Mississauga Halton LHIN

Environmental Scan – Diabetes

Background
Physician Survey - Spring 2008
Survey for Adults with Diabetes – Fall 2008

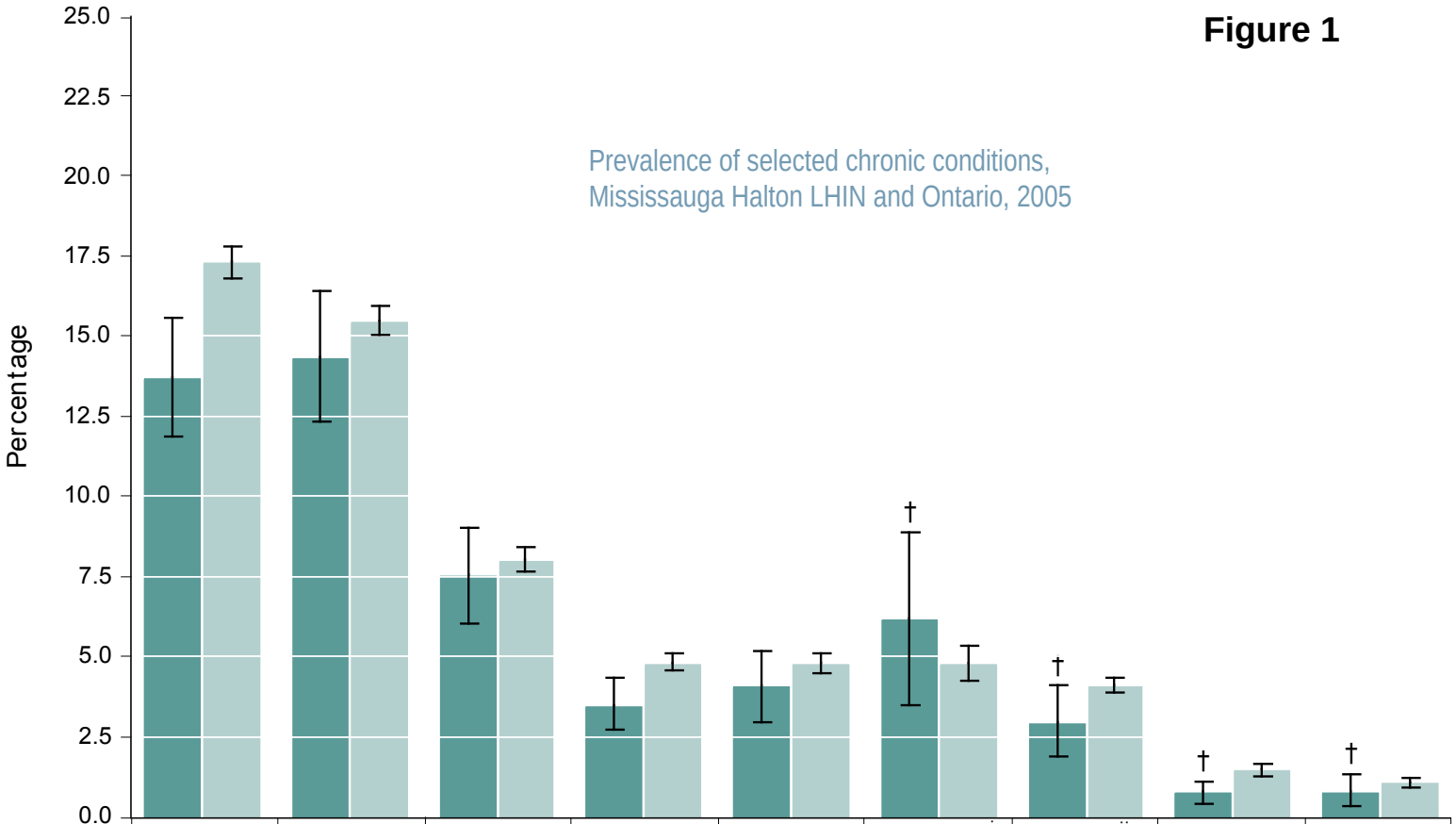
Ontario
Local Health Integration Network

Diabetes - prevalence

- Chronic conditions generally develop slowly, are long lasting, often progress in severity, and usually cannot be cured (HSIE)
- According to the HSIE, the top five self reported chronic conditions in the MH LHIN in descending order are: Hypertension, Arthritis, Asthma, Depression and Diabetes (Figure 1)
- When compared to data collected from the Ontario Diabetes Database, it appears that diabetes is under reported by residents in the MH LHIN (Figure 2)
- The self reported value for diabetes in the MH LHIN (4.1% in 2005) is significantly lower than the prevalence rate obtained through the Ontario Diabetes Database (8.6% in 2005; ICES)
- In Ontario, it is estimated that one million people have diabetes (800,000 have been diagnosed and about 200,000 are unaware they have the condition) (Report of the Diabetes Management Expert Panel December 2006)

Figure 1

Prevalence of selected chronic conditions,
Mississauga Halton LHIN and Ontario, 2005



	Arthritis	Hypertension	Asthma	Heart disease	Diabetes	Depression[i] (2002)	COPD [ii]	Cancer	Stroke
Mississauga Halton	13.7 *	14.3	7.5	3.5 *	4.1	6.2	3.0	0.8 *	0.3
Ontario	17.2	15.4	8.0	4.8	4.8	4.8	4.1	1.5	1.1

Error bars represent 95% confidence intervals (CIs).
Source: 2005 Canadian Community Health Survey and 2002 Canadian Comunity Health Survey (Mental Health and Well-being), Statistics Canada, Ontario Share File.
i Prevalence of depression is calculated for those age 15 years and over.
ii COPD includes chronic pulmonary disease, emphysema and bronchitis and is reported for the population aged 30 and over.
† Coefficient of variation 16.6% to 33.3% - interpret with caution.
* Significantly different from provincial average based on assessment of 95% confidence interval.

Figure 2

Age- and sex-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians and number of persons with DM aged 20 years and older, by Local Health Integration Network (LHIN), 2000/01–2004/05

LHIN	2000/01		2001/02		2002/03		2003/04		2004/05	
	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases
1. Erie St. Clair	7.4	34,793	7.7	36,971	8.1	39,480	8.4	41,684	8.8	44,091
2. South West	6.2	43,109	6.5	45,893	6.8	48,786	7.0	51,222	7.2	54,019
3. Waterloo Wellington	5.6	24,702	5.9	26,598	6.1	28,641	6.4	30,624	6.7	32,959
4. Hamilton Niagara Haldimand Brant	6.3	64,369	6.6	69,160	6.9	73,761	7.2	78,119	7.4	82,418
5. Central West	7.7	31,355	8.4	34,872	8.9	38,436	9.3	42,054	9.8	46,082
6. Mississauga Halton	7.1	41,444	7.5	45,794	7.8	50,326	8.2	54,707	8.6	59,629
7. Toronto Central	7.6	63,583	8.1	68,872	8.6	74,309	9.2	79,678	9.8	85,552
8. Central	7.8	73,387	8.2	79,745	8.5	86,158	8.7	92,461	9.1	100,186
9. Central East	7.4	75,326	7.9	81,851	8.3	88,721	8.8	95,861	9.4	103,944
10. South East	6.3	24,337	6.6	25,948	6.8	27,517	7.0	28,809	7.3	30,388
11. Champlain	6.1	50,216	6.5	54,349	6.9	58,811	7.2	63,013	7.5	67,050
12. North Simcoe Muskoka	5.6	16,416	5.7	17,497	5.9	18,604	6.0	19,553	6.1	20,624
13. North East	7.4	34,380	7.8	36,778	8.3	39,157	8.6	41,119	8.9	43,334
14. North West	8.1	14,426	8.4	15,279	8.8	16,038	9.0	16,687	9.4	17,611
Overall	**6.9**	**591,843**	**7.3**	**639,607**	**7.6**	**688,745**	**8.0**	**735,591**	**8.4**	**787,887**

- **Prevalence rates of DM increased across all LHINs between 2000/01 and 2004/05, with the greatest rate increase seen in the Toronto Central LHIN.**
- **In 2004/05, DM prevalence rates were lowest in the North Simcoe Muskoka LHIN (6.1 per 100 Ontarians) and highest in the Central West and Toronto Central LHINs (9.8 per 100 Ontarians).**

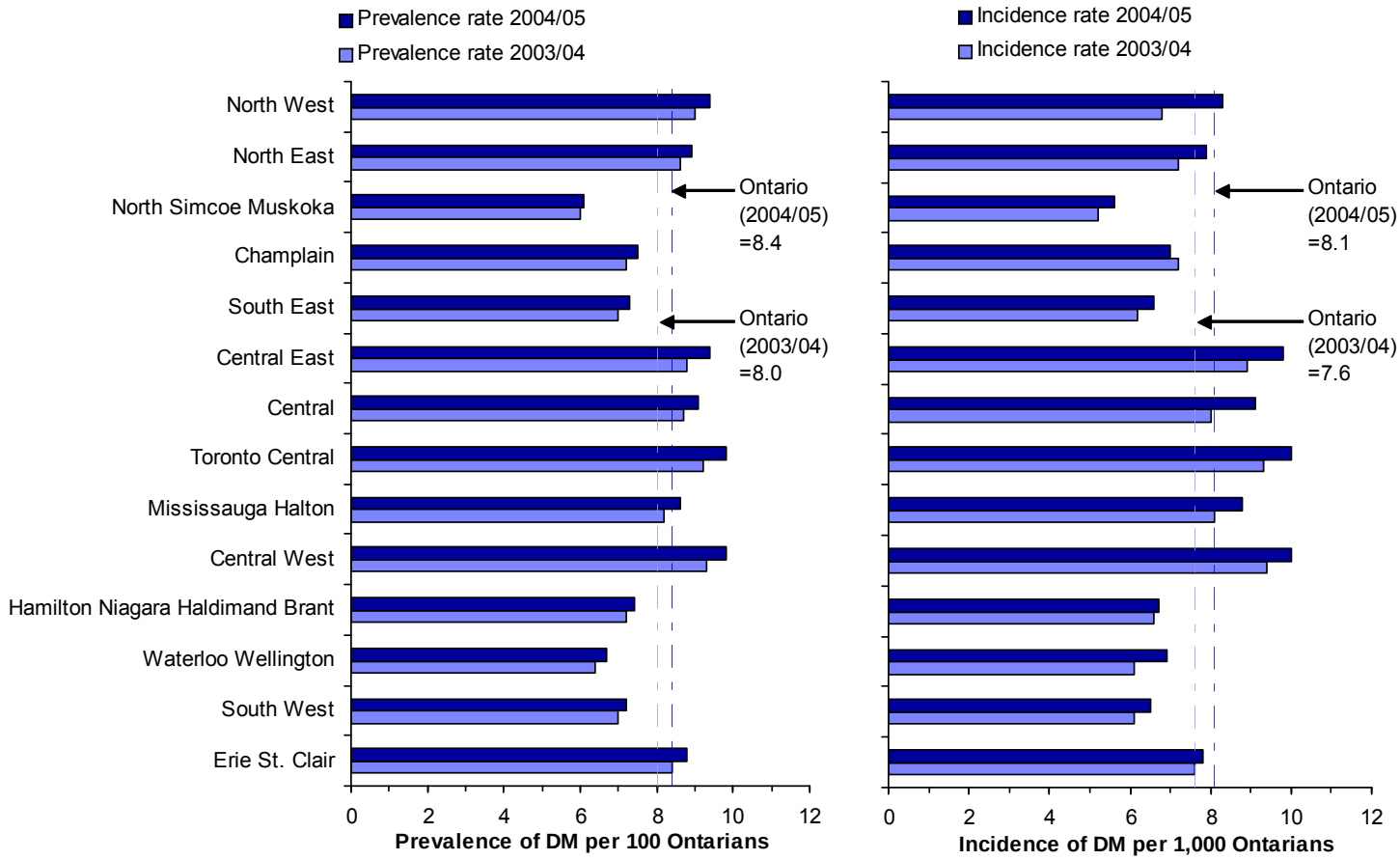
Diabetes rates in MH LHIN and Ontario (ICES)

According to ICES (2004/05):

- Diabetes prevalence rates were similar or slightly higher than the provincial average (Figure 3)
- Diabetes prevalence rates in the MH LHIN and Ontario overall, increased between 1995/96 and 2004/05 (Figure 4)
- Diabetes prevalence rates for men were slightly higher than Ontario rates for men (Figure 4)
- Diabetes prevalence rates for women were similar to Ontario rates for women (Figure 4)
- Diabetes prevalence rates increase with age (Figure 5)
- The MH LHIN incidence rates (new cases) for diabetes increased between 1995/96 and 2004/05 and at a slightly faster pace than the rates for Ontario overall (Figure 6)

Age- and sex-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians, an incidence rate per 1,000 Ontarians, aged 20 years and older, by LHIN and for Ontario, 2003/04–2004/05

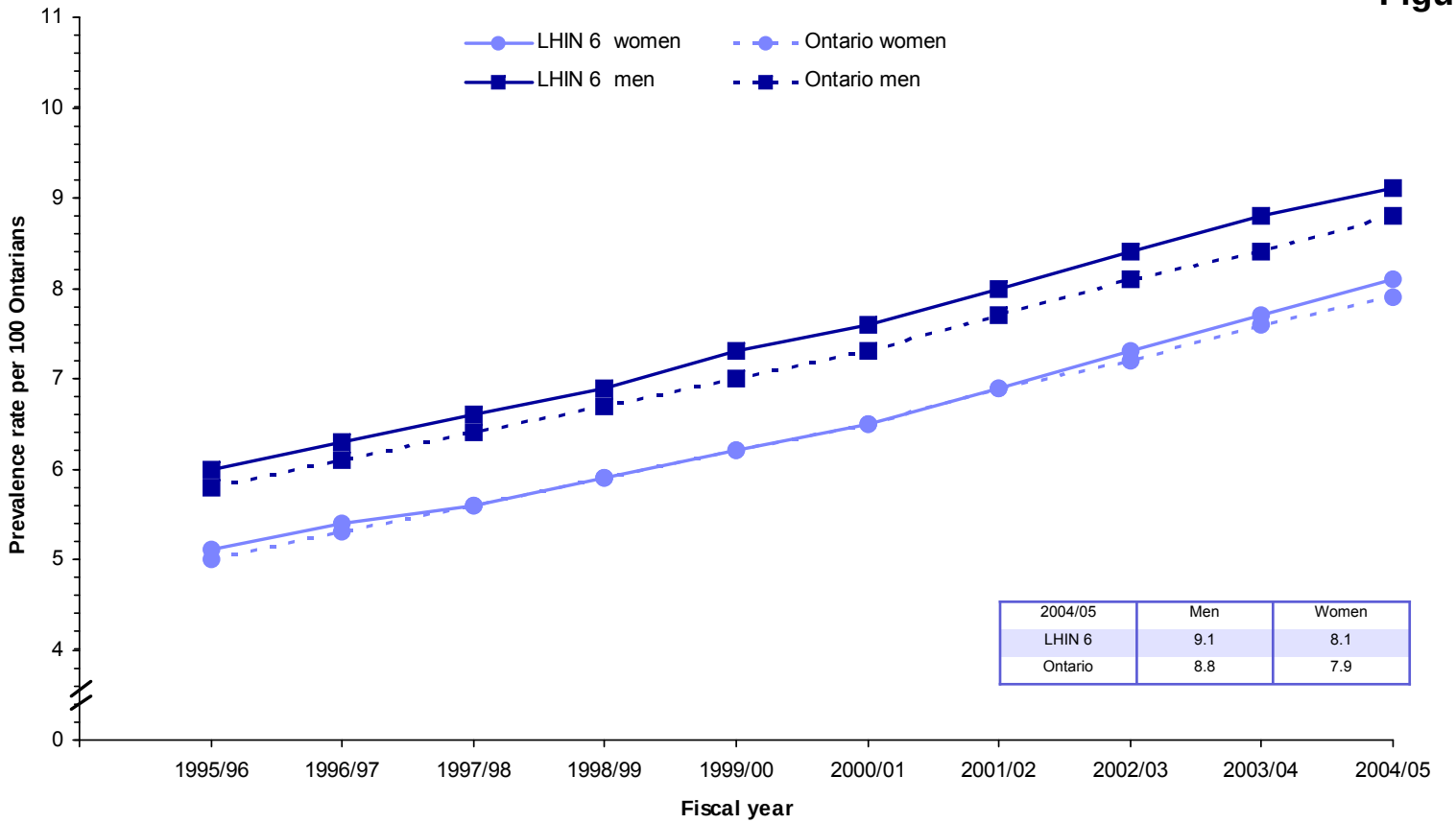
Figure 3



- Prevalence rates of DM increased in all LHINs from 2003/04 to 2004/05.
- Incidence rates of DM increased in all LHINs except Champlain during the same period.
- Prevalence rates and incidence rates were lowest in the North Simcoe Muskoka LHIN and highest in the Toronto Central and Central West LHINs.

