



Scottish Diabetes Survey 2013

Scottish Diabetes Survey Monitoring Group

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Foreword

The Scottish Diabetes Survey 2013 data reflects many aspects of the quality of diabetes care across the whole of Scotland.

The information in this Survey is a powerful tool for the diabetes community. The diabetes Managed Clinical Network in each NHS Board in particular, will find it useful in helping identify what is needed to further improve the quality of diabetes care.

Research is also a key aspect of informing high quality diabetes care. The data collected will continue to be used for epidemiological research providing key information to help develop and plan services and improve outcomes for people living with diabetes across Scotland. Throughout 2012/2013 alone we have used these data to improve our understanding of the epidemiology of cardiovascular disease in Type 1 Diabetes, changes in amputation rates for those with diabetes and diabetic retinopathy in our population. We have also improved our understanding of hospital admission in those with diabetes and the link to diabetes control.

These data have also stimulated a recognition that we need to improve type 1 diabetes control in Scotland. Two national meetings have already taken place to develop plans to improve care locally using improvement methodology as this has already been successful in some units.

Our data linkage work has also proven very useful in identifying those with diabetes in hospital and this will aid the improvement work that is being developed with the support of the Scottish Government and Healthcare Improvement Scotland.

The quality and the completeness of the data included within the Survey continue to improve. Most of the data contained in the Survey is extracted from our national award-winning diabetes IT system SCI-DC. Progress is gradually being made in the introduction of an updated version (SCI-Diabetes). Data on SCI-Diabetes can also be viewed by GP practices and hospitals and now, through our “My Diabetes My Way” website (<http://www.mydiabetesmyway.scot.nhs.uk>), people who have registered can review their own data to support them self-manage their diabetes.

Once again the Survey now includes graphs and charts that will enable each Board to quickly review their performance in comparison to 2012 and against the Scottish average.

As in previous years, the Survey shows an ongoing increase in the prevalence of diabetes without a definite increase in the incidence of Type 2 Diabetes. The Survey also illustrates some significant improvements in diabetes care:

More people than ever before have had an HbA1c recorded and are accessing retinopathy screening.

There is an increase in the percentage of people with type 1 and type 2 diabetes with good blood pressure.

The Survey also identifies a number of ongoing challenges for NHS Scotland:

The number of people with diabetes continues to increase, presenting greater organisational and resource pressures.

The Survey reports that 39.3% of people with type 1 diabetes have poor glycaemic control.

While the overall screening for retinopathy has slightly improved, screening for retinopathy is better for people with type 2 diabetes, than for people with type 1 diabetes. Almost one in five people with type 1 diabetes do not have a record of eye screening within the last 15 months.

There remains significant variation between different NHS Boards in the collection of Survey data and the outcomes achieved.

NHS Boards will wish to address these issues through their diabetes Managed Clinical Networks where appropriate.

We have also led an international comparison of Type 1 diabetes control that has been presented at the European Association for the Study of Diabetes Meeting 2013, to share learning with a view to improve services.

The Survey will also assist the Scottish Diabetes Group to understand progress with the Scottish Diabetes Action Plan and to identify priorities for a refreshed Action Plan. We therefore expect to build on the messages the Survey gives us to further improve the quality of diabetes care in Scotland and help ensure that people with diabetes in Scotland receive world class safe, effective and person centred care.

John A McKnight

Chairman

Scottish Diabetes Survey Monitoring Group

Executive Summary

This report presents the results of the 2013 Scottish Diabetes Survey. The survey¹ collates information submitted by all 14 NHS Boards and provides data on the number of people with diabetes, the effects on their health, and the progress being made to improve the delivery and outcomes of care for diabetes. In this survey, we report separately on those with type 1 and type 2 diabetes.

In this Scottish Diabetes Survey 2013, we report that:

- There were 268,154 people diagnosed with diabetes in Scotland recorded on local diabetes registers at the end of 2013. This represents 5.0% of the population;
- Crude prevalence of diabetes ranged from 4.34% to 5.80% across NHS Boards (Table 1);
- 88.2% (236,605) of all people registered with diabetes had type 2 diabetes (Table 15);
- 10.9% of all registered people had type 1 diabetes. The number of people registered with type 1 diabetes increased from 26,294 in 2006 to 29,261 in 2014;
- 0.85% (2,288) were recorded as having “other” types of diabetes, including maturity onset diabetes of the young (MODY) and those with unknown diabetes type (Table 15);
- 37.5% of patients with a recorded BMI and type 1 diabetes and 31.8% of those with a recorded BMI and type 2 diabetes were overweight (BMI 25-30kg/m²), while 24.8% of those with type 1 and 55.0% of those with type 2 were obese (BMI 30kg/m² or above, Tables 22 and 23);
- 88.7% (type 1) and 93.9% (type 2) had an HbA_{1c} recorded in the previous 15 months. Of these, 21.5% and 61.1% had a result < 58mmol/mol (7.5%), the target reported in previous surveys (Tables 25, 26 and 27);
- 86.8% of those with type 1 and 94.9% of those with type 2 diabetes had their blood pressure recorded in the previous 15 months. Of these, 47.6% and 33.8% respectively had a systolic BP measurement of ≤ 130/80 mmHg (Tables 35, 39 and 41; Figures 18 and 20);
- Cholesterol was recorded in 91.0% of patients within the previous 15 months, and the target of ≤5 mmol/l was achieved in 71.3% of those with type 1 and 80.8% of those with type 2 diabetes (Tables 45 and 46);
- 23.5% (type 1) and 18.1% (type 2) were current smokers (tables 50 and 51);
- 1,060 (3.6%) of those with type 1 and 23,546 (10.0%) of those with type 2 diabetes have had a myocardial infarction and survived, and 2.6% and 7.3% respectively have undergone cardiac revascularisation (tables 53 and 55);
- 357 (1.2%) of those with type 1 and 1210 (0.5%) of those with type 2 diabetes have a record of having end stage renal failure (Table 62);
- 86.7% of people with diabetes had had eye screening in the previous 15 months (Table 63);

- 55.9% of patients with type 1 diabetes and 69.7 of those with type 2 had their foot scores recorded in the previous 15 months (Table 66 and 67);
 - 334 (1.1%) of those with type 1 and 1730 (0.7%) of those with type 2 diabetes have a record of having had a lower limb amputation (Table 70).
-

1 Full details of the 2013 survey questions are available at <http://www.sci-diabetes.scot.nhs.uk/wp-content/uploads/2014/04/Scottish-Diabetes-Survey-2013-Guidelines.pdf>

Prevalence

At the end of 2013 there were 268,154 people with known diabetes in Scotland recorded on local diabetes registers, which represents a crude prevalence of 5.05% of the population. In the 2012 Scottish Diabetes Survey, 258,570 people (4.92%) were known to have diabetes. The increase in reported prevalence depends on a number of factors, including:

- demographic change - diabetes is more prevalent in older people so the increasing number of older people each year increases the prevalence of diabetes
- an increase in the incidence of type 1 diabetes - we know that there has been a steady increase in the incidence of diabetes in Scottish children over the last 40 years
- better survival partly because of improved control of blood glucose, blood pressure and cholesterol level
- possibly better detection of diabetes in people with type 2 diabetes, many of whom have no symptoms

Table 1. Crude and age-adjusted prevalence of diabetes (all types), 2013, by NHS Board, ranked by age adjusted prevalence.

NHS Board	Population	Number on diabetes register at end of 2013	Crude prevalence	Age adjusted prevalence
Western Isles	27560	1310	4.75%	4.08%
Orkney	21530	1049	4.87%	4.37%
Highland	319811	15780	4.93%	4.42%
Shetland	23210	1035	4.46%	4.44%
Borders	113707	6031	5.30%	4.53%
Lothian	843733	36586	4.34%	4.74%
Grampian	573420	26380	4.60%	4.75%
Dumfries and Galloway	150828	8716	5.78%	4.88%
Tayside	411749	21428	5.20%	4.90%
Forth Valley	299099	15282	5.11%	5.13%
Fife	366219	19810	5.41%	5.25%
Ayrshire and Arran	373189	21630	5.80%	5.32%
Greater Glasgow and Clyde	1217025	61647	5.07%	5.35%
Lanarkshire	572520	31470	5.50%	5.59%
Scotland	5,313,600	268,154	5.05%	

Variation between NHS Boards also depends on deprivation, the age and the ethnic distribution of the population of each Board. However the broad similarity of reported prevalence, compared to some previous years, gives confidence in the completeness of recording. The increased prevalence in recent years is likely to be real rather than because of better reporting.

Table 2. Crude prevalence of diabetes for patients aged 65 and over (all types), 2013, by NHS Board, ranked by prevalence.

NHS Board	Aged ≥ 65 (n)	Aged ≥ 65 with Diabetes	Prevalence in those aged ≥ 65
Western Isles	6,176	732	11.9%
Shetland	3,982	531	13.3%
Highland	65,203	8,738	13.4%
Orkney	4,450	599	13.5%
Borders	24,936	3,528	14.1%
Lothian	129,370	18,453	14.3%
Dumfries and Galloway	34,337	4,973	14.5%
Grampian	94,041	13,885	14.8%
Tayside	80,354	12,040	15.0%
Ayrshire and Arran	74,583	11,446	15.3%
Greater Glasgow and Clyde	194,992	30,101	15.4%
Forth Valley	51,466	8,007	15.6%
Fife	67,153	10,647	15.9%
Lanarkshire	94,708	15,578	16.4%
Scotland	925,751	139,258	15.0%

Age adjusted prevalence is based on direct age/sex standardisation using the Scottish population as the reference population structure. Population figures are based on mid-year population estimates published by National Records of Scotland (formerly GRO(S)). Because of publication dates surveys have in each case used population figures for the previous year - so that the 2013 survey uses diabetes data from 2013 but population estimates from 2012. This will lead to a very small overestimate of diabetes prevalence.

Differences in prevalence are due to a number of factors. One is age - type 2 diabetes is more common in older age groups so the age structure of an area will affect the crude

prevalence. A health board area with an older population will have a higher crude prevalence; e.g. the crude (unadjusted) prevalence of diabetes in Dumfries & Galloway is 12.7% above the Scottish average; however when the figure is adjusted for the age of the population, the Dumfries & Galloway prevalence is actually lower than the Scottish average. Other reasons for differences in observed prevalence are given at the start of this section.

Figure 1. Crude diabetes prevalence (all types) by NHS Health Board, Scotland, 2013.
Vertical capped lines show 95% confidence intervals.

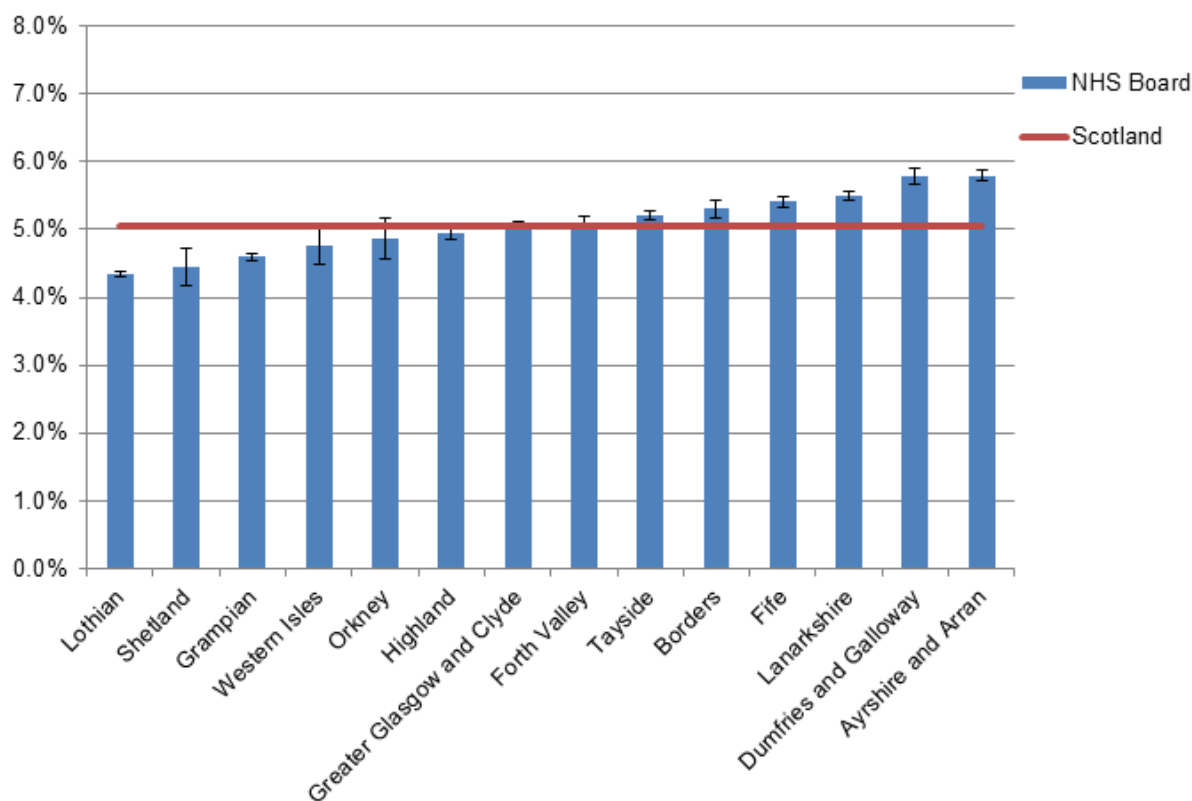


Figure 2. Age-adjusted diabetes prevalence (all types) by NHS Health Board, Scotland, 2013, ranked by prevalence. Vertical lines show 95% confidence intervals.

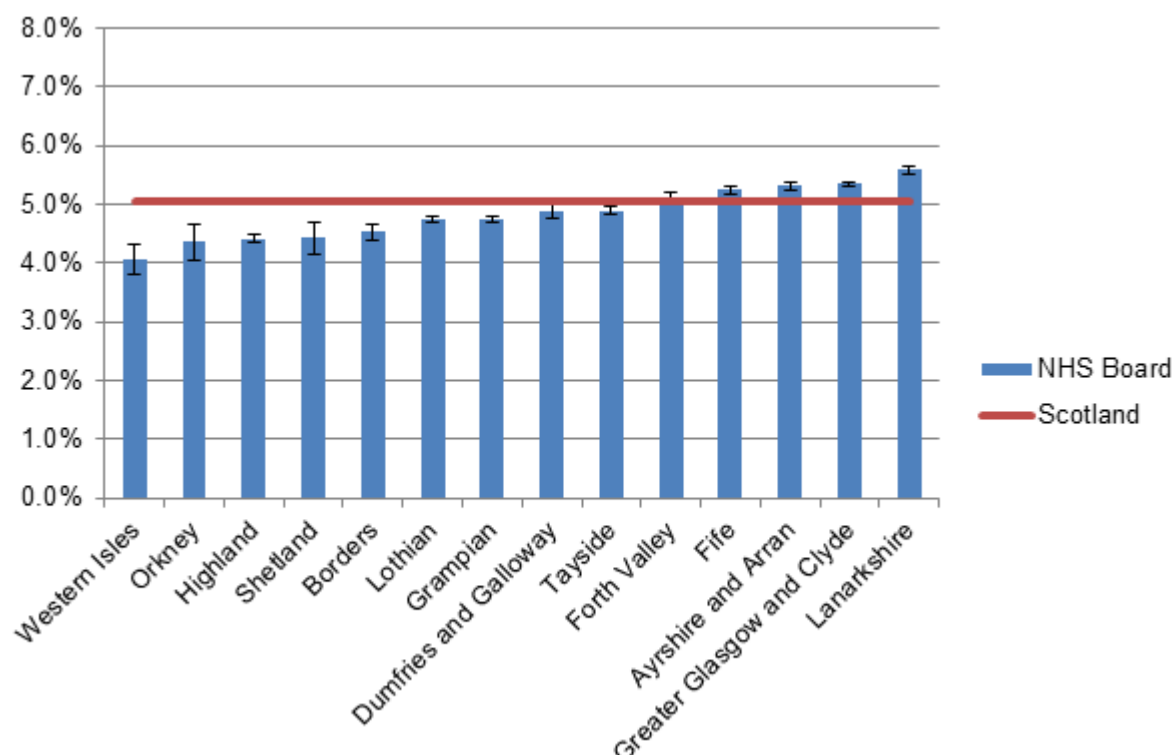


Table 1 and Figures 1 and 2 show both crude and age-adjusted figures for the prevalence of diabetes of all types in 2013. The age-adjusted figures take account of the fact that the average age differs between boards and that older populations have higher diabetes prevalence. Table 2 shows that the prevalence of diabetes is particularly high among those aged 65 and over.

Note: These are crude incidence figures that have been calculated retrospectively using SCI-Diabetes data and therefore may be slightly affected by factors such as post-survey patient migration and on-going validation of diabetes classification.

Figure 3. Number of people with all types of diabetes in each NHS Health Board in 2013.

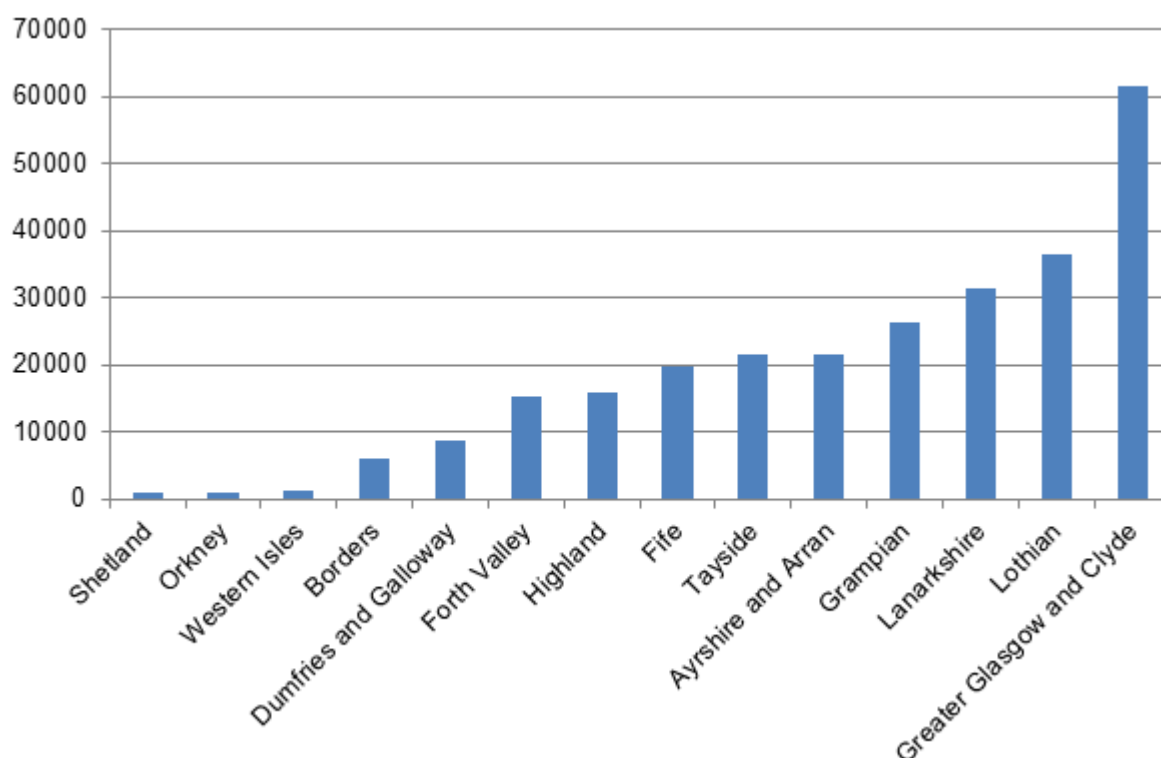


Figure 4. Number of people recorded with diabetes (all types), Scotland 2001 – 2013.

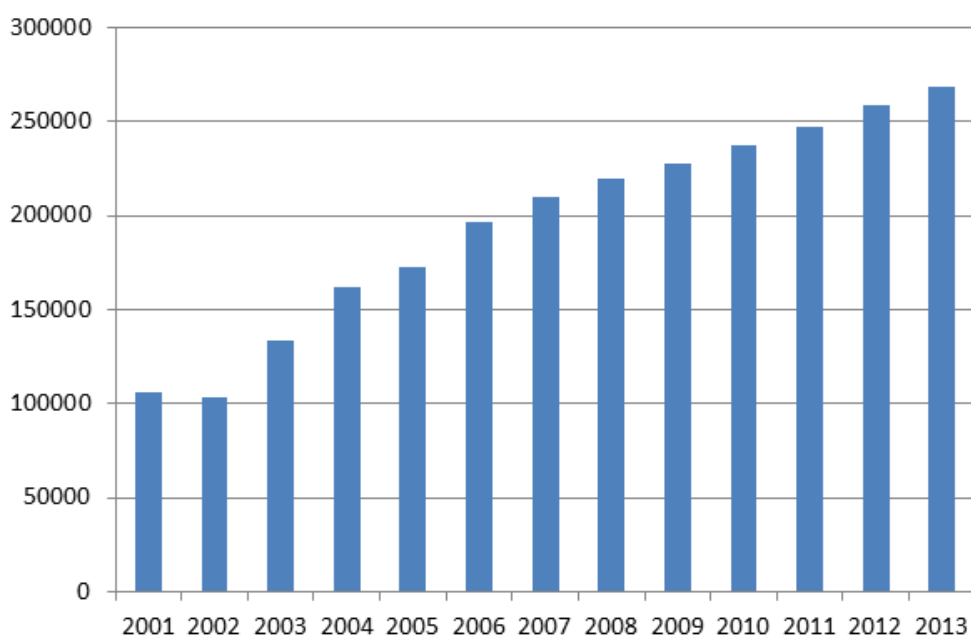


Table 3. Number of people with diabetes, crude prevalence of diabetes and changes in numbers/proportions, compared to previous years (2007-2013).

Survey	Diabetes register	Crude prevalence	Increase	(%) Increase	Absolute increase
2013	268,154	5.05%	9,584	3.71%	0.13%
2012	258,570	4.92%	11,292	4.57%	0.18%
2011	247,278	4.74%	9,810	4.13%	0.16%
2010	237,468	4.57%	9,464	4.15%	0.16%
2009	228,004	4.41%	8,041	3.66%	0.14%
2008	219,963	4.28%	10,257	4.89%	0.18%
2007	209,706	4.10%	12,905	6.56%	0.24%

Table 4. Type 1 diabetes: number of new cases and incidence rate (per 100,000 population per year) of by age, Scotland 2009-2013.

Age	2009		2010		2011		2012		2013		
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Population	Cases	Rate
0 to 4	148	27	145	26	166	29	66	22	295,871	51	17
5 to 9	258	41	268	43	244	40	137	50	275,541	88	32
10 to 14	168	24	177	25	205	29	152	54	281,597	125	44
15 to 19	145	22	127	20	129	20	110	35	319,783	104	33
20 to 29	92	12	93	12	114	14	96	12	717,689	159	22
30 to 39	71	11	69	10	63	9	66	9	654,970	82	10
40 to 49	44	8	50	9	37	6	43	7	795,765	74	10
50 to 59	28	5	29	5	15	2	18	3	723,995	36	6
60 to 69	954	18	958	18	973	19	978	19	608,370	18	3
Over 69									640,019		
Total	954	18	958	18	973	19	978	19	5,313,600	848	16

Table 5. Type 1 diabetes: incidence rate (per 100,000 population per year) of by age, Scotland 2007-2013.

Age range	2007	2008	2009	2010	2011	2012	2013
<10	22	24	27	26	29	36	24
10-19	44	42	41	43	40	44	38
20-29	26	24	24	25	29	24	22
30-39	24	21	22	20	20	18	17
40-49	19	16	12	12	14	12	10
50-59	10	8	11	10	9	9	10
60-69	6	10	8	9	6	7	6
>=70	6	4	5	5	2	3	3
Total	20	19	18	18	19	19	16

Table 6. Type 2 diabetes: number of new cases and incidence rate (per 100,000 population per year) by age, Scotland 2009-2013

Age	2009		2010		2011		2012		2013		
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Population	Cases	Rate
Under 10	2	0	0	0	0	0	0	0	571,412	1	0
10 to 19	22	4	18	3	10	2	21	3	601,380	8	1
20 to 29	164	24	166	24	163	23	208	29	717,689	178	25
30 to 39	797	120	755	116	730	113	939	146	654,970	810	124
40 to 49	2,667	335	2555	321	2552	322	2733	347	795,765	2,570	323
50 to 59	4411	653	4787	629	4106	595	4567	650	723,995	4,387	606
60 to 69	5286	944	4870	851	4741	814	4943	833	608,370	5,023	826
Over 69	5286	867	4925	799	4667	747	4596	729	640,019	4,876	762
Total	18627	360	17576	338	16969	325	18007	343	5,313,600	17,853	336

Table 7. Type 2 diabetes: incidence rate (per 100,000 population per year) of by age, Scotland 2007-2013.

Age range	2007	2008	2009	2010	2011	2012	2013
<10	0	0	0	0	0	0	0.
10-19	4	3	4	3	2	3	1
20-29	23	24	24	24	23	29	25
30-39	101	127	120	116	113	146	124
40-49	304	310	335	321	322	347	323
50-59	608	628	653	629	595	650	606
60-69	955	917	944	851	814	833	826
>=70	835	874	867	799	747	729	761.85
Total	339	350	360	338	325	343	335.99

Table 8. Type 1 diabetes: number of new cases of and crude incidence rate for all ages (cases per 100,000 population per year) by NHS Board, 2009-2013, ranked by rate in 2013.

NHS Board	2009		2010		2011		2012		2013	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Orkney	2	10	4	20	5	25	3	15	0	0
Shetland	5	23	6	27	3	13	4	18	1	4
Fife	56	16	53	15	80	22	63	17	47	13
Dumfries and Galloway	29	20	26	18	20	13	20	14	21	14
Borders	16	14	20	18	17	15	20	18	16	14
Grampian	115	21	123	23	117	21	90	17	88	15
Greater Glasgow and Clyde	218	18	205	17	221	18	228	19	187	15
Lanarkshire	127	23	103	18	110	20	110	20	88	15
Tayside	57	14	71	18	58	14	73	18	65	16
Ayrshire and Arran	70	19	69	19	68	19	79	22	64	17
Forth Valley	50	17	64	22	61	21	70	24	52	17
Lothian	136	17	155	19	136	16	153	18	152	18
Western Isles	4	15	6	23	3	11	9	35	5	18
Highland	69	22	53	17	74	24	49	16	62	19
Scotland	954	18	958	18	973	19	978	19	848	16

Table 9. Type 1 diabetes: crude incidence rate of new cases for all ages (cases per 100,000 population per year) by NHS Board, 2009-2013, ranked by rate in 2013.

NHS Board	2007	2008	2009	2010	2011	2012	2013
Orkney	15	30	10	20	25	15	0
Shetland	14	18	23	27	13	18	4
Fife	22	17	15	15	22	17	13
Dumfries and Galloway	16	16	20	18	13	14	14
Borders	19	17	14	18	15	18	14
Grampian	15	19	21	23	21	17	15
Greater Glasgow and Clyde	21	18	18	17	18	19	15
Lanarkshire	25	19	23	18	20	20	15
Tayside	18	19	14	18	14	18	16
Ayrshire and Arran	21	20	19	19	19	22	17
Forth Valley	17	21	17	22	21	24	17
Lothian	23	18	17	19	16	18	18
Western Isles	15	19	15	23	11	35	18
Highland	14	21	22	17	24	16	19
Scotland	20	19	18	18	19	19	16

Table 10. Type 2 diabetes: number of new cases and crude incidence rate for all ages (cases per 100,000 population per year) by NHS Board, 2009-2013, ranked by rate in 2013.

NHS Board	2009		2010		2011		2012		2013	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Shetland	74	337	75	338	82	366	51	227	51	220
Lothian	2211	270	1988	241	2191	262	2271	268	2303	273
Highland	1136	367	1122	361	1010	325	1035	332	1023	320
Western Isles	96	366	101	386	71	271	75	288	90	327
Forth Valley	970	334	973	334	876	299	1051	356	981	328
Tayside	1614	407	1670	418	1544	383	1440	355	1352	328
Borders	411	366	428	380	384	340	448	396	385	339
Dumfries and Galloway	669	450	589	397	573	387	563	380	514	341
Greater Glasgow and Clyde	4039	338	3952	330	3801	316	4131	341	4159	342
Grampian	2063	382	1721	316	1596	290	1866	336	1995	348
Ayrshire and Arran	1660	425	1521	414	1545	421	1570	428	1315	352
Fife	1315	363	1296	357	1235	338	1363	371	1397	381
Lanarkshire	2302	410	2081	370	1976	351	2083	370	2197	384
Orkney	67	337	59	296	85	423	61	303	91	423
Scotland	18627	360	17576	338	16969	325	18008	343	17853	336

Table 11. Type 2 diabetes: crude incidence rate for all ages (cases per 100,000 population per year) by NHS Board, 2009-2013, ranked by rate in 2013.

NHS Board	2007	2008	2009	2010	2011	2012	2013
Shetland	238	287	337	338	366	227	220
Lothian	310	281	270	241	262	268	273
Highland	335	348	367	361	325	332	320
Western Isles	323	327	366	386	271	288	327
Forth Valley	320	330	334	334	299	356	328
Tayside	350	380	407	418	383	355	328
Borders	380	384	366	380	340	396	339
Dumfries and Galloway	359	378	450	397	387	380	341
Greater Glasgow and Clyde	322	348	338	330	316	341	342
Grampian	329	336	382	316	290	336	348
Ayrshire and Arran	390	445	452	414	421	428	352
Fife	352	363	363	357	338	371	381
Lanarkshire	382	371	410	370	351	370	384
Orkney	369	388	337	296	423	303	423
Scotland	339	350	360	338	325	343	336

Undiagnosed diabetes

Estimates of undiagnosed diabetes in Scotland were included in the 2011 Scottish Diabetes Survey. These were based on the Association of Public Health Observatories (APHO) prevalence model. However the model does not provide updated figures for 2012/13, so the previously published estimates shown in the 2011 survey report should be used. More details are available at:

<http://www.scotpho.org.uk/health-wellbeing-and-disease/diabetes/data/undiagnosed-diabetes>

Duration of Diabetes

The date of diagnosis was recorded for almost 100% of patients, of which 7% have had diabetes for less than one year and 9.6% have a record of having had diabetes for 20 years or more (although it should be noted that dates of diagnosis >50 years ago are unreliable).

Table 12. Duration of diabetes (years since diagnosis) by type of diabetes, Scotland, 2013.

