM 2014 Presentation by Hugh Taylor can be viewed at - **TBA**

CALD / Multilingual

- NDSS translated resources
- Health Translations by the Victorian Government includes translated health information
- Multicultural Health by the Queensland Government
- Multicultural Health Communication by NSW Health

Translated resources for CALD groups	All of the NDSS's translated resources are now also available on our Multicultural Diabetes Portal. The portal provides access to a broad range of diabetes resources for people from culturally and linguistically diverse (CALD) backgrounds. Resources contained on the site have been sourced from Diabetes Australia and its agents and from other reputable sources. All content has undergone a quality assessment process and guidelines are in place to ensure periodic review. To view or download this content, please click here
Web portal for information about diabetes for people from culturally and linguistically diverse backgrounds	To view or download your copy, please click here
Diabetes and Ramadan	To assist health professionals, religious leaders and people with diabetes who fast during Ramadan, the Australian Diabetes Society, in conjunction with the International Diabetes Federation and Diabetes and Ramadan International Alliance, has endorsed the following brochures: • Diabetes during Ramadan: Patient Guide • Ramadan and Diabetes: Guidance Sheet for Imam • Management of Diabetes During Ramadan: Quick Reference Guide for Health Professionals In February 2017 the NADC joined representatives from the ADS and the Diabetes and Ramadan (DaR) International Alliance at the first-ever Diabetes and Ramadan Symposium at Concord Repatriation General Hospital. The event promoted the new IDF-DaR Diabetes and Ramadan Practical Guidelines, which aim to support healthcare professionals to better support patients during this important religious period. A copy of the guidelines can be downloaded from the IDF website at http://www.idf.org/guidelines/diabetes-in-ramadan and presentations from the event can be viewed here: http://nadc.net.au/video/ or via the NADC YouTube channel - NADC Australia. Diabetes and Ramadan Overview Diabetes and Ramadan Symposium Introduction - Dr Sof Andrikopoulos Diabetes and Ramadan Dr Marwan Obaid

	Diabetes and Ramadan 2 Case Studies Dr Elif Ekinci Ramadan, Diabetes and Pregnancy Dr Sarah Abdo IDF DAR Practical Guidelines Dr Mohamed Hassanein

Data / Research / Quality Improvement

- Diabetes Australia Research Program
- Juvenile Diabetes Research Foundation (JDRF)
- The Australian Centre for Behavioural Research in Diabetes
- The Diabetes Research Centre
- The Diabetes Research Foundation Western Australia
- The John Curtin School of Medical Research
- The NHMRC Centre of Clinical Research Excellence on Clinical Science in Diabetes (Diabetes CCRE)
- Baker IDI
- The Walter and Eliza Hall Institute of Medical Research

Australian National Diabetes Audit (ANDA) reports	The primary aim of ANDA is to: ·conduct a survey that will assess a standardised set of predefined clinical (AQCA) and self-management diabetes (AQSMA) indicators including demographic and biological variables, and clinical outcomes; ·enable diabetes services to benchmark their practice processes and clinical outcome data against that of other centres; ·enable diabetes services to compare their practice processes and clinical outcome data over time (where participation in previous collections has occurred); and ·provide pooled national data and data grouped by state and metropolitan/regional/remote location on the clinical status of people with diabetes attending diabetes services. This important quality assurance activity promotes continuous improvement in the standard of service provided by diabetes centres and is the primary quality assurance activity of the NADC. To view this data please click here
ANDA: Lessons from the 2016 Quality Self-Management Audit	ASM 2017 Presentation Slides by Anthony Pease can be accessed here
Data Snapshots	NDSS national diabetes data snapshots are updated every three months, and provide key statistics for all types of diabetes, type 1 diabetes, type 2 diabetes, gestational diabetes, and insulin therapy. To view or download these snapshots, please click here
Diabetes Map Australia	The Australian Diabetes Map is the only national map monitoring the prevalence of diabetes in Australia. The data contained in the Australian Diabetes Map is derived from the National Diabetes Services Scheme (NDSS) Registrant database* and the Australian Bureau of Statistics (ABS) and shows people diagnosed with diabetes that are registered on the Scheme. It shows the numbers of people diagnosed with diabetes in all parts of Australia with information on age, gender, type of diabetes, ATSI status and socio-economic disadvantage. To view the Australian Diabetes Map, please click here
2015 Miles Youth Report	To view or download your copy, please click here