Age-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by sex, 1995/96–2004/05 LHIN 6 (Mississauga Halton) vs. Ontario

Figure 4



2004/05	Men	Women
LHIN 6	9.1	8.1
Ontario	8.8	7.9

- Prevalence rates of DM in the Mississauga Halton LHIN and for Ontario overall, increased between 1995/96 and 2004/05.
- DM prevalence rates for men in the LHIN were slightly higher than Ontario rates for men, while DM prevalence rates for women in the LHIN were similar to Ontario rates for women throughout the study period.
- In the LHIN, DM prevalence rates were higher in men than in women.

Prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by sex, age group and neighbourhood income quintile*, 2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Sex and age group (years)			Q1 (lowest income)	Q2	Q3	Q4	Q5 (highest income)
Women	20–34	LHIN 6	2.1	1.9	1.6	1.3	1.4
		Ontario	2.1	1.7	1.5	1.3	1.3
	35–49	LHIN 6	7.8	6.1	4.5	3.5	2.6
		Ontario	7.3	5.2	4.1	3.1	2.6
	50–64	LHIN 6	18.0	14.8	11.8	10.5	8.0
		Ontario	16.3	12.9	10.6	9.1	7.5
	65–74	LHIN 6	25.7	23.9	20.9	18.7	14.3
		Ontario	24.5	21.2	18.5	16.5	14.1
	75+	LHIN 6	20.9	23.5	21.1	19.6	14.8
		Ontario	23.3	21.5	20.0	18.0	16.1
	All ages	LHIN 6	11.3	10.1	8.4	7.3	5.6
		Ontario	10.9	8.9	7.6	6.5	5.6
Men	20–34	LHIN 6	1.6	1.3	1.1	1.1	0.9
		Ontario	1.4	1.3	1.1	1.0	1.0
	35–49	LHIN 6	8.5	6.7	5.0	3.7	2.6
		Ontario	7.5	5.6	4.4	3.5	2.9
	50–64	LHIN 6	22.4	20.5	16.4	14.5	12.0
		Ontario	18.8	16.6	14.7	12.8	11.4
	65–74	LHIN 6	31.8	30.9	27.3	26.0	22.0
		Ontario	27.8	27.0	24.6	22.4	20.6
	75+	LHIN 6	26.8	29.9	25.8	23.5	21.8
		Ontario	27.0	26.0	24.5	23.2	22.2
	All ages	LHIN 6	12.7	11.7	9.6	8.5	7.0
		Ontario	11.1	9.9	8.7	7.7	6.9
Overall Rate		**LHIN 6**	**12.0**	**10.9**	**9.0**	**7.9**	**6.3**
		Ontario	**11.0**	**9.4**	**8.1**	**7.1**	**6.3**

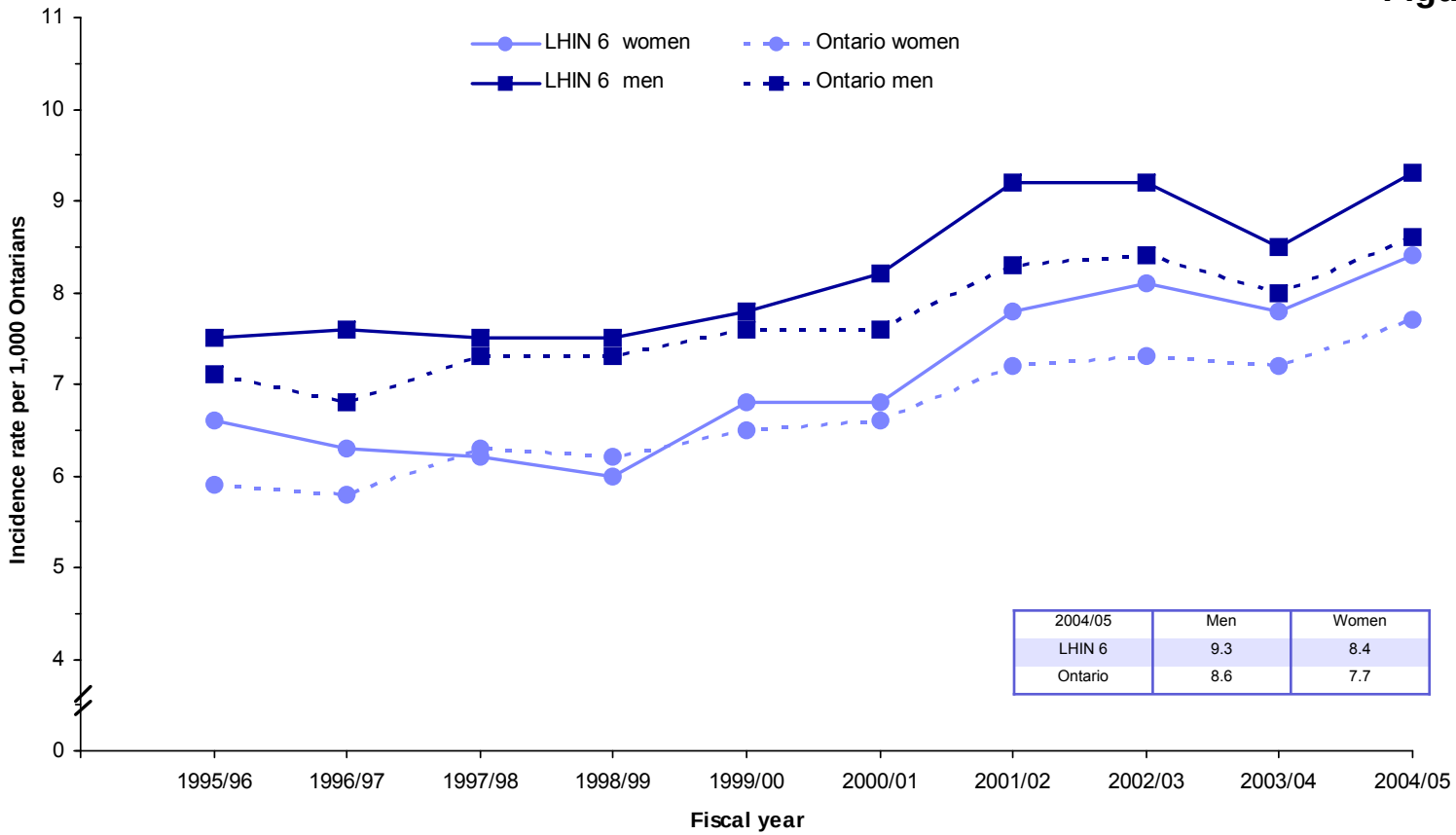
Figure 5

* A measure of overall socioeconomic status.

- **In 2004/05, prevalence rates of DM in the Mississauga Halton LHIN and for Ontario overall generally decreased with higher socioeconomic status (SES) across sex and age groups. When all age groups were combined, LHIN rates were slightly higher than Ontario rates for both men and women.**
- **Across SES groups, prevalence rates in the LHIN and for Ontario increased with age, leveling off after 65 years of age.**
- **DM prevalence rates in the LHIN were higher in men than in women for those aged 50 years and older.**

Age-adjusted incidence rate of diabetes mellitus (DM) per 1,000 Ontarians aged 20 years and older, by sex, 1995/96–2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Figure 6



2004/05	Men	Women
LHIN 6	9.3	8.4
Ontario	8.6	7.7

- Incidence rates of DM in the Mississauga Halton LHIN increased between 1995/96 and 2004/05 but at a slightly faster pace than rates for Ontario overall, resulting in a widening in the disparity of incidence rates.
- DM incidence rates in the LHIN were generally higher than Ontario rates for both men and women throughout the study period.
- DM incidence rates in the LHIN were higher in men than in women though this difference decreased slightly after 2001/02.

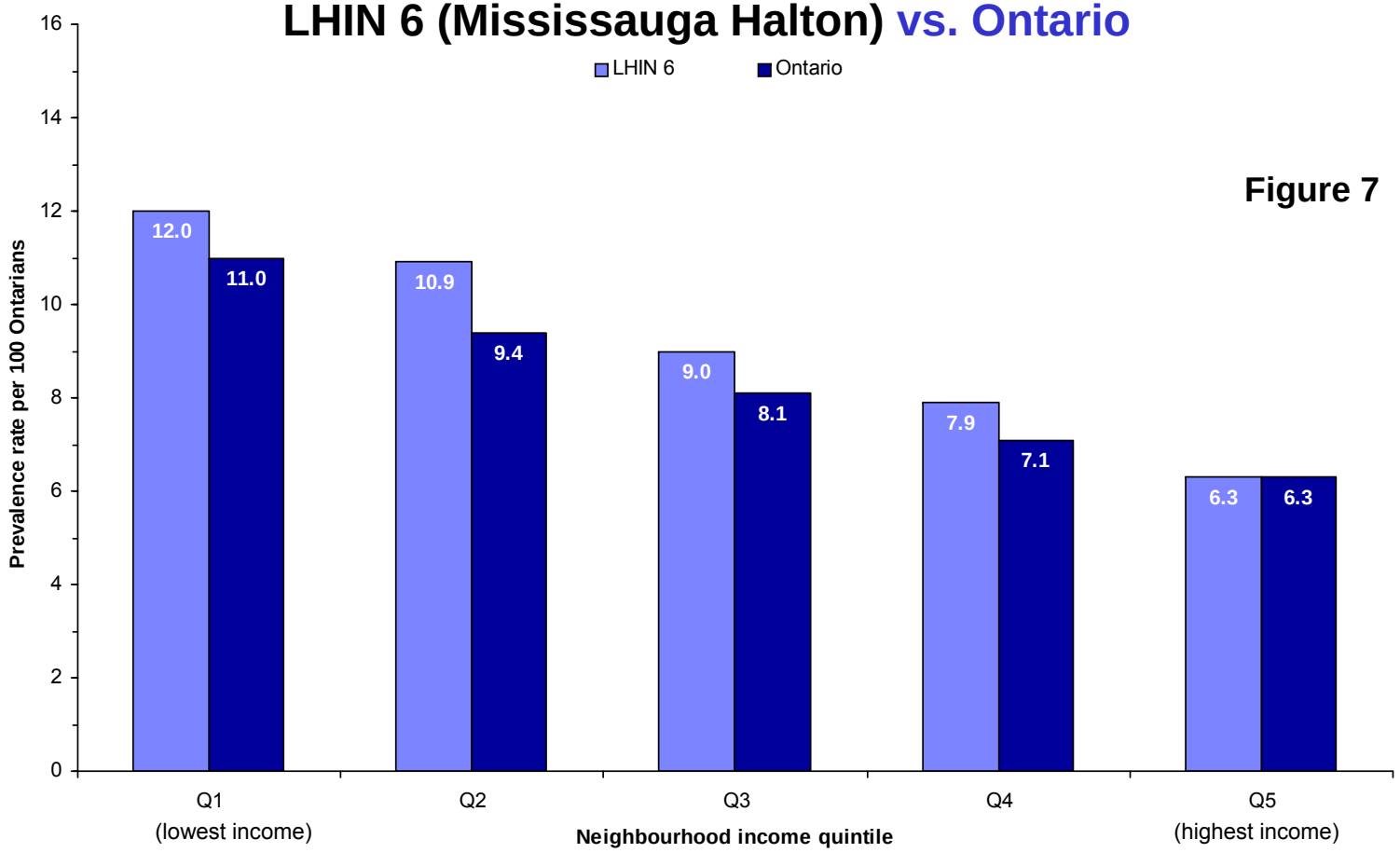
Diabetes rates in MH LHIN and Ontario (ICES)

According to ICES (2004/05):

- The MH LHIN diabetes prevalence rates were higher among residents with lower socio economic status (Figure 7)
- The MH LHIN prevalence and incidence rate of diabetes increased among all socio-economic status groups, and in particular among the lower socio-economic groups (Figure 8, Figure 9).