Duration (Years)	Type 1 diabetes		Type 2 diabetes		T1 and T2 diabetes	
	Number of patients	Percentage	Number of patients	Percentage	Total numbers	Total percentage
< 1	844	2.9%	17,659	7.5%	18,503	7.0%
1-4	3,657	12.5%	67,025	28.3%	70,682	26.6%
5-9	4,279	14.6%	68,264	28.9%	72,543	27.3%
10-14	4,459	15.2%	47,002	19.9%	51,461	19.4%
15-19	3,569	12.2%	18,950	8.0%	22,519	8.5%
20-24	3,187	10.9%	8,455	3.6%	11,642	4.4%
25-29	2,403	8.2%	3,235	1.4%	5,638	2.1%
30-34	2,109	7.2%	1,185	0.5%	3,294	1.2%
35-39	1,525	5.2%	441	0.2%	1,966	0.7%
40-44	1,074	3.7%	238	0.1%	1,312	0.5%
45-49	614	2.1%	123	0.1%	737	0.3%
≥50	1,531	5.2%	3,973	1.7%	5,504	2.1%
Total	29,251	100.0%	236,550	100.0%	265,801	100.0%

Note: Excludes patients where date of diagnosis not known (Type 1 = 19; Type 2 = 141).

Sex

A greater proportion of those with diagnosed diabetes are male; 56.10% of those with type 1 diabetes and 55.48% of those with type 2 diabetes. This proportion has remained approximately stable since the survey started in 2001.

Age

Type 2 diabetes is more common in older people; 135,090 (57.1%) of all the people whose data are recorded in the survey are aged 65 years or older. Figures 5 and 6 show the age distribution of people with diabetes compared with that of the general population; the possibility that type 2 diabetes is developing in people at a younger age is currently under investigation. This may have long-term implications for the NHS, because they will have diabetes for long enough to develop complications such as renal failure.

Figure 5. Type 1 diabetes: age distribution of people recorded compared with age distribution of general population), Scotland, 2013.

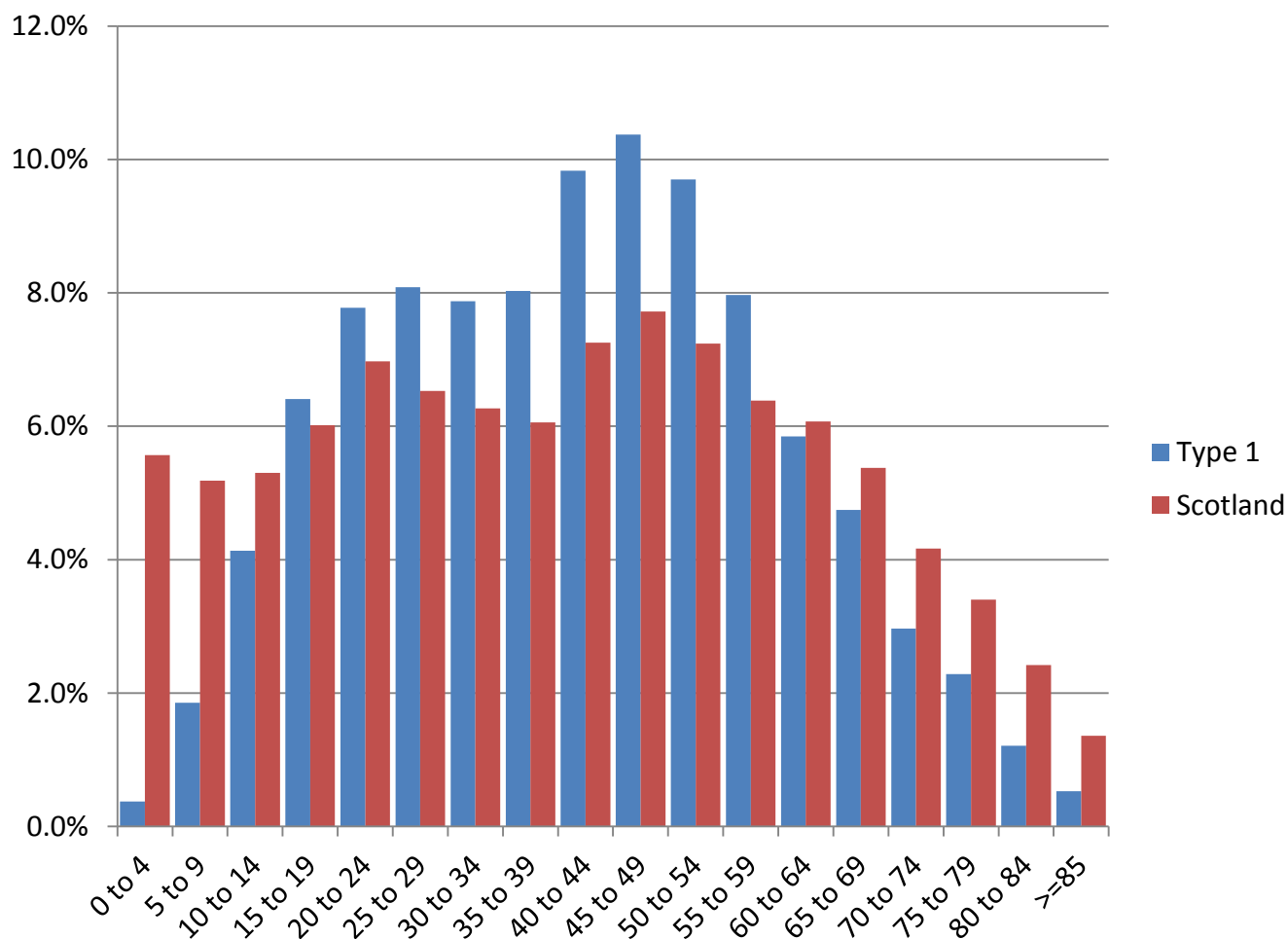


Figure 6. Type 2 diabetes: age distribution of people recorded compared with age distribution of general population, Scotland, 2013.

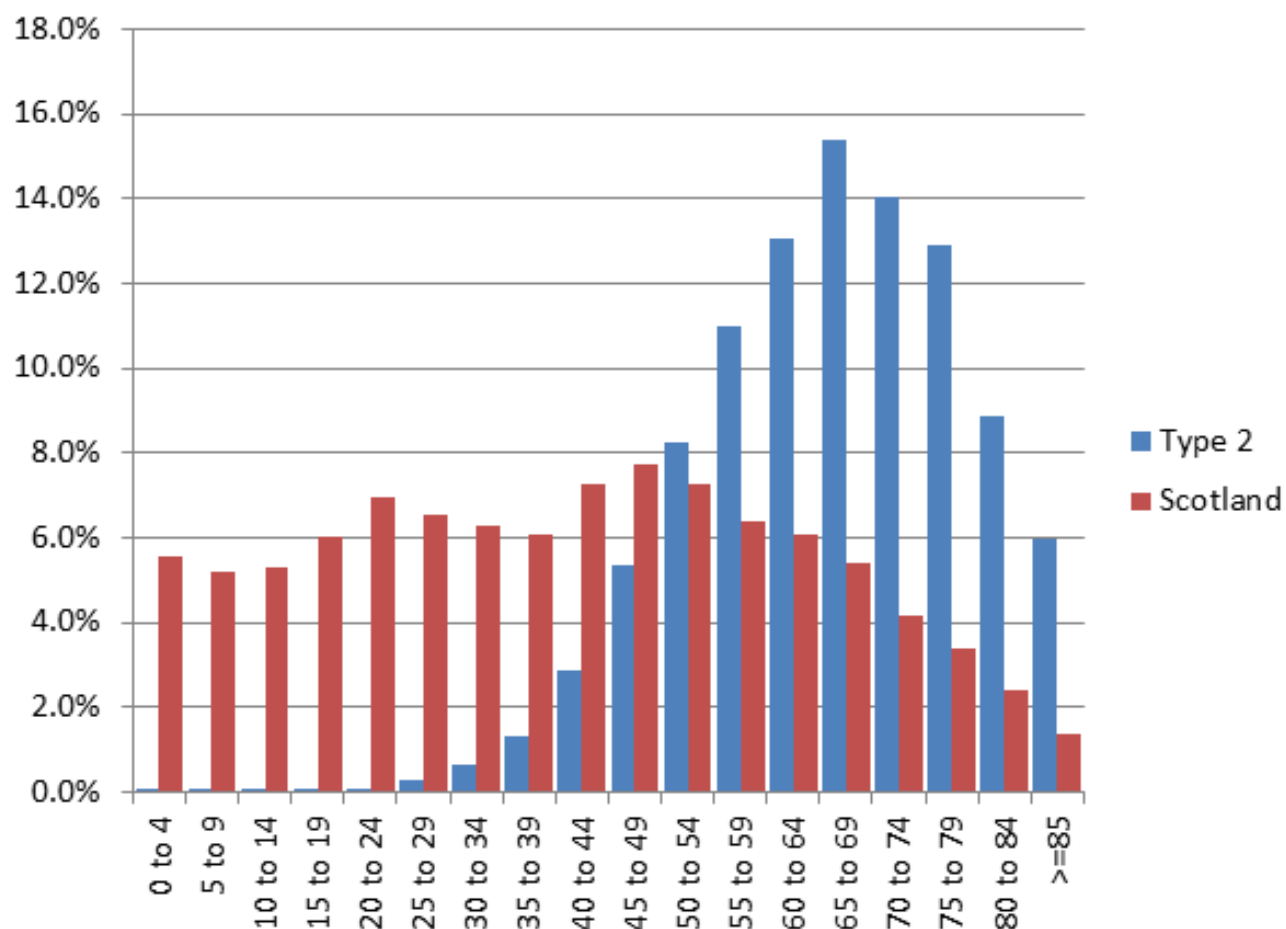


Table 13. Age group of people recorded with type 1 or type 2 diabetes, percentage in each age group and cumulative percentage in each age group, by diabetes type.

Age	Type 1 diabetes			Type 2 diabetes		
	Number	Percentage	Cumulative Percentage	Number	Percentage	Cumulative Percentage
0-4	109	0.4%	0.4%	5	0.0%	0.0%
5-9	542	1.9%	2.2%	1	0.0%	0.0%
10-14	1,209	4.1%	6.4%	13	0.0%	0.0%
15-19	1,873	6.4%	12.8%	45	0.0%	0.0%
20-24	2,274	7.8%	20.5%	227	0.1%	0.1%
25-29	2,363	8.1%	28.6%	619	0.3%	0.4%
30-34	2,302	7.9%	36.5%	1,580	0.7%	1.1%
35-39	2,347	8.0%	44.5%	3,143	1.3%	2.4%
40-44	2,874	9.8%	54.4%	6,739	2.8%	5.2%
45-49	3,032	10.4%	64.7%	12,612	5.3%	10.6%
50-54	2,836	9.7%	74.4%	19,539	8.3%	18.8%
55-59	2,330	8.0%	82.4%	26,024	11.0%	29.8%
60-64	1,710	5.8%	88.3%	30,859	13.0%	42.9%
65-69	1,388	4.7%	93.0%	36,342	15.4%	58.2%
70-74	867	3.0%	96.0%	33,203	14.0%	72.3%
75-79	668	2.3%	98.3%	30,507	12.9%	85.2%
80-84	354	1.2%	99.5%	20,947	8.9%	94.0%
≥85	155	0.5%	100.0%	14,091	6.0%	100.0%
Scotland	29,233	100.0%	100.0%	236,496	100.0%	100.0%

Mortality

Table 14. The number and crude percentage of the diabetes population (all diabetes types) who have died within the last year, by NHS Board, Scotland 2013, ranked by mortality.

NHS Board	Deaths	
	Total	% of population
Shetland	34	3.2%
Fife	663	3.2%
Grampian	921	3.4%
Lothian	1,275	3.4%
Western Isles	46	3.4%
Borders	213	3.4%
Greater Glasgow and Clyde	2,189	3.4%
Highland	570	3.5%
Lanarkshire	1,143	3.5%
Orkney	39	3.6%
Forth Valley	572	3.6%
Tayside	807	3.6%
Ayrshire and Arran	834	3.7%
Dumfries and Galloway	340	3.8%
Scotland	9,646	3.5%

Note: These data were calculated from all people with diabetes who died in the prior year expressed as a percentage of all people with diabetes still alive at the end of the year plus those who died during the year. This does not take account of the fact that as people die during the year the size of the population that remains and is still at risk of death becomes very slightly smaller. As a result these figures slightly underestimate the true mortality risk. Note that comparisons between NHS Boards do not take into account important differences in age structure which result in higher mortality in boards with older populations.

Type of diabetes

The majority of registered patients had type 2 diabetes (236,605 or 88.2%). The proportion of people with diabetes who have a record of type 1 diabetes has fallen from 18.2% in 2002 to 10.9% in 2013, probably largely due to more complete recording of data from people with type 1 diabetes than type 2 diabetes in earlier years. However, the absolute number of patients with type 1 diabetes continues to increase (22,597 in 2003; 29,261 in 2013). This reflects the rising incidence of type 1 diabetes in children and better survival over the last 40 years. We know from a series of studies of incidence that it has been rising by 2-3% a year since 1968.

Other types of diabetes include Maturity Onset Diabetes of the Young (MODY), gestational diabetes and secondary diabetes. The remainder of this report focuses on type 1 and type 2 diabetes and excludes other types.

Figure 7 Proportions of diabetes population by type

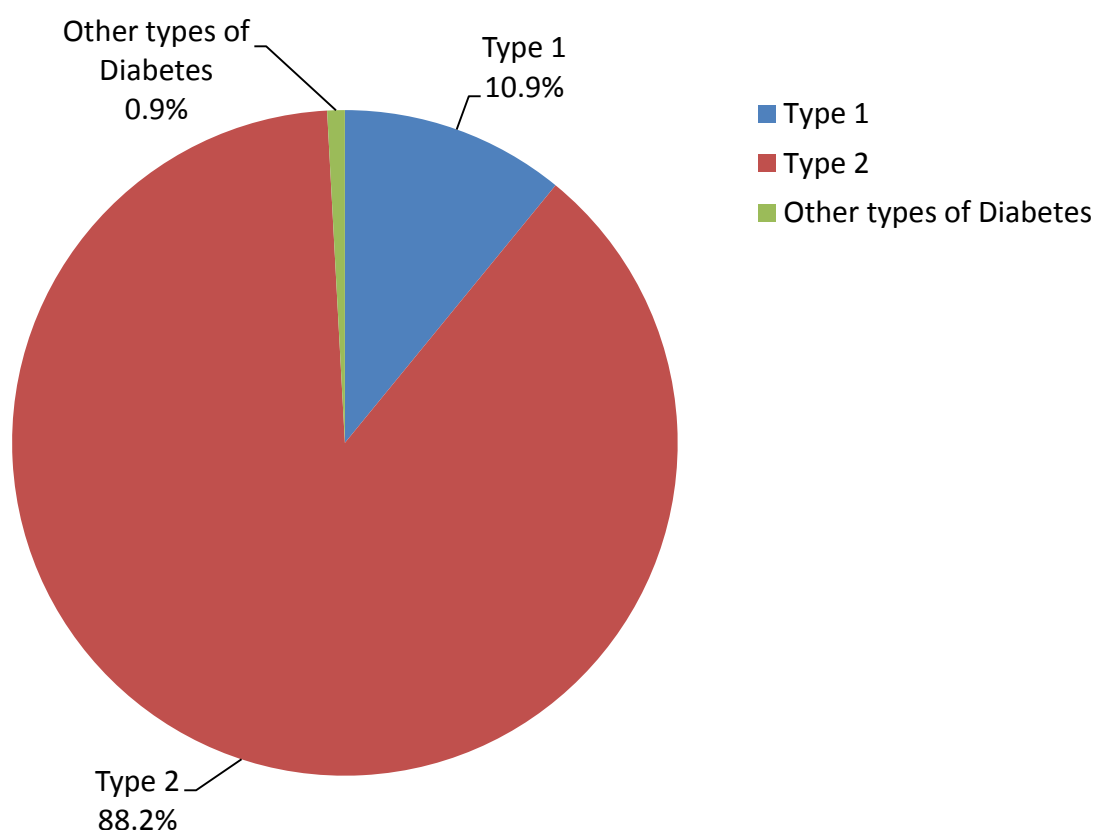


Table 15. Numbers of people with diabetes and the distribution of diabetes type, by NHS board, Scotland 2013, ranked in increasing order by the percentage with type 2 diabetes.

NHS Board	Type 1		Type 2		Other types of diabetes	Total
	Number	Percentage	Number	Percentage		
Western Isles	184	14.0%	1,122	85.6%	4	1,310
Highland	1,867	11.8%	13,701	86.8%	212	15,780
Lothian	4,372	11.9%	31,833	87.0%	381	36,586
Shetland	126	12.2%	902	87.1%	7	1,035
Grampian	3,158	12.0%	23,082	87.5%	140	26,380
Lanarkshire	3,586	11.4%	27,637	87.8%	247	31,470
Greater Glasgow and Clyde	6,464	10.5%	54,406	88.3%	777	61,647
Forth Valley	1,672	10.9%	13,521	88.5%	89	15,282
Orkney	118	11.2%	929	88.6%	2	1,049
Borders	633	10.5%	5,349	88.7%	49	6,031
Dumfries and Galloway	908	10.4%	7,738	88.8%	70	8,716
Ayrshire and Arran	2,226	10.3%	19,336	89.4%	68	21,630
Fife	1,996	10.1%	17,731	89.5%	83	19,810
Tayside	1,951	9.1%	19,318	90.2%	159	21,428
Scotland	29,261	10.9%	236,605	88.2%	2,288	268,154

Note: Percentages (of the total diabetes population) have been calculated for type 1 and type 2 diabetes only.

Ethnicity

Information on ethnic group was available for 79.2% of the registered diabetic population. The completeness of this information fell from 37% in 2002 to 24.4% in 2006, increased to 33.3% in 2007 and again to 77.7% in 2012. Type 2 diabetes is much more common in South Asian than White ethnic groups and tends to present at an earlier age.

Table 16. Type 1 diabetes: completeness of recording of ethnic group by NHS Board, Scotland, 2013, ranked in decreasing order of completeness.

NHS Board	Ethnic group identified	
	Number	Percentage
Shetland	119	94.4%
Lothian	4,043	92.5%
Forth Valley	1,535	91.8%
Greater Glasgow and Clyde	5,884	91.0%
Dumfries and Galloway	818	90.1%
Borders	561	88.6%
Fife	1,740	87.2%
Lanarkshire	3,080	85.9%
Tayside	1,577	80.8%
Orkney	92	78.0%
Highland	1,454	77.9%
Western Isles	123	66.8%
Grampian	2,043	64.7%
Ayrshire and Arran	1,378	61.9%
Scotland	24,447	83.5%

Table 17. Type 2 diabetes: completeness of recording of ethnic group by NHS board, Scotland, 2013, ranked in decreasing order of completeness.

NHS Board	Ethnic group identified	
	Number	Percentage
Shetland	858	95.1%
Greater Glasgow and Clyde	50,821	93.4%
Dumfries and Galloway	6,875	88.8%
Lanarkshire	23,961	86.7%
Forth Valley	11,578	85.6%
Lothian	26,656	83.7%
Borders	4,443	83.1%
Highland	10,651	77.7%
Tayside	14,469	74.9%
Orkney	683	73.5%
Fife	11,651	65.7%
Grampian	13,904	60.2%
Ayrshire and Arran	9,178	47.5%
Western Isles	507	45.2%
Scotland	186,235	78.7%

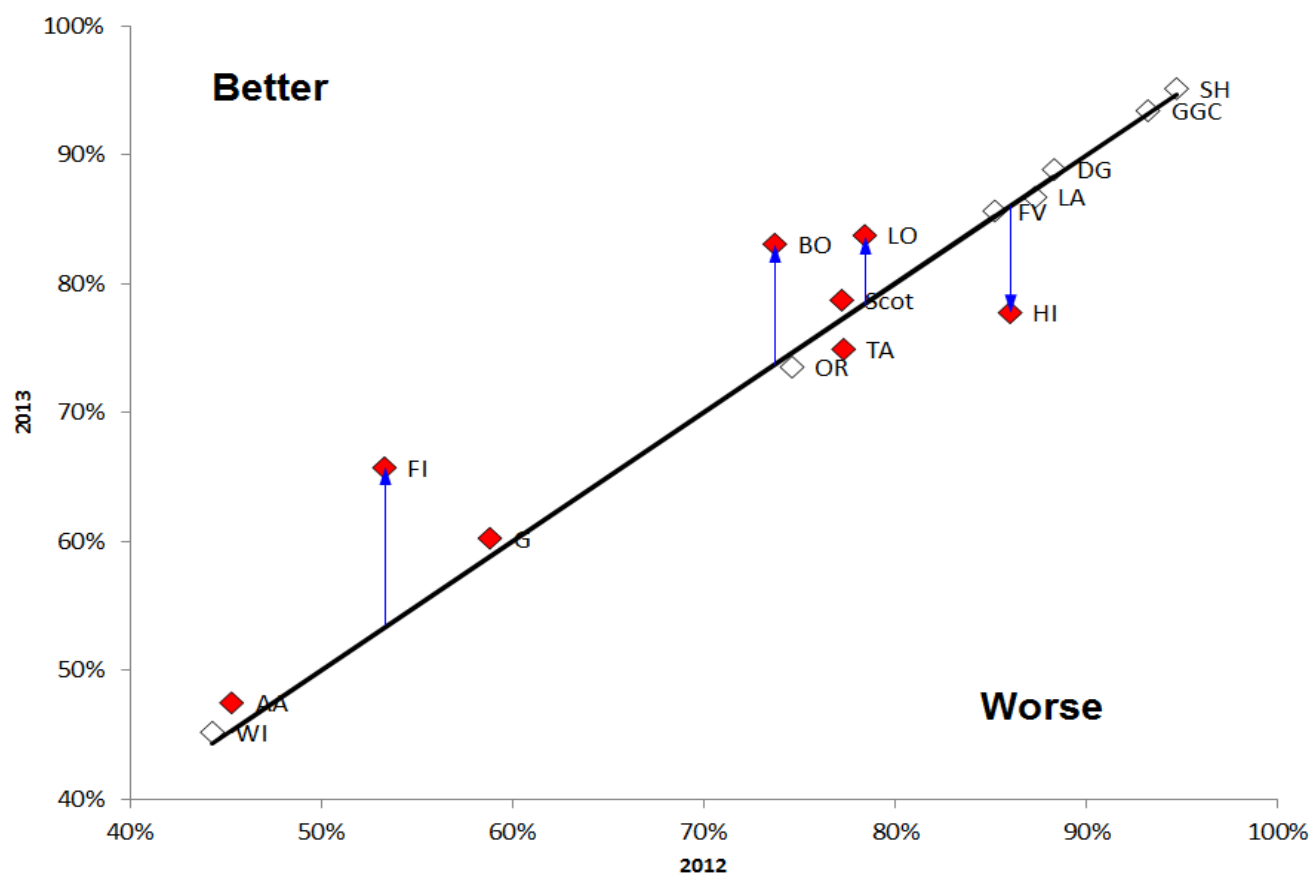
Table 18 Recorded ethnic group for type 1, type 2 and combined.

Ethnic group	Type 1		Type 2		Type 1 and 2	
	Number	Percent	Number	Percent	Number	Percent
A - White	23,373	79.9%	171,418	72.4%	194,791	73.3%
B - Mixed or multiple ethnic groups	535	1.8%	5,749	2.4%	6,284	2.4%
C - Asian, Asian Scottish or Asian British	328	1.1%	7,322	3.1%	7,650	2.9%
D - African, Caribbean or Black	95	0.3%	731	0.3%	826	0.3%
E - Other ethnic group	116	0.4%	1,015	0.4%	1,131	0.4%
Not recorded / Not known	4,814	16.5%	50,370	21.3%	55,184	20.8%

Table 19. Completeness of recording of ethnic group for Scotland, 2002-2013 (type 1 and type 2 combined).

Year	Number identified	Percentage identified
2013	210,682	79.2%
2012	199,587	77.7%
2011	190,397	77.5%
2010	164,370	69.6%
2009	126,997	56.0%
2008	94,925	43.2%
2007	69,875	33.3%
2006	48,035	24.4%
2005	42,164	25.0%
2004	44,695	30.6%
2003	49,614	37.0%
2002	32,036	30.9%

Figure 8. Completeness of recording of ethnic group from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 4% change between 2012 and 2013.



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Body Mass Index

Body Mass Index (BMI) was recorded for 88.7% of patients with type 1 or type 2 diabetes in the previous 15 months. This is a decrease from 89.2% recorded in 2012 and the same as recorded in 2011. Of those with a record of BMI, 32.3% were overweight (BMI 25-29.9kg/m²) and 52.0% were obese (BMI 30kg/m² or over).

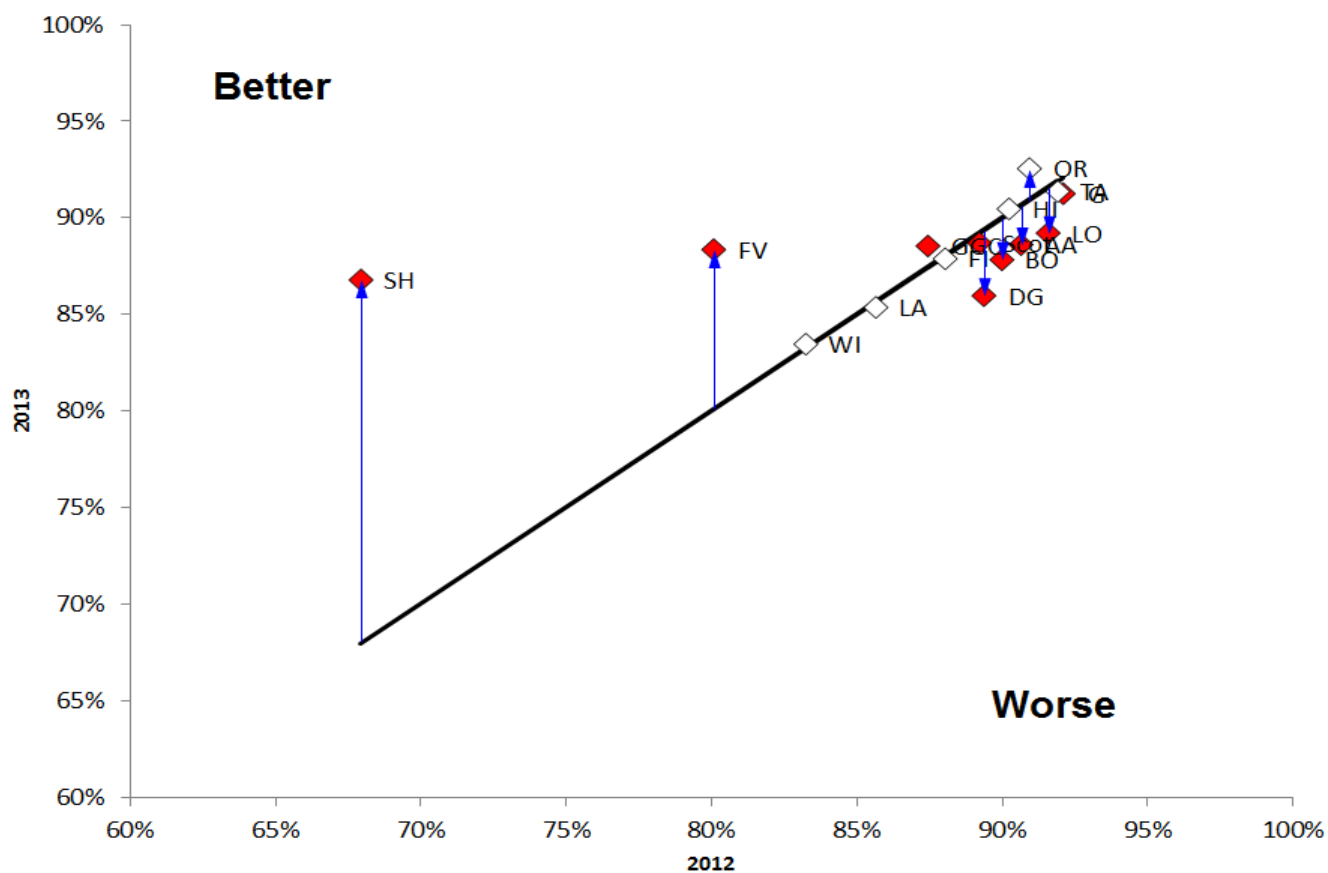
Despite type 2 diabetes being more prevalent in obese patients, 12.6% of those with type 2 diabetes had normal weight (BMI 18.5-24.9kg/m²) and 31.8% were overweight (BMI 25-29.9 kg/m²).

Table 20. Proportion of people with diabetes who had a record of BMI within the previous 15 months, by NHS Board and diabetes type, 2013, ranked by decreasing completeness for type 2.