National Association of Diabetes Centres Accreditation	ASM 2014 Presentation by Elaine Pretorious can be viewed at nadc.net.au/video/2/
Implementing and utilising the Biogrid database in Diabetes Centres	ASM 2014 Presentation by Peter Coleman can be viewed at nadc.net.au/video/2/
HbA1c	
ADEA Position Statement on HbA1c Reporting	The ADEA supports the change in routine laboratory HbA1c reporting from the NGSP % units to International Federation of Clinical Chemists (IFCC) units (mmol/mol). To view ADEA's position statement - **TBA**
Individualisation of HbA1c targets for Adults with Diabetes Mellitus.	To view or download the full version of this guideline, please click here To view or download the short version, please click here
Subcutaneous Devices / Techniques	
ADEA Clinical Guiding Principles for Subcutaneous Injection Technique	The ADEA Clinical Guiding Principles for Subcutaneous Injection Technique identifies a number of broad clinical issues including optimal needle length and angle of needle insertion for children/adolescents and adults of varying anatomical size. These clinical recommendations reinforce the importance of documenting the process of teaching and reviewing injection technique. To view or download your copy, please - **TBA**
Use of subcutaneous insulin delivery devices	This position statement outlines ADEA recommendations for use of subcutaneous insulin delivery devices. To view or download your copy, please - **TBA**
Australian New Zealand (ANZ) Forum for Injection Technique & Therapy Expert Recommendations (FITTER)	ANZ FITTER Speaker Presentation Slides: Introduction to FITTER Presentation – Prof Glen Maberly IT in Adults & AU ITQ Findings – Michelle Robins IT In Children – Prof Paul Hofman NZ Perspective & IT Trends – Dr Helen Snell & Dr Brandon Orr-Walker The Role of General Prac in IT Education for Patients – Dr Kean-Seng Lim… The Role of Pharmacy in IT Education for Patients – Teresa Di Franco
Driving	
ADEA Fitness to Drive	The goal of the roll out of *the Support for Health Professionals in the assessment of a person with diabetes and their fitness to drive program* is to ensure a large percentage of health professionals are exposed to the online program and are aware of their obligations under AustRoad's *Assessing Fitness to Drive for commercial and private drivers; Medical Standards for Licensing and Clinical Management Guidelines*. Templates have been developed to assist general practice in implementing discussions around diabetes and driving during consultations: Rich text format template - **TBA** Rich text format template - **TBA**

Assessing Fitness to Drive	The National Transport Commission and Austroads have released Assessing Fitness to Drive 2016, a new edition of national medical standards for driver licensing. To view or download a copy, please click here
Driving and Diabetes in Australia Booklet	To view or download a copy please click here
Driving and Recent Severe Hypoglycaemia Flyer	To view or download a copy, please click here
ADS Position Statement on Insulin-requiring diabetes and recreation diving	To view or download your copy, please click here
Workplace	
An Employee's Guide to Diabetes in the Workplace	This booklet was developed in response to questions, concerns and suggestions Diabetes Australia received from members of the diabetes community about diabetes in the workplace. To view or download your copy, please click here
Diabetes Victoria Diabetes in the Workplace	Diabetes Victoria have developed booklets about diabetes in the workplace for people with diabetes, their employees and co-workers. To access these booklets and additional information from Diabetes Victoria click here or click below to view or download your PDF copy of a specific booklet. • An employer's guide to diabetes in the workplace (PDF) • An employee's guide to diabetes in the workplace (PDF) • Diabetes in the workplace: explanatory notes for health professionals (PDF) • Diabetes in the workplace checklist (PDF)
NDSS	
Blood Glucose Test Strip Six Month Approval – NDSS	To download your copy, please click here
Medication Change Form – NDSS	To download your copy, please click here
Registration Form - NDSS	To download your copy, please click here
Personal Details Update Form - NDSS	To download your copy, please click here
Insulin Pump Consumables Assessment Form - NDSS	To download your copy, please click here
Continuous Glucose Monitoring Eligibility Assessment Form – NDSS	To download your copy, please click here
Continuous Glucose Monitoring Update or Termination Form – NDSS	To download your copy, please click here
NDSS Resource Library	To access resources, please click here
Diabetes Related Organisations In Australia	
• Australian Diabetes Society • Australian Diabetes Educators Association • Diabetes Australia	

- National Diabetes Services Scheme
- National Association of Diabetes Centres

Diabetes Australia Position Statements	To view or download all current Diabetes Australia position statements, please click here

Australian Government Departments

- Australian Department of Health
    - BPDC 2016 Minister for Health Presentation – Priorities for the Government in Health can be viewed at https://www.youtube.com/watch?v=w-0QRgDlSS8
- Australian Institute of Health and Welfare
- Federation of Ethnic Communities Council Australia
- Healthdirect Australia
- Food Standards Australia and New Zealand
- Medicare Australia
- National Health and Medical Research Council (NH&MRC)
- Pharmaceutical Benefits Scheme
- Therapeutic Goods Administration

Professional Associations & Organisations

- Australian Diabetes Society (ADS)
- Australian Diabetes Educators Association (ADEA)
- Australian Medicare Local Alliance (AMLA) - formerly AGPN
- Australian Practice Nurses Association (APNA)
- Australasian Diabetes In Pregnancy Society (ADIPS)
- Australasian Paediatric Endocrine Group (APEG)
- Australasian Podiatry Council
- Cancer Council Australia
- Dietitians Association of Australia
- National Heart Foundation
- Kidney Health Australia
- National Aboriginal Community Controlled Health Organisation
- National Stroke Foundation
- Optometrists Association of Australia
- Palliative Care Australia
- Pharmaceutical Society of Australia
- The Royal Australian College of General Practitioners
- Pharmacy Guild of Australia

International Diabetes Associations

- International Diabetes Federation
- American Diabetes Association
- Canadian Diabetes Association
- Diabetes New Zealand
- Diabetes United Kingdom
- Glycosmedia

Support

- Children with Diabetes (part of the Johnson & Johnson Diabetes Franchise)
- Diabetes Counselling Online
- Munted Pancreas
- Reality Check Inc.
- Diabetes and Emotional Health Handbook and Toolkit

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