Age- and sex-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by neighbourhood income quintile*, 2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Figure 7



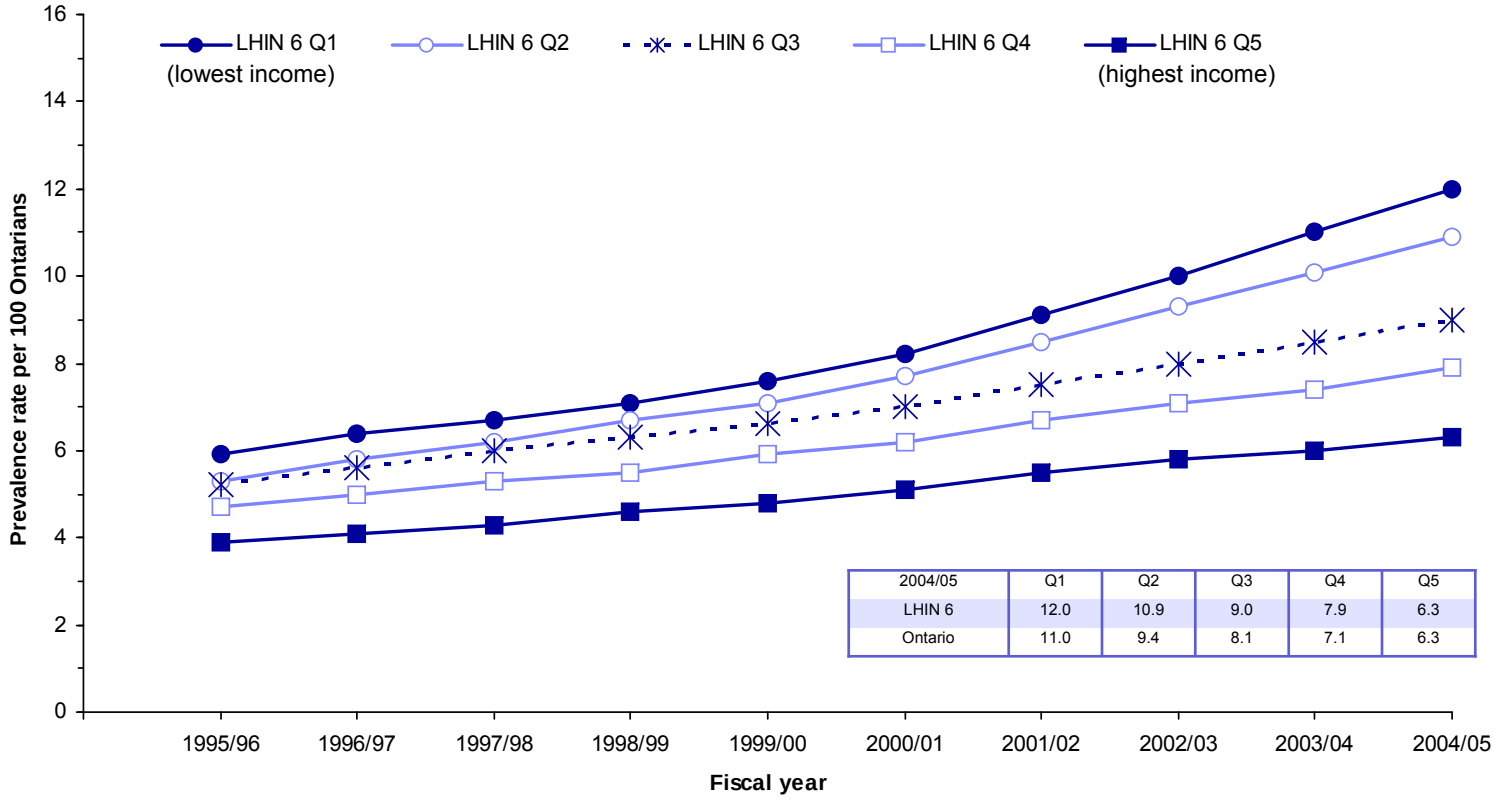
* A measure of overall socioeconomic status

- In 2004/05, prevalence rates of DM decreased with higher socioeconomic status (SES) in the Mississauga Halton LHIN and for Ontario overall.
- Across SES groups, DM prevalence rates in the LHIN were higher than those for Ontario overall except for the highest SES group (Q5) where the rates were the same.

Age- and sex-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by neighbourhood income quintile*, 1995/96–2004/05

LHIN 6 (Mississauga Halton) vs. Ontario

Figure 8



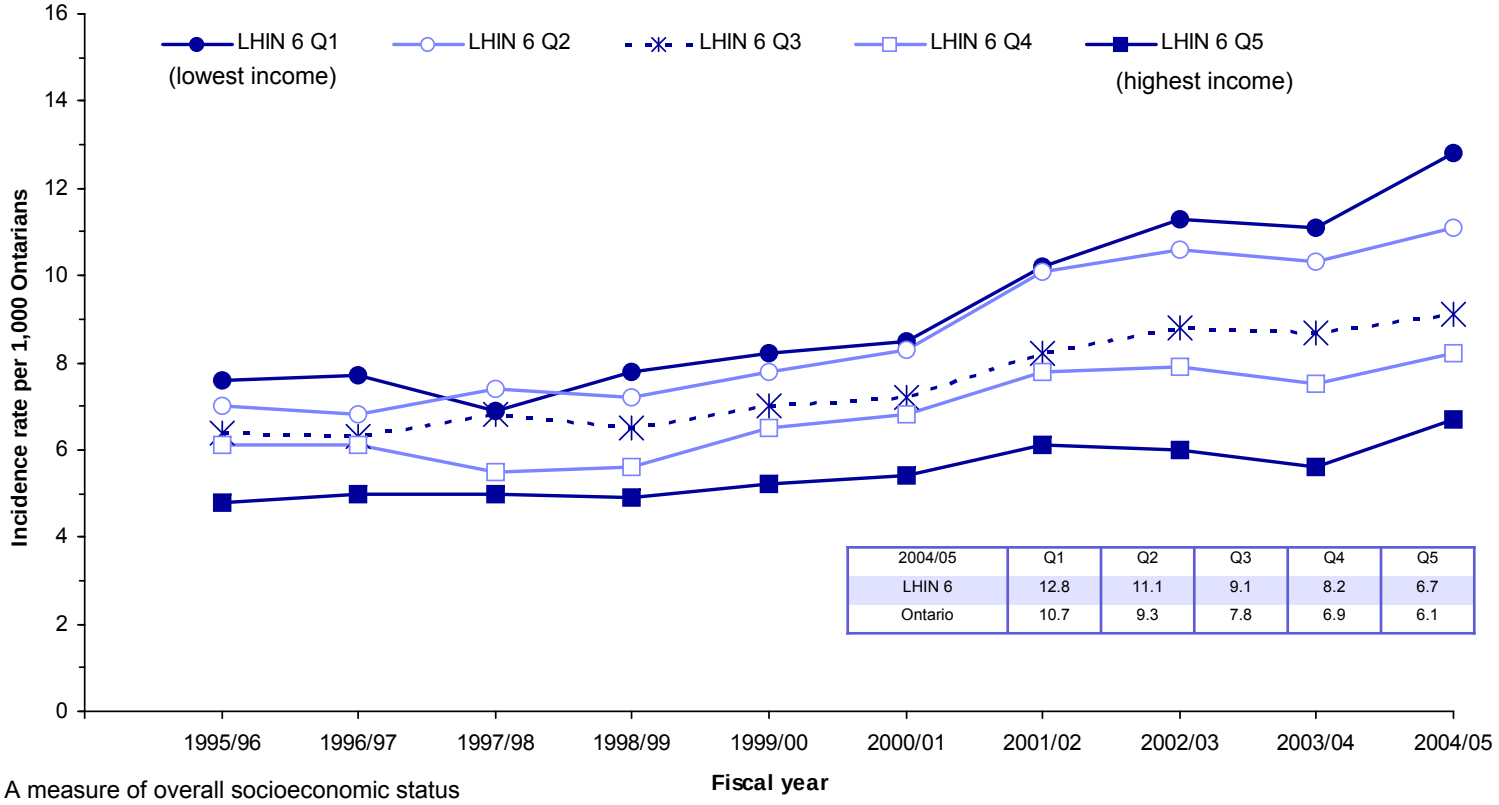
2004/05	Q1	Q2	Q3	Q4	Q5
LHIN 6	12.0	10.9	9.0	7.9	6.3
Ontario	11.0	9.4	8.1	7.1	6.3

* A measure of overall socioeconomic status

- From 1995/96 to 2004/05, prevalence rates of DM in the Mississauga Halton LHIN increased across all socioeconomic status (SES) groups, particularly in the lower SES groups (Q1 and Q2).
- The lowest SES group (Q1) had the highest prevalence rates while the highest SES group (Q5) had the lowest prevalence rates throughout the study period and this difference increased over time.

Age- and sex-adjusted incidence rate of diabetes mellitus (DM) per 1,000 Ontarians aged 20 years and older, by neighbourhood income quintile*, 1995/96–2004/05 LHIN 6 (Mississauga Halton) vs. Ontario

Figure 9



2004/05	Q1	Q2	Q3	Q4	Q5
LHIN 6	12.8	11.1	9.1	8.2	6.7
Ontario	10.7	9.3	7.8	6.9	6.1

* A measure of overall socioeconomic status

- From 1995/96 to 2004/05, incidence rates of DM in the Mississauga Halton LHIN increased across all socioeconomic status (SES) groups, particularly in the two lowest SES groups (Q1 and Q2).
- The lowest SES group (Q1) had the highest incidence rates while the highest SES group (Q5) had the lowest incidence rates throughout most of the study period and this difference increased over time.

Mississauga Halton Sub-LHIN Planning Areas – Prevalence

- The MH LHIN can be divided into five (5) sub-LHIN planning areas: Halton Hills, Milton, Oakville, Northwest Mississauga, Southeast Mississauga, South Etobicoke
- The prevalence rates for diabetes in MH LHIN (all planning areas combined) were similar to those for Ontario (Figure 10)
- Diabetes prevalence rates varied across sub-planning areas and were markedly higher in Southeast Mississauga and South Etobicoke (Figure 11)

Prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by sex, age group and planning area, 2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Figure 10

LHIN 6 (Mississauga Halton) planning areas	Men by age group (years)			Women by age group (years)			Overall
	<65	65+	Overall	<65	65+	Overall	
6.a Milton	5.6	20.8	7.4	4.1	14.4	5.8	6.6
6.b Halton Hills	4.6	22.8	7.3	3.8	16.9	6.3	6.8
6.c Oakville	4.8	21.2	7.1	4.3	14.9	6.2	6.6
6.d Northwest Mississauga	6.1	17.9	7.9	5.0	15.1	7.0	7.5
6.e Southeast Mississauga	7.2	32.3	11.1	6.0	26.6	10.1	10.6
6.f South Etobicoke (Toronto)	6.2	34.5	10.8	5.4	27.3	9.6	10.2
LHIN 6 (Mississauga Halton)	**6.2**	**26.1**	**9.2**	**5.2**	**20.8**	**8.2**	**8.7**
Ontario	**6.3**	**24.5**	**9.0**	**5.4**	**19.7**	**8.1**	**8.5**

Note: Overall LHIN and Ontario rates in planning area exhibits differ slightly from other exhibits since updated Registered Persons Database files were used.

NR = No data in this category or not reportable due to small cell size

- **In 2004/05, prevalence rates of DM in the Mississauga Halton LHIN (all planning areas combined) were similar to those for Ontario.**
- **DM prevalence rates varied across planning areas–rates were markedly higher in Southeast Mississauga (6.e) and South Etobicoke (6.f) for men and women aged 65 years and older.**
- **DM prevalence rates were higher in men than in women.**

Age- and sex-adjusted prevalence rate of diabetes mellitus (DM) per 100 Ontarians aged 20 years and older, by neighbourhood income quintile* and planning area, 2004/05 LHIN 6 (Mississauga Halton) vs. Ontario

Figure 11

LHIN 6 (Mississauga Halton) planning areas	Q1 (lowest income)	Q2	Q3	Q4	Q5 (highest income)
6.a Milton	7.3	7.9	7.9	7.1	4.0
6.b Halton Hills	NR	7.6	7.3	7.3	6.1
6.c Oakville	8.9	8.6	8.8	8.3	5.9
6.d Northwest Mississauga	11.9	9.9	7.9	7.6	7.6
6.e Southeast Mississauga	11.4	10.8	10.0	9.8	7.9
6.f South Etobicoke (Toronto)	10.8	10.2	9.2	8.5	7.2
LHIN 6 (Mississauga Halton)	**11.1**	**10.2**	**9.1**	**8.3**	**6.7**
Ontario	**10.5**	**9.3**	**8.4**	**7.6**	**6.7**

Note: Overall LHIN and Ontario rates in planning area exhibits differ slightly from other exhibits since updated Registered Persons Database files were used.

NR = No data in this category or not reportable due to small cell size

* A measure of overall socioeconomic status.

- **In 2004/05, prevalence rates of DM decreased with higher socioeconomic status (SES) in the Mississauga Halton LHIN (all planning areas combined) and for Ontario.**

Mississauga Halton Sub-LHIN Planning Areas - Incidence

- The 2004/05 incidence rates of diabetes in MH LHIN (all planning areas combined) were slightly higher than those for Ontario (Figure 12)
- Diabetes 2004/05 incidence rates varied markedly across planning areas – highest in Southeast Mississauga and lowest in Milton (Figure 13)

Incidence rate of diabetes mellitus (DM) per 1,000 Ontarians aged 20 years and older, by sex, age group and planning area, 2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Figure 12

LHIN 6 (Mississauga Halton) planning areas	Men by age group (years)			Women by age group (years)			Overall
	<65	65+	Overall	<65	65+	Overall	
6.a Milton	5.4	14.7	6.4	4.7	11.3	5.6	6.0
6.b Halton Hills	6.0	19.7	7.9	3.0	15.4	5.4	6.6
6.c Oakville	5.6	16.3	7.0	5.9	12.4	7.0	7.0
6.d Northwest Mississauga	7.9	15.2	9.0	6.4	12.4	7.6	8.3
6.e Southeast Mississauga	8.9	25.4	11.4	7.5	22.1	10.4	10.9
6.f South Etobicoke (Toronto)	7.7	23.9	10.5	6.1	22.6	9.3	9.9
LHIN 6 (Mississauga Halton)	**7.7**	**20.3**	**9.6**	**6.5**	**17.3**	**8.5**	**9.0**
Ontario	**7.2**	**17.5**	**8.8**	**6.2**	**14.6**	**7.8**	**8.3**

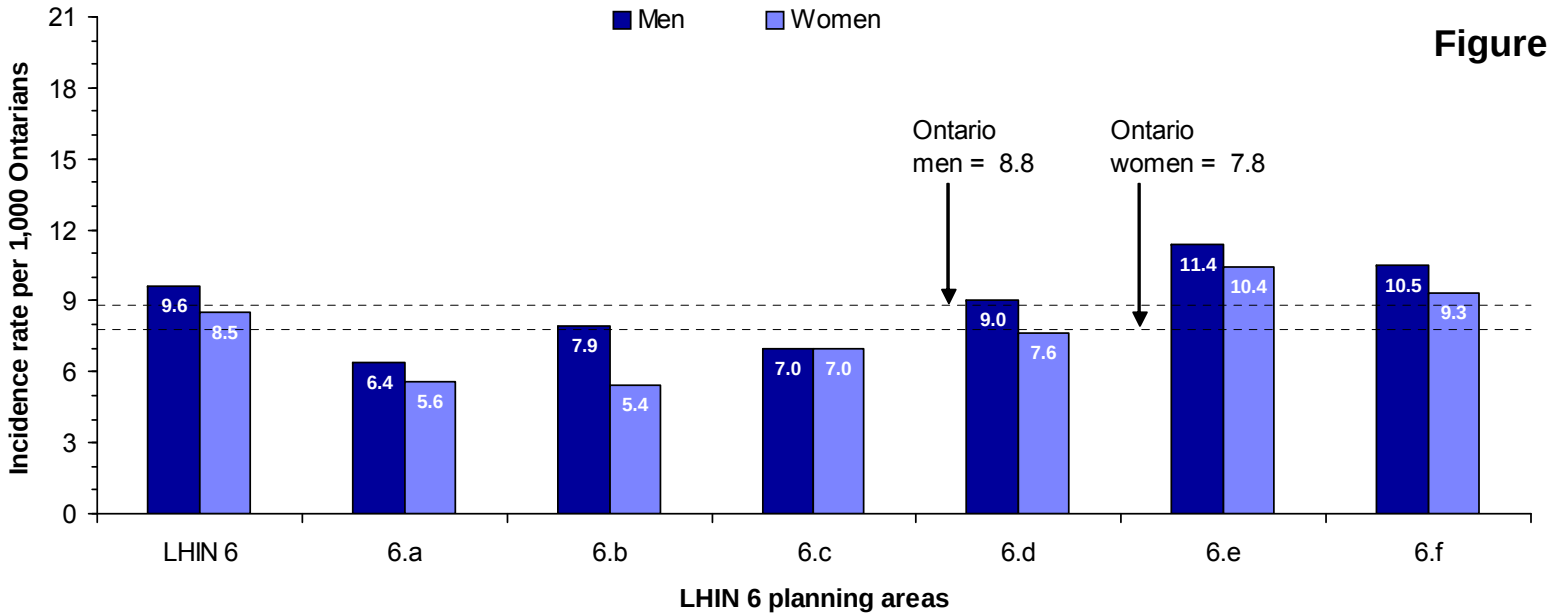
Note: Overall LHIN and Ontario rates in planning area exhibits differ slightly from other exhibits since updated Registered Persons Database files were used.