NHS Board	Type 1 diabetes BMI percentage recorded	Type 2 diabetes BMI percentage recorded	Total recorded	Total not recorded
Orkney	94.3%	92.4%	957	77
Tayside	89.6%	91.5%	19,247	1,818
Grampian	89.8%	91.4%	23,639	2,267
Highland	89.2%	90.6%	13,882	1,463
Lothian	91.0%	89.0%	31,973	3,866
Ayrshire and Arran	85.2%	89.0%	18,884	2,426
Greater Glasgow and Clyde	86.2%	88.8%	53,331	6,901
Forth Valley	88.0%	88.4%	13,250	1,746
Fife	87.6%	87.9%	17,155	2,365
Borders	92.5%	87.3%	5,190	719
Shetland	87.5%	86.7%	880	134
Lanarkshire	78.9%	86.1%	26,237	4,498
Dumfries and Galloway	86.8%	85.9%	7,360	1,201
Western Isles	75.9%	84.6%	1,075	213
Scotland	87.1%	88.9%	233,060	29,694

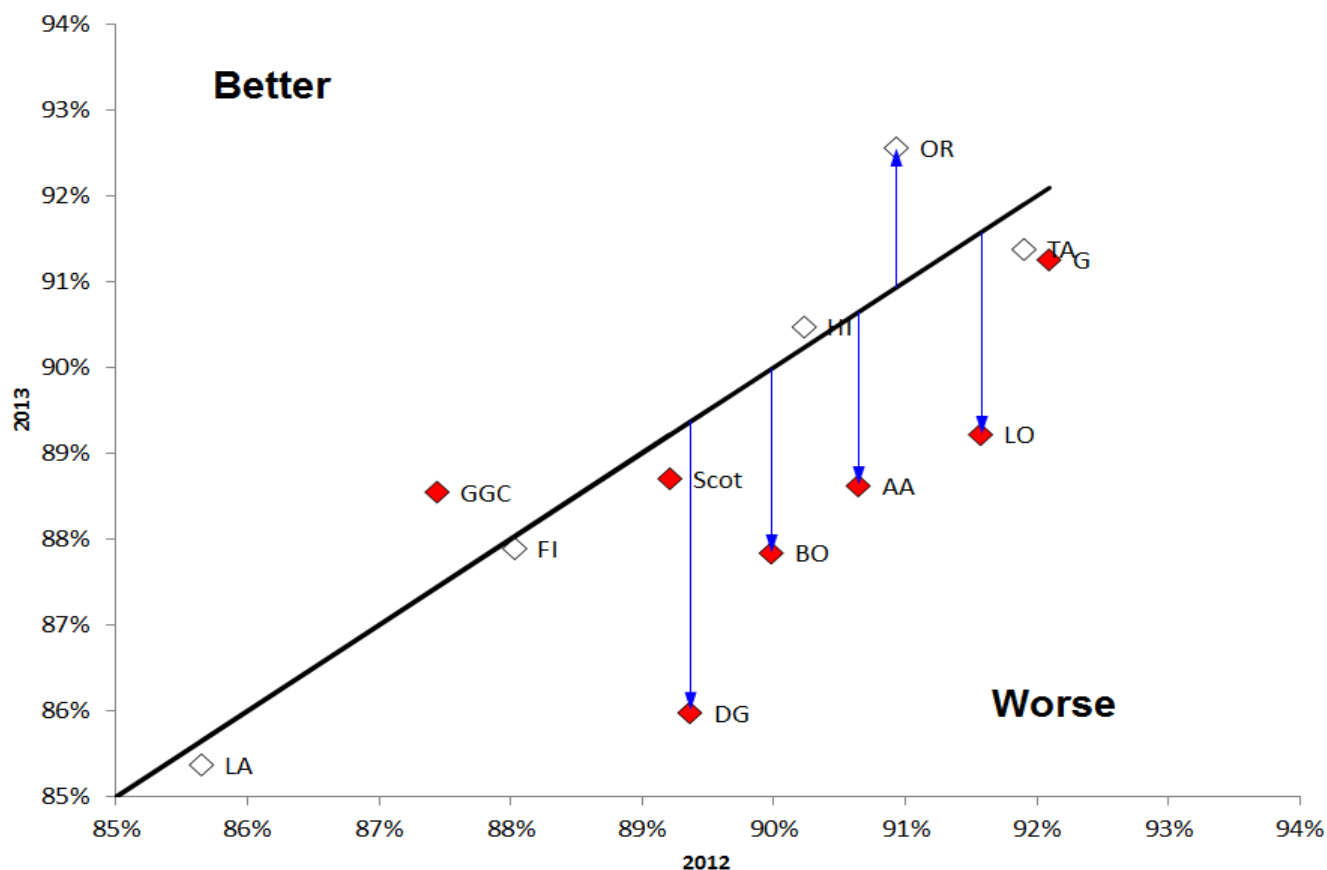
Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 3112).

Figure 9. Proportion of people who had a record of BMI from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1.5% change between 2012 and 2013.



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Figure 10. Proportion of people who had a record of BMI from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1.5% change between 2012 and 2013. Only health boards with values above 85% are shown (expanded version of Figure 9)



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 21. Proportion of people with diabetes (types 1 and 2 combined) with a record of BMI in the previous 15 months, Scotland 2001 – 2013.

Year	BMI recorded
2013	88.7%
2012	89.2%
2011	88.7%
2010	82.0%
2009	89.7%
2008	87.4%
2007	85.3%
2006	84.8%
2005	69.1%
2004	66.1%
2003	58.9%
2002	52.3%
2001	39.8%

Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 3133).

Table 22. Type 1 diabetes: percentage of people with a record of BMI in the last 15 months who are in each BMI category (by NHS board), 2013, ranked in increasing order by % with BMI $\geq 40\text{kg/m}^2$

NHS Board	BMI (kg/m^2)						Total recorded	Not recorded
	<18.5	18.5-24.9	25-29.9	30-34.9	35-39.9	≥ 40		
Highland	1.4%	32.6%	40.3%	18.8%	5.2%	1.7%	1,470	178
Tayside	1.7%	35.5%	38.8%	17.7%	4.3%	2.0%	1,567	182
Orkney	0.0%	42.4%	34.3%	12.1%	9.1%	2.0%	99	6
Shetland	0.0%	34.7%	29.6%	23.5%	10.2%	2.0%	98	14
Forth Valley	3.8%	37.8%	35.4%	15.9%	5.1%	2.1%	1,303	177
Greater Glasgow & Clyde	2.3%	36.6%	37.7%	16.1%	5.1%	2.3%	5,041	809
Western Isles	0.8%	40.5%	37.3%	19.0%	0.0%	2.4%	126	40
Lothian	2.6%	37.2%	37.0%	15.7%	5.1%	2.4%	3,658	360
Lanarkshire	2.2%	35.5%	36.1%	17.3%	6.5%	2.5%	2,502	668
Grampian	1.7%	35.8%	39.1%	15.4%	5.4%	2.6%	2,539	289
Fife	1.6%	33.4%	38.2%	18.8%	5.3%	2.7%	1,577	223
Ayrshire and Arran	2.2%	34.1%	37.0%	17.0%	6.6%	3.2%	1,685	292
Borders	1.0%	30.9%	36.1%	20.5%	8.1%	3.5%	521	42
Dumfries and Galloway	3.8%	33.0%	34.2%	19.7%	5.8%	3.5%	719	109
Scotland	2.2%	35.6%	37.5%	16.9%	5.5%	2.4%	22,905	3,389

Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 3,001).

Table 23. Type 2 diabetes: proportion of people who are in each BMI category (by NHS board), 2013, ranked by % with BMI ≥ 40 . kg/m²

NHS Board	BMI (kg/m ²)						Total recorded	Not recorded
	<18.5	18.5-24.9	25-29.9	30-34.9	35-39.9	≥ 40		
Grampian	0.6%	12.7%	32.3%	30.0%	14.9%	9.4%	21,100	1,978
Western Isles	0.3%	11.2%	31.8%	30.8%	16.4%	9.5%	949	173
Greater Glasgow and Clyde	0.8%	13.6%	32.8%	28.9%	14.2%	9.7%	48,290	6,092
Highland	0.6%	12.3%	33.0%	29.6%	14.8%	9.7%	12,412	1,285
Tayside	0.6%	12.5%	31.9%	29.8%	15.4%	9.8%	17,680	1,636
Lanarkshire	0.5%	12.4%	30.8%	30.1%	15.9%	10.3%	23,735	3,830
Ayrshire and Arran	0.7%	12.7%	31.6%	29.8%	14.8%	10.4%	17,199	2,134
Lothian	0.7%	12.7%	30.9%	29.6%	15.7%	10.5%	28,315	3,506
Dumfries and Galloway	0.5%	12.3%	31.8%	30.0%	14.9%	10.5%	6,641	1,092
Borders	0.6%	11.8%	31.7%	29.8%	15.6%	10.6%	4,669	677
Forth Valley	0.5%	11.7%	30.7%	29.6%	16.3%	11.2%	11,947	1,569
Fife	0.6%	11.3%	30.8%	28.8%	16.8%	11.7%	15,578	2,142
Orkney	0.7%	8.9%	32.3%	31.4%	14.5%	12.4%	858	71
Shetland	0.4%	9.3%	28.6%	28.9%	18.7%	14.1%	782	120
Scotland	0.6%	12.6%	31.8%	29.5%	15.3%	10.2%	210,155	26,305

Note: Excludes children under 18 years of age (n = 145).

Glycaemic Control

93.3% of patients had an HbA_{1c} recorded in the previous 15 months (Table 24). In 57.0% of patients with a recorded result, HbA_{1c} was less than 58mmol/mol (7.5%), suggesting reasonable control of diabetes. While all laboratories in Scotland are using a standardised (IFCC aligned) HbA_{1c} assay, there are some slight differences in actual results between laboratories and some concern remains about the comparability of results between laboratories. This should be considered when comparing results from different health board areas. It should be noted that HbA_{1c} is higher in the winter with an average variability of around 6mmol/mol (0.5%). This is described in more detail in Appendix 3.

Table 24. Percentage of people with diabetes (type 1 and type 2 combined) with a record of HbA_{1c} in previous 15 months, Scotland, 2004-2013.

Year	Recorded within previous 15 months
2013	93.3%
2012	92.1%
2011	91.1%
2010	91.4%
2009	89.5%
2008	89.8%
2007	88.7%
2006	87.0%
2005	84.0%
2004	73.6%

Figure 11. Percentage of patients with diabetes with a recording of HbA1c within the previous 15 months by NHS Board and diabetes type, Scotland, 2013 (horizontal lines show figures for Scotland as a whole and bars are ranked by figures for type 2 diabetes).

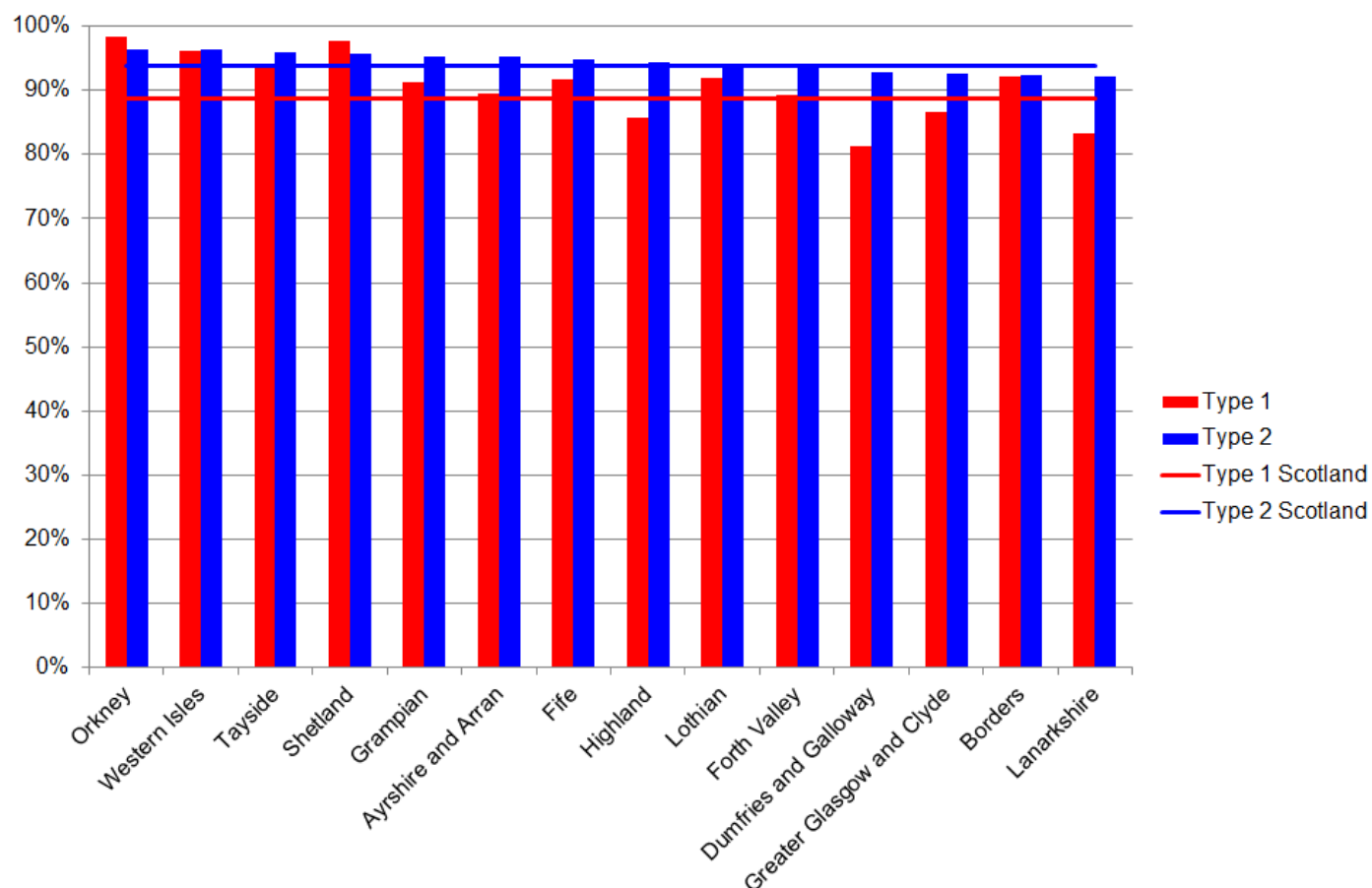
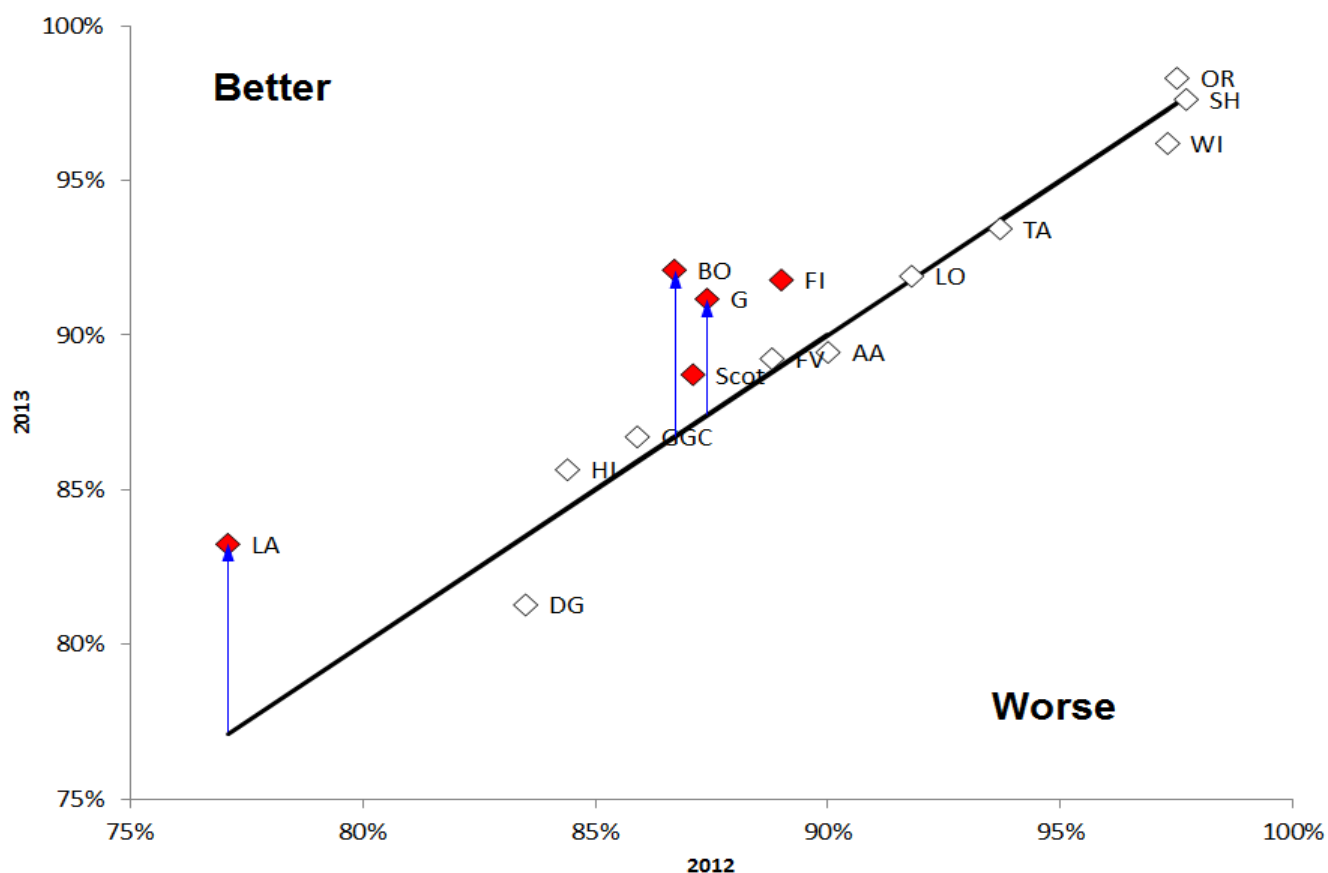
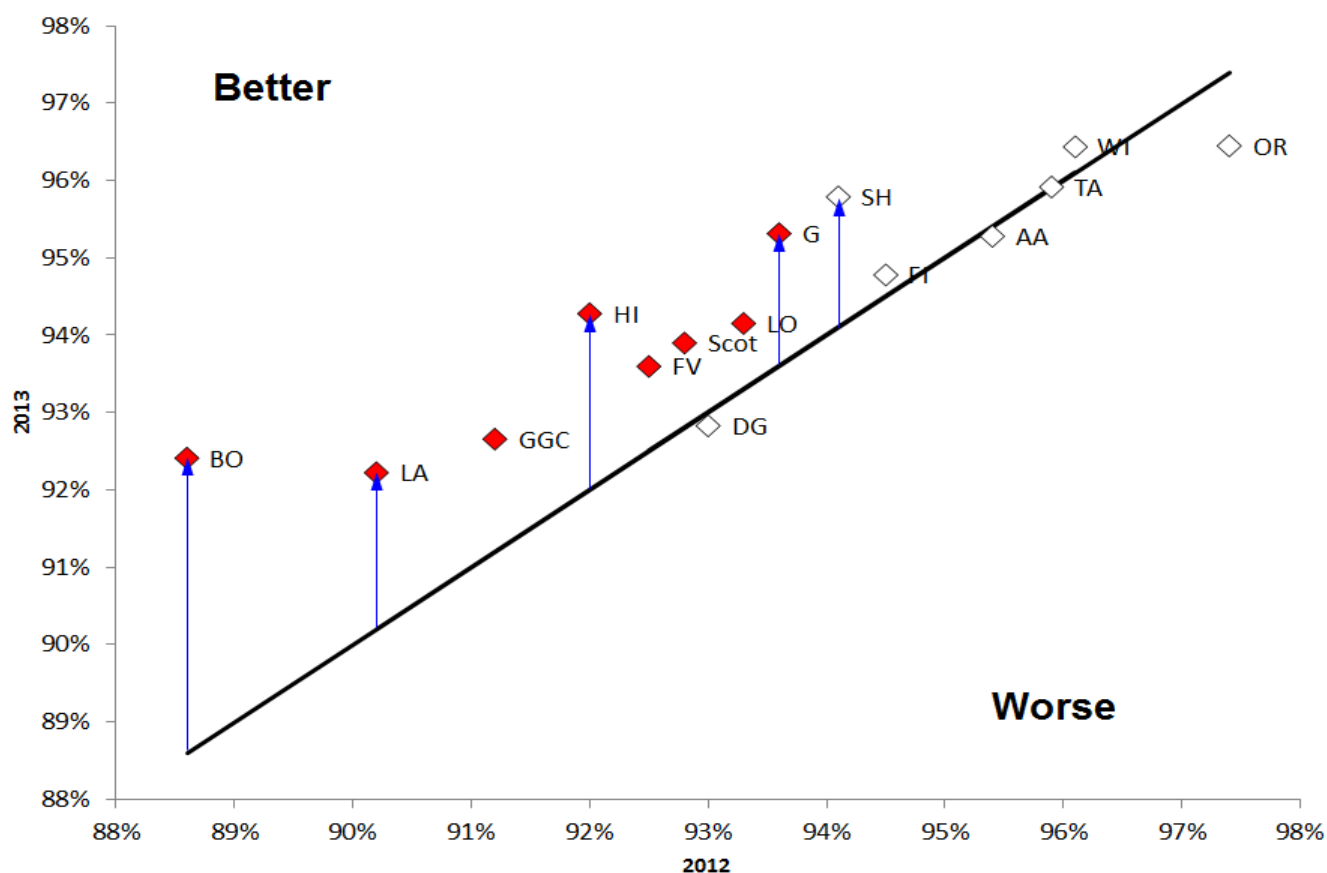


Figure 12. Proportion of people with type 1 diabetes who had a record of HbA1c from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 3.5% change between 2012 and 2013



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Figure 13. Proportion of people with type 2 diabetes who had a record of HbA1c from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1.5% change between 2012 and 2013



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 25. Percentage of people with diabetes who had a record of HbA_{1c} within the previous 15 months, by diabetes type and NHS board, 2013, ranked in decreasing order by proportions among people with type 2 diabetes.

NHS Board	Type 1 diabetes			Type 2 diabetes			Total recorded
	Recorded within previous 15 months		Not recorded	Recorded within previous 15 months		Not recorded	
	Number	Percentage		Number	Percentage		
Orkney	116	98.3%	2	896	96.4%	33	1,012
Western Isles	177	96.2%	7	1,082	96.4%	40	1,259
Tayside	1,823	93.4%	128	18,529	95.9%	789	20,352
Shetland	123	97.6%	3	864	95.8%	38	987
Grampian	2,879	91.2%	279	22,000	95.3%	1,082	24,879
Ayrshire and Arran	1,991	89.4%	235	18,423	95.3%	913	20,414
Fife	1,832	91.8%	164	16,805	94.8%	926	18,637
Highland	1,599	85.6%	268	12,917	94.3%	784	14,516
Lothian	4,018	91.9%	354	29,971	94.2%	1,862	33,989
Forth Valley	1,492	89.2%	180	12,655	93.6%	866	14,147
Dumfries and Galloway	738	81.3%	170	7,183	92.8%	555	7,921
Greater Glasgow and Clyde	5,605	86.7%	859	50,410	92.7%	3,996	56,015
Borders	583	92.1%	50	4,943	92.4%	406	5,526
Lanarkshire	2,985	83.2%	601	25,487	92.2%	2,150	28,472
Scotland	25,961	88.7%	3,300	222,165	93.9%	14,440	248,126

Figure 14. Type 1 diabetes: percentage of people in each HbA_{1c} category for HbA_{1c} recorded in the previous 15 months, by NHS Board, 2013, ranked by proportion with HbA_{1c} over 75 mmol/mol (9%).

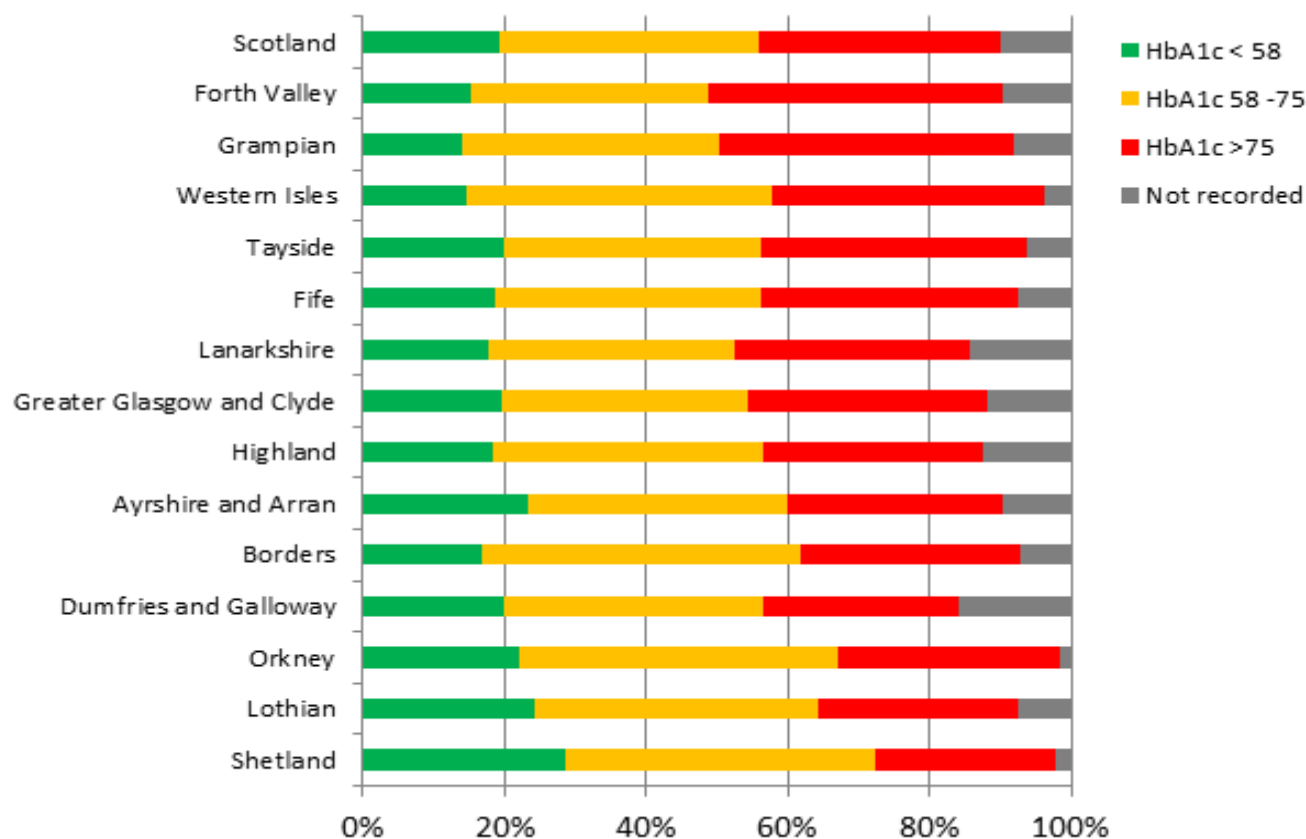


Figure 15. Type 2 diabetes: percentage of people in each HbA_{1c} category for HbA_{1c} recorded in the previous 15 months, by NHS Board, 2013, ranked by percentage with HbA_{1c} over 75mmol/mol (9%).

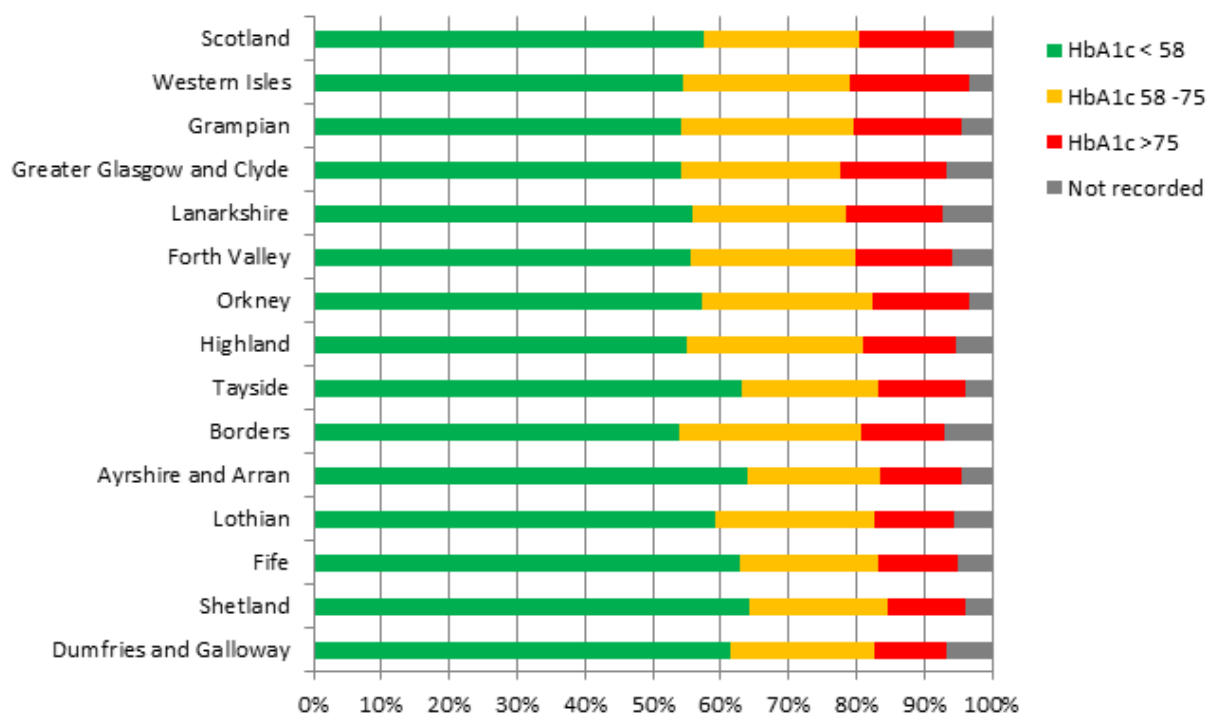


Table 26. Type 1 diabetes: HbA_{1c} category as a percentage of patients with HbA_{1c} recorded in previous 15 months, by NHS Board, ranked by proportion with HbA_{1c} over 75mmol/mol (9%).

NHS Board	HbA _{1c} < 58 mmol/mol (7.5%)		HbA _{1c} 58 -75 mmol/mol (7.5 - 9.0%)		HbA _{1c} >75 mmol/mol (9%)		Total recorded	Not recorded
Shetland	36	29.3%	55	44.7%	32	26.0%	123	3
Lothian	1,053	26.2%	1,741	43.3%	1,224	30.5%	4,018	354
Orkney	26	22.4%	53	45.7%	37	31.9%	116	2
Dumfries and Galloway	175	23.7%	319	43.2%	244	33.1%	738	170
Borders	106	18.2%	283	48.5%	194	33.3%	583	50
Ayrshire and Arran	515	25.9%	806	40.5%	670	33.7%	1,991	235
Highland	336	21.0%	698	43.7%	565	35.3%	1,599	268
Greater Glasgow & Clyde	1,247	22.2%	2,209	39.4%	2,149	38.3%	5,605	859
Lanarkshire	613	20.5%	1,212	40.6%	1,160	38.9%	2,985	601
Fife	368	20.1%	744	40.6%	720	39.3%	1,832	164
Tayside	383	21.0%	709	38.9%	731	40.1%	1,823	128
Western Isles	27	15.3%	79	44.6%	71	40.1%	177	7
Grampian	439	15.2%	1,135	39.4%	1,305	45.3%	2,879	279
Forth Valley	254	17.0%	552	37.0%	686	46.0%	1,492	180
Scotland	5,578	21.5%	10,595	40.8%	9,788	37.7%	25,961	3,300

Table 27. Type 2 diabetes: HbA_{1c} category as percentage of patients with HbA_{1c} recorded in previous 15 months, by NHS Board, ranked by proportion with HbA_{1c} over 75mmol/mol (9%).