NR = No data in this category or not reportable due to small cell size

- **In 2004/05, incidence rates of DM for the Mississauga Halton LHIN (all planning areas combined) were slightly higher than those for Ontario.**
- **DM incidence rates varied markedly across planning areas–highest in Southeast Mississauga (6.e) and lowest in Milton (6.a).**
- **DM incidence rates were generally higher in men than in women.**

Age-adjusted incidence rate of diabetes mellitus (DM) per 1,000 Ontarians aged 20 years and older, by sex and planning area, 2004/05
LHIN 6 (Mississauga Halton) vs. Ontario

Figure 13



6.a Milton	6.c Oakville	6.e Southeast Mississauga
6.b Halton Hills	6.d Northwest Mississauga	6.f South Etobicoke (Toronto)

Note: Overall LHIN and Ontario rates in planning area exhibits differ slightly from other exhibits since updated Registered Persons Database files were used.

- **In 2004/05, incidence rates of DM for the Mississauga Halton LHIN (all planning areas combined) were slightly higher than those for Ontario.**
- **DM incidence rates varied markedly across planning areas–highest in Southeast Mississauga (6.e) and lowest in Milton (6.a).**
- **DM incidence rates were generally higher in men than in women.**

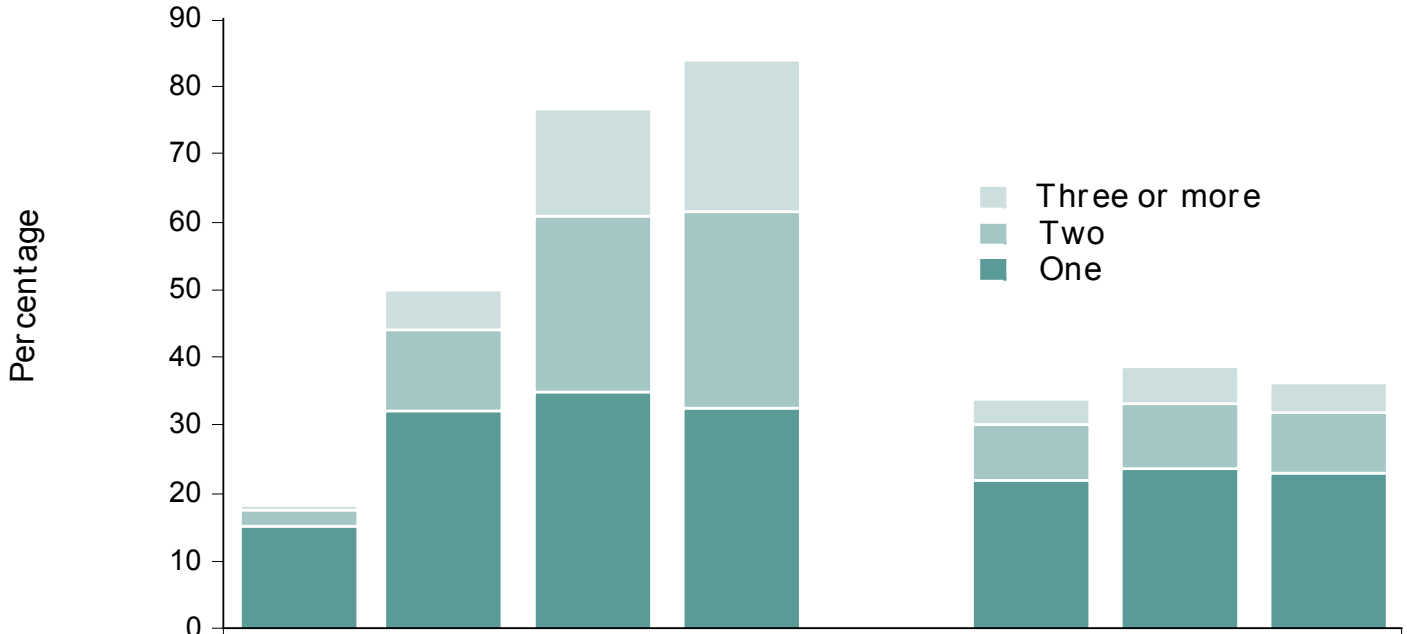
Diabetes and Co-Morbidities

- The prevalence of multiple chronic conditions increases with age
- Among MH LHIN residents aged 45+, 20% had two or more chronic conditions (Figure 14)
- The 2005 CCHS shows that among Ontario residents who reported having diabetes:
  - 53% also had hypertension
  - 40% also had arthritis/rheumatism
  - 21% also had heart disease (HSIE: 2007)
- It is also estimated that more than 45% of adults with end stage renal disease have diabetes; and 23% of adults who get a kidney transplant have diabetes

Source: Report of the Diabetes Management Expert Panel: December 2006

Population aged 12+ reporting one, two or three or more of selected chronic conditions, by age groups and sex, Ontario, 2005

Figure 14



	12-44	45-64	65-74	75 +	Male	Female	Total
Three +	0.5	5.8	15.9	22.2	3.9	5.3	4.6
Two	2.6	11.8	25.9	29.1	8.1	9.6	8.9
One	15.0	32.2	35.0	32.6	21.9	23.7	22.8

Age group | Sex

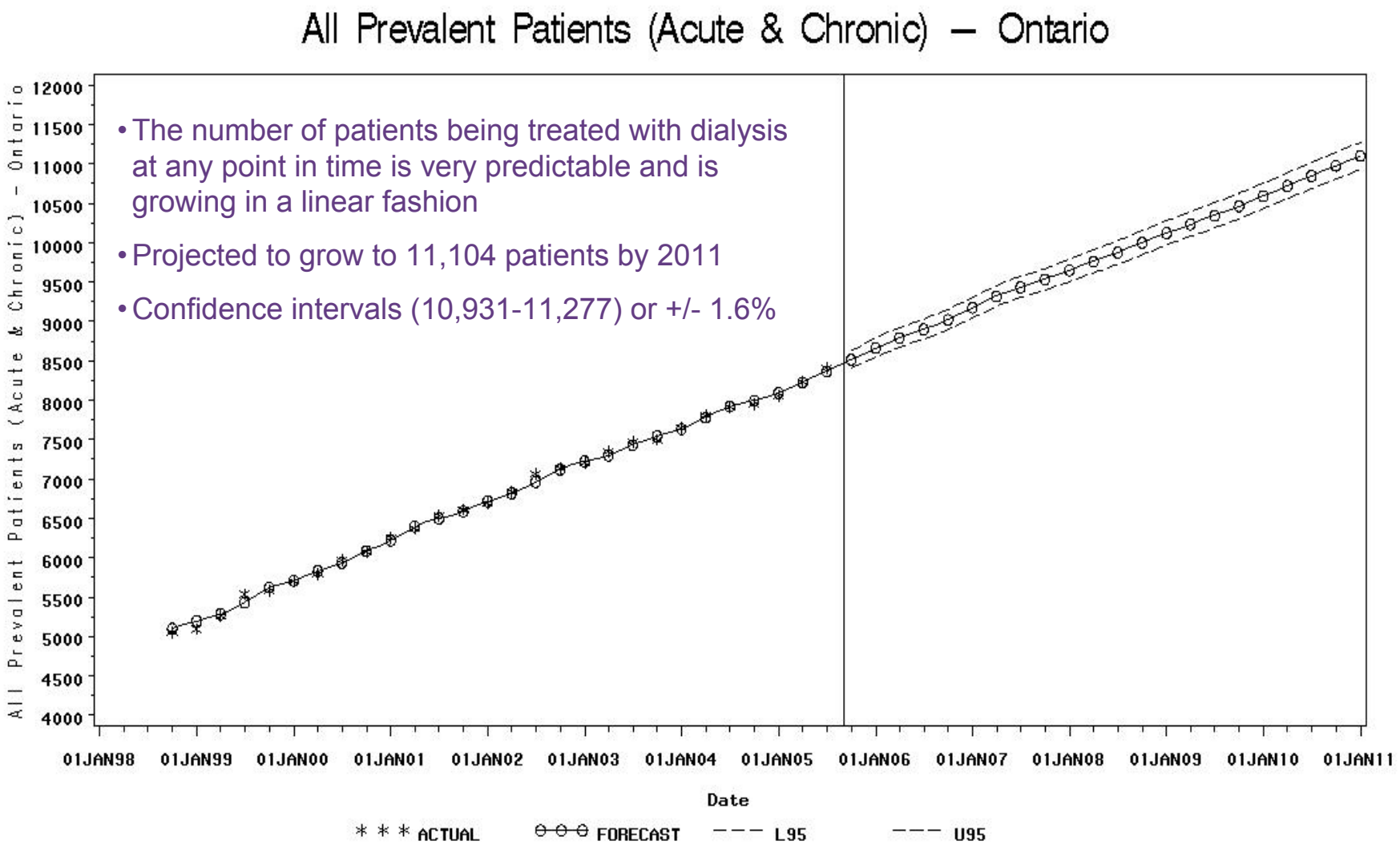
Source: 2005 Canadian Community Health Survey, Statistics Canada, Ontario Share File.

Chronic Kidney Disease (CKD)

- End stage renal disease (ESRD) is a slow and progressive deterioration of kidney function, which is usually irreversible and for which there is no cure. ESRD is the final stage of chronic kidney failure/disease
- Individuals with ESRD must rely on renal replacement therapy (dialysis or kidney transplantation) in order to survive
- The prevalence of chronic kidney patients is increasing in Ontario and the MH LHIN, as is the demand for dialysis (Figure 15, Figure 16)
- The number of patients being treated with dialysis is growing in a linear fashion (Figure 16, Figure 17)
- One of the risk factors for chronic kidney disease is diabetes. People with diabetes have a risk of end stage renal disease 13 times greater than people without diabetes.

Number of prevalent dialysis patients (actual and forecasted), Oct 1998 – Jan 2011, Ontario

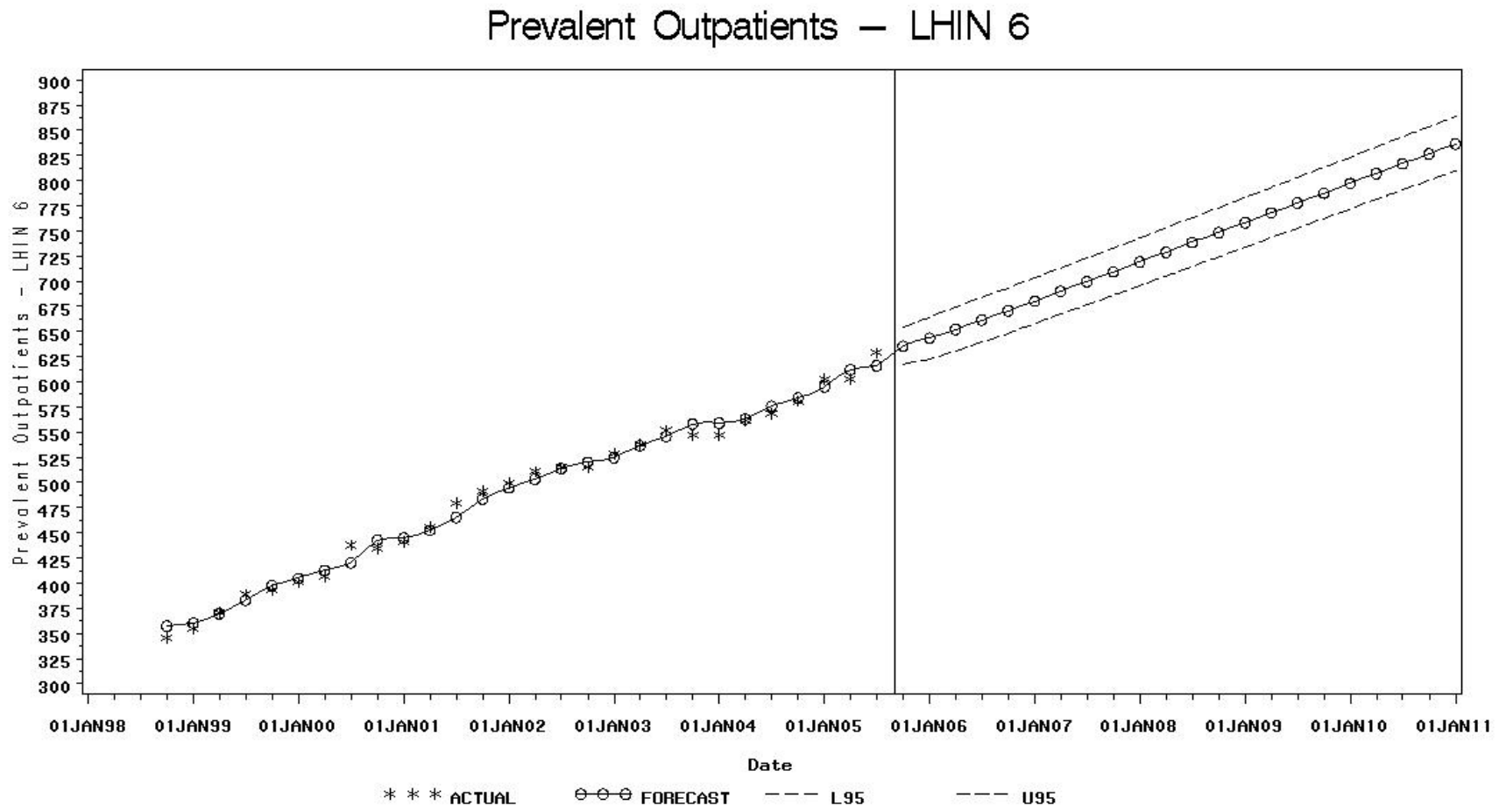
Figure 15



- The number of patients being treated with dialysis at any point in time is very predictable and is growing in a linear fashion
- Projected to grow to 11,104 patients by 2011
- Confidence intervals (10,931-11,277) or +/- 1.6%

Number of prevalent outpatients (actual and forecasted), Oct 1998 – Jan 2011, LHIN 6 (Mississauga Halton)

Figure 16



MH LHIN Environmental Scan Diabetes Information Sources

The previous slides include excerpts from the following documents:

ICES: Trends in Diabetes Prevalence, Incidence and Mortality, Mississauga Halton LHIN, 1995/96-2004/05 (InTool).

ICES: Predicting the Growth in Dialysis Services in Mississauga Halton LHIN, 2007-211 (InTool).

Report of the Diabetes Management Expert Panel, December 2006.

Health System Intelligence Project – October 2007: Chronic Conditions in the Mississauga Halton LHIN.

Mississauga Halton LHIN
Physician Survey Results

June 2008

Ontario
Local Health Integration Network

Background

- The incidence and prevalence of diabetes in the MH LHIN increased from 1995/96 to 2004/05 (ICES)
- People with diabetes have an important role to play in self-managing their condition
- Family physicians are the main providers of physician care for people with diabetes in Ontario
- In addition to family physicians, diabetes education and care is also provided in specialized diabetes education programs. There are seven (7) adult and two (2) pediatric Diabetes Education and Care Centres in the MH LHIN
- It is estimated that 28% of people with diabetes in Ontario are in structured (specialized) diabetes education programs
- To learn more about MH LHIN physician referral practices to Diabetes Education Centres, a survey was developed and distributed to physicians in the MH LHIN in June 2008.
- Source: ICES INTool
  Report of the Diabetes Management Expert Panel: December 2006

Objectives of the Physician Survey

- Learn more about physician referral practices to diabetes education centres in the MH LHIN
- Obtain physician input for improving access to diabetes education in the MH LHIN
- Obtain physician advice for strengthening the prevention and management of care for people with diabetes in the MH LHIN.

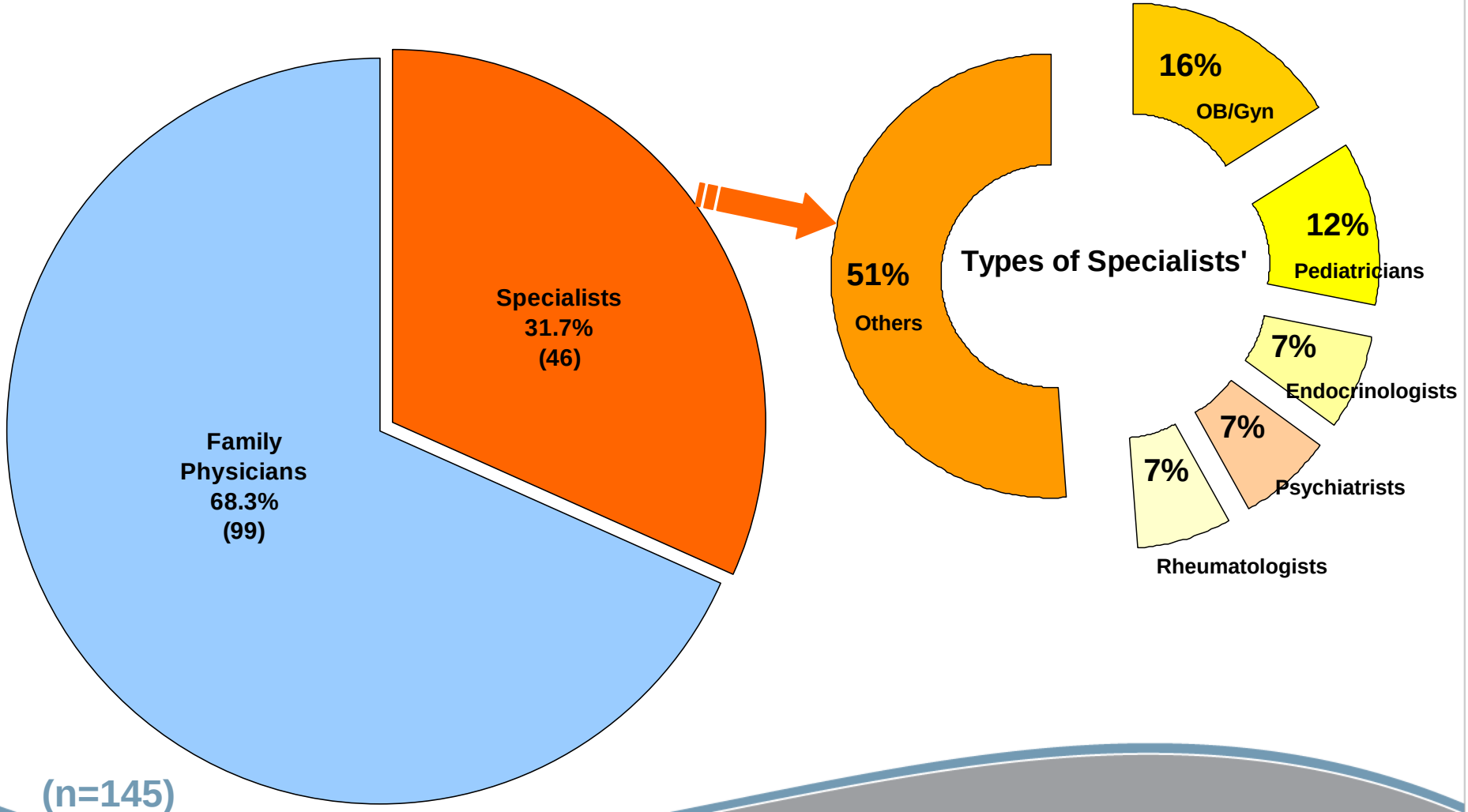
Survey Design / Sample

- Survey was developed by the MH LHIN Diabetes Education Task Group
- Distributed to 1,403 Physicians in the MH LHIN (Family Physicians and Specialists)
- Survey was posted on the MH LHIN Web site June 2008
- Total of 150 Physician responses (representing 11% of MH LHIN physicians – not all physicians answered every question)
- 68% of respondents are Family Physicians; 32% Specialists
- As Family Physicians (FP) conduct the majority of referrals to Diabetes Education Programs, FP responses are highlighted in this report

Physician Survey Highlights

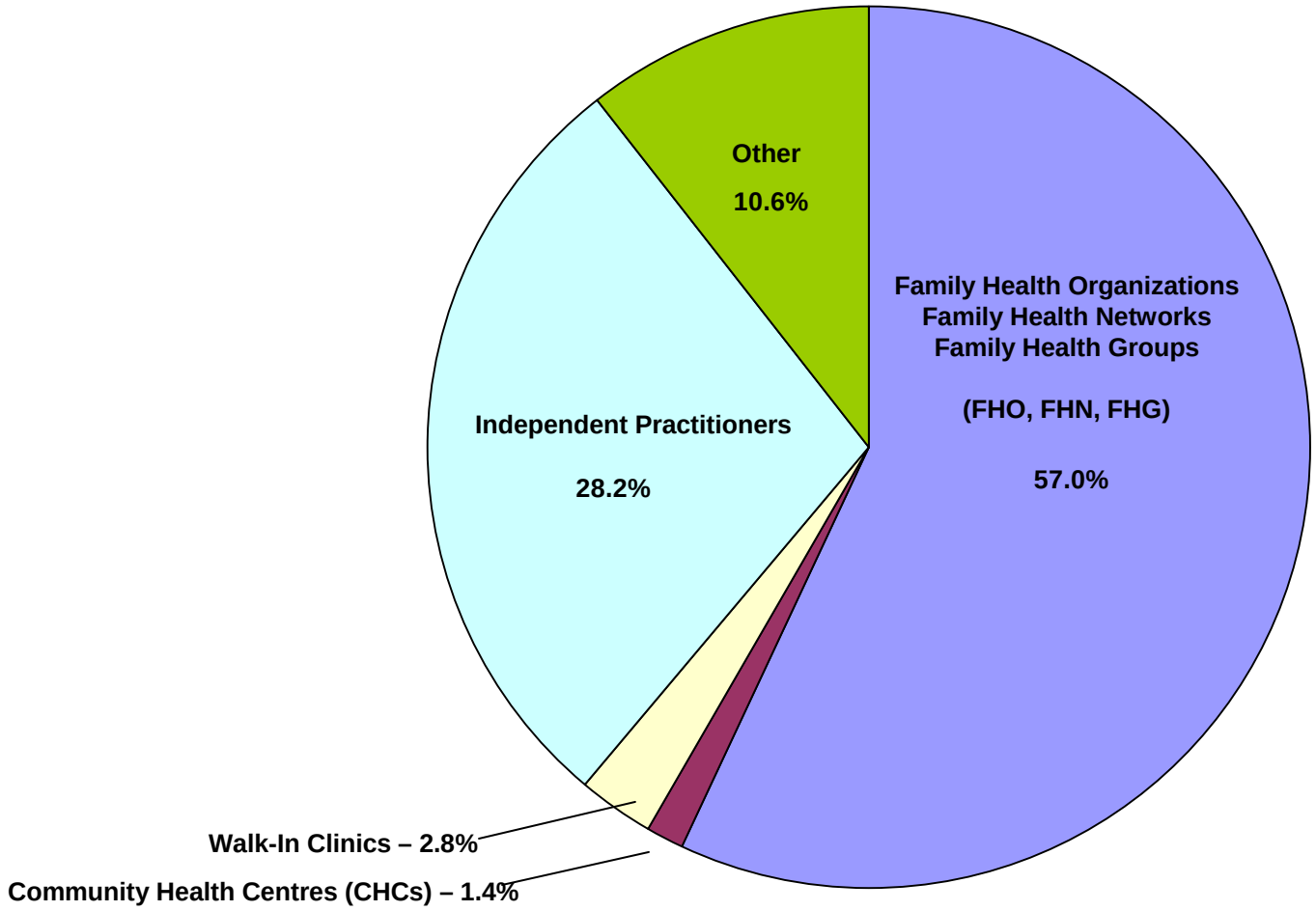
- Ninety-eight percent (98%) of family physicians indicate they refer patients to Diabetes Education Programs in MH LHIN
- 80% of physicians said the main reason they refer people is for re-education
- 61% of physicians said they have referred 1 -10 people in past 6 months
- Reasons patients give family physicians for not attending Diabetes Education Programs: Times not suitable (55%), Language barrier (29%), Not helpful to patient (23%) & No convenient location (21%)
- Physician reasons for not referring patients to diabetes programs: Patient unwilling to attend (75%), Language barrier (27%), Long waiting list (≥2 wks) (24%), Times unsuitable (18%)
- Areas for improvement: Shorten wait times (26%), Improve access to Quicker/easier access to diabetes centres during the week (17%), Referral issues (13%)

Physician Respondent Profile



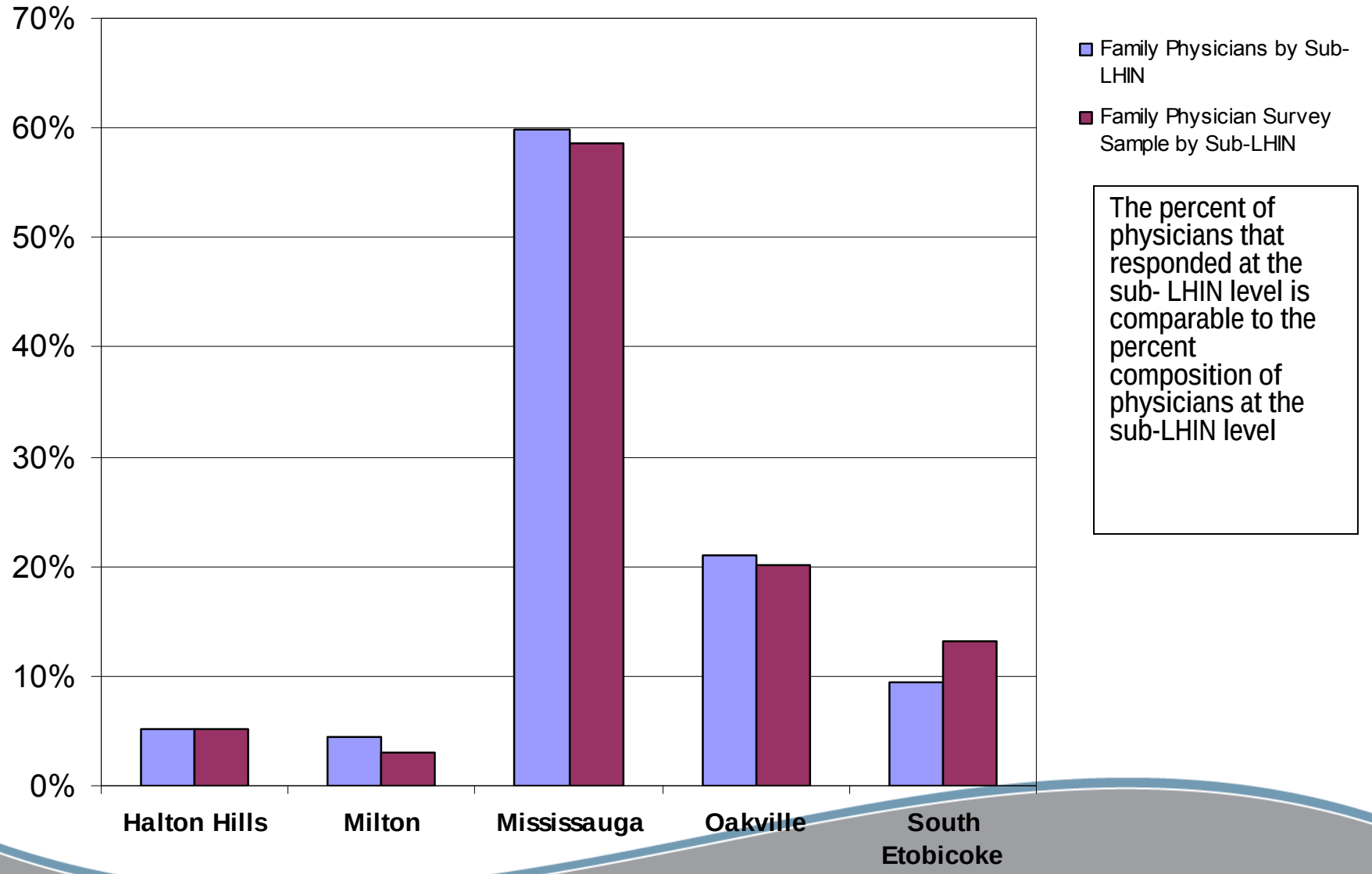
(n=145)

What is your primary practice?