NHS Board	HbA _{1c} < 58 mmol/mol (7.5%)		HbA _{1c} 58 -75 mmol/mol (7.5 - 9.0%)		HbA _{1c} >75 mmol/mol (9%)		Total recorded	Not recorded
Dumfries and Galloway	4,723	65.8%	1,646	22.9%	814	11.3%	7,183	555
Shetland	579	67.0%	183	21.2%	102	11.8%	864	38
Fife	11,104	66.1%	3,604	21.4%	2,097	12.5%	16,805	926
Lothian	18,804	62.7%	7,381	24.6%	3,786	12.6%	29,971	1,862
Ayrshire and Arran	12,315	66.8%	3,769	20.5%	2,339	12.7%	18,423	913
Borders	2,861	57.9%	1,433	29.0%	649	13.1%	4,943	406
Tayside	12,145	65.5%	3,884	21.0%	2,500	13.5%	18,529	789
Highland	7,517	58.2%	3,549	27.5%	1,851	14.3%	12,917	784
Orkney	531	59.3%	232	25.9%	133	14.8%	896	33
Forth Valley	7,485	59.1%	3,267	25.8%	1,903	15.0%	12,655	866
Lanarkshire	15,357	60.3%	6,206	24.3%	3,924	15.4%	25,487	2,150
Greater Glasgow & Clyde	29,266	58.1%	12,702	25.2%	8,442	16.7%	50,410	3,996
Grampian	12,471	56.7%	5,839	26.5%	3,690	16.8%	22,000	1,082
Western Isles	609	56.3%	277	25.6%	196	18.1%	1,082	40
Scotland	135,767	61.1%	53,972	24.3%	32,426	14.6%	222,165	14,440

Table 28. Type 1 diabetes: number and percentage of people with a record of HbA_{1c} in each HbA_{1c} category, Scotland, 2009-2013.

Year	HbA _{1c} < 58 (7.5%)		HbA _{1c} 58-75 (7.5-9.0%)		HbA _{1c} >75 (9.0%)		Total recorded	Not recorded
	Number	Percentage	Number	Percentage	Number	Percentage		
2013	5,578	21.5%	10,595	40.8%	9,788	37.7%	25,961	3,300
2012	5,407	21.5%	9,830	39.1%	9,881	39.3%	25,118	3,731
2011	5,345	22.0%	9,893	40.7%	9,071	37.3%	24,309	3,963
2010	5,337	21.8%	9,754	39.9%	9,375	38.3%	24,466	3,444
2009	5,194	21.8%	9,556	40.1%	9,096	38.1%	23,846	3,521

Table 29. Type 2 diabetes: number and percentage of people with a record of HbA_{1c} in each HbA_{1c} category, Scotland, 2009-2013.

Year	HbA _{1c} < 58 (7.5%)		HbA _{1c} 58-75 (7.5-9.0%)		HbA _{1c} >75 (9.0%)		Total recorded	Not recorded
	Number	Percentage	Number	Percentage	Number	Percentage		
2013	135,767	61.1%	53,972	24.3%	32,426	14.6%	222,165	14,440
2012	126,141	59.7%	52,547	24.8%	32,775	15.5%	211,463	16,504
2011	123,974	62.1%	46,475	23.3%	29,177	14.6%	199,626	17,888
2010	122,563	64.0%	42,603	22.3%	26,264	13.7%	191,430	16,849
2009	114,281	63.8%	40,537	22.6%	24,234	13.5%	179,052	20,212

Table 30. Type 1 diabetes: HbA_{1c} category as percent of all those with HbA_{1c} recorded in the previous 15 months (HbA_{1c} in mmol/mol), by NHS Board, 2013, ranked by proportion with HbA_{1c} over 75mmol/mol.

NHS Board	HbA _{1c} <53	HbA _{1c} 53-57	HbA _{1c} 58-63	HbA _{1c} 64-68	HbA _{1c} 69-75	HbA _{1c} >75	Total recorded	Not recorded
Shetland	13.8%	15.4%	17.9%	13.0%	13.8%	26.0%	123	3
Lothian	14.5%	11.7%	15.6%	13.4%	14.3%	30.5%	4,018	354
Orkney	11.2%	11.2%	16.4%	19.0%	10.3%	31.9%	116	2
Dumfries and Galloway	13.4%	10.3%	14.6%	14.2%	14.4%	33.1%	738	170
Borders	9.8%	8.4%	15.3%	17.2%	16.1%	33.3%	583	50
Ayrshire and Arran	14.7%	11.2%	13.4%	14.5%	12.6%	33.7%	1,991	235
Highland	10.4%	10.6%	17.0%	13.1%	13.5%	35.3%	1,599	268
Greater Glasgow & Clyde	13.3%	9.0%	14.0%	11.7%	13.8%	38.3%	5,605	859
Lanarkshire	11.8%	8.7%	14.0%	12.2%	14.4%	38.9%	2,985	601
Fife	11.1%	9.0%	12.8%	14.2%	13.6%	39.3%	1,832	164
Tayside	12.0%	9.0%	12.5%	13.3%	13.1%	40.1%	1,823	128
Western Isles	9.6%	5.6%	19.2%	10.2%	15.3%	40.1%	177	7
Grampian	7.6%	7.7%	12.3%	13.9%	13.2%	45.3%	2,879	279
Forth Valley	9.6%	7.4%	13.2%	10.5%	13.3%	46.0%	1,492	180
Scotland	12.0%	9.4%	14.1%	13.0%	13.7%	37.7%	25,961	3,300

Table 31. Type 2 diabetes: HbA_{1c} category as percent of all those with HbA_{1c} recorded in the previous 15 months (HbA_{1c} in mmol/mol), by NHS Board, 2013, ranked by proportion with HbA_{1c} over 75 mmol/mol (9%).

NHS Board	HbA _{1c} <53	HbA _{1c} 53-57	HbA _{1c} 58-63	HbA _{1c} 64-68	HbA _{1c} 69-75	HbA _{1c} >75	Total recorded	Not recorded
Dumfries & Galloway	51.4%	14.4%	11.6%	6.3%	5.0%	11.3%	7,183	555
Shetland	53.7%	13.3%	10.8%	6.5%	3.9%	11.8%	864	38
Fife	49.8%	16.3%	10.1%	6.8%	4.5%	12.5%	16,805	926
Lothian	47.3%	15.4%	12.2%	6.8%	5.6%	12.6%	29,971	1,862
Ayrshire and Arran	52.0%	14.8%	9.3%	6.5%	4.7%	12.7%	18,423	913
Borders	40.5%	17.4%	15.3%	7.6%	6.0%	13.1%	4,943	406
Tayside	50.5%	15.0%	9.7%	6.6%	4.6%	13.5%	18,529	789
Highland	41.8%	16.4%	13.3%	7.7%	6.4%	14.3%	12,917	784
Orkney	43.1%	16.2%	11.9%	8.5%	5.5%	14.8%	896	33
Forth Valley	43.1%	16.1%	13.0%	7.0%	5.9%	15.0%	12,655	866
Lanarkshire	45.8%	14.4%	11.8%	6.6%	5.9%	15.4%	25,487	2,150
Greater Glasgow & Clyde	42.6%	15.5%	12.3%	6.9%	6.0%	16.7%	50,410	3,996
Grampian	39.1%	17.6%	12.5%	8.2%	5.8%	16.8%	22,000	1,082
Western Isles	42.4%	13.9%	12.2%	6.7%	6.7%	18.1%	1,082	40
Scotland	45.5%	15.6%	11.8%	7.0%	5.6%	14.6%	222,165	14,440

Table 32. Mean HbA_{1c} (mmol/mol) recorded in the previous 15 months, by NHS Board, for people with type 1 diabetes by age and for type 2 diabetes (all ages combined), ranked by mean HbA_{1c} for those with type 2 diabetes.

NHS Board	Type 1 diabetes; age in years											Type 2 diabetes
	0-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60-79	>79	All ages
Ayrshire and Arran	68	71	76	75	77	74	67	70	67	64	60	56
Dumfries and Galloway	-	61	66	73	77	76	69	70	69	65	65	56
Fife	84	72	71	81	81	74	72	72	71	68	66	56
Shetland	74	67	64	86	91	66	66	66	63	64	-	56
Tayside	65	63	70	76	84	77	74	72	71	66	61	56
Lothian	72	64	67	75	74	71	68	69	68	64	68	57
Lanarkshire	71	67	72	82	79	75	71	72	71	67	66	58
Orkney	-	62	70	102	86	80	67	67	70	62	63	58
Borders	77	66	71	77	77	74	69	73	73	66	68	59
Forth Valley	65	67	76	81	85	81	76	74	74	68	63	59
Greater Glasgow and Clyde	57	59	62	74	78	72	71	72	71	68	70	59
Highland	72	60	66	76	79	76	75	71	70	65	69	59
Grampian	67	69	74	81	80	75	74	75	73	72	76	60
Western Isles	60	54	69	80	90	75	72	77	67	63	67	60
Ayrshire and Arran	68	71	76	75	77	74	67	70	67	64	60	56

Table 33. Numbers (and percentages) of people aged under 18 with type 1 diabetes on insulin pumps by age and NHS Board, December 2013.

NHS Board	Type 1 population	Number of patients	Percentage
Ayrshire and Arran	246	67	27.2%
Borders	68	28	41.2%
Dumfries and Galloway	78	22	28.2%
Fife	198	48	24.2%
Forth Valley	191	33	17.3%
Grampian	332	50	15.1%
Greater Glasgow & Clyde	610	160	26.2%
Highland	199	26	13.1%
Lanarkshire	396	59	14.9%
Lothian	354	84	23.7%
Orkney	13	3	23.1%
Shetland	11	4	36.4%
Tayside	201	70	34.8%
Western Isles	20	5	25.0%
Scotland	2,917	659	22.6%

Note: These figures are those provided by MCNs to the Scottish Government in December 2013.

Table 34. Numbers (and percentages) of people aged 18 or over with type 1 diabetes on insulin pumps by age and NHS Board, December 2013.

NHS Board	Type 1 population	Number of patients	Percentage
Ayrshire and Arran	1,974	70	3.5%
Borders	561	46	8.2%
Dumfries and Galloway	823	58	7.0%
Fife	1,789	136	7.6%
Forth Valley	1,485	75	5.1%
Grampian	2,814	78	2.8%
Greater Glasgow and Clyde	5,854	165	2.8%
Highland	1,806	58	3.2%
Lanarkshire	3,137	116	3.7%
Lothian	4,019	266	6.6%
Orkney	105	5	4.8%
Shetland	116	3	2.6%
Tayside	1,749	109	6.2%
Western Isles	162	3	1.9%
Scotland	26,394	1,188	4.5%

Note: These figures are those provided by MCNs to the Scottish Government in December 2013.

Cardiovascular Risk

Diabetes is associated with an increased risk of cardiovascular disease and it is therefore important to address cardiovascular risk factors such as blood pressure (BP), cholesterol and smoking.

Blood Pressure

94.0% of people with diabetes had their BP recorded within the previous 15 months, of which 78.6% had a systolic BP less than or equal to 140mmHg, suggesting reasonable control of blood pressure.

There has been little recent change in the completeness of blood pressure recording (table 36-37). However, the proportion with a systolic blood pressure of 140mmHg or greater has fallen (Table 42) reflecting better blood pressure control overall.

Figure 16. Percentage of people with diabetes (by diabetes type) with a recording of BP in the previous 15 months, by NHS Board (horizontal lines show levels for Scotland as a whole); ranked by figures for type 2 (Note that Y axis is interrupted at 50%).

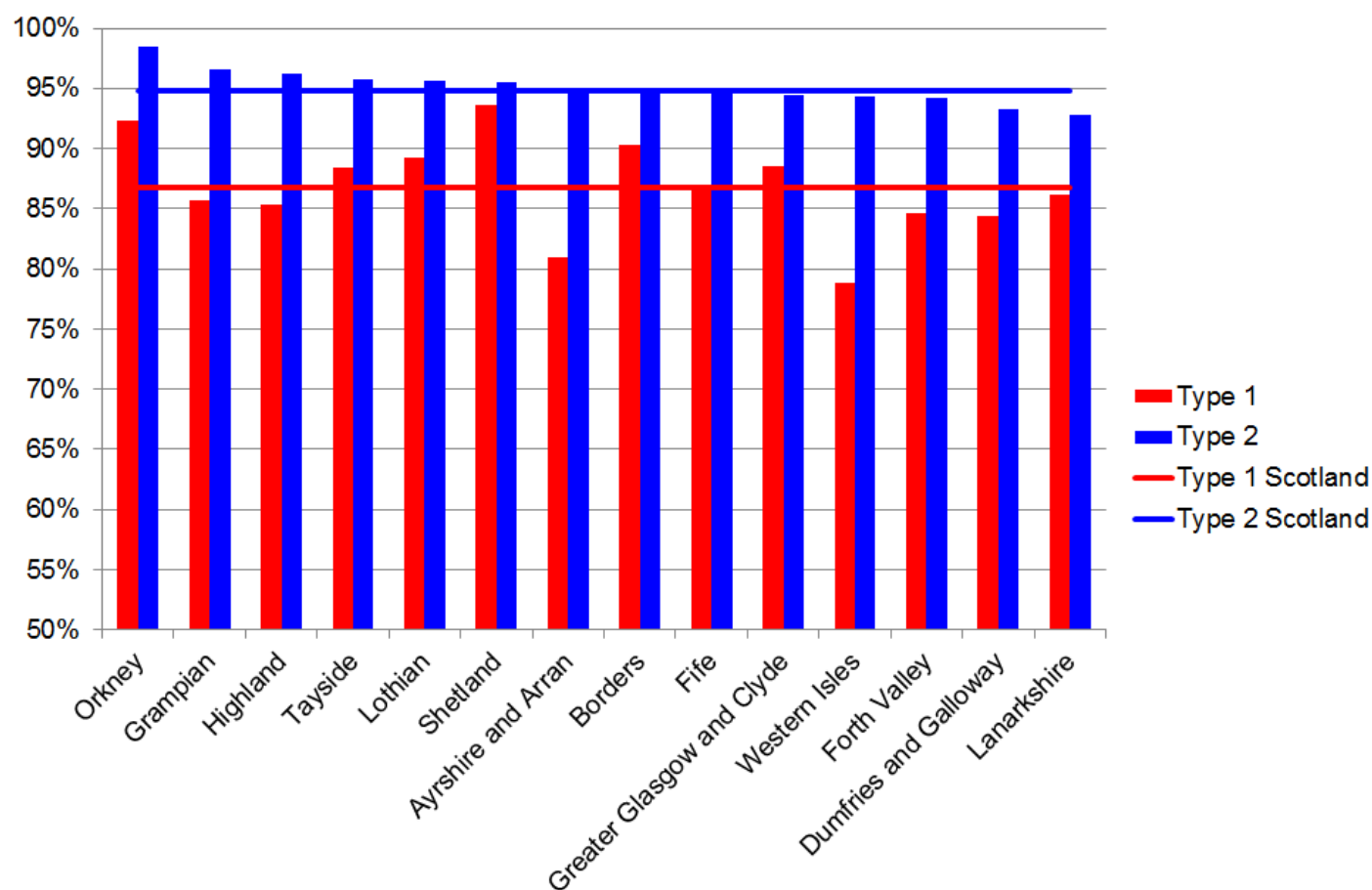


Table 35. Percentage of people with diabetes with a recording of BP in the previous 15 months, by NHS Board and diabetes type, ranked by figures for type 2 diabetes.

NHS Board	Recorded within previous 15 months			
	Type 1 diabetes		Type 2 diabetes	
	Number	Percentage	Number	Percentage
Orkney	109	92.4%	915	98.5%
Grampian	2,708	85.8%	22,282	96.5%
Highland	1,594	85.4%	13,176	96.2%
Tayside	1,726	88.5%	18,490	95.7%
Lothian	3,900	89.2%	30,438	95.6%
Shetland	118	93.7%	862	95.6%
Ayrshire and Arran	1,802	81.0%	18,334	94.8%
Borders	572	90.4%	5,063	94.7%
Fife	1,728	86.6%	16,762	94.5%
Greater Glasgow & Clyde	5,724	88.6%	51,417	94.5%
Western Isles	145	78.8%	1,059	94.4%
Forth Valley	1,415	84.6%	12,745	94.3%
Dumfries and Galloway	766	84.4%	7,219	93.3%
Lanarkshire	3,088	86.1%	25,658	92.8%
Scotland	25,395	86.8%	224,420	94.9%

Note: The numbers in this Table relate to all ages.

Table 36. Percentage of people with Type 1 diabetes with BP recorded within the previous 15 months, Scotland, 2009-2013.

Type 1			
Year	Type 1 population	BP Recorded (n)	BP (%)
2013	29,261	25,395	86.8%
2012	28,849	24,574	85.2%
2011	28,272	24,165	85.5%
2010	27,910	23,977	85.9%
2009	27,367	23,568	86.1%

Table 37. Percentage of people with Type 2 diabetes with a BP recorded within the previous 15 months, Scotland, 2009-2013.

Year	Type 2 population	BP Recorded (n)	BP (%)
2013	236,605	224,420	94.9%
2012	227,967	215,702	94.6%
2011	217,514	204,782	94.1%
2010	208,279	196,638	94.4%
2009	199,264	189,289	95.0%

Figure 17. Type 1 diabetes : percentage of people with most recent systolic blood pressure (SBP) < 140 mmHg in the last 15 months by NHS Board. Horizontal line indicates level for Scotland as a whole.

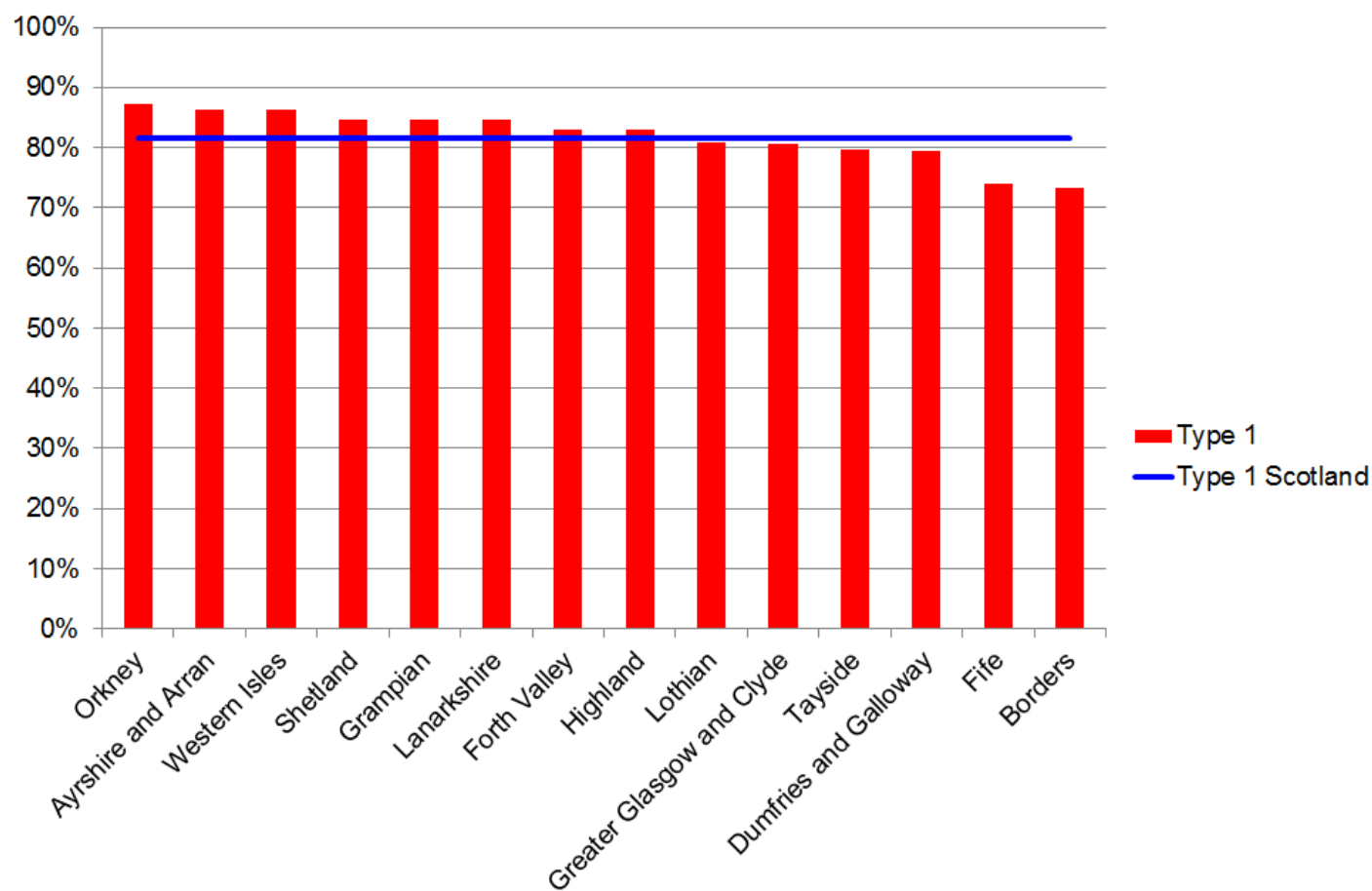


Figure 18. Type 1 diabetes :percentage of people with most recent blood pressure in the last 15 months < 130 mmHg (systolic) and <80mmHg (diastolic), by NHS Board. Horizontal line indicates level for Scotland as a whole.

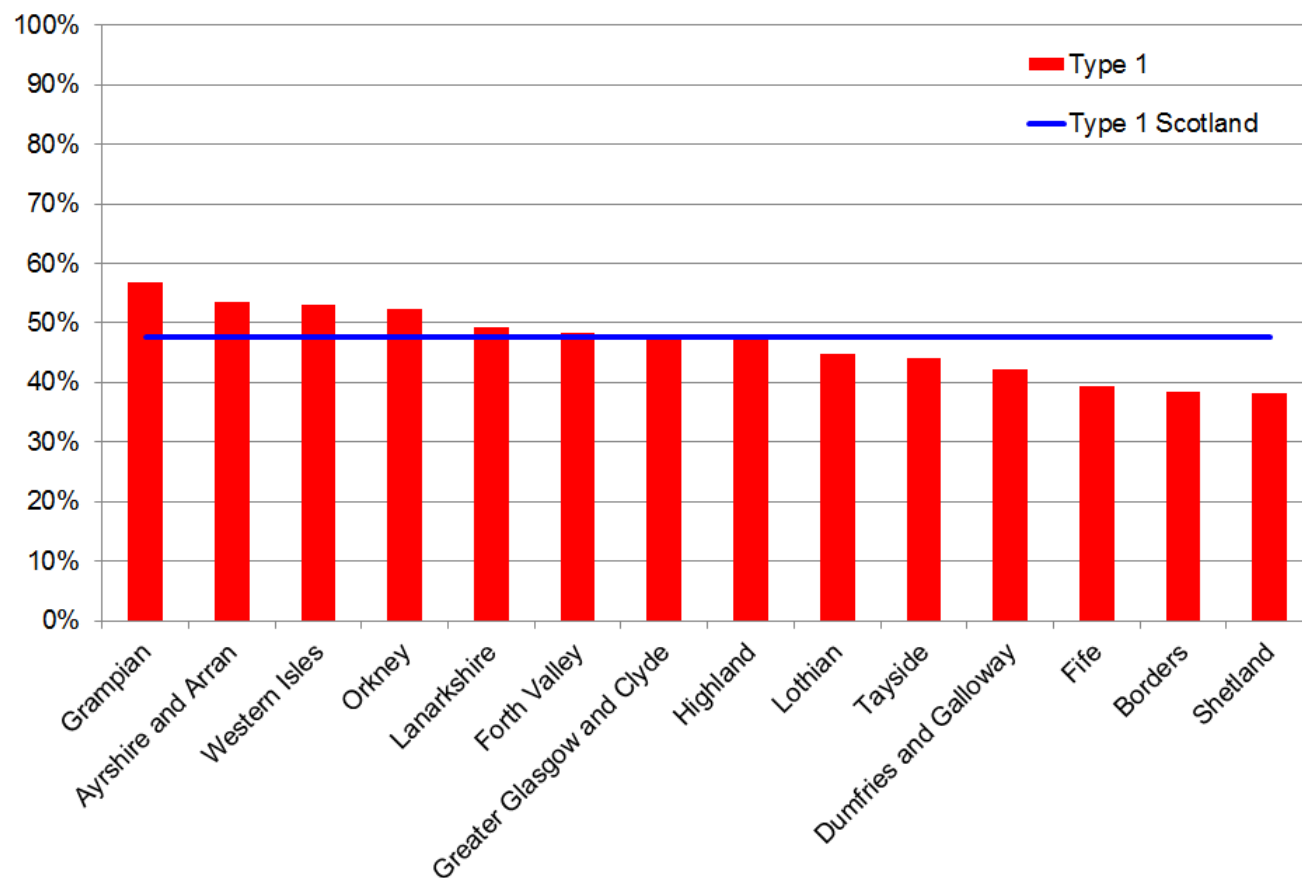


Figure 19. Type 2 diabetes: percentage of people with most recent systolic blood pressure (SBP) < 140 mmHg in the last 15 months by NHS Board. Horizontal line indicates level for Scotland as a whole.

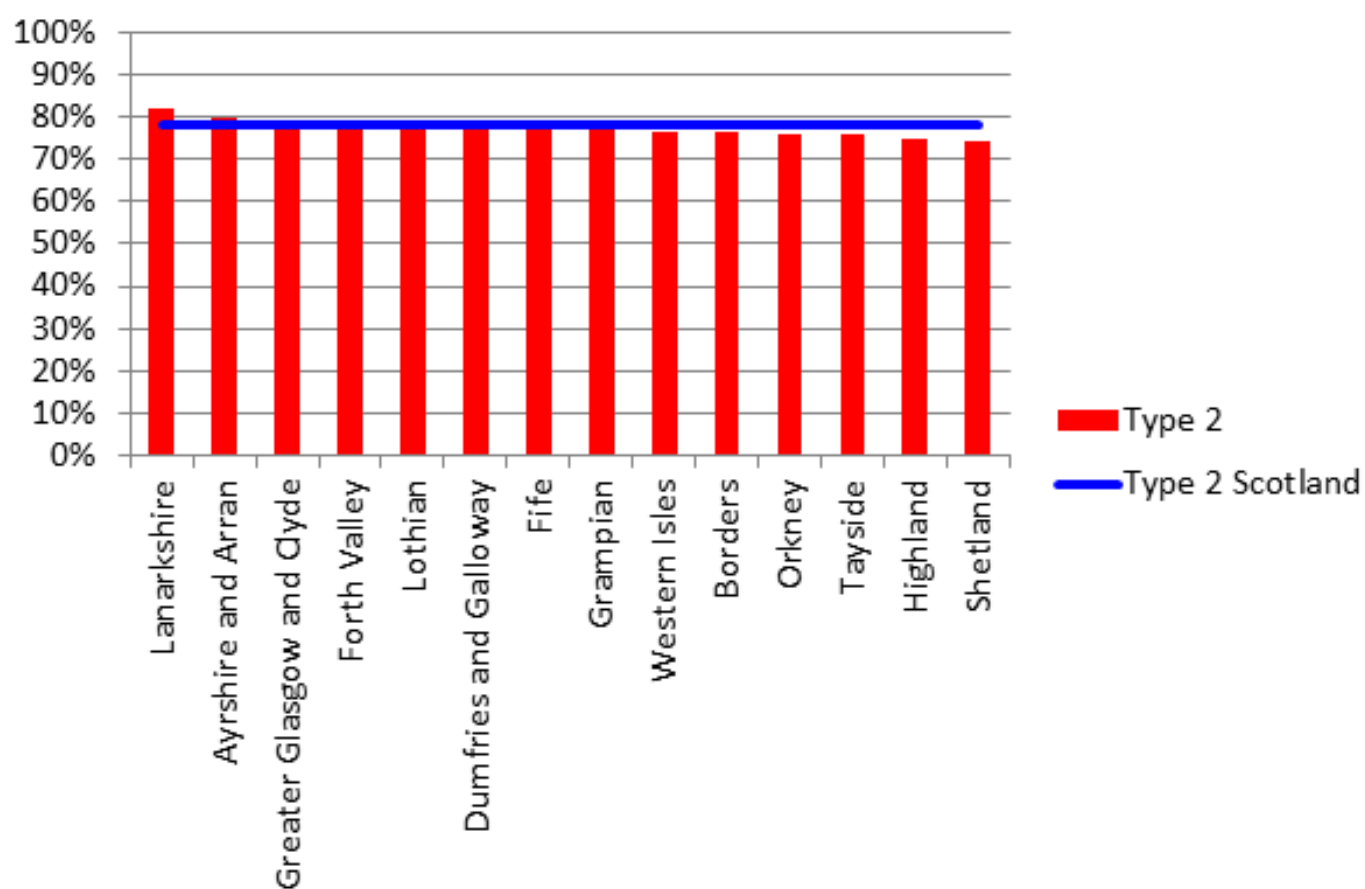


Figure 20. Type 2 diabetes: percentage of people with most recent blood pressure in the last 15 months < 130 mmHg (systolic) and <80mmHg (diastolic), by NHS Board. Horizontal line indicates level for Scotland as a whole.