(n=145)

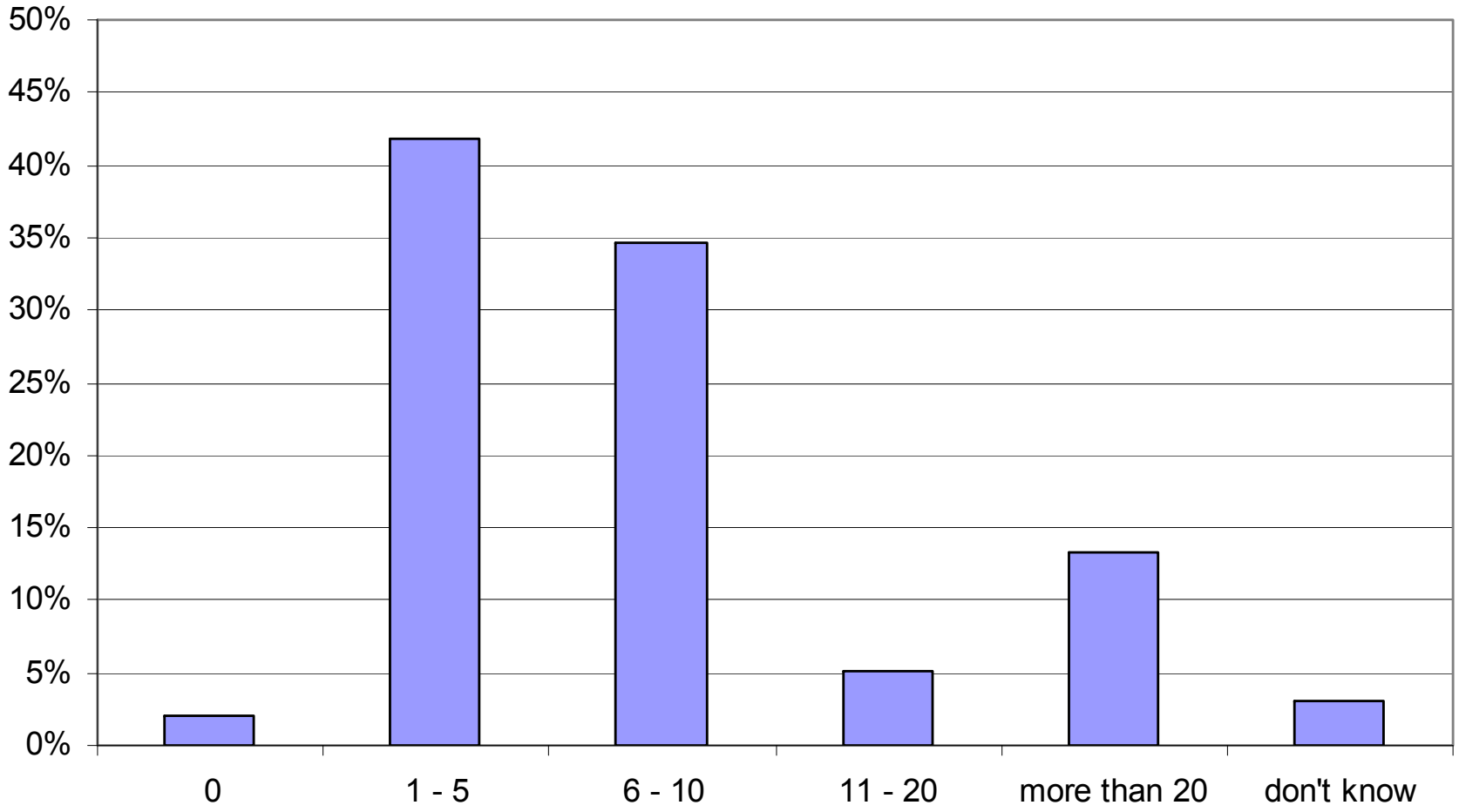
Survey Sample: Family Physician Sub-LHIN Geographic Representation



The percent of physicians that responded at the sub- LHIN level is comparable to the percent composition of physicians at the sub-LHIN level

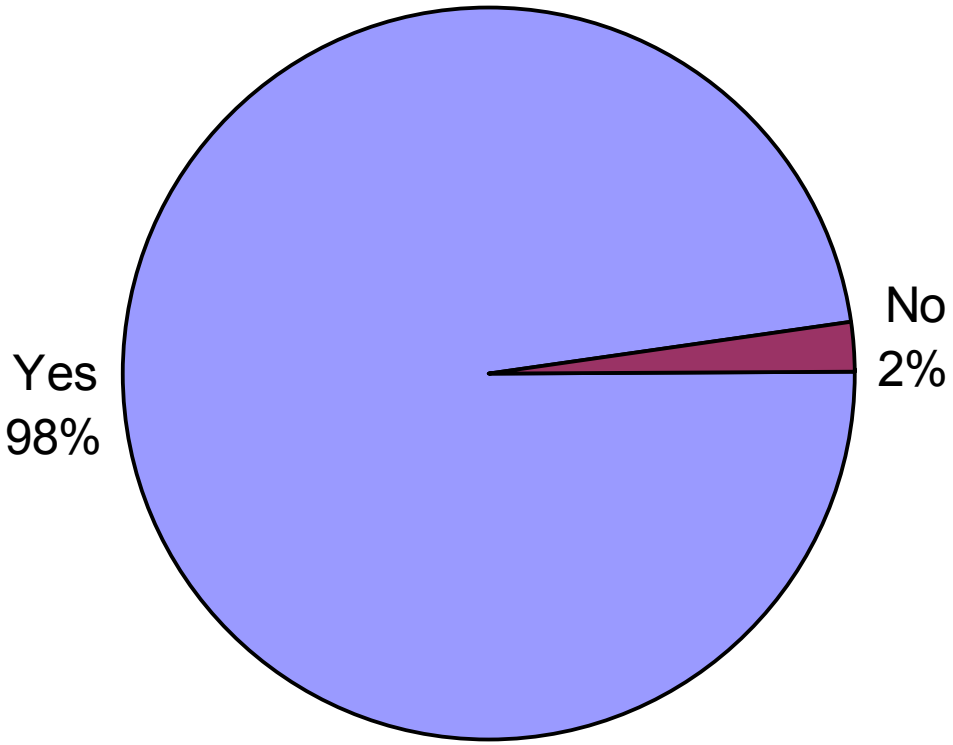
Number of family physicians in each sub-LHIN area divided by number of family physicians in MH LHIN as a whole (772). Data provided by OMA in April 2008. Survey responses filtered to include family physician responses only (n=99).

In the past 6 months, how many new diagnosis of diabetes did you make?



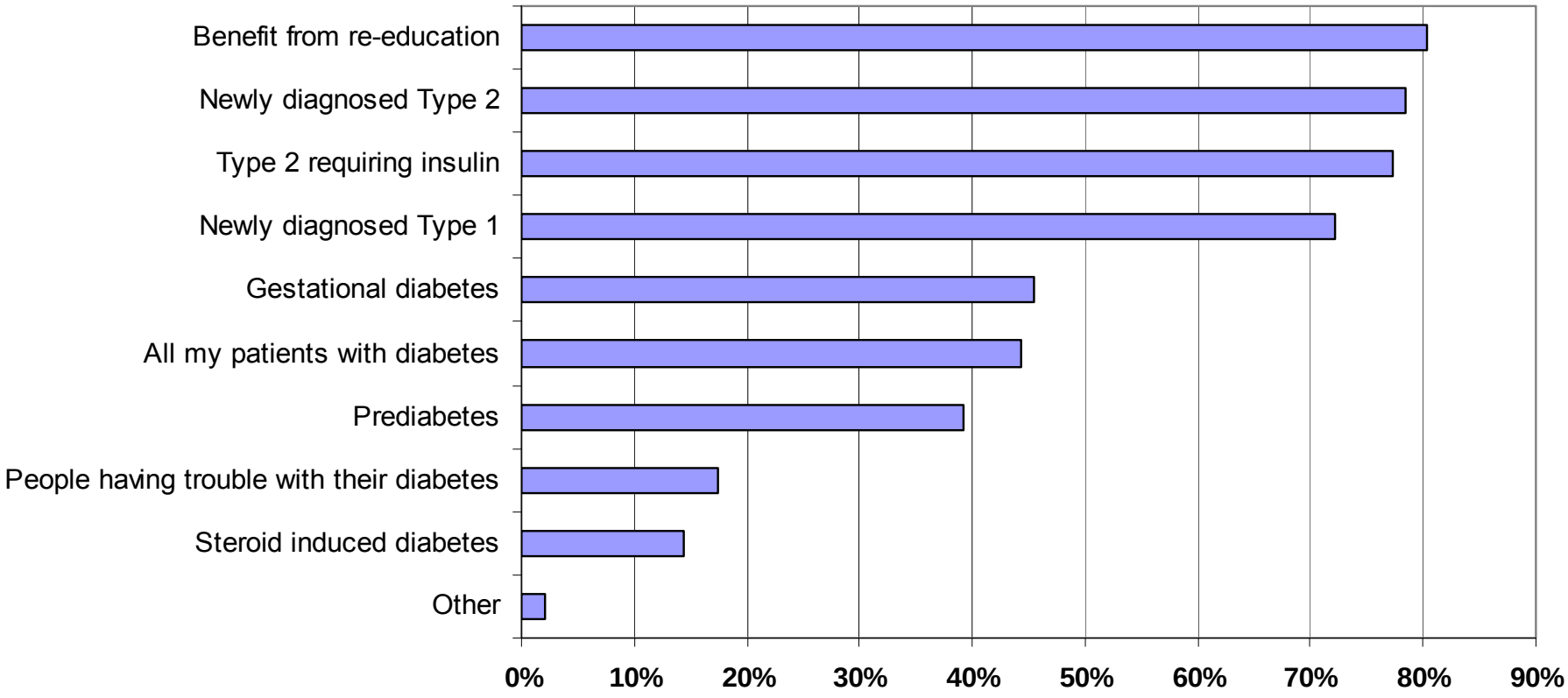
(Family Physicians, n=98)

Do you refer people to a Diabetes Centre?



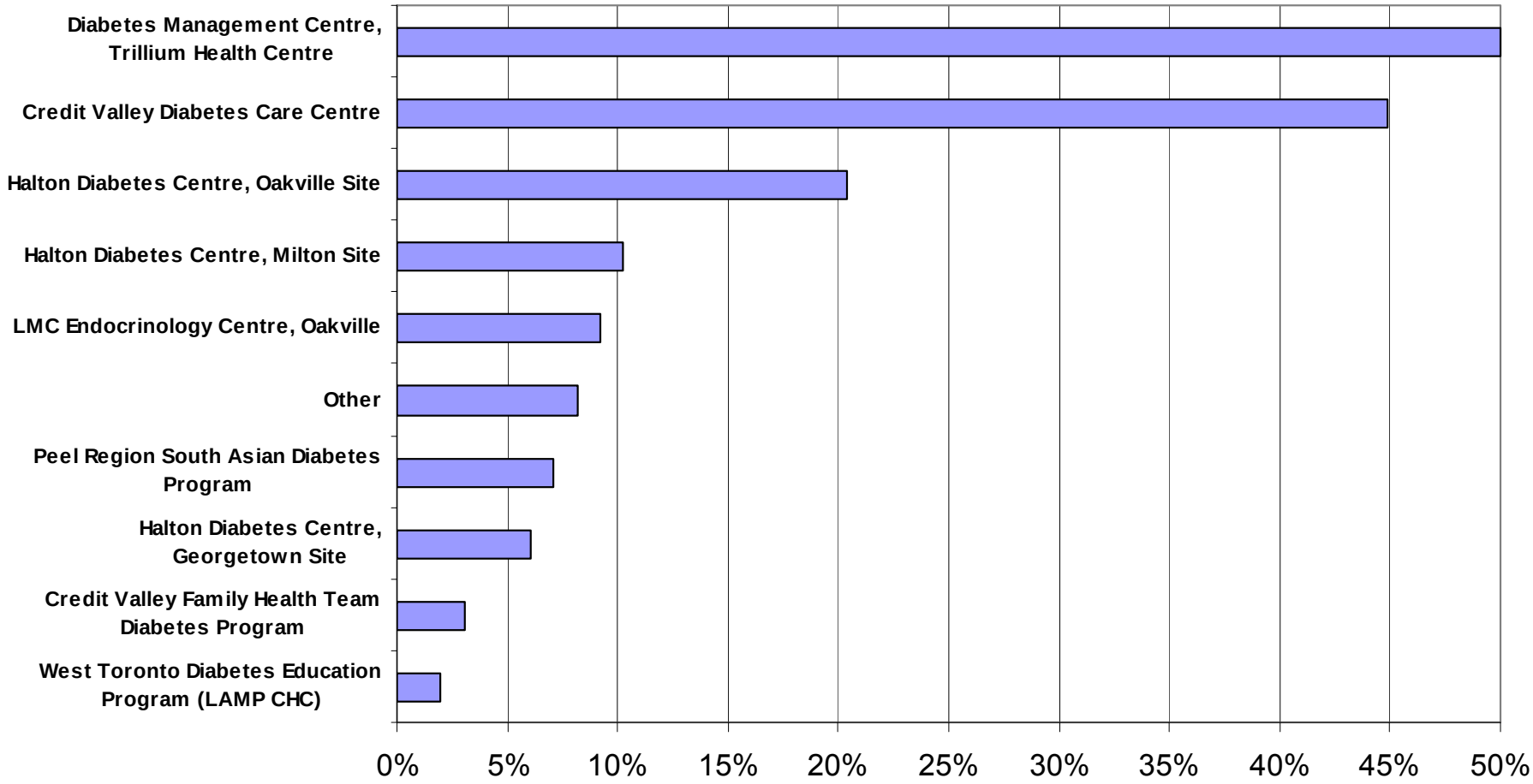
(Family Physicians, n=99)

Which of your patients do you refer to a diabetes centre?



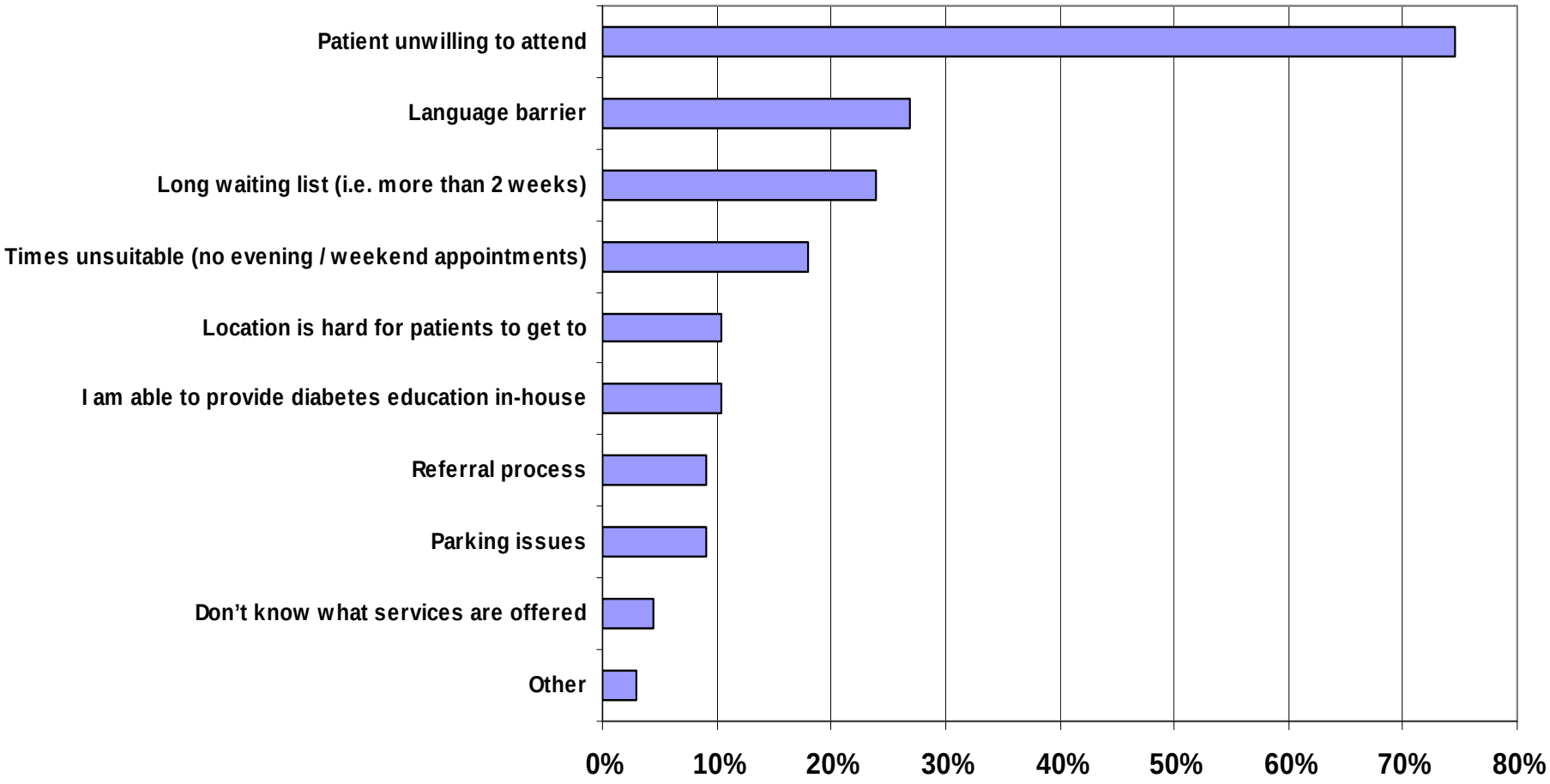
(Family Physicians, n=97)

Which Diabetes Centre do you refer to?