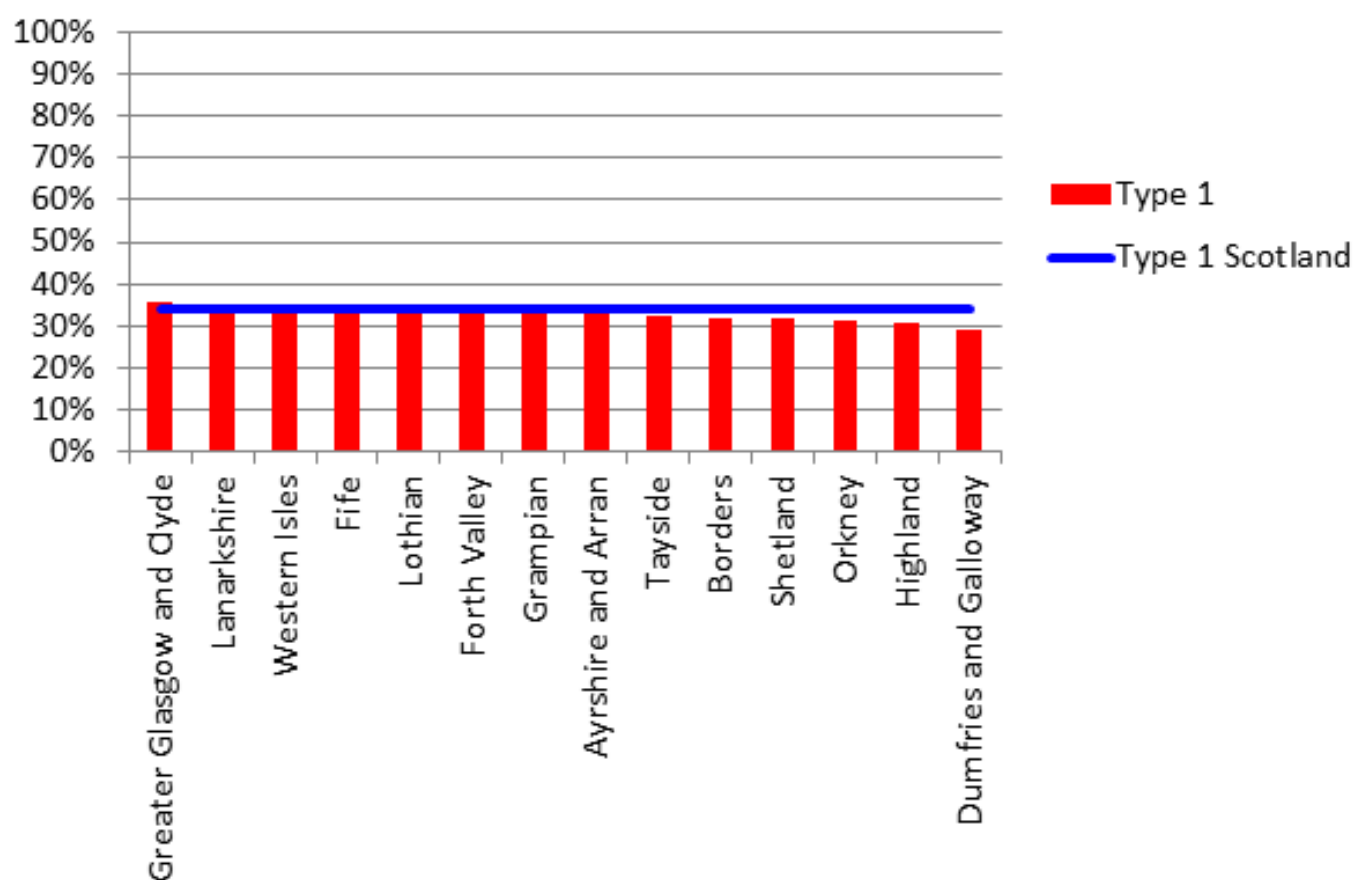
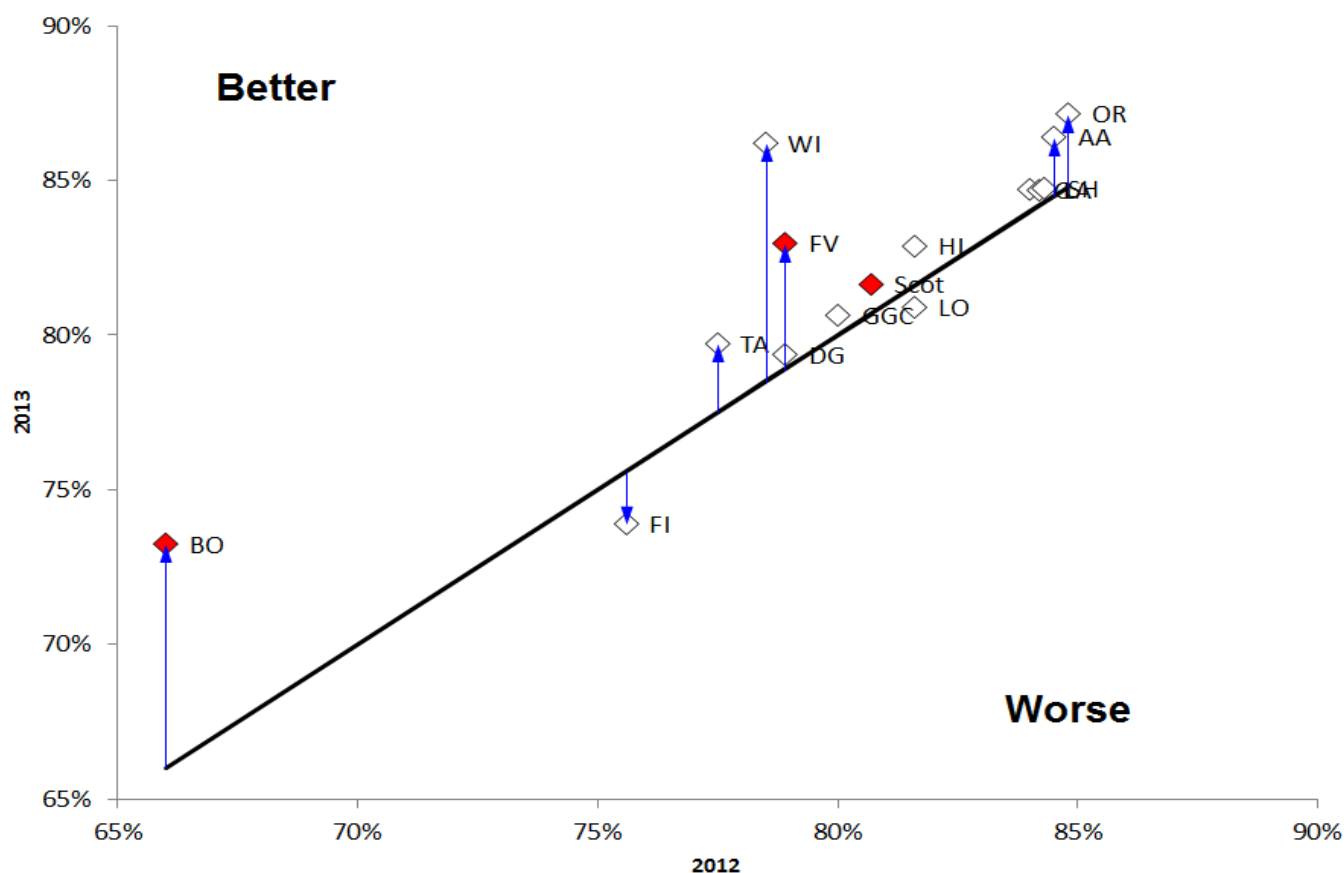


Table 38. Type 1 diabetes : percentage of people with systolic blood pressure (SBP) < 140 mmHg by NHS Board, ranked by percentage > 140 mmHg.

NHS Board	Systolic BP ≤ 140		Systolic BP > 140		Total recorded	Not recorded (n,%)	
	Number	Percentage	Number	Percentage		Number	Percentage
Orkney	95	87.2%	14	12.8%	109	9	7.6%
Ayrshire and Arran	1,557	86.4%	245	13.6%	1,802	424	19.0%
Western Isles	125	86.2%	20	13.8%	145	39	21.2%
Shetland	100	84.7%	18	15.3%	118	8	6.3%
Grampian	2,294	84.7%	414	15.3%	2,708	450	14.2%
Lanarkshire	2,615	84.7%	473	15.3%	3,088	498	13.9%
Forth Valley	1,174	83.0%	241	17.0%	1,415	257	15.4%
Highland	1,321	82.9%	273	17.1%	1,594	273	14.6%
Lothian	3,155	80.9%	745	19.1%	3,900	472	10.8%
Greater Glasgow and Clyde	4,616	80.6%	1,108	19.4%	5,724	740	11.4%
Tayside	1,376	79.7%	350	20.3%	1,726	225	11.5%
Dumfries and Galloway	608	79.4%	158	20.6%	766	142	15.6%
Fife	1,277	73.9%	451	26.1%	1,728	268	13.4%
Borders	419	73.3%	153	26.7%	572	61	9.6%
Scotland	20,732	81.6%	4,663	18.4%	25,395	3,866	13.2%

Note: Restricted to most recent value recorded in the previous 15 months – those recorded longer ago than that were classed as missing (not recorded).

Figure 21. Type 1 diabetes: percentage of people with SBP ≤ 140 mmHg from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 2.5% change between 2012 and 2013.



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 39. Type 1 diabetes: percentage of people with systolic blood pressure (SBP) <130 mmHg AND diastolic blood pressure (DBP) <80mmHg, by NHS Board, ranked by percentage > 130/80 mmHg.

NHS Board	BP ≤ 130/80		BP > 130/80		Total recorded	Not recorded	
	Number	Percentage	Number	Percentage		Number	Percentage
Grampian	1,537	56.8%	1,171	43.2%	2,708	450	14.2%
Ayrshire and Arran	963	53.4%	839	46.6%	1,802	424	19.0%
Western Isles	77	53.1%	68	46.9%	145	39	21.2%
Orkney	57	52.3%	52	47.7%	109	9	7.6%
Lanarkshire	1,522	49.3%	1,566	50.7%	3,088	498	13.9%
Forth Valley	683	48.3%	732	51.7%	1,415	257	15.4%
Greater Glasgow and Clyde	2,727	47.6%	2,997	52.4%	5,724	740	11.4%
Highland	750	47.1%	844	52.9%	1,594	273	14.6%
Lothian	1,747	44.8%	2,153	55.2%	3,900	472	10.8%
Tayside	760	44.0%	966	56.0%	1,726	225	11.5%
Dumfries and Galloway	323	42.2%	443	57.8%	766	142	15.6%
Fife	679	39.3%	1,049	60.7%	1,728	268	13.4%
Borders	220	38.5%	352	61.5%	572	61	9.6%
Shetland	45	38.1%	73	61.9%	118	8	6.3%
Scotland	12,090	47.6%	13,305	52.4%	25,395	3,866	13.2%

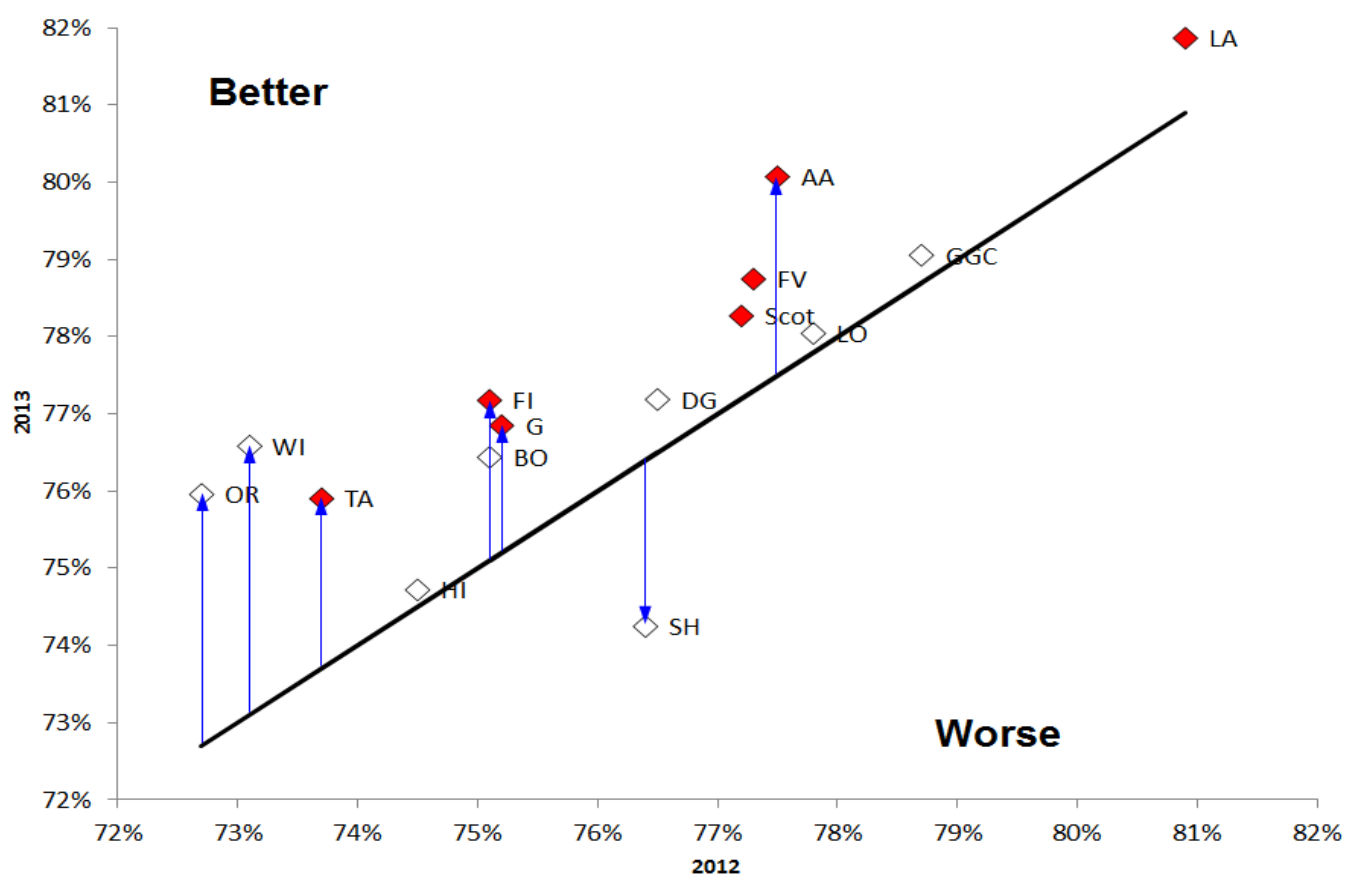
Note: Restricted to most recent value recorded in the previous 15 months – those recorded longer ago than that were classed as missing (not recorded).

Table 40. Type 2 diabetes: percentage of people with systolic blood pressure (SBP) < 140 mmHg by NHS Board, ranked by percentage > 140 mmHg.

NHS Board	Systolic BP ≤ 140		Systolic BP > 140		Total recorded	Not recorded	
	Number	Percentage	Number	Percentage		Number	Percentage
Lanarkshire	21,005	81.9%	4,653	18.1%	25,658	1,979	7.2%
Ayrshire and Arran	14,680	80.1%	3,654	19.9%	18,334	1,002	5.2%
Greater Glasgow and Clyde	40,647	79.1%	10,770	20.9%	51,417	2,989	5.5%
Forth Valley	10,036	78.7%	2,709	21.3%	12,745	776	5.7%
Lothian	23,754	78.0%	6,684	22.0%	30,438	1,395	4.4%
Dumfries and Galloway	5,572	77.2%	1,647	22.8%	7,219	519	6.7%
Fife	12,936	77.2%	3,826	22.8%	16,762	969	5.5%
Grampian	17,123	76.8%	5,159	23.2%	22,282	800	3.5%
Western Isles	811	76.6%	248	23.4%	1,059	63	5.6%
Borders	3,870	76.4%	1,193	23.6%	5,063	286	5.3%
Orkney	695	76.0%	220	24.0%	915	14	1.5%
Tayside	14,034	75.9%	4,456	24.1%	18,490	828	4.3%
Highland	9,845	74.7%	3,331	25.3%	13,176	525	3.8%
Shetland	640	74.2%	222	25.8%	862	40	4.4%
Scotland	175,648	78.3%	48,772	21.7%	224,420	12,185	5.1%

Note: Restricted to most recent value recorded in the previous 15 months – those recorded longer ago than that were classed as missing (not recorded).

Figure 22. Type 2 diabetes: percentage of people with SBP ≤ 140 mmHg from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1.5% change between 2012 and 2013.



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 41. Type 2 diabetes: percentage of people with systolic blood pressure (SBP) <130 mmHg AND diastolic blood pressure (DBP) <80mmHg, by NHS Board, ranked by percentage > 130/80 mmHg.

NHS Board	BP ≤ 130/80		BP > 130/80		Total recorded	Not recorded	
	Number	Percentage	Number	Percentage		Number	Percentage
Greater Glasgow and Clyde	18,386	35.8%	33,031	64.2%	51,417	2,989	5.5%
Lanarkshire	9,053	35.3%	16,605	64.7%	25,658	1,979	7.2%
Western Isles	368	34.7%	691	65.3%	1,059	63	5.6%
Fife	5,717	34.1%	11,045	65.9%	16,762	969	5.5%
Lothian	10,324	33.9%	20,114	66.1%	30,438	1,395	4.4%
Forth Valley	4,311	33.8%	8,434	66.2%	12,745	776	5.7%
Grampian	7,438	33.4%	14,844	66.6%	22,282	800	3.5%
Ayrshire and Arran	5,987	32.7%	12,347	67.3%	18,334	1,002	5.2%
Tayside	5,997	32.4%	12,493	67.6%	18,490	828	4.3%
Borders	1,611	31.8%	3,452	68.2%	5,063	286	5.3%
Shetland	274	31.8%	588	68.2%	862	40	4.4%
Orkney	288	31.5%	627	68.5%	915	14	1.5%
Highland	4,043	30.7%	9,133	69.3%	13,176	525	3.8%
Dumfries and Galloway	2,109	29.2%	5,110	70.8%	7,219	519	6.7%
Scotland	75,906	33.8%	148,514	66.2%	224,420	12,185	5.1%

Note. Restricted to most recent value recorded in the previous 15 months – those recorded longer ago than that were classed as missing (not recorded).

Table 42. Percentage of people with diabetes (type 1 and type 2 combined) with systolic blood pressure (SBP) < 140 mmHg, Scotland, 2005-2013.

Year	Total	Systolic BP ≤ 140	Systolic BP > 140	Not recorded
2013	265,866	78.6%	21.4%	6.0%
2012	256,816	77.5%	22.5%	6.4%
2011	228,948	76.0%	24.0%	6.9%
2010	220,615	74.9%	25.1%	6.6%
2009	212,857	75.1%	24.9%	6.1%
2008	199,650	73.3%	26.7%	9.2%
2007	204,166	73.0%	27.0%	2.6%
2006	188,424	71.1%	28.9%	4.3%
2005	155,269	69.2%	30.8%	7.9%

Note: From 2008 onwards, there was a requirement that BP should be in previous 15 months. In 2004 to 2007, older results could be included if there was no recent result.

Table 43. Type 1 diabetes: mean BP (mmHg) recorded in previous 15 months in people aged <40 years in 2013, by NHS Board, ranked by mean systolic BP.

NHS Board	Mean systolic BP	Mean diastolic BP
Grampian	118	70
Ayrshire and Arran	119	72
Orkney	119	72
Western Isles	119	73
Lanarkshire	122	73
Forth Valley	123	72
Greater Glasgow and Clyde	123	74
Highland	123	74
Dumfries and Galloway	124	76
Lothian	124	76
Shetland	124	74
Tayside	124	75
Borders	127	73
Fife	127	77

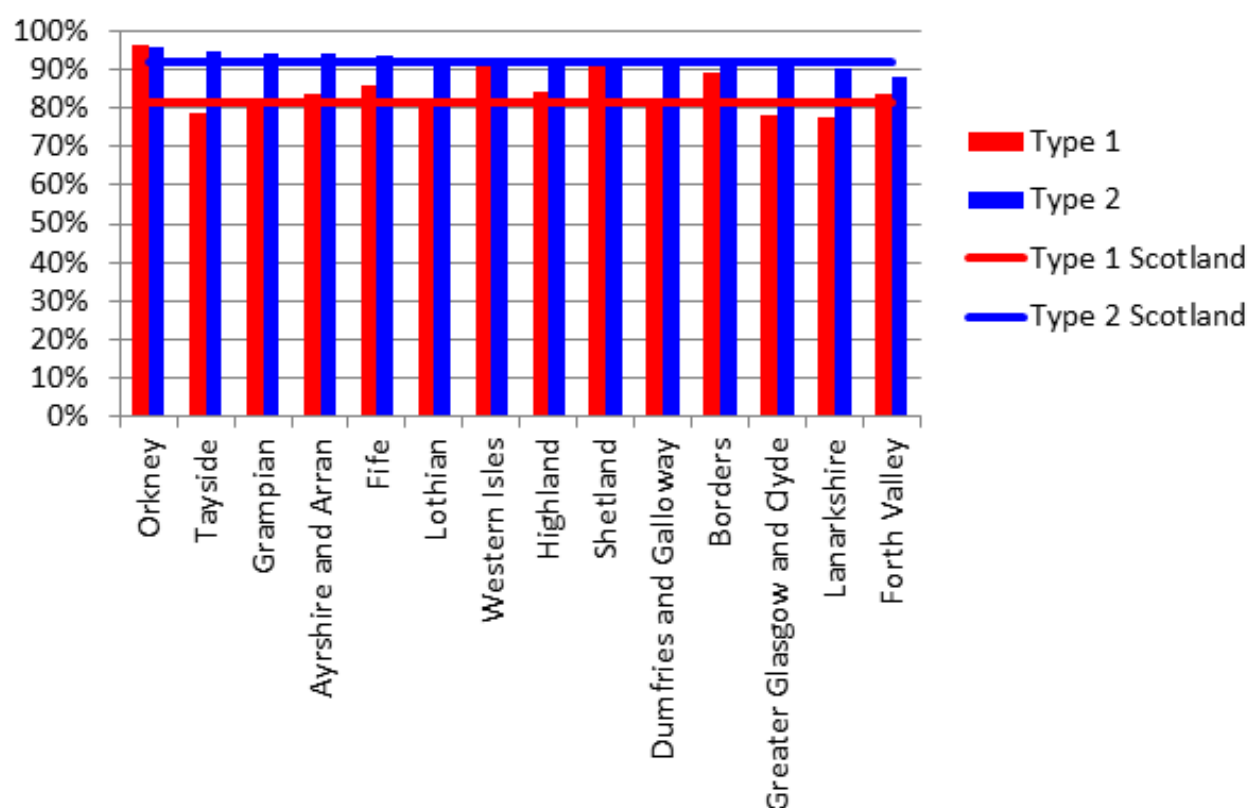
Table 44. Type 2 diabetes: mean BP recorded in previous 15 months in people aged 50-60 years in 2013, by NHS Board, ranked by mean systolic BP.

NHS Board	Mean systolic BP	Mean diastolic BP
Greater Glasgow and Clyde	131	78
Orkney	131	78
Ayrshire and Arran	132	78
Fife	132	79
Forth Valley	132	78
Grampian	132	78
Lanarkshire	132	77
Lothian	132	79
Shetland	132	78
Tayside	132	79
Western Isles	132	79
Borders	133	78
Dumfries and Galloway	133	79
Highland	133	78

Total cholesterol

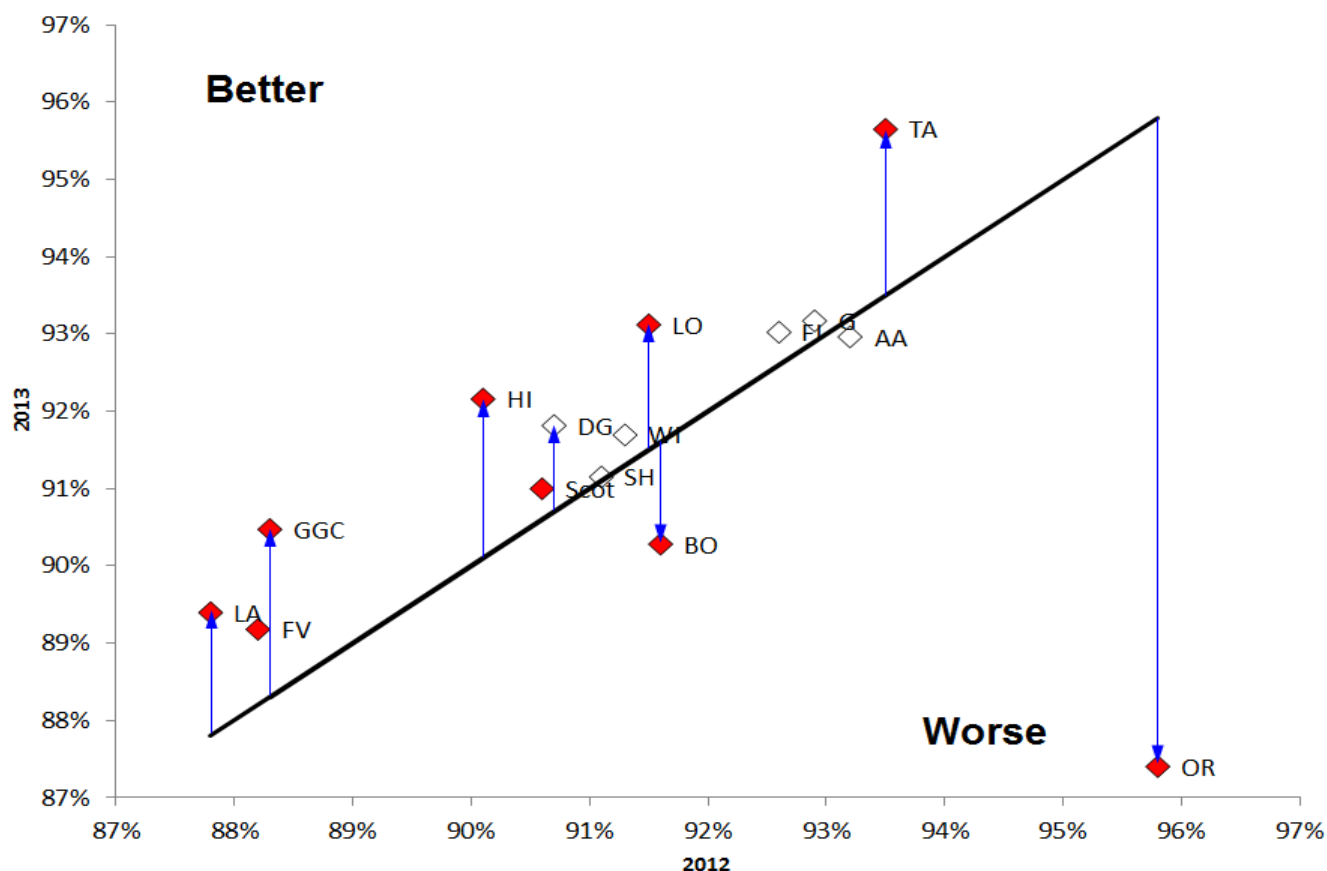
Cholesterol level was recorded in 91.0% of people with type 1 or type 2 diabetes within the previous 15 months. Total cholesterol was less than or equal to 5.0mmol/l in 71.3% of patients with a recorded result.

Figure 23. Percentage of people with diabetes with a record of cholesterol within the previous 15 months by diabetes type and NHS Board, 2013. Horizontal lines indicate figures for Scotland as a whole.



Note: Excludes children under 18 years (n=3112).

Figure 24. Percentage of people with diabetes (type 1 and type 2 combined) with a recording of cholesterol within the previous 15 months from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1% change between 2012 and 2013.



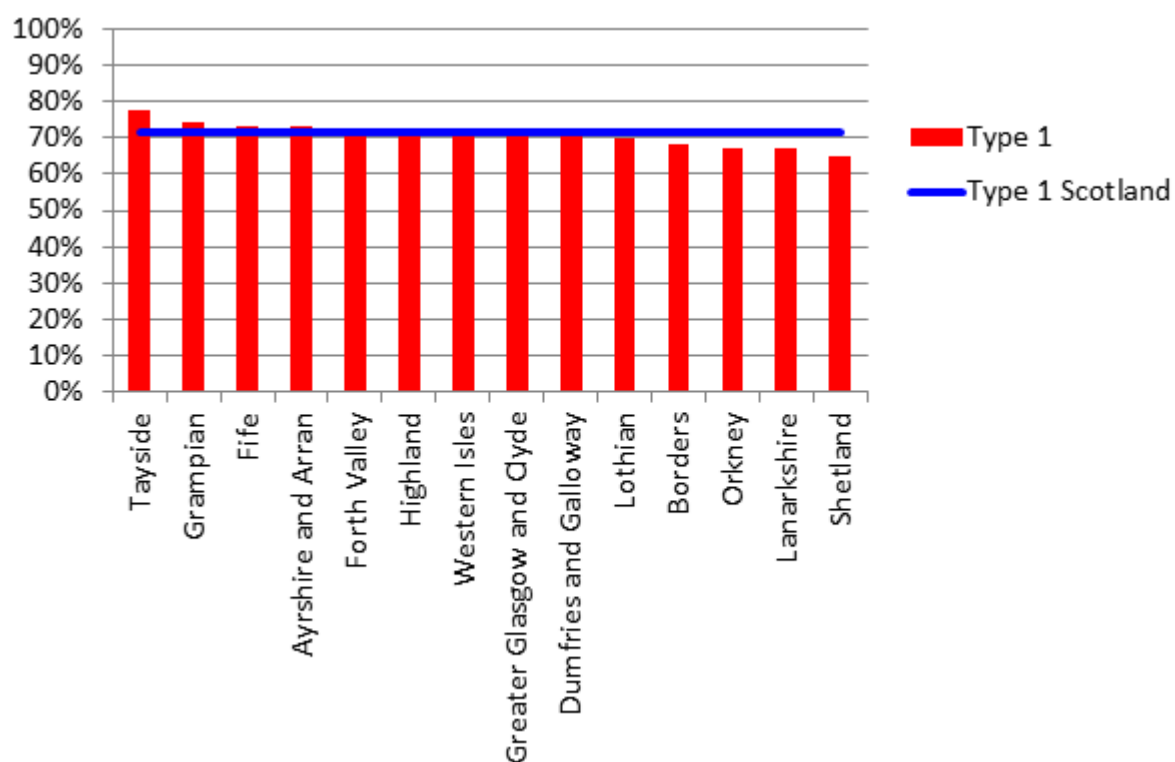
Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 45. Percentage of people with diabetes (Type 1 and Type 2 combined) with a recording of cholesterol within the previous 15 months, Scotland, 2002-2013.

Year	Recorded within previous 15 months
2013	91.0%
2012	90.6%
2011	89.2%
2010	89.6%
2009	86.5%
2008	90.1%
2007	88.4%
2006	85.5%
2005	79.2%
2004	69.0%
2003	40.2%
2002	60.5%

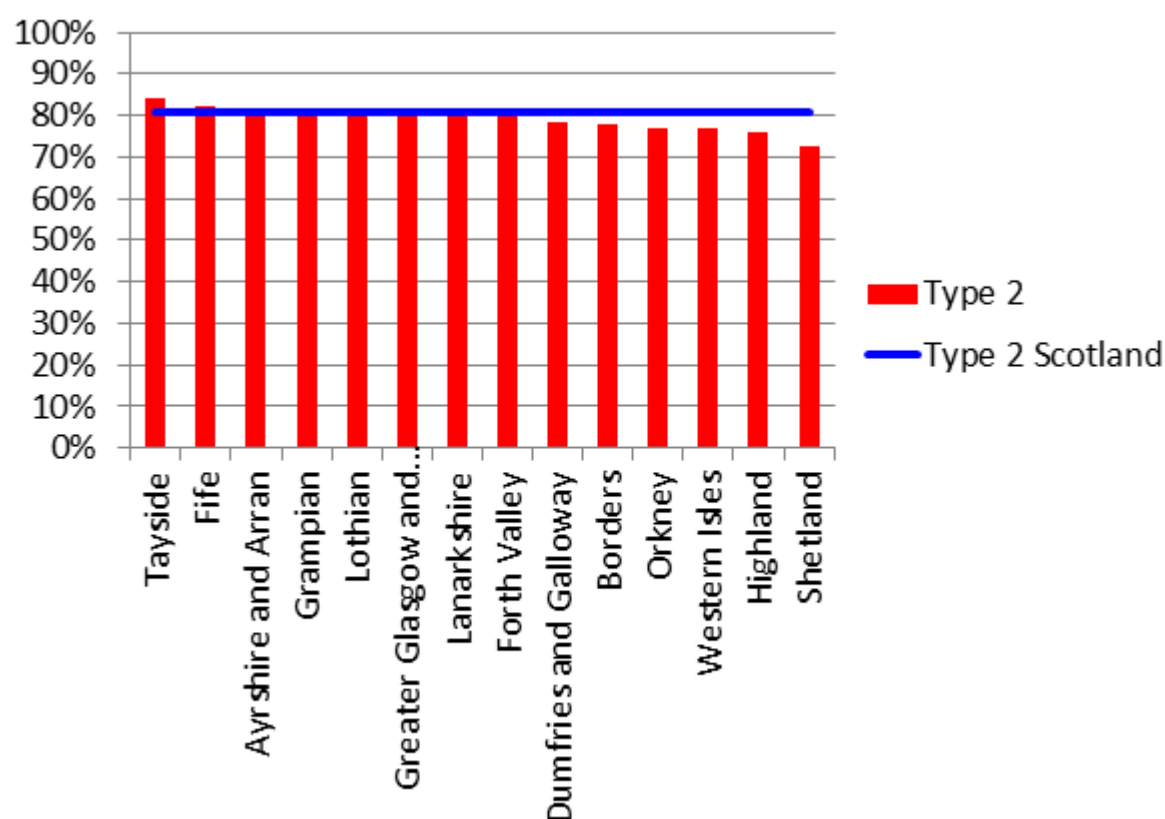
Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 3112).

Figure 25. Type 1 diabetes: percentage of people with cholesterol $\leq 5\text{mmol/l}$, by NHS Board (denominator those with recording of cholesterol within the previous 15 months). Horizontal line indicates level for Scotland as a whole.



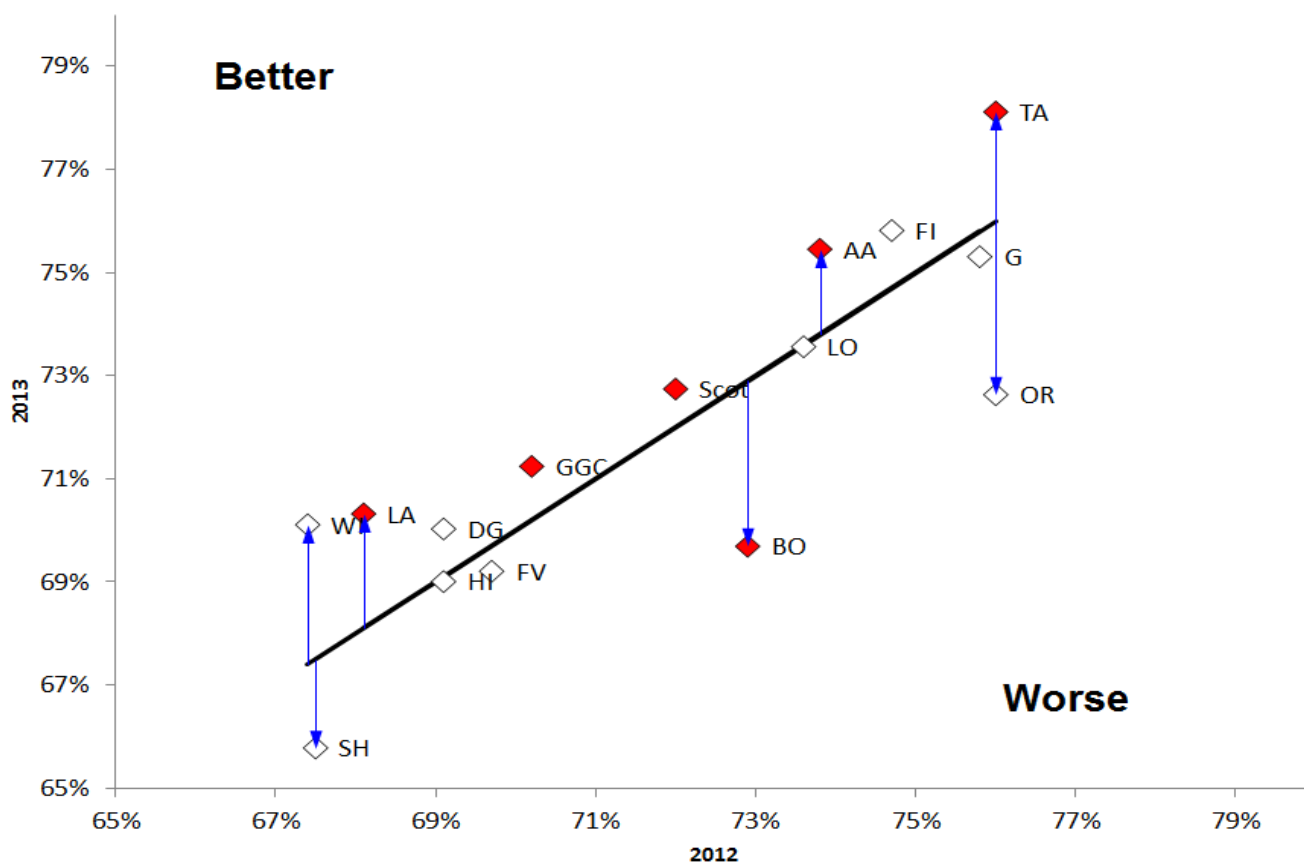
Note: Excludes children under 18 years (n=2967).

Figure 26. Type 2 diabetes: percentage of people with cholesterol $\leq 5\text{mmol/l}$, by NHS Board (denominator those with recording of cholesterol within the previous 15 months). Horizontal line indicates level for Scotland as a whole.



Note: Excludes children under 18 years (n= 145).

Figure 27. Percentage of people with diabetes (type 1 and type 2 combined) with cholesterol ≤ 5 mmol/l within the previous 15 months from 2012 to 2013: Arrows showing the direction of change have been added for all boards with more than 1.5% change between 2012 and 2013.



Note: Points in red indicate statistically significant change. The diagonal line shows no change between 2012 and 2013.

Table 46. Type 1 diabetes : percentage of people with cholesterol ≤ 5 mmol/l, by NHS Board (denominator those with recording of cholesterol within the previous 15 months), ranked by percentage.

NHS Board	Total recorded	Total cholesterol ≤ 5	Not recorded
Tayside	1,377	77.4%	21.3%
Grampian	2,343	74.4%	17.1%
Fife	1,548	73.3%	14.0%
Ayrshire and Arran	1,656	73.0%	16.2%
Forth Valley	1,236	72.1%	16.5%
Highland	1,389	71.4%	15.7%
Western Isles	151	70.8%	9.0%
Greater Glasgow and Clyde	4,562	70.2%	22.0%
Dumfries and Galloway	681	70.2%	17.8%
Lothian	3,327	69.8%	17.2%
Borders	501	68.0%	11.0%
Orkney	101	67.3%	3.8%
Lanarkshire	2,454	67.3%	22.6%
Shetland	103	65.0%	8.0%
Scotland	21,429	71.3%	18.5%

Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 2697).

Table 47. Type 2 diabetes: percentage of people with cholesterol ≤ 5 mmol/l, by NHS Board (denominator those with recording of cholesterol within the previous 15 months), ranked by percentage.

NHS Board	Total recorded	Total cholesterol ≤ 5	Not recorded
Tayside	18,249	84.3%	5.5%
Fife	16,629	82.2%	6.2%
Ayrshire and Arran	18,167	81.9%	6.0%
Grampian	21,740	81.7%	5.8%
Lothian	29,535	81.4%	7.2%
Greater Glasgow and Clyde	49,282	80.6%	9.4%
Lanarkshire	24,955	80.0%	9.5%
Forth Valley	11,871	79.9%	12.2%
Dumfries and Galloway	7,048	78.3%	8.9%
Borders	4,845	78.0%	9.4%
Orkney	888	76.9%	4.4%
Western Isles	1,036	76.8%	7.7%
Highland	12,598	76.2%	8.0%
Shetland	828	72.5%	8.2%
Scotland	217,671	80.8%	7.9%

Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 145).

Table 48. Percentage of people with diabetes (type 1 and type 2 combined) with cholesterol ≤ 5 mmol/l, by NHS Board (denominator those with recording of cholesterol within the previous 15 months).

Year	Cholesterol ≤ 5		Cholesterol > 5		Not recorded		Total
	Number	Percentage	Number	Percentage	Number	Percentage	
2013	191,130	79.9%	47,970	20.1%	23,654	9.0%	262,754
2012	182,643	79.5%	47,145	20.5%	23,895	9.4%	253,683
2011	174,832	79.8%	44,364	20.2%	25,604	10.4%	245,786
2010	169,367	80.4%	41,391	19.6%	24,440	10.4%	235,198
2009	157,434	80.7%	37,650	19.3%	30,551	13.5%	225,635
2008	157,938	80.1%	39,107	19.9%	21,858	10.0%	218,903
2007	159,843	79.8%	40,552	20.2%	8,257	4.0%	208,652
2006	143,999	78.9%	38,614	21.1%	13,104	6.7%	195,717
2005	113,542	75.1%	37,631	24.9%	16,680	9.9%	167,853

Note: From 2008 onwards, there was a requirement that cholesterol should be in previous 15 months. In 2004 to 2007, older results could be included if there was no recent result. Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 3112).

Table 49. Type 2 diabetes: mean total cholesterol recorded in previous 15 months in people aged ≥ 50 -60 years in 2013, by NHS Board, ranked by mean cholesterol.

NHS Board	Mean total cholesterol (mmol/l)
Tayside	4.1
Fife	4.2
Grampian	4.2
Ayrshire and Arran	4.2
Forth Valley	4.2
Lothian	4.3
Greater Glasgow and Clyde	4.3
Lanarkshire	4.3
Orkney	4.3
Western Isles	4.4
Borders	4.4
Dumfries and Galloway	4.4
Highland	4.4
Shetland	4.5

Smoking status

Smoking status was recorded for 98.5% of the diabetic population. Around 18.7% of people with diabetes were recorded as being current smokers.

Figure 28. Type 1 diabetes: smoking status as a percentage of all those with type 1 diabetes, by NHS Board.

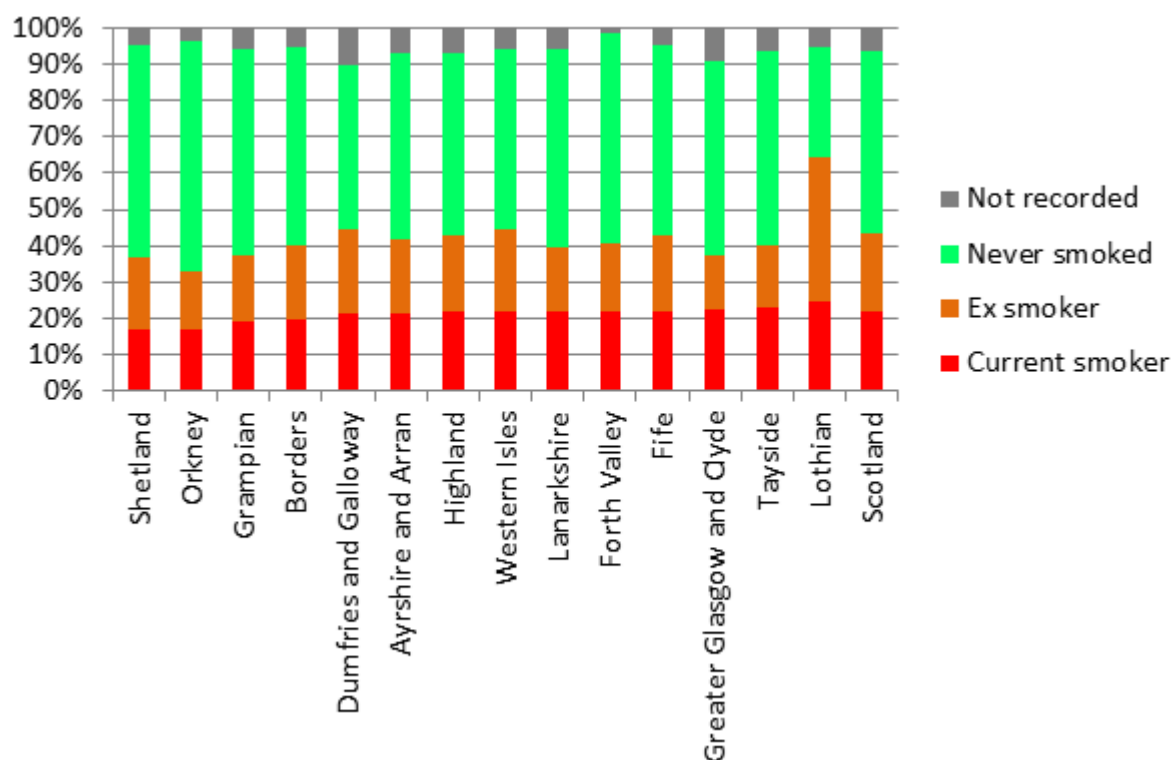


Figure 29. Type 2 diabetes: smoking status as a percentage of all those with type 2 diabetes, by NHS Board.

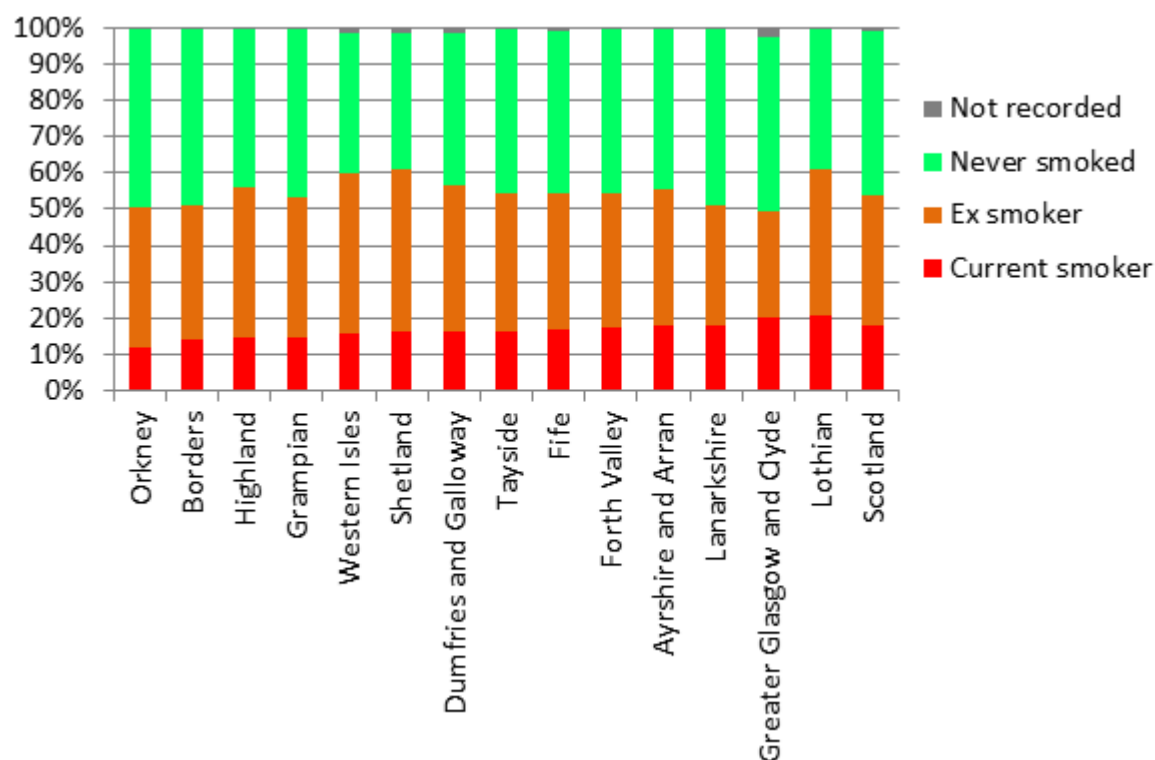


Table 50. Type 1 diabetes: Percentage of people who were recorded as current, ex- or never-smokers, by NHS Board (denominator those with recording of smoking status); ranked by proportion who are current smokers.

NHS Board	No with known status	Current smoker	Ex-smoker	Never smoked	% recorded
Shetland	120	17.5%	20.8%	61.7%	95.2%
Orkney	114	17.5%	16.7%	65.8%	96.6%
Grampian	2,974	20.1%	19.3%	60.6%	94.2%
Borders	601	20.6%	21.5%	57.9%	94.9%
Forth Valley	1,644	22.4%	19.2%	58.5%	98.3%
Ayrshire and Arran	2,070	22.9%	21.7%	55.4%	93.0%
Lanarkshire	3,380	23.1%	19.0%	57.9%	94.3%
Fife	1,903	23.1%	22.0%	54.9%	95.3%
Western Isles	173	23.1%	24.3%	52.6%	94.0%
Highland	1,742	23.2%	22.7%	54.0%	93.3%
Dumfries and Galloway	817	23.4%	26.1%	50.6%	90.0%
Tayside	1,829	24.5%	18.4%	57.1%	93.7%
Greater Glasgow and Clyde	5,878	24.5%	16.3%	59.2%	90.9%
Lothian	4,145	26.2%	42.0%	31.8%	94.8%
Scotland	27,390	23.5%	22.8%	53.7%	93.6%

Table 51. Type 2 diabetes: Percentage of people who were recorded as current, ex- or never-smokers, by NHS Board (denominator those with recording of smoking status); ranked by proportion who are current smokers.

NHS Board	No with known status	Current smoker	Ex-smoker	Never smoked	% recorded
Orkney	924	11.7%	39.0%	49.4%	99.5%
Borders	5,331	14.3%	37.2%	48.5%	99.7%
Highland	13,664	14.7%	41.2%	44.1%	99.7%
Grampian	23,012	14.7%	38.5%	46.8%	99.7%
Western Isles	1,105	16.2%	44.6%	39.2%	98.5%
Shetland	889	16.3%	45.8%	37.9%	98.6%
Dumfries and Galloway	7,628	16.4%	40.8%	42.8%	98.6%
Tayside	19,213	16.5%	38.1%	45.3%	99.5%
Fife	17,610	17.0%	38.0%	45.0%	99.3%
Forth Valley	13,442	17.5%	37.5%	45.1%	99.4%
Ayrshire and Arran	19,261	18.2%	37.5%	44.3%	99.6%
Lanarkshire	27,536	18.2%	32.8%	49.0%	99.6%
Greater Glasgow and Clyde	53,080	20.5%	30.3%	49.2%	97.6%
Lothian	31,754	20.8%	40.4%	38.8%	99.8%
Scotland	234,449	18.1%	36.3%	45.6%	99.1%

Table 52. Percentage of people with diabetes (type 1 and type 2 combined) who were recorded as current, ex- or never-smokers (denominator those with record of smoking status), Scotland, 2005-2013.

Year	Current smoker	Ex-smoker	Never smoked	Not recorded
2013	18.7%	34.9%	46.5%	1.5%
2012	19.3%	35.2%	45.5%	4.7%
2011	19.3%	34.4%	46.4%	0.8%
2010	19.3%	35.1%	45.7%	1.0%
2009	19.5%	35.5%	45.0%	1.1%
2008	19.6%	35.6%	44.8%	1.8%
2007	20.0%	35.2%	44.9%	3.3%
2006	20.3%	35.2%	44.6%	6.3%
2005	21.4%	32.9%	45.7%	8.9%

Note: Data for years 2001 to 2013 are calculated as a percentage of all registered patients with recorded smoking status.

Complications of diabetes

The main complications of diabetes include those due to large vessel (arterial) disease:

- myocardial infarction (MI) – the commonest cause of death in people with diabetes;
- stroke – the risk is increased compared to people without diabetes;
- peripheral vascular disease, which can lead to amputations;

And those due to small vessel disease (microangiopathy);

- renal disease, which can lead to end-stage renal failure requiring dialysis;
- retinopathy – diabetes has been the commonest cause of blindness in the people of working age;

Diabetes also leads to poorer outcomes in pregnancy, but this survey does not include pregnancy outcomes.

The purpose of screening is to detect changes early and intervene to prevent further deterioration. In this section, the data presented include both screening performance and recording of prevalent complications.

Myocardial infarction

24,606 (9.3%) of registered patients have a record of a previous MI. Others will have had an MI but not survived. There have been improvements in recording, increased use of procedures and better survival following an MI in recent years.

Table 53. Number and percentage of people with diabetes recorded as having had a previous myocardial infarction (MI), by diabetes type and NHS board, ranked by percentages for type 2.

NHS Board	Recorded as having had an MI			
	Type 1		Type 2	
	Number	Percentage	Number	Percentage
Shetland	7	5.6%	60	6.7%
Orkney	4	3.4%	76	8.2%
Dumfries and Galloway	33	3.6%	639	8.3%
Western Isles	8	4.3%	96	8.6%
Grampian	103	3.3%	2,187	9.5%
Borders	34	5.4%	512	9.6%
Lothian	132	3.0%	3,121	9.8%
Fife	71	3.6%	1,752	9.9%
Forth Valley	52	3.1%	1,338	9.9%
Ayrshire and Arran	91	4.1%	1,927	10.0%
Greater Glasgow and Clyde	224	3.5%	5,545	10.2%
Lanarkshire	161	4.5%	2,839	10.3%
Highland	68	3.6%	1,411	10.3%
Tayside	72	3.7%	2,043	10.6%
Scotland	1,060	3.6%	23,546	10.0%

Table 54. Percentage of people with diabetes (type 1 and type 2 combined) who are recorded as having had a previous myocardial infarction (MI), Scotland, 2001-2013.

Year of Survey	Myocardial infarction
2013	9.3%
2012	9.4%
2011	9.5%
2010	9.1%
2009	9.5%
2008	9.5%
2007	9.5%
2006	9.4%
2005	8.6%
2004	7.3%
2003	7.7%
2002	8.1%
2001	6.7%

Note: This Table shows the percentage of people with diabetes who have ever had a heart attack and survived.

Cardiac revascularisation

17,986 (6.8%) people included in the survey have a record of having undergone cardiac revascularisation, including coronary artery bypass graft (CABG) and percutaneous transluminal coronary angioplasty (PTCA).

Table 55. Number and percentage of people with diabetes who have a record of cardiac revascularisation by NHS Board and diabetes type, ranked by percentages for type 2.

NHS Board	Recorded as having undergone cardiac revascularisation			
	Type 1		Type 2	
	Number	Percentage	Number	Percentage
Shetland	6	4.8%	44	4.9%
Orkney	2	1.7%	55	5.9%
Dumfries and Galloway	28	3.1%	468	6.0%
Fife	43	2.2%	1,129	6.4%
Forth Valley	42	2.5%	901	6.7%
Ayrshire and Arran	51	2.3%	1,319	6.8%
Tayside	56	2.9%	1,383	7.2%
Borders	17	2.7%	389	7.3%
Lanarkshire	117	3.3%	2,063	7.5%
Greater Glasgow and Clyde	155	2.4%	4,107	7.5%
Highland	55	2.9%	1,042	7.6%
Lothian	97	2.2%	2,431	7.6%
Grampian	78	2.5%	1,815	7.9%
Western Isles	3	1.6%	90	8.0%
Scotland	750	2.6%	17,236	7.3%

Table 56. Percentage of people with diabetes recorded as having ever had cardiac revascularisation, Scotland, 2001-2013.

Year of Survey	Cardiac Revascularisation
2013	6.8%
2012	6.7%
2011	6.6%
2010	6.4%
2009	6.3%
2008	6.1%
2007	5.9%
2006	5.5%
2005	4.9%
2004	3.9%
2003	2.8%
2002	3.7%
2001	2.1%

Stroke

13,168 (5.0%) people with diabetes were recorded as having ever had a cerebrovascular accident (stroke), an increase in numbers but a similar percentage to that in previous surveys (4.9% in 2012 and 2011, 5.0% in 2010 and 5.1% in each year between 2006 and 2011).

Table 57. Number and percentage of people with diabetes who were recorded as ever having had a stroke, by NHS Board and diabetes type, ranked by figures for type 2 diabetes.

NHS Board	Recorded as having had a stroke			
	Type 1 diabetes		Type 2 diabetes	
	Number	Percentage	Number	Percentage
Orkney	2	1.7%	34	3.7%
Shetland	2	1.6%	36	4.0%
Dumfries and Galloway	21	2.3%	319	4.1%
Western Isles	3	1.6%	50	4.5%
Grampian	49	1.6%	1,072	4.6%
Lanarkshire	80	2.2%	1,377	5.0%
Fife	48	2.4%	917	5.2%
Highland	40	2.1%	720	5.3%
Forth Valley	29	1.7%	713	5.3%
Ayrshire and Arran	52	2.3%	1,051	5.4%
Greater Glasgow and Clyde	116	1.8%	3,000	5.5%
Tayside	39	2.0%	1,082	5.6%
Lothian	93	2.1%	1,860	5.8%
Borders	18	2.8%	345	6.4%
Scotland	592	2.0%	12,576	5.3%

Kidney Disease

Serum creatinine

Serum creatinine was recorded for 93.2% of patients overall.

Table 58. Number and percentage of people with diabetes who have a record of serum creatinine within the previous 15 months, by NHS board and diabetes type, ranked by percentage for type 2.

NHS Board	Recorded within previous 15 months				Total
	Type 1 diabetes		Type 2 diabetes		
	Number	Percentage	Number	Percentage	
Western Isles	170	95.0%	1,092	97.3%	1,262
Shetland	108	90.8%	875	97.0%	983
Tayside	1,634	86.9%	18,700	96.8%	20,334
Ayrshire and Arran	1,862	87.0%	18,653	96.5%	20,515
Fife	1,747	90.4%	17,086	96.4%	18,833
Grampian	2,560	84.0%	22,212	96.2%	24,772
Forth Valley	1,424	88.4%	12,829	94.9%	14,253
Orkney	108	95.6%	880	94.7%	988
Lothian	3,652	86.2%	30,121	94.7%	33,773
Dumfries and Galloway	722	82.0%	7,262	93.9%	7,984
Greater Glasgow and Clyde	5,019	80.3%	50,919	93.6%	55,938
Lanarkshire	2,708	79.0%	25,686	93.2%	28,394
Borders	541	89.3%	4,879	91.2%	5,420
Highland	1,390	77.7%	12,182	88.9%	13,572
Scotland	23,645	83.8%	223,376	94.5%	247,021

Note: Excludes children under 12 years of age or patients who have no date of birth recorded (n=1176).

Table 59. Percentage of people with diabetes (type 1 and type 2 combined) who had a record of serum creatinine within the previous 15 months, 2003-2013.

Year	Recorded within previous 15 months	Total eligible population
2013	93.3%	264,695
2012	92.6%	255,640
2011	91.2%	244,800
2010	90.8%	235,198
2009	90.0%	225,635
2008	90.3%	218,903
2007	88.6%	208,652
2006	86.1%	195,717
2005	82.3%	171,899
2004	69.2%	149,353
2003	42.5%	133,889

Note: Excludes children under 12 years of age or patients who have no date of birth recorded (n=1171). Figures prior to 2009 reported on those with all types of diabetes mellitus. The figures for 2009 and onwards report only on those with type 1 and type 2 diabetes.

Urinary microalbuminuria

Table 60 shows information on the recording of microalbuminuria. Note that there are data quality issues for some boards and that not all boards have collected data on microalbuminuria for those with type 2 diabetes.

Table 60. Number and percentage of people with diabetes who have a record of estimated urinary microalbumin value available on SCI-Diabetes within the previous 15 months, by NHS board and diabetes type, ranked by figures for type 2.

NHS Board	Recorded within previous 15 months				Total
	Type 1 diabetes		Type 2 diabetes		
	Number	Percentage	Number	Percentage	
Tayside	1,304	69.4%	16,195	83.8%	17,499
Fife	1,458	75.5%	14,822	83.6%	16,280
Grampian	2,044	67.1%	19,030	82.4%	21,074
Western Isles	128	71.5%	900	80.2%	1,028
Orkney	85	75.2%	715	77.0%	800
Shetland	91	76.5%	677	75.1%	768
Highland	1,029	57.5%	10,236	74.7%	11,265
Lothian	3,076	72.6%	23,339	73.3%	26,415
Forth Valley	919	57.1%	9,804	72.5%	10,723
Ayrshire and Arran	1,129	52.8%	13,393	69.3%	14,522
Lanarkshire	1,658	48.4%	18,525	67.2%	20,183
Greater Glasgow and Clyde	3,780	60.5%	35,953	66.1%	39,733
Dumfries and Galloway	240	27.3%	2,618	33.9%	2,858
Borders	315	52.0%	344	6.4%	659
Scotland	17,256	61.2%	166,551	70.4%	183,807

Note: Excludes children under 12 years of age or patients who have no date of birth recorded (n=1171). In some cases, urinary microalbumin was estimated from albumin/creatinine ratio (ACR).

Table 61. Number and percentage of people with diabetes who have a record of eGFR available on SCI-Diabetes within the previous 15 months, by NHS board and diabetes type, ranked by figures for type 2.

NHS Board	Recorded within previous 15 months				Total
	Type 1 diabetes		Type 2 diabetes		
	Number	Percentage	Number	Percentage	
Shetland	107	95.5%	876	97.1%	983
Tayside	1,502	85.9%	18,690	96.8%	20,192
Grampian	2,414	85.4%	21,954	95.1%	24,368
Highland	1,406	85.3%	12,907	94.2%	14,313
Orkney	93	88.6%	874	94.1%	967
Greater Glasgow and Clyde	4,476	76.5%	50,316	92.5%	54,792
Forth Valley	1,173	79.3%	12,378	91.6%	13,551
Western Isles	125	75.3%	1,018	90.7%	1,143
Dumfries and Galloway	672	81.2%	7,004	90.6%	7,676
Fife	1,454	80.8%	15,669	88.4%	17,123
Borders	502	89.2%	4,596	86.0%	5,098
Lothian	1,750	43.6%	17,994	56.5%	19,744
Lanarkshire	1,162	36.7%	11,581	42.0%	12,743
Ayrshire and Arran	446	22.6%	6,292	32.5%	6,738
Scotland	17,282	65.7%	182,149	77.0%	199,431

End stage renal failure

End stage renal failure implies a need for renal dialysis or transplantation.

Table 62. Number and percentage of people with diabetes recorded as having end stage renal failure, by NHS board and diabetes type, ranked by percentage for type 2.