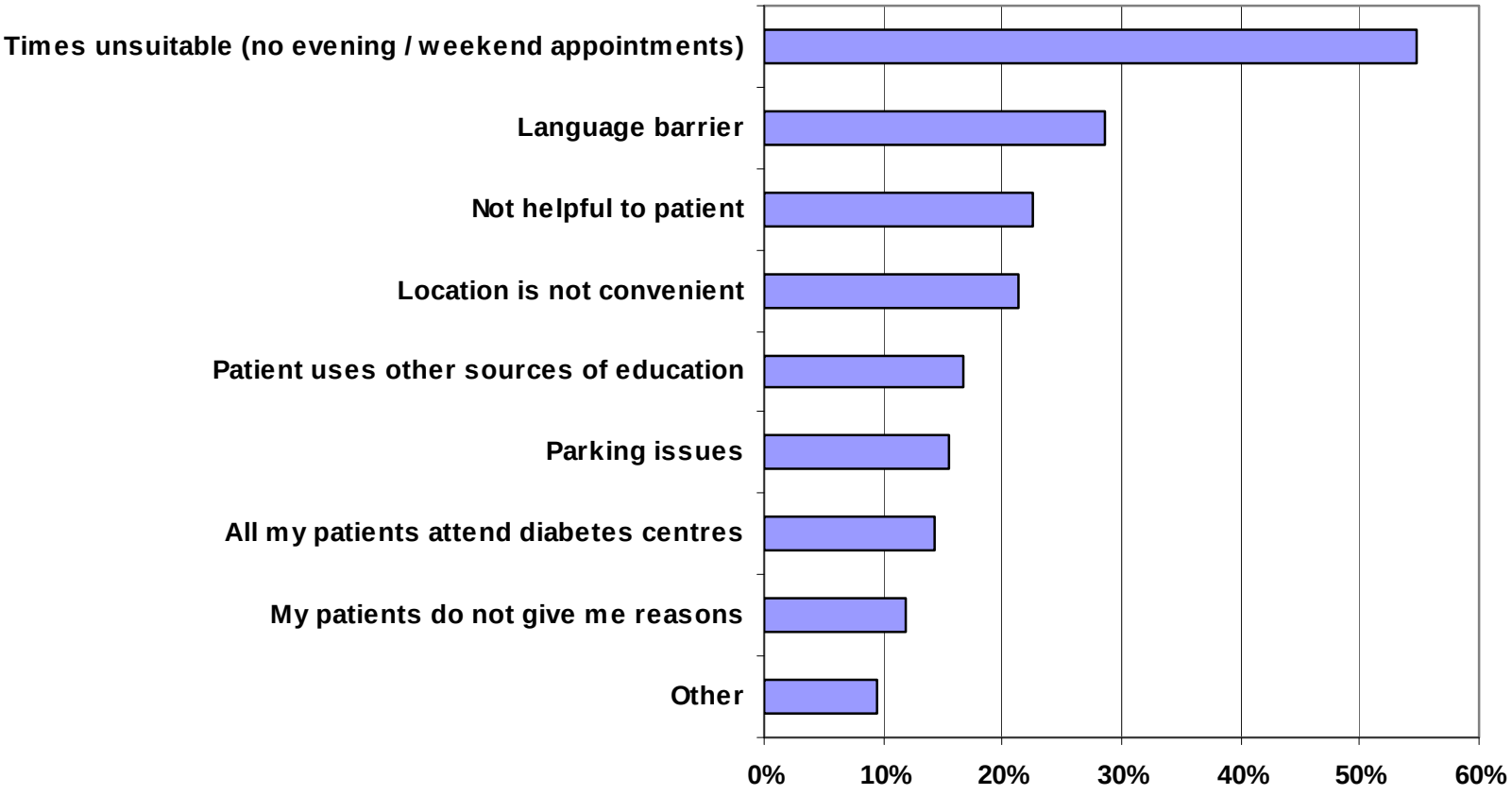
(Family Physicians, n=99)

What are some of the reasons why you do not refer patients to a diabetes centre?



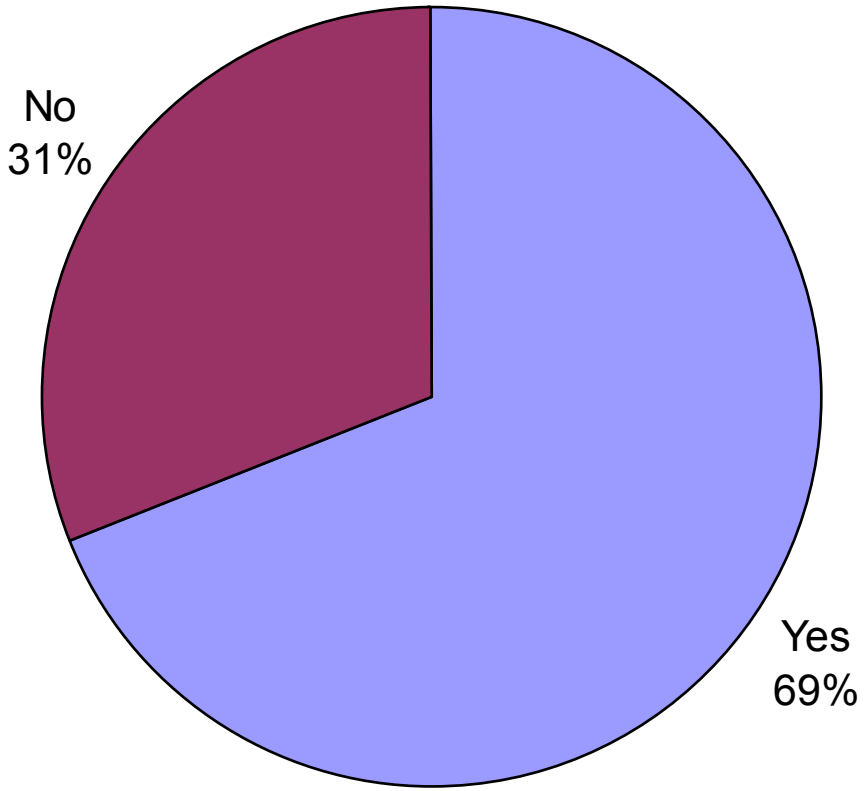
(Family Physicians, n=67)

What reasons do your patients give for not attending the diabetes centre?



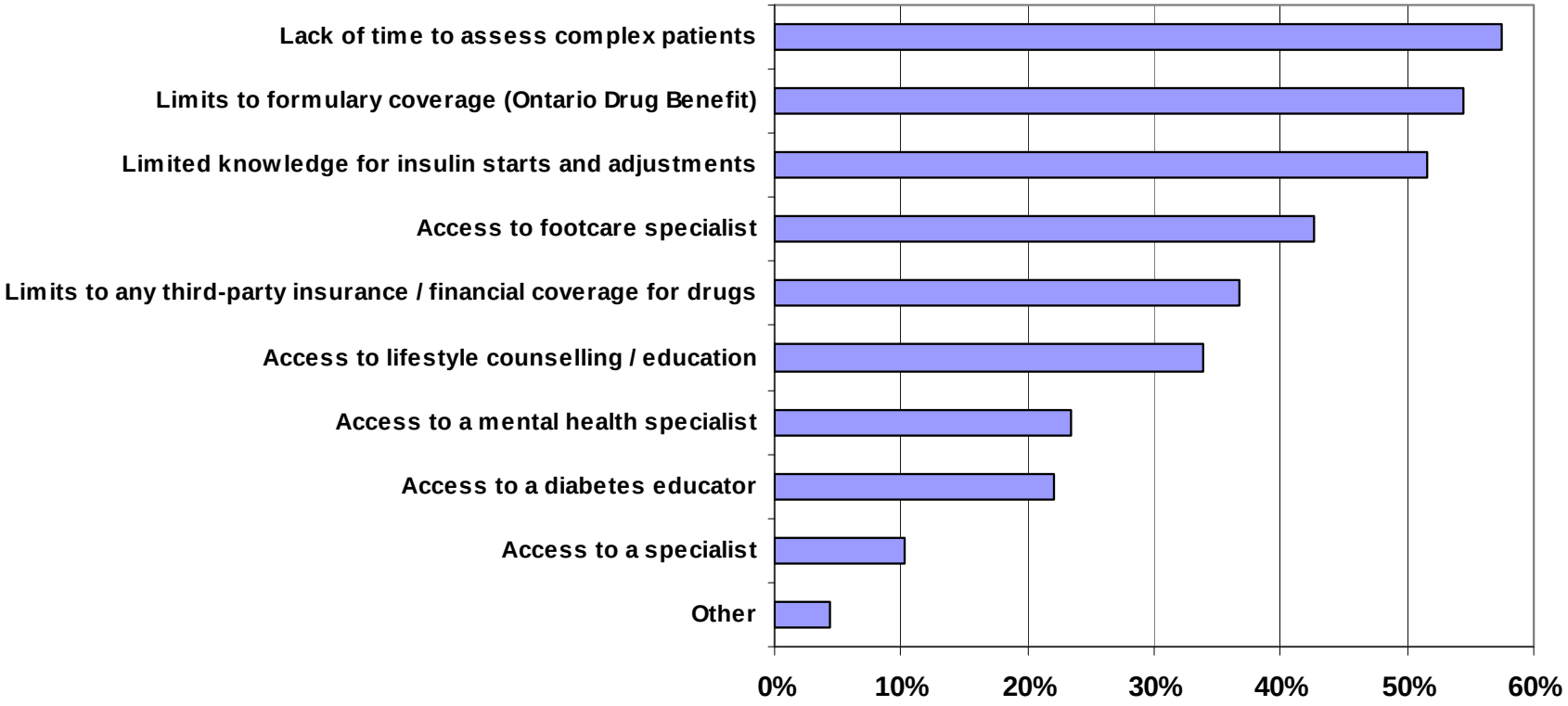
(Family Physicians, n=84)

Are there barriers to caring for patients with Diabetes?



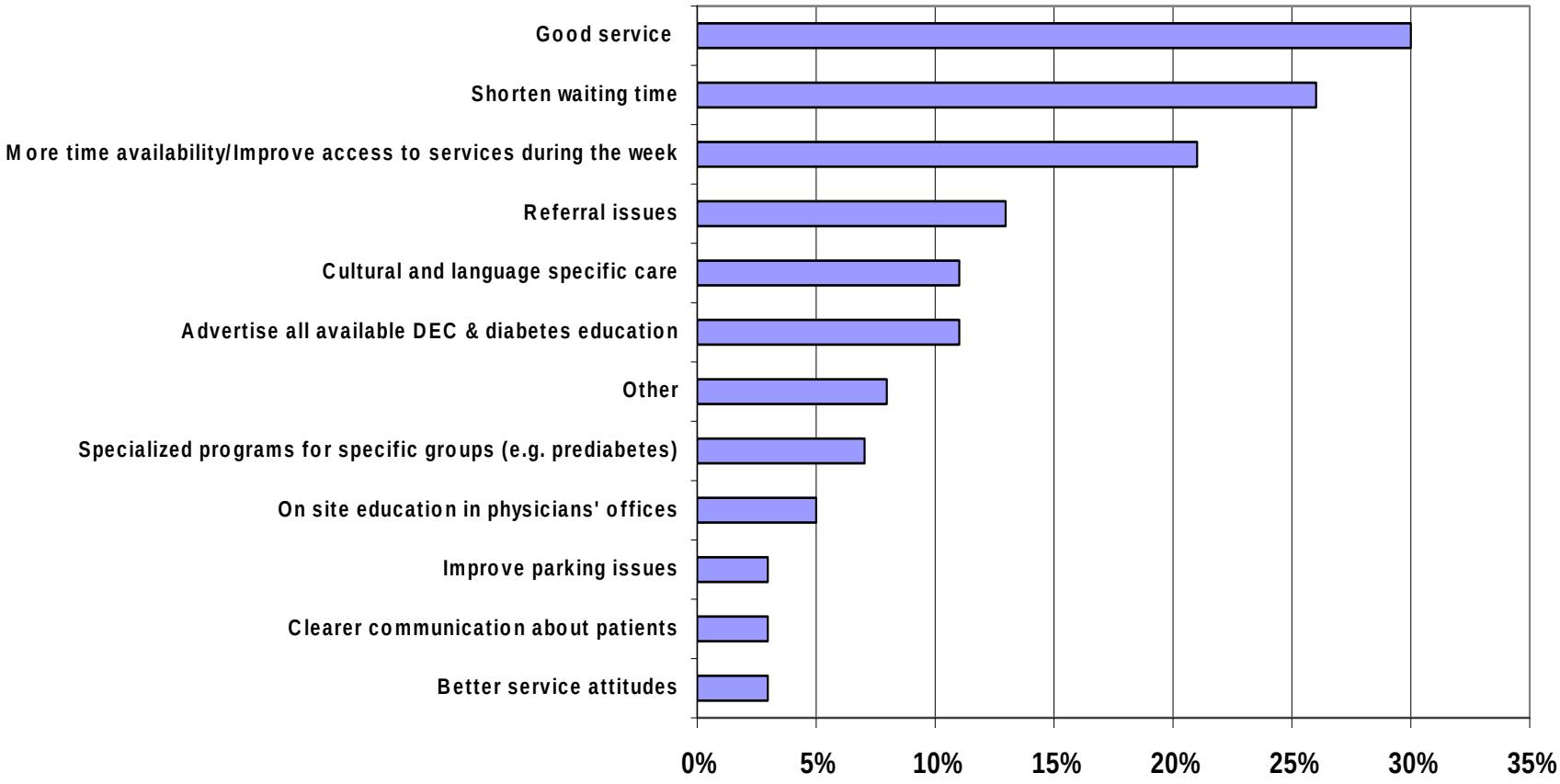
(Family Physicians, n=87)

What are the barriers to caring for patients with diabetes?