NHS Board	Recorded as having end stage renal failure			
	Type 1 diabetes		Type 2 diabetes	
	Number	Percentage	Number	Percentage
Western Isles	1	0.5%	3	0.3%
Orkney	2	1.7%	3	0.3%
Dumfries and Galloway	6	0.7%	30	0.4%
Borders	12	1.9%	22	0.4%
Lanarkshire	43	1.2%	117	0.4%
Ayrshire and Arran	42	1.9%	82	0.4%
Forth Valley	17	1.0%	64	0.5%
Greater Glasgow and Clyde	67	1.0%	259	0.5%
Highland	18	1.0%	71	0.5%
Shetland	1	0.8%	5	0.6%
Grampian	52	1.6%	128	0.6%
Fife	20	1.0%	104	0.6%
Lothian	40	0.9%	197	0.6%
Tayside	36	1.8%	125	0.6%
Scotland	357	1.2%	1,210	0.5%

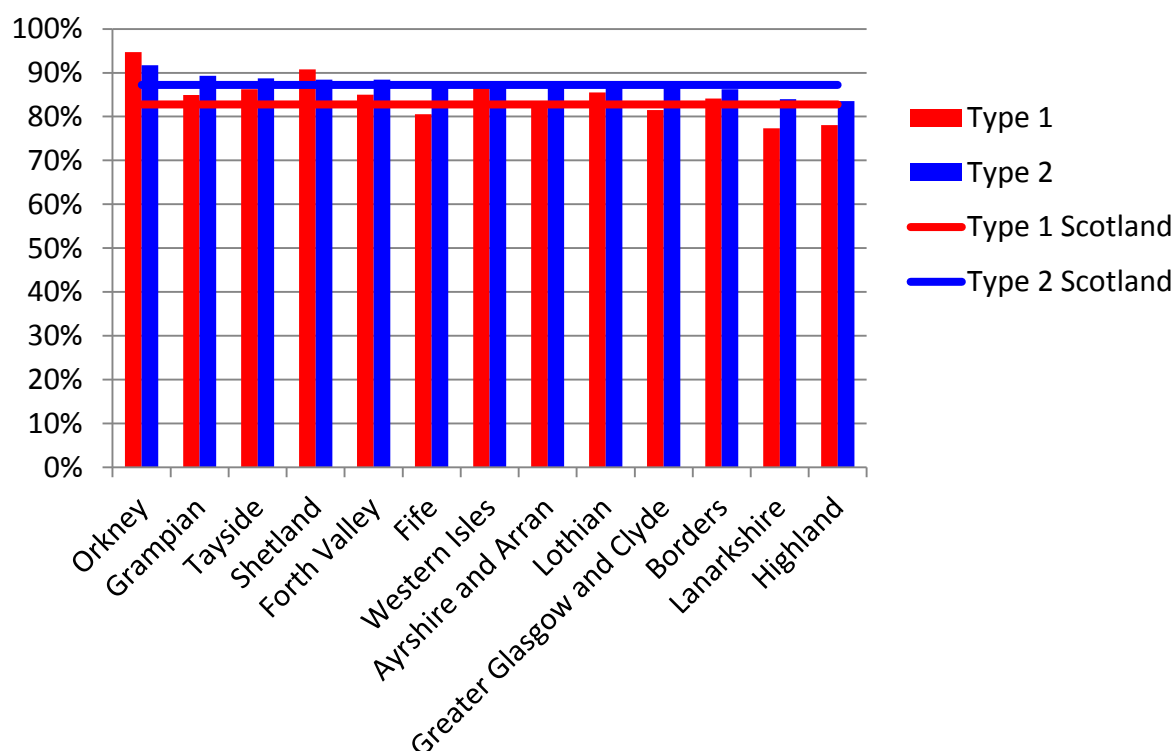
Diabetic Eye Disease

Diabetic retinal screening

85.1% of patients had a record of eye screening through the retinal screening service recorded on SCI-Diabetes in the previous 15 months, including those attending ophthalmology services.

Note that figures for retinopathy and blindness are not provided in this year's report. Quantifying blindness and retinopathy (using last known retinal status) requires interrogation of historical data that may be some years old. As the move from SCI-DC to SCI-Diabetes limited historical data migration to 2 years it was not possible to provide accurate figures for these items. At the time of data extraction this affected 10 of the 14 Health Board Regions and thus it was decided to exclude these questions from this year's report. All historical data should be back-populated into SCI-Diabetes in time for next year's survey and questions relating to blindness and retinopathy will be re-instated.

Figure 30. Percentage of people with diabetes with a record of diabetic retinopathy screening within the previous 15 months through retinal screening service, including those attending ophthalmology clinics and those suspended, by NHS Board and diabetes type, ranked by percentage for type 2.



Note: Excludes patients under 18 years of age and patients whose date of birth has not been recorded (n = 1,171).

Table 63 shows the number of patients of appropriate age (≥ 12 years) who were either screened, were getting eye-care via specialist services or were deliberately (for clinical or

social reasons) suspended from screening as a proportion of the total number of patients who had a record of date of birth and were over 12 years of age.

Table 63. Percentage of people with diabetes of appropriate age (≥ 12 years) who were either recorded as having had diabetic retinopathy screening within the previous 15 months, were attending specialist ophthalmology clinics or were appropriately suspended from screening as a proportion of the total number of patients who had a record of date of birth and were over 12 years of age; by NHS Board and diabetes type, ranked (descending) by percentage figure for type 2

NHS Board	Type 1 diabetes		Type 2 diabetes		All (type 1 and type 2)		Not recorded
	Number	Percentage	Number	Percentage	Number	Percentage	
Dumfries and Galloway	801	91.0%	7,253	93.8%	8,054	93.5%	560
Orkney	107	94.7%	852	91.7%	959	92.0%	83
Grampian	2,589	84.9%	20,619	89.3%	23,208	88.8%	2,921
Tayside	1,622	86.3%	17,146	88.8%	18,768	88.5%	2,430
Shetland	108	90.8%	798	88.5%	906	88.7%	115
Forth Valley	1,368	85.0%	11,956	88.5%	13,324	88.1%	1,803
Fife	1,556	80.5%	15,570	87.9%	17,126	87.1%	2,529
Western Isles	157	87.7%	984	87.7%	1,141	87.7%	160
Ayrshire and Arran	1,773	82.9%	16,941	87.6%	18,714	87.1%	2,761
Lothian	3,623	85.5%	27,667	86.9%	31,290	86.8%	4,768
Greater Glasgow and Clyde	5,092	81.5%	47,251	86.9%	52,343	86.3%	8,294
Borders	510	84.2%	4,611	86.2%	5,121	86.0%	832
Lanarkshire	2,651	77.3%	23,157	84.0%	25,808	83.3%	5,189
Highland	1,397	78.0%	11,442	83.5%	12,839	82.9%	2,649
Scotland	23,354	82.8%	206,247	87.2%	229,601	86.7%	35,094

Note: Excludes children under 12 years of age or patients who have no date of birth recorded (n = 1,171).

Table 64. Numbers of patients eligible for screening and percentages of those who were actually screened (type 1 and type 2 combined), 2012, ranked by percentage of screened patients.

NHS Board	Eligible for screening	Screened	Percentage screened
Dumfries and Galloway	7,828	7,268	92.8%
Orkney	899	816	90.8%
Grampian	24,405	21,484	88.0%
Shetland	956	841	88.0%
Forth Valley	14,483	12,680	87.6%
Tayside	18,272	15,842	86.7%
Western Isles	1,186	1,026	86.5%
Ayrshire and Arran	20,079	17,318	86.2%
Fife	17,685	15,156	85.7%
Lothian	32,614	27,846	85.4%
Greater Glasgow and Clyde	55,729	47,435	85.1%
Borders	5,055	4,223	83.5%
Lanarkshire	28,538	23,349	81.8%
Highland	14,002	11,353	81.1%
Scotland	241,731	206,637	85.5%

Table 65. Percentage of people with diabetes (type 1 and type 2 combined) who were recorded as having had eye-screening, ophthalmology care or an appropriate suspension from screening (depending on methodology at the time of each report): 2001-2013.

Year	Recorded within previous 15 months
2013	86.8%
2012	86.1%
2011	85.6%
2010	85.1%
2009	80.6%
2008	71.9%
2007	83.6%
2006	70.8%
2005	67.7%
2004	60.4%
2003	40.4%
2002	60.3%
2001	42.2%

Note: Excludes children under 12 years or patients who have no date of birth recorded (n=1.171). 2008 data is taken only from digital imaging via Diabetes Retinopathy Screening. For 2002 to 2007, data from any form of screening was acceptable.

Foot Complications

Foot risk calculation

Table 66. Type 1 diabetes: percentage of people with high, moderate or low foot risk score recorded in the previous 15 months, by NHS board, ranked by percentage who have active foot disease.

NHS Board	Recorded as having active foot disease		Recorded as having high foot risk score		Recorded as having moderate foot risk score		Recorded as having low foot risk score		Recorded as having foot risk score	
	n	%	n	%	n	%	n	%	n	%
Orkney	0	0.0%	7	7.4%	11	11.7%	76	80.9%	94	79.7%
Shetland	0	0.0%	5	4.6%	9	8.3%	94	87.0%	108	85.7%
Lothian	29	1.1%	142	5.2%	282	10.3%	2,276	83.4%	2,729	62.4%
Grampian	23	1.1%	87	4.2%	156	7.5%	1,808	87.2%	2,074	65.7%
Ayrshire and Arran	14	1.2%	65	5.4%	117	9.8%	997	83.6%	1,193	53.6%
Highland	21	1.7%	77	6.2%	164	13.1%	988	79.0%	1,250	67.0%
Fife	23	1.8%	81	6.5%	187	15.0%	954	76.6%	1,245	62.4%
Forth Valley	20	1.9%	54	5.0%	146	13.6%	852	79.5%	1,072	64.1%
Borders	10	2.3%	46	10.6%	51	11.7%	328	75.4%	435	68.7%
Dumfries and Galloway	14	2.5%	37	6.7%	70	12.7%	431	78.1%	552	60.8%
Tayside	34	2.7%	106	8.3%	115	9.0%	1,025	80.1%	1,280	65.6%
Western Isles	4	2.8%	19	13.2%	35	24.3%	86	59.7%	144	78.3%
Greater Glasgow and Clyde	110	3.0%	237	6.5%	446	12.1%	2,881	78.4%	3,674	56.8%
Lanarkshire	77	3.5%	162	7.4%	283	12.9%	1,666	76.1%	2,188	61.0%
Scotland	379	2.1%	1,125	6.2%	2,072	11.5%	14,462	80.2%	18,038	61.6%

Table 67. Type 2 diabetes: percentage of people with high, moderate or low foot risk score recorded in the previous 15 months, by NHS board, ranked by percentage with active foot disease.

NHS Board	Recorded as having active foot disease		Recorded as having high foot risk score		Recorded as having moderate foot risk score		Recorded as having low foot risk score		Recorded as having foot risk score	
	n	%	n	%	n	%	n	%	n	%
Forth Valley	46	0.4%	429	3.9%	1,904	17.3%	8,618	78.4%	10,997	81.3%
Ayrshire and Arran	88	0.6%	447	2.8%	1,797	11.3%	13,514	85.3%	15,846	82.0%
Grampian	116	0.6%	670	3.5%	3,009	15.5%	15,607	80.4%	19,402	84.1%
Shetland	5	0.6%	40	5.1%	129	16.6%	603	77.6%	777	86.1%
Borders	33	0.8%	237	5.6%	518	12.2%	3,465	81.5%	4,253	79.5%
Lothian	232	0.9%	1,248	4.8%	4,709	18.1%	19,820	76.2%	26,009	81.7%
Fife	121	0.9%	1,149	8.5%	3,691	27.4%	8,492	63.1%	13,453	75.9%
Dumfries and Galloway	60	1.0%	255	4.2%	1,067	17.7%	4,636	77.0%	6,018	77.8%
Highland	122	1.1%	834	7.3%	2,069	18.0%	8,442	73.6%	11,467	83.7%
Tayside	178	1.1%	1,094	6.6%	3,077	18.5%	12,299	73.9%	16,648	86.2%
Western Isles	10	1.1%	149	16.2%	298	32.3%	465	50.4%	922	82.2%
Greater Glasgow and Clyde	499	1.2%	2,122	5.0%	8,883	21.0%	30,776	72.8%	42,280	77.7%
Orkney	9	1.2%	59	8.1%	178	24.5%	482	66.2%	728	78.4%
Lanarkshire	315	1.5%	1,153	5.5%	3,135	14.9%	16,499	78.2%	21,102	76.4%
Scotland	1,834	1.0%	9,886	5.2%	34,464	18.1%	143,718	75.7%	189,902	80.3%

Foot ulceration

13,789 (5.2%) people with type 1 or type 2 diabetes were reported to have had a foot ulcer. The increasing percentages for foot ulcer shown in Table 69 below are likely to be due to better recording rather than a real increase in the risk of foot ulcer.

Table 68. Number and percentage of people with diabetes with a record of ever having had a foot ulcer, by NHS board and diabetes type, ranked by figures for type 2.

NHS Board	Recorded as ever having had a foot ulcer			
	Type 1 diabetes		Type 2 diabetes	
	Number	Percentage	Number	Percentage
Shetland	2	1.6%	17	1.9%
Grampian	133	4.2%	473	2.0%
Ayrshire and Arran	108	4.9%	397	2.1%
Dumfries and Galloway	50	5.5%	213	2.8%
Borders	49	7.7%	157	2.9%
Orkney	7	5.9%	31	3.3%
Tayside	146	7.5%	697	3.6%
Forth Valley	167	10.0%	543	4.0%
Highland	106	5.7%	583	4.3%
Fife	133	6.7%	778	4.4%
Greater Glasgow and Clyde	585	9.1%	2,401	4.4%
Western Isles	11	6.0%	57	5.1%
Lothian	351	8.0%	2,038	6.4%
Lanarkshire	725	20.2%	2,831	10.2%
Scotland	2,573	8.8%	11,216	4.7%

Table 69. Percentage of people with diabetes (type 1 and type 2 combined) who had a record of ever having had a foot ulcer, Scotland, 2001-2013.

Year of Survey	Recorded as ever having had a foot ulcer
2013	5.2%
2012	5.1%
2011	4.3%
2010	4.4%
2009	4.3%
2008	4.6%
2007	4.7%
2006	5.0%
2005 (a)	3.9%
2004	2.2%
2003	1.5%
2002	1.4%
2001	1.0%

(a) Excludes NHS Borders and NHS Lanarkshire.

Lower limb amputation

2,064 (0.8%) patients have ever had a lower limb amputation.

Table 70. Number and percentage of people with diabetes with a record of ever having had a major lower limb amputation, by NHS board and diabetes type, ranked by percentage for type 2.

NHS Board	Recorded as ever having had a lower limb amputation			
	Type 1 diabetes		Type 2 diabetes	
	Number	Percentage	Number	Percentage
Shetland	1	0.8%	4	0.4%
Western Isles	2	1.1%	6	0.5%
Ayrshire and Arran	21	0.9%	114	0.6%
Lanarkshire	35	1.0%	175	0.6%
Lothian	32	0.7%	202	0.6%
Tayside	21	1.1%	133	0.7%
Borders	9	1.4%	39	0.7%
Grampian	38	1.2%	172	0.7%
Greater Glasgow and Clyde	75	1.2%	413	0.8%
Forth Valley	23	1.4%	104	0.8%
Fife	27	1.4%	146	0.8%
Orkney	1	0.8%	8	0.9%
Dumfries and Galloway	20	2.2%	74	1.0%
Highland	29	1.6%	140	1.0%
Scotland	334	1.1%	1,730	0.7%

Table 71. Number and percentage of people with diabetes (type 1 and type 2 combined) who had a record of ever having had a lower limb amputation, Scotland, 2002-2013.

Year of Survey	Lower limb amputation	
	Number	Percentage
2013	2064	0.8%
2012	1854	0.7%
2011	1359	0.6%
2010	1250	0.5%
2009	1132	0.5%
2008	1051	0.5%
2007	950	0.5%
2006	868	0.4%
2005 (a)	774	0.5%
2004	845	0.6%
2003	1014	0.8%
2002	996	1.0%

Note: These figures are for those who have ever had an amputation in any year, and are still alive.

(a) excludes NHS Borders and NHS Lanarkshire.

Other statistics

My Diabetes My Way

“My Diabetes My Way” (www.mydiabetesmyway.scot.nhs.uk) is the NHS Scotland interactive diabetes website that helps to support people who have diabetes and their carers. The table below shows the number of people who had registered to access their own clinical information using the website by the end of 2013. Records access is a key objective of the Scottish Diabetes Action Plan.

Table 72. Numbers of people with diabetes registered to access their clinical information using the “My Diabetes My Way” website by NHS Board, 2012, Scotland.

NHS Board	Type 1	Type 2	Total
Ayrshire and Arran	36	179	215
Borders	19	52	71
Dumfries and Galloway	43	72	115
Fife	169	376	545
Forth Valley	238	624	862
Grampian	92	243	335
Greater Glasgow and Clyde	262	485	747
Highland	73	202	275
Lanarkshire	245	240	485
Lothian	869	1421	2290
Orkney	3	8	11
Shetland	20	36	56
Tayside	122	381	503
Western Isles	4	6	10
Scotland	2195	4325	6520

Note: The above figures show the number of patients who had registered to access their diabetes data at the end of 2013. Following registration, a consent form must be completed and signed in order to complete the patient’s enrolment. At this stage, username and password are sent out. At the end of 2013, 1923 patients had accessed their results using this service. During the final 3 months of 2013, a total of 810 (42.1% of active users) had logged in, showing a good level of continued engagement.

Healthcare providers across NHS Scotland are encouraged to raise awareness of My Diabetes My Way services amongst their patient cohorts. Further information and awareness materials may be obtained by emailing mydiabetesmyway@nhs.net.

Scottish Diabetes Research Network (SDRN) Research Register

The SDRN research register allows people with diabetes to indicate their interest in taking part in research on diabetes in Scotland, including clinical trials. The Table below shows the numbers who had joined the register by the end of 2013. It should be noted that many other people with diabetes who are not necessarily on this registry also take part in research.

Table 73. Numbers of people with diabetes who had joined the SDRN diabetes research register by the end of 2012, by NHS Board, Scotland.

NHS Board	Type 1	Type 2	Total
Ayrshire and Arran	8	12	20
Borders	2	10	12
Dumfries and Galloway	144	698	842
Fife	85	252	337
Forth Valley	58	151	209
Grampian	158	645	803
Greater Glasgow and Clyde	432	877	1309
Highland	494	977	1471
Lanarkshire	116	532	648
Lothian	917	1845	2762
Orkney	0	0	0
Shetland	2	0	2
Tayside	318	1596	1914
Western Isles	1	0	1
Scotland	2735	7595	10330

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Appendix 1: SCI-Diabetes Data Sources

SCI-Diabetes receives data from a variety of data sources in order to maintain its shared electronic record for diabetes. A breakdown of the main sources at January 2013 is as follows:

- All 994 general practices across Scotland (EMIS, Vision)
- 39 hospital diabetes clinics (SCI-DC Clinical and SCI-Diabetes)
- 10 regions linking to local laboratory data (SCI Store – see below)
- National Diabetic Retinopathy Screening (DRS) System
- Community Health Index (master patient identifier)
- Direct web entry on SCI-Diabetes

Inpatient Management: 1 region linking to local patient administration system for admission, discharge and transfer data

Registration onto the system can be initiated via the primary and secondary care feeds, registration onto the DRS system or the web patient administration forms. As part of the DRS registration process, primary care users are expected to review their SCI-Diabetes lists periodically to ensure that all patients eligible for screening are included.

At present, the SCI-Diabetes team are, via its National Implementation Group, encouraging those boards that have not yet activated their SCI Store link to do so to ensure the completeness of their laboratory data. Although transcribed versions of these data are received from practice and clinic systems, data accuracy and completeness cannot be guaranteed and so a SCI Store link is essential. The current SCI Store Implementation matrix is shown below.

Table 74. Progress towards links from SCI Store to SCI-Diabetes.

Region	Implementation Requested	Status	Comments
Ayrshire and Arran	Yes	Live	
Borders	Yes	Region contacted with documentation	To be progressed.
Dumfries and Galloway	Yes		Reviewing documentation. Further discussion required
Fife	Yes	Live	
Fife/Tayside	Yes	Live	Tayside store feeding to Fife for north Fife patients
Forth Valley	Yes	Live	
Grampian	Yes	Live	
Greater Glasgow and Clyde	Yes	n/a	To be progressed.
Highland	Yes	n/a	In progress in Argyll & Bute
Lanarkshire	Yes	Live	
Lothian	Yes	Live	
Orkney	No	n/a	To be progressed
Shetland	Yes	Live	
Tayside	Yes	Live	
Western Isles	Yes	Live	

In addition to incoming feeds, SCI-Diabetes data are also transferred to external systems

National Diabetic Retinopathy Screening: to maintain the call-recall system

My Diabetes My Way: patients accessing their own information

SCI-Diabetes Audit Server: for regional and national reporting

Back-Population of 915 (92%) GP systems (in support of a single-point of data entry). The implementation matrix for back-population is shown below:

Table 75. Progress towards back-population of GP systems from SCI-Diabetes.

Region	01/01/2014	Total Practices	Percentage	Comments
Ayrshire & Arran	46	55	84%	
Borders	21	23	91%	
Dumfries & Galloway	25	34	74%	
Fife	57	58	98%	
Forth Valley	57	57	100%	
Glasgow	257	263	98%	
Grampian	81	82	99%	
Highland	62	99	63%	
Lanarkshire	96	99	97%	
Lothian	120	127	94%	
Orkney	10	10	100%	
Tayside	63	67	94%	
Western Isles	10	10	100%	
Shetland	10	10	100%	
Total	915	994	92%	

More information about the SCI-DC programme and SCI-Diabetes is available at:

<http://www.sci-diabetes.scot.nhs.uk/>

The full details of the questions and definitions used in data collection for the 2013 Scottish Diabetes Survey are available at:

<http://www.sci-diabetes.scot.nhs.uk/wp-content/uploads/2014/04/Scottish-Diabetes-Survey-2013-Guidelines.pdf>

Appendix 2: Comparison with England/ Wales

This section provides a comparison of the results of this survey with the 2011-12 National Diabetes Audit (NDA) in England and Wales. Please note that the definitions and cut-off values for blood pressure are not exactly the same so the figure may not be directly comparable.

Diabetes prevalence. The 2013 Scottish Diabetes survey reports that 5.0% of the population had diabetes (268,154 people), compared to 4.7% among 88% of general practices in England and Wales that participated in the National diabetes Audit for 2011-12 (NDA) (2,473,239 people) ¹.

1 National Diabetes Audit 2011-2012 for England. Available at <http://www.hscic.gov.uk/catalogue/PUB12421/nati-diab-audi-11-12-care-proc-rep.pdf>

Table 76. Comparison of distribution of key risk factors between Scotland and England/Wales by type of diabetes

	Type 1		Type 2	
	Scottish Diabetes Survey 2013	England and Wales NDA 2011-2	Scottish Diabetes Survey 2013	England and Wales NDA 2011-2
HbA1c < 58mmol/mol (7.5%),	21.5%	27.0%	61.1%	65.8%
BP<130/80	47.6%		33.8%	
BP <140/80 for patients without recorded eye, kidney or vascular disease or <130/80 for patients with recorded eye, kidney or vascular disease		51.9%		37.7%
Total cholesterol ≤5 mmol/l	71.3%	71.1%	80.8%	77.5%
Current smokers	23.5%	17.1%	18.1%	13.1%
BMI>30kg/m2	24.8%	21.3%	55.0%	47.1%

Appendix 3: Variability of HbA1c

In Scotland laboratory service are provided by 14 separately funded Health Boards from multiple sites. A range of technologies are used in those various sites. Recent information from Birmingham UK National External Quality Assurance Schemes indicated returns from Scotland for 20 sites using ion exchange methods (17 Arkray HA systems and 3 Tosoh G8 systems), 2 affinity chromatograph systems (Menarini 9210) and 6 immunoassay systems (Siemens DCA). Some services use different technologies for high volume workloads (e.g. Arkray HA) and point of care testing (Siemens DCA immunoassay). Although systems are similarly calibrated against IFCC standards, differences are seen in methods-specific bias (deviation) from all-method mean values in EQA schemes and from target values set by secondary IFCC assay methods. Recently the Tosoh G8 methods, used by two health boards in Scotland, for instance have shown UK-wide a median bias against method means of circa +5%, with the Arkray method demonstrating a median bias of -1.6%.

Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	2,226	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	19,336	4.7	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	2,226	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	19,336	5.2	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	834	3.7	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	18,884	88.6	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	1,991	89.4	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	18,423	95.3	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	1,802	81.0	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	18,334	94.8	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	1,656	83.8	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	18,167	94.0	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	2,070	93.0	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	19,261	99.6	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	1,862	87.0	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	18,653	96.5	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	1,129	52.8	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	13,393	69.3	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	446	22.6	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	6,292	32.5	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	1,767	82.8	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	16,881	87.6	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	1,193	53.6	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	15,846	82.0	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	473	21.2	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	3,499	18.1	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	451	22.8	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	9,462	48.9	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	1,557	69.9	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	14,680	75.9	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	670	30.1	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	2,339	12.1	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	447	22.6	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	3,297	17.1	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	42	1.9	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	82	0.4	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	1,113	52.0	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	5,706	29.5	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	91	4.1	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	1,927	10.0	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	51	2.3	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	1,319	6.8	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	52	2.3	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	1,051	5.4	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	108	4.9	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	397	2.1	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	21	0.9	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	114	0.6	%	0.7			

Spine Chart Key: % =percent
sr2=age-sex standardised rate per 100 population

Spine Chart Key: Statistically significantly 'worse' than National average
 Statistically not significantly different from National average
 Statistically significantly 'better' than National average
 Statistically significant difference compared to National average
 No significance can be calculated



See the detailed Definitions and Sources table for indicator information and Technical Report (on the web) for further guidance on interpreting the spine.

Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	633	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	5,349	3.9	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	633	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	5,349	4.7	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	213	3.4	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	5,190	87.8	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	583	92.1	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	4,943	92.4	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	572	90.4	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	5,063	94.7	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	501	89.0	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	4,845	90.6	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	601	94.9	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	5,331	99.7	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	541	89.3	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	4,879	91.2	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	315	52.0	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	344	6.4	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	502	89.2	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	4,596	86.0	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	504	84.0	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	4,481	85.9	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	435	68.7	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	4,253	79.5	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	124	19.6	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	763	14.3	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	167	29.7	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	2,612	48.9	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	419	66.2	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	3,870	72.3	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	194	30.6	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	649	12.1	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	160	28.4	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	1,068	20.0	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	12	1.9	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	22	0.4	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	232	38.3	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	974	18.2	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	34	5.4	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	512	9.6	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	17	2.7	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	389	7.3	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	18	2.8	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	345	6.4	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	49	7.7	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	157	2.9	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	9	1.4	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	39	0.7	%	0.7			

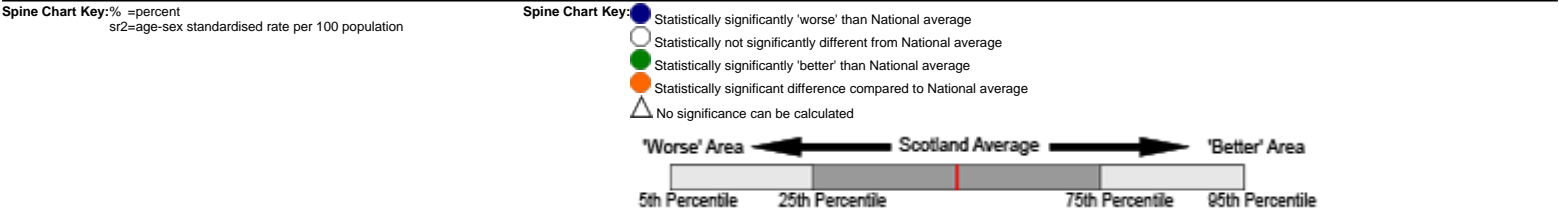
Spine Chart Key: % =percent
sr2=age-sex standardised rate per 100 population

Spine Chart Key: Statistically significantly 'worse' than National average
 Statistically not significantly different from National average
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 Statistically significant difference compared to National average
 No significance can be calculated

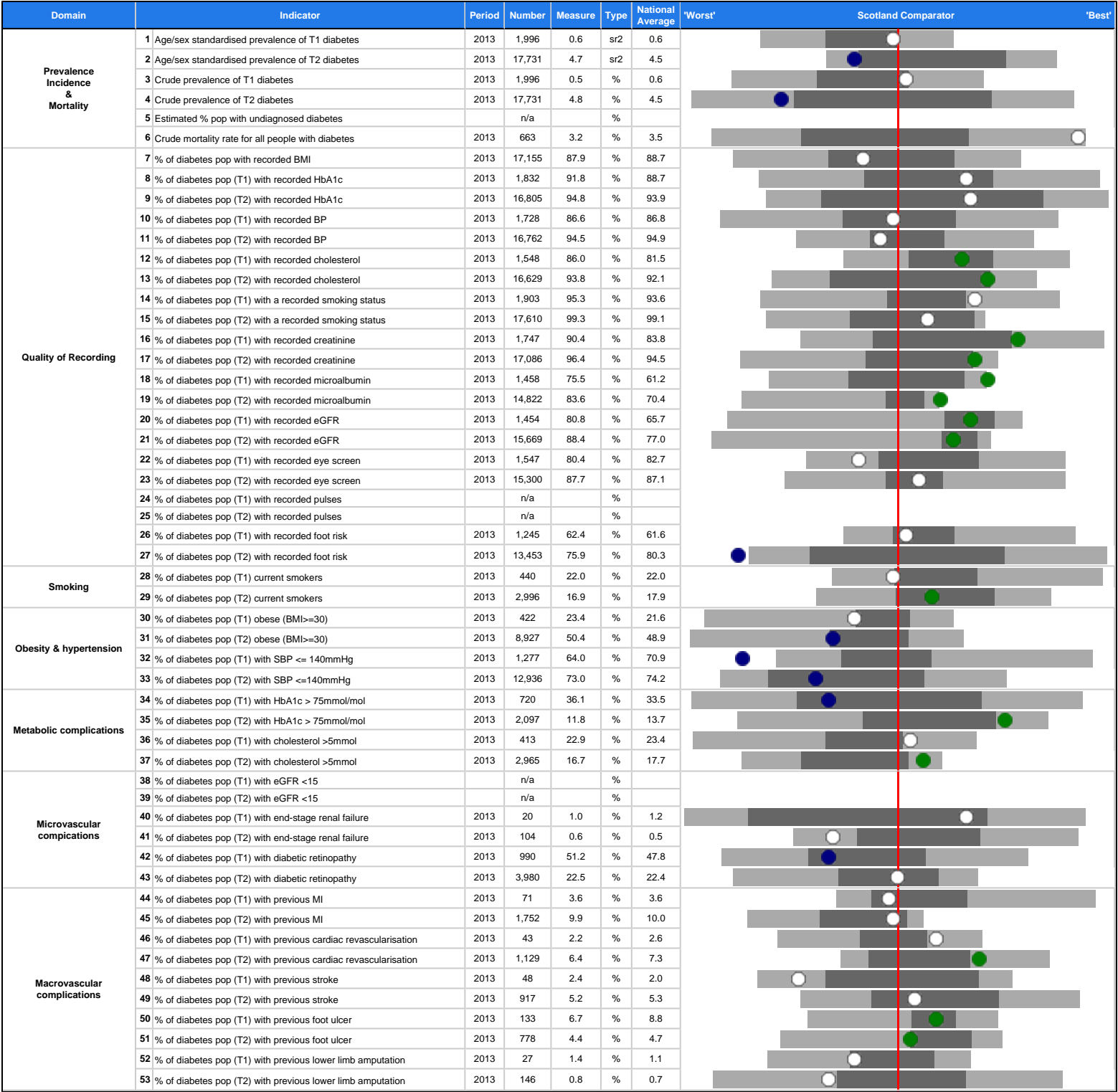


See the detailed Definitions and Sources table for indicator information and Technical Report (on the web) for further guidance on interpreting the spine.

Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	908	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	7,738	4.2	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	908	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	7,738	5.1	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	340	3.8	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	7,360	86.0	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	738	81.3	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	7,183	92.8	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	766	84.4	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	7,219	93.3	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	681	82.2	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	7,048	91.1	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	817	90.0	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	7,628	98.6	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	722	82.0	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	7,262	93.9	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	240	27.3	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	2,618	33.9	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	672	81.2	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	7,004	90.6	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	788	90.9	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	7,134	93.7	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	552	60.8	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	6,018	77.8	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	191	21.0	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	1,252	16.2	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	209	25.2	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	3,681	47.6	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	608	67.0	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	5,572	72.0	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	244	26.9	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	814	10.5	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	203	24.5	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	1,531	19.8	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	6	0.7	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	30	0.4	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	513	58.3	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	2,605	33.7	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	33	3.6	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	639	8.3	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	28	3.1	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	468	6.0	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	21	2.3	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	319	4.1	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	50	5.5	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	213	2.8	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	20	2.2	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	74	1.0	%	0.7			

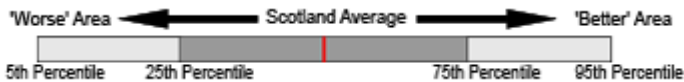


See the detailed Definitions and Sources table for indicator information and Technical Report (on the web) for further guidance on interpreting the spine.



Spine Chart Key: % =percent
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Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	1,672	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	13,521	4.5	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	1,672	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	13,521	4.5	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	572	3.6	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	13,250	88.4	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	1,492	89.2	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	12,655	93.6	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	1,415	84.6	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	12,745	94.3	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	1,236	83.5	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	11,871	87.8	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	1,644	98.3	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	13,442	99.4	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	1,424	88.4	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	12,829	94.9	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	919	57.1	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	9,804	72.5	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	1,173	79.3	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	12,378	91.6	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	1,361	84.9	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	11,906	88.4	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	1,072	64.1	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	10,997	81.3	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	368	22.0	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	2,347	17.4	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	301	20.3	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	6,823	50.5	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	1,174	70.2	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	10,036	74.2	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	686	41.0	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	1,903	14.1	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	345	23.3	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	2,384	17.6	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	17	1.0	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	64	0.5	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	845	52.5	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	3,708	27.4	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	52	3.1	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	1,338	9.9	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	42	2.5	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	901	6.7	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	29	1.7	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	713	5.3	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	167	10.0	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	543	4.0	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	23	1.4	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	104	0.8	%	0.7			

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Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	3,158	0.5	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	23,082	4.2	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	3,158	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	23,082	4.0	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	921	3.4	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	23,639	91.2	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	2,879	91.2	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	22,000	95.3	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	2,708	85.8	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	22,282	96.5	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	2,343	82.9	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	21,740	94.2	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	2,974	94.2	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	23,012	99.7	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	2,560	84.0	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	22,212	96.2	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	2,044	67.1	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	19,030	82.4	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	2,414	85.4	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	21,954	95.1	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	2,571	84.9	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	20,287	89.2	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	2,074	65.7	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	19,402	84.1	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	599	19.0	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	3,392	14.7	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	594	21.0	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	11,474	49.7	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	2,294	72.6	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	17,123	74.2	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	1,305	41.3	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	3,690	16.0	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	599	21.2	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	3,975	17.2	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	52	1.6	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	128	0.6	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	1,444	47.4	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	4,386	19.0	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	103	3.3	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	2,187	9.5	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	78	2.5	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	1,815	7.9	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	49	1.6	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	1,072	4.6	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	133	4.2	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	473	2.0	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	38	1.2	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	172	0.7	%	0.7			

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Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	6,464	0.5	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	54,406	4.8	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	6,464	0.5	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	54,406	4.5	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	2,189	3.4	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	53,331	88.5	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	5,605	86.7	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	50,410	92.7	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	5,724	88.6	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	51,417	94.5	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	4,562	78.0	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	49,282	90.6	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	5,878	90.9	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	53,080	97.6	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	5,019	80.3	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	50,919	93.6	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	3,780	60.5	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	35,953	66.1	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	4,476	76.5	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	50,316	92.5	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	5,051	81.4	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	46,885	86.8	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	3,674	56.8	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	42,280	77.7	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	1,440	22.3	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	10,904	20.0	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	1,183	20.2	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	25,505	46.9	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	4,616	71.4	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	40,647	74.7	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	2,149	33.2	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	8,442	15.5	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	1,358	23.2	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	9,576	17.6	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	67	1.0	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	259	0.5	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	2,972	47.6	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	11,794	21.7	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	224	3.5	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	5,545	10.2	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	155	2.4	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	4,107	7.5	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	116	1.8	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	3,000	5.5	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	585	9.1	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	2,401	4.4	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	75	1.2	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	413	0.8	%	0.7			

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Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	1,867	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	13,701	3.8	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	1,867	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	13,701	4.3	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	570	3.5	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	13,882	90.5	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	1,599	85.6	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	12,917	94.3	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	1,594	85.4	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	13,176	96.2	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	1,389	84.3	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	12,598	92.0	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	1,742	93.3	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	13,664	99.7	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	1,390	77.7	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	12,182	88.9	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	1,029	57.5	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	10,236	74.7	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	1,406	85.3	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	12,907	94.2	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	1,390	78.0	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	11,287	83.3	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	1,250	67.0	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	11,467	83.7	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	405	21.7	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	2,012	14.7	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	379	23.0	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	6,713	49.0	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	1,321	70.8	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	9,845	71.9	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	565	30.3	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	1,851	13.5	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	397	24.1	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	3,001	21.9	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	18	1.0	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	71	0.5	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	796	44.5	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	2,680	19.6	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	68	3.6	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	1,411	10.3	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	55	2.9	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	1,042	7.6	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	40	2.1	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	720	5.3	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	106	5.7	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	583	4.3	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	29	1.6	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	140	1.0	%	0.7			

Spine Chart Key: % =percent
sr2=age-sex standardised rate per 100 population

Spine Chart Key: Statistically significantly 'worse' than National average
 Statistically not significantly different from National average
 Statistically significantly 'better' than National average
 Statistically significant difference compared to National average
 No significance can be calculated



See the detailed Definitions and Sources table for indicator information and Technical Report (on the web) for further guidance on interpreting the spine.

Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	3,586	0.6	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	27,637	4.9	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	3,586	0.6	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	27,637	4.8	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	1,143	3.5	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	26,237	85.4	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	2,985	83.2	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	25,487	92.2	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	3,088	86.1	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	25,658	92.8	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	2,454	77.4	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	24,955	90.5	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	3,380	94.3	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	27,536	99.6	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	2,708	79.0	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	25,686	93.2	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	1,658	48.4	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	18,525	67.2	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	1,162	36.7	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	11,581	42.0	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	2,607	77.0	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	22,656	83.7	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	2,188	61.0	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	21,102	76.4	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	780	21.8	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	5,021	18.2	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	658	20.8	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	13,365	48.5	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	2,615	72.9	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	21,005	76.0	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	1,160	32.3	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	3,924	14.2	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	803	25.3	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	4,993	18.1	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	43	1.2	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	117	0.4	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	1,627	47.5	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	6,533	23.7	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	161	4.5	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	2,839	10.3	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	117	3.3	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	2,063	7.5	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	80	2.2	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	1,377	5.0	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	725	20.2	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	2,831	10.2	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	35	1.0	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	175	0.6	%	0.7			

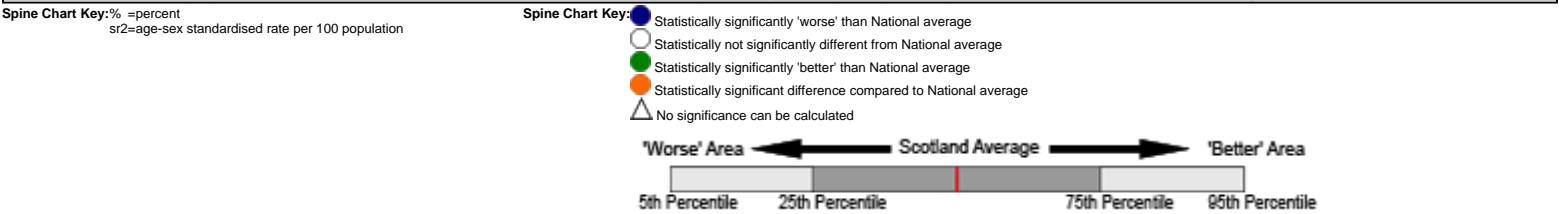
Spine Chart Key: % =percent
sr2=age-sex standardised rate per 100 population

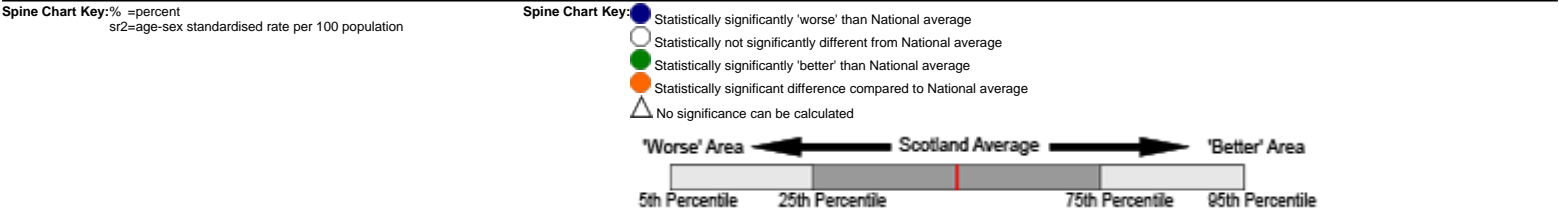
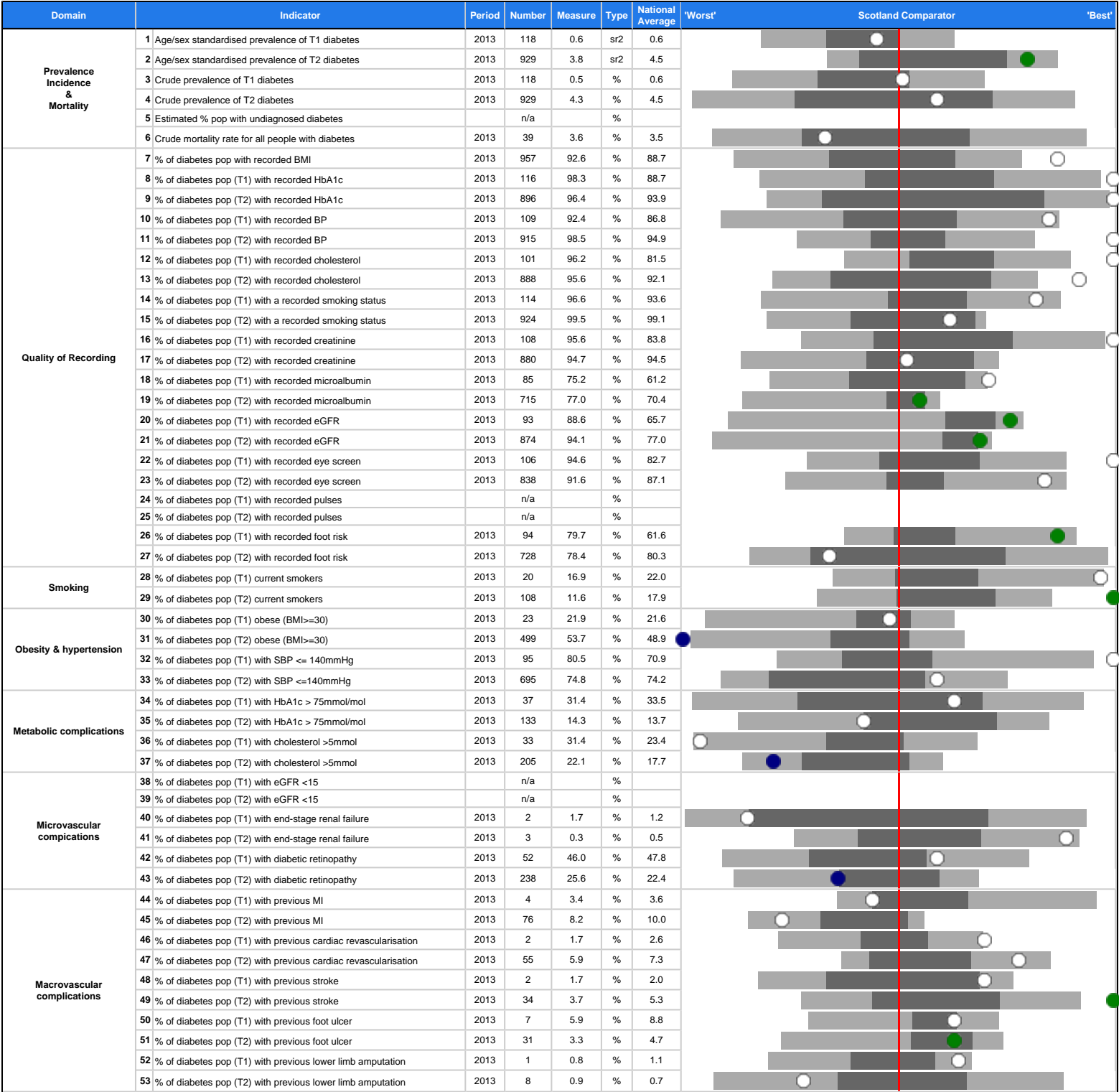
Spine Chart Key: Statistically significantly 'worse' than National average
 Statistically not significantly different from National average
 Statistically significantly 'better' than National average
 Statistically significant difference compared to National average
 No significance can be calculated

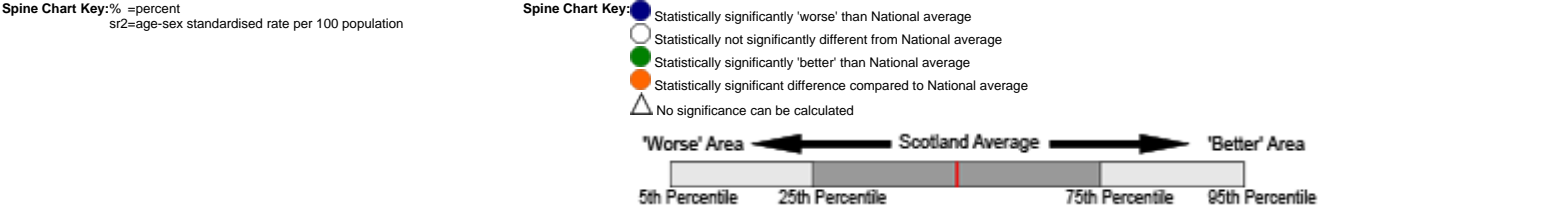
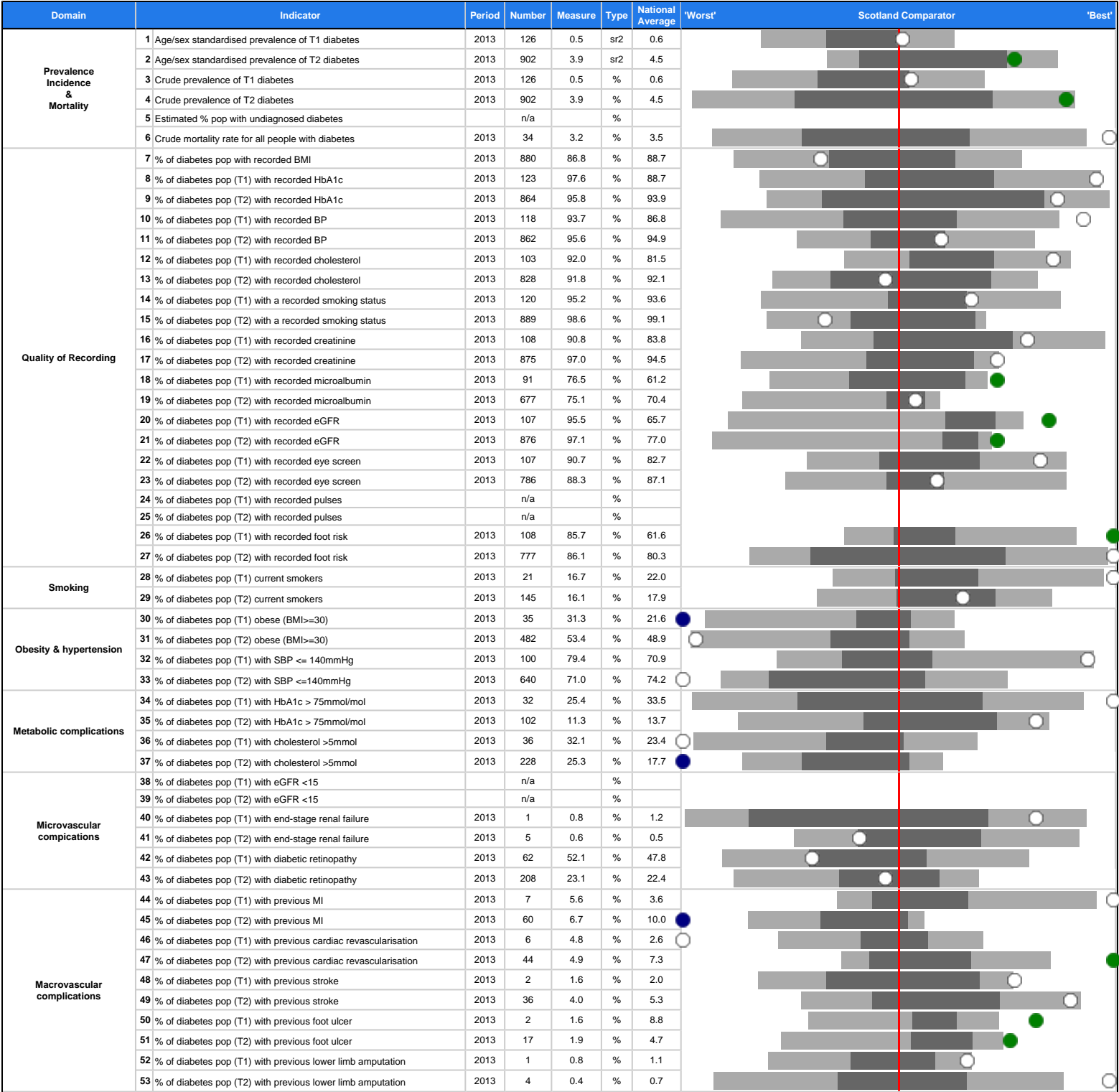


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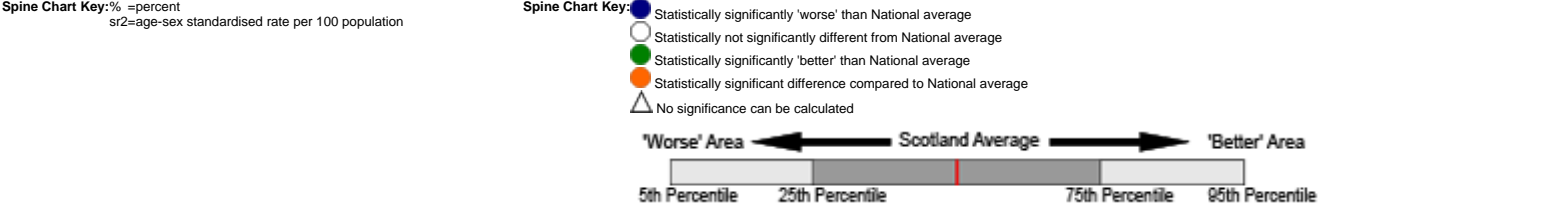
Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	4,372	0.5	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	31,833	4.2	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	4,372	0.5	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	31,833	3.8	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	1,275	3.4	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	31,973	89.2	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	4,018	91.9	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	29,971	94.2	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	3,900	89.2	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	30,438	95.6	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	3,327	82.8	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	29,535	92.8	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	4,145	94.8	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	31,754	99.8	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	3,652	86.2	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	30,121	94.7	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	3,076	72.6	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	23,339	73.3	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	1,750	43.6	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	17,994	56.5	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	3,589	85.4	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	27,144	86.7	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	2,729	62.4	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	26,009	81.7	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	1,084	24.8	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	6,611	20.8	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	847	21.1	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	15,797	49.6	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	3,155	72.2	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	23,754	74.6	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	1,224	28.0	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	3,786	11.9	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	1,004	25.0	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	5,494	17.3	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	40	0.9	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	197	0.6	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	1,821	43.0	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	5,626	17.7	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	132	3.0	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	3,121	9.8	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	97	2.2	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	2,431	7.6	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	93	2.1	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	1,860	5.8	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	351	8.0	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	2,038	6.4	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	32	0.7	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	202	0.6	%	0.7			







Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	1,951	0.5	sr2	0.6			
	2 Age/sex standardised prevalence of T2 diabetes	2013	19,318	4.4	sr2	4.5			
	3 Crude prevalence of T1 diabetes	2013	1,951	0.5	%	0.6			
	4 Crude prevalence of T2 diabetes	2013	19,318	4.7	%	4.5			
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	807	3.6	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	19,247	91.4	%	88.7			
	8 % of diabetes pop (T1) with recorded HbA1c	2013	1,823	93.4	%	88.7			
	9 % of diabetes pop (T2) with recorded HbA1c	2013	18,529	95.9	%	93.9			
	10 % of diabetes pop (T1) with recorded BP	2013	1,726	88.5	%	86.8			
	11 % of diabetes pop (T2) with recorded BP	2013	18,490	95.7	%	94.9			
	12 % of diabetes pop (T1) with recorded cholesterol	2013	1,377	78.7	%	81.5			
	13 % of diabetes pop (T2) with recorded cholesterol	2013	18,249	94.5	%	92.1			
	14 % of diabetes pop (T1) with a recorded smoking status	2013	1,829	93.7	%	93.6			
	15 % of diabetes pop (T2) with a recorded smoking status	2013	19,213	99.5	%	99.1			
	16 % of diabetes pop (T1) with recorded creatinine	2013	1,634	86.9	%	83.8			
	17 % of diabetes pop (T2) with recorded creatinine	2013	18,700	96.8	%	94.5			
	18 % of diabetes pop (T1) with recorded microalbumin	2013	1,304	69.4	%	61.2			
	19 % of diabetes pop (T2) with recorded microalbumin	2013	16,195	83.8	%	70.4			
	20 % of diabetes pop (T1) with recorded eGFR	2013	1,502	85.9	%	65.7			
	21 % of diabetes pop (T2) with recorded eGFR	2013	18,690	96.8	%	77.0			
	22 % of diabetes pop (T1) with recorded eye screen	2013	1,614	86.2	%	82.7			
	23 % of diabetes pop (T2) with recorded eye screen	2013	16,861	88.6	%	87.1			
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	1,280	65.6	%	61.6			
	27 % of diabetes pop (T2) with recorded foot risk	2013	16,648	86.2	%	80.3			
Smoking	28 % of diabetes pop (T1) current smokers	2013	448	23.0	%	22.0			
	29 % of diabetes pop (T2) current smokers	2013	3,179	16.5	%	17.9			
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	375	21.4	%	21.6			
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	9,717	50.3	%	48.9			
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	1,376	70.5	%	70.9			
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	14,034	72.6	%	74.2			
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	731	37.5	%	33.5			
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	2,500	12.9	%	13.7			
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	311	17.8	%	23.4			
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	2,860	14.8	%	17.7			
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	36	1.8	%	1.2			
	41 % of diabetes pop (T2) with end-stage renal failure	2013	125	0.6	%	0.5			
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	927	49.3	%	47.8			
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	4,216	21.8	%	22.4			
	44 % of diabetes pop (T1) with previous MI	2013	72	3.7	%	3.6			
	45 % of diabetes pop (T2) with previous MI	2013	2,043	10.6	%	10.0			
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	56	2.9	%	2.6			
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	1,383	7.2	%	7.3			
	48 % of diabetes pop (T1) with previous stroke	2013	39	2.0	%	2.0			
	49 % of diabetes pop (T2) with previous stroke	2013	1,082	5.6	%	5.3			
	50 % of diabetes pop (T1) with previous foot ulcer	2013	146	7.5	%	8.8			
	51 % of diabetes pop (T2) with previous foot ulcer	2013	697	3.6	%	4.7			
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	21	1.1	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	133	0.7	%	0.7			



See the detailed Definitions and Sources table for indicator information and Technical Report (on the web) for further guidance on interpreting the spine.

Domain	Indicator	Period	Number	Measure	Type	National Average	'Worst'	Scotland Comparator	'Best'
Prevalence Incidence & Mortality	1 Age/sex standardised prevalence of T1 diabetes	2013	184	0.7	sr2	0.6	●		
	2 Age/sex standardised prevalence of T2 diabetes	2013	1,122	3.3	sr2	4.5			●
	3 Crude prevalence of T1 diabetes	2013	184	0.7	%	0.6	●		
	4 Crude prevalence of T2 diabetes	2013	1,122	4.1	%	4.5			●
	5 Estimated % pop with undiagnosed diabetes		n/a		%				
	6 Crude mortality rate for all people with diabetes	2013	46	3.4	%	3.5			
Quality of Recording	7 % of diabetes pop with recorded BMI	2013	1,075	83.5	%	88.7	●		
	8 % of diabetes pop (T1) with recorded HbA1c	2013	177	96.2	%	88.7			○
	9 % of diabetes pop (T2) with recorded HbA1c	2013	1,082	96.4	%	93.9			○
	10 % of diabetes pop (T1) with recorded BP	2013	145	78.8	%	86.8	○		
	11 % of diabetes pop (T2) with recorded BP	2013	1,059	94.4	%	94.9		○	
	12 % of diabetes pop (T1) with recorded cholesterol	2013	151	91.0	%	81.5			○
	13 % of diabetes pop (T2) with recorded cholesterol	2013	1,036	92.3	%	92.1		○	
	14 % of diabetes pop (T1) with a recorded smoking status	2013	173	94.0	%	93.6		○	
	15 % of diabetes pop (T2) with a recorded smoking status	2013	1,105	98.5	%	99.1		○	
	16 % of diabetes pop (T1) with recorded creatinine	2013	170	95.0	%	83.8			○
	17 % of diabetes pop (T2) with recorded creatinine	2013	1,092	97.3	%	94.5			○
	18 % of diabetes pop (T1) with recorded microalbumin	2013	128	71.5	%	61.2			○
	19 % of diabetes pop (T2) with recorded microalbumin	2013	900	80.2	%	70.4		●	
	20 % of diabetes pop (T1) with recorded eGFR	2013	125	75.3	%	65.7		○	
	21 % of diabetes pop (T2) with recorded eGFR	2013	1,018	90.7	%	77.0		●	
	22 % of diabetes pop (T1) with recorded eye screen	2013	157	87.7	%	82.7			○
	23 % of diabetes pop (T2) with recorded eye screen	2013	974	87.6	%	87.1		○	
	24 % of diabetes pop (T1) with recorded pulses		n/a		%				
	25 % of diabetes pop (T2) with recorded pulses		n/a		%				
	26 % of diabetes pop (T1) with recorded foot risk	2013	144	78.3	%	61.6			●
	27 % of diabetes pop (T2) with recorded foot risk	2013	922	82.2	%	80.3			○
Smoking	28 % of diabetes pop (T1) current smokers	2013	40	21.7	%	22.0		○	
	29 % of diabetes pop (T2) current smokers	2013	179	16.0	%	17.9		○	
Obesity & hypertension	30 % of diabetes pop (T1) obese (BMI>=30)	2013	27	16.3	%	21.6			○
	31 % of diabetes pop (T2) obese (BMI>=30)	2013	538	48.0	%	48.9		○	
	32 % of diabetes pop (T1) with SBP <= 140mmHg	2013	125	67.9	%	70.9		○	
Metabolic complications	33 % of diabetes pop (T2) with SBP <=140mmHg	2013	811	72.3	%	74.2		○	
	34 % of diabetes pop (T1) with HbA1c > 75mmol/mol	2013	71	38.6	%	33.5		○	
	35 % of diabetes pop (T2) with HbA1c > 75mmol/mol	2013	196	17.5	%	13.7	●		
	36 % of diabetes pop (T1) with cholesterol >5mmol	2013	44	26.5	%	23.4		○	
	37 % of diabetes pop (T2) with cholesterol >5mmol	2013	240	21.4	%	17.7	●		
Microvascular complications	38 % of diabetes pop (T1) with eGFR <15		n/a		%				
	39 % of diabetes pop (T2) with eGFR <15		n/a		%				
	40 % of diabetes pop (T1) with end-stage renal failure	2013	1	0.5	%	1.2			○
	41 % of diabetes pop (T2) with end-stage renal failure	2013	3	0.3	%	0.5			○
	42 % of diabetes pop (T1) with diabetic retinopathy	2013	99	55.3	%	47.8		○	
Macrovascular complications	43 % of diabetes pop (T2) with diabetic retinopathy	2013	277	24.7	%	22.4		○	
	44 % of diabetes pop (T1) with previous MI	2013	8	4.3	%	3.6			○
	45 % of diabetes pop (T2) with previous MI	2013	96	8.6	%	10.0		○	
	46 % of diabetes pop (T1) with previous cardiac revascularisation	2013	3	1.6	%	2.6			○
	47 % of diabetes pop (T2) with previous cardiac revascularisation	2013	90	8.0	%	7.3		○	
	48 % of diabetes pop (T1) with previous stroke	2013	3	1.6	%	2.0			○
	49 % of diabetes pop (T2) with previous stroke	2013	50	4.5	%	5.3			○
	50 % of diabetes pop (T1) with previous foot ulcer	2013	11	6.0	%	8.8			○
	51 % of diabetes pop (T2) with previous foot ulcer	2013	57	5.1	%	4.7		○	
	52 % of diabetes pop (T1) with previous lower limb amputation	2013	2	1.1	%	1.1			
	53 % of diabetes pop (T2) with previous lower limb amputation	2013	6	0.5	%	0.7			○