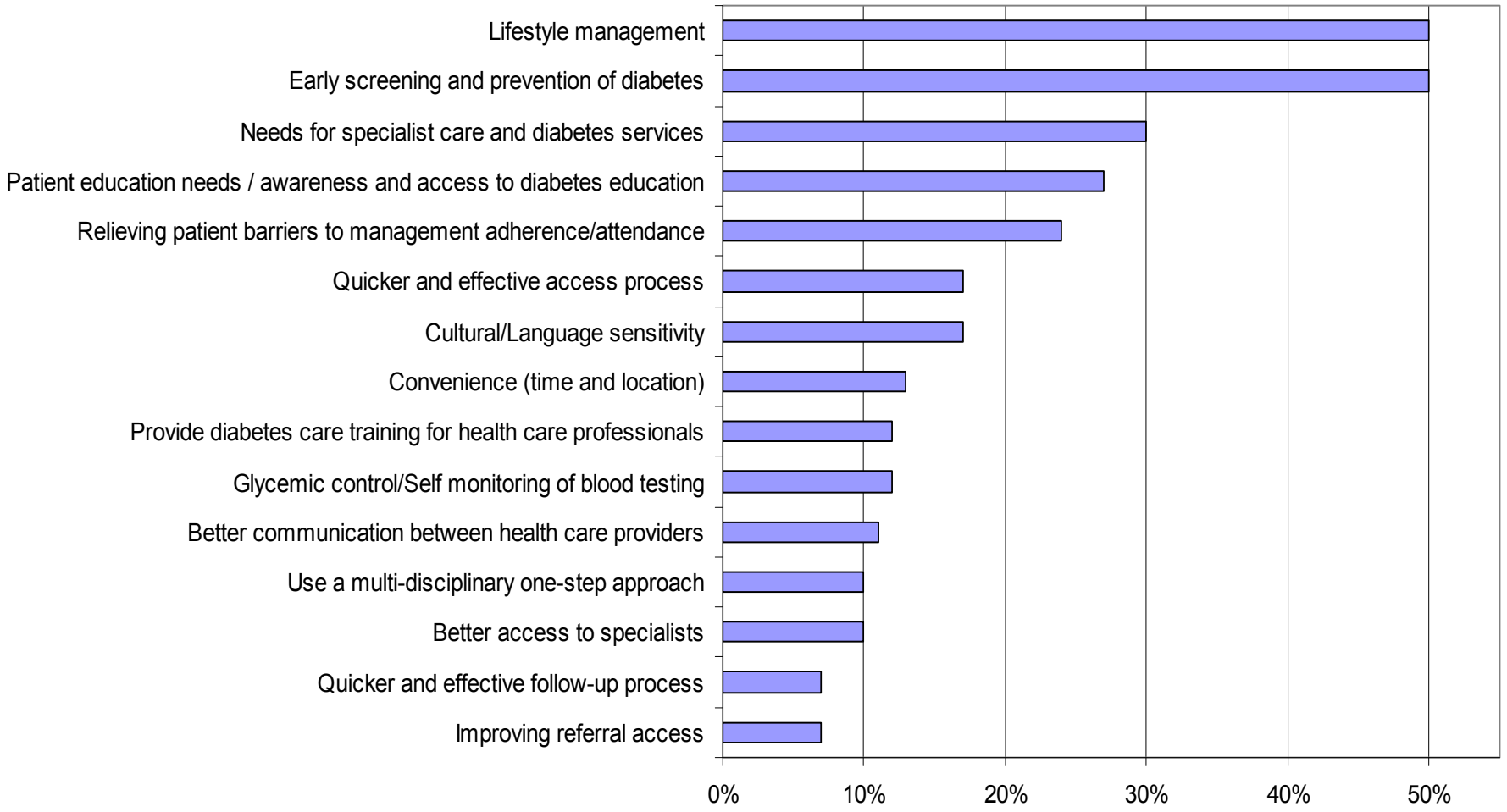
(Family Physicians, n=68)

What are your suggestions for improving services provided by diabetes Centres to Physicians and their patients?



(Family Physicians, n=61)

What are 4 areas that the MH LHIN should focus on to strengthen diabetes prevention and management care for people with diabetes? (top 15 responses)



(Family Physicians, n=82)

Mississauga Halton LHIN
Survey for Adults with Diabetes

December 2008

Background

- The incidence and prevalence of diabetes in the MH LHIN increased from 1995/96 to 2004/05 (ICES)
- People with diabetes have an important role to play in self-managing their condition
- Family physicians are the main providers of physician care for people with diabetes in Ontario
- In addition to family physicians, diabetes education and care is also provided in specialized diabetes education programs. There are seven (7) adult and two (2) pediatric Diabetes Education and Care Centres in the MH LHIN
- It is estimated that 28% of people with diabetes in Ontario are in structured (specialized) diabetes education programs
- To learn more about the sources of diabetes education used by MH LHIN residents and to obtain advice on how to improve diabetes education, a survey was developed for MH LHIN residents in the fall of 2008.
- Source: ICES INTool
  Report of the Diabetes Management Expert Panel: December 2006

Purpose of the Survey for Adults with Diabetes

- To identify ways to improve access to diabetes education in the Mississauga Halton LHIN
- To learn more about how people with diabetes in the MH LHIN access information about diabetes and self-management
- To identify barriers for people with diabetes to self-manage their care.

Survey Design / Sample

- Survey was developed by MH LHIN Diabetes Education Task Group
- Total of 229 responses; not all respondents answered every question
- Online survey
- Hard copy survey distributed through local pharmacies, optometrist, conferences and select local programs
- Advertisement in five (5) local newspapers
- Data Limitations: the respondents' profile may not be representative of the population of the Mississauga Halton LHIN which limits the applicability of findings for all residents. Findings in teh

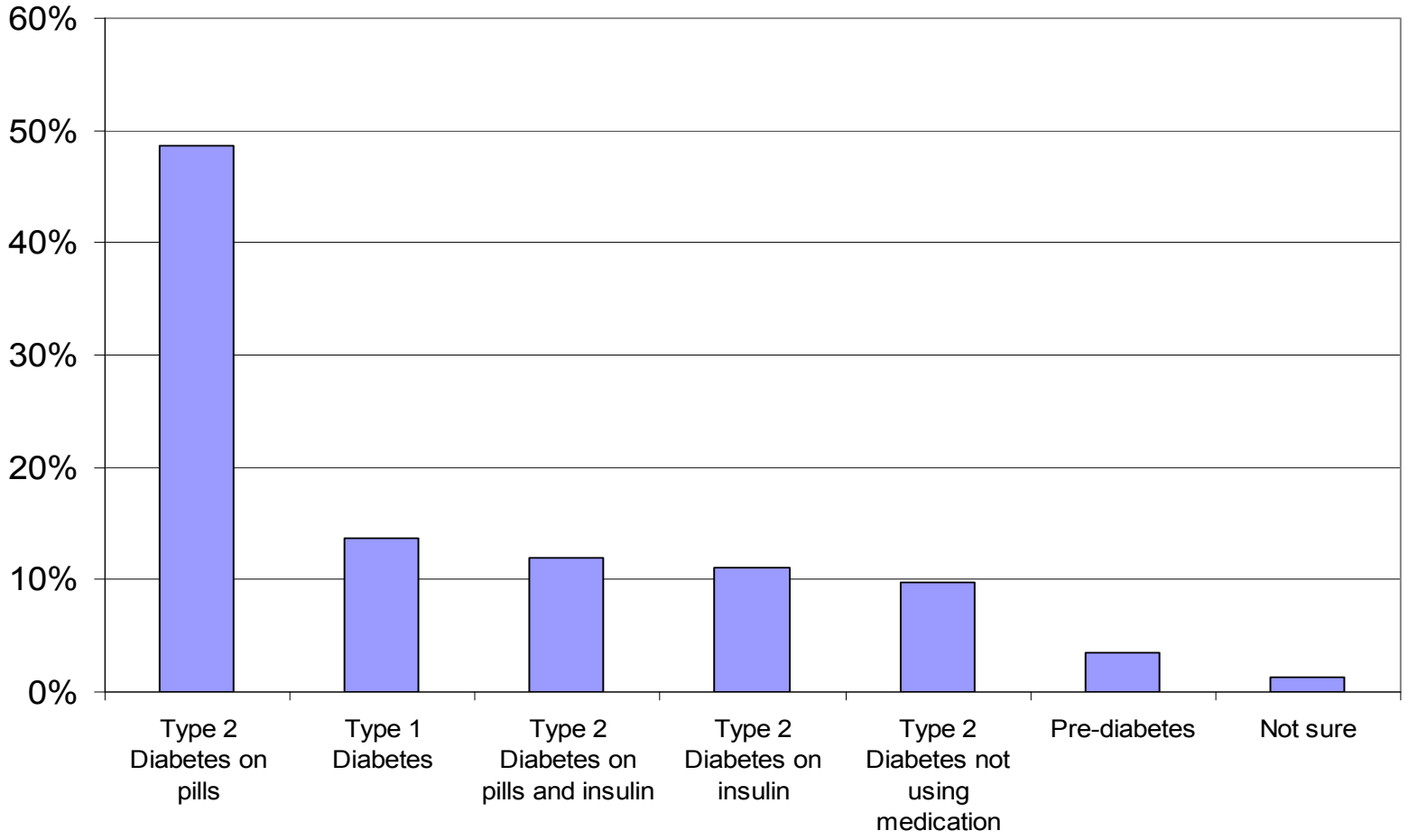
Survey Highlights: Profile of Respondents

- 51% male and 49% female; 39% over 65 years of age
- 53% born in Canada
- Majority of respondents have Type 2 diabetes, and are managed with pills
- 90% of respondents have other health problems in addition to diabetes: high blood pressure (58%); cholesterol (52%); weight problems (44%); problems with eyes (32%) problems with feet (32%)
- Approximately 90% of respondents chose English as the preferred language to hear and read health information
- When asked where you look for trusted health information about diabetes or other medical conditions:
  - 79% stated family physician
  - 41% stated diabetes centre
  - 31% stated pharmacy
  - 28% stated internet
- Approximately 68% of respondents said they currently access the internet and 67% of respondents said they would use the internet as a source of information for diabetes or other medical conditions

Survey Highlights - Utilization

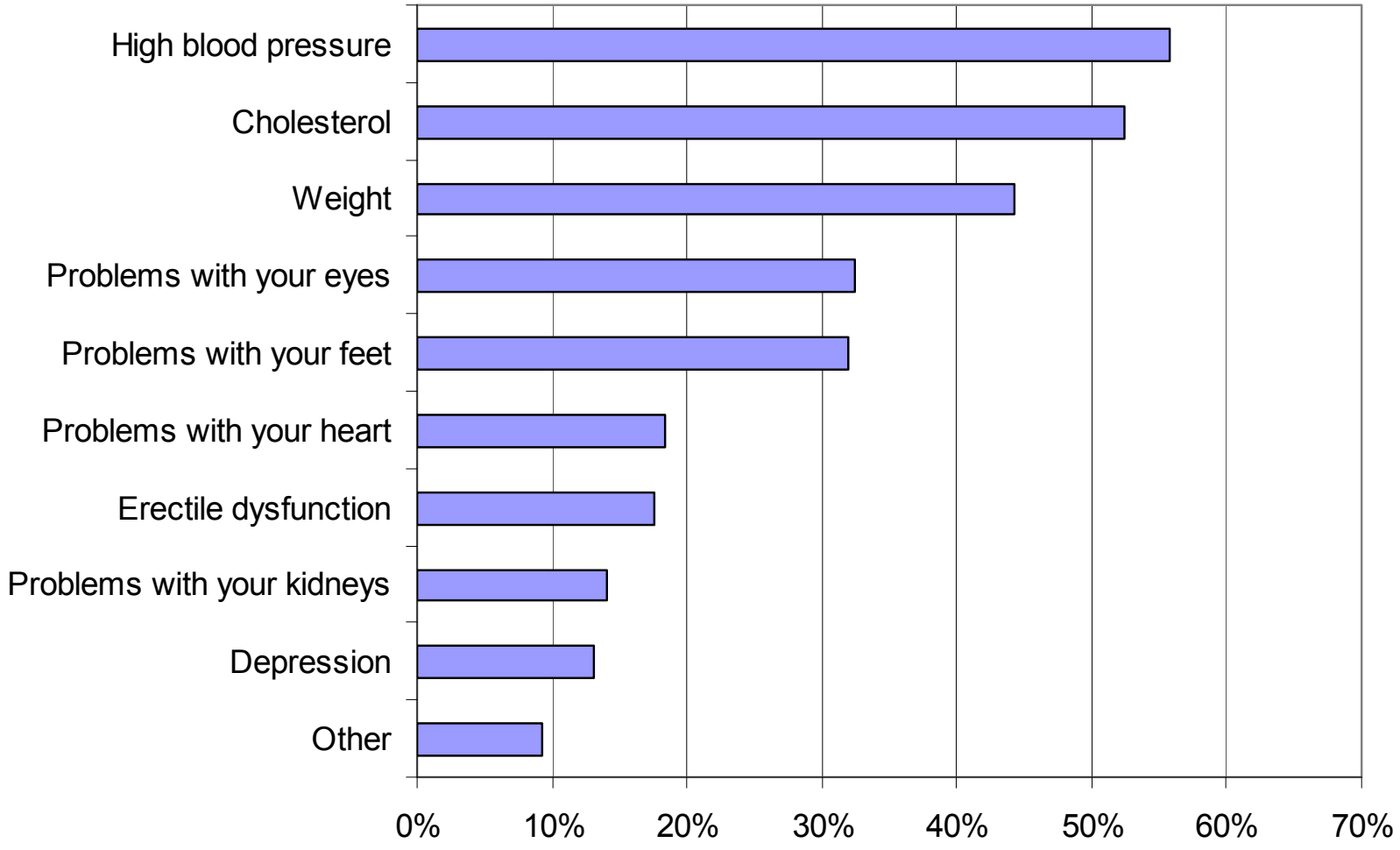
- 99% of respondents have a regular family physician
- Respondents identified family physicians as main source of referral to diabetes centres (72%)
- 33% of respondents have never attended a diabetes centre
- The most common reason provided for not attending a diabetes centre is:
  - Own doctor provides diabetes education (39%)
  - Doctor does not promote diabetes centre (29%)
  - Feel have enough information and support to self-manage diabetes (24%)
- When asked to rate own overall management of diabetes:
  - 71% responded good, fair or poor
  - 29% responded very good or excellent

What type of diabetes do you have?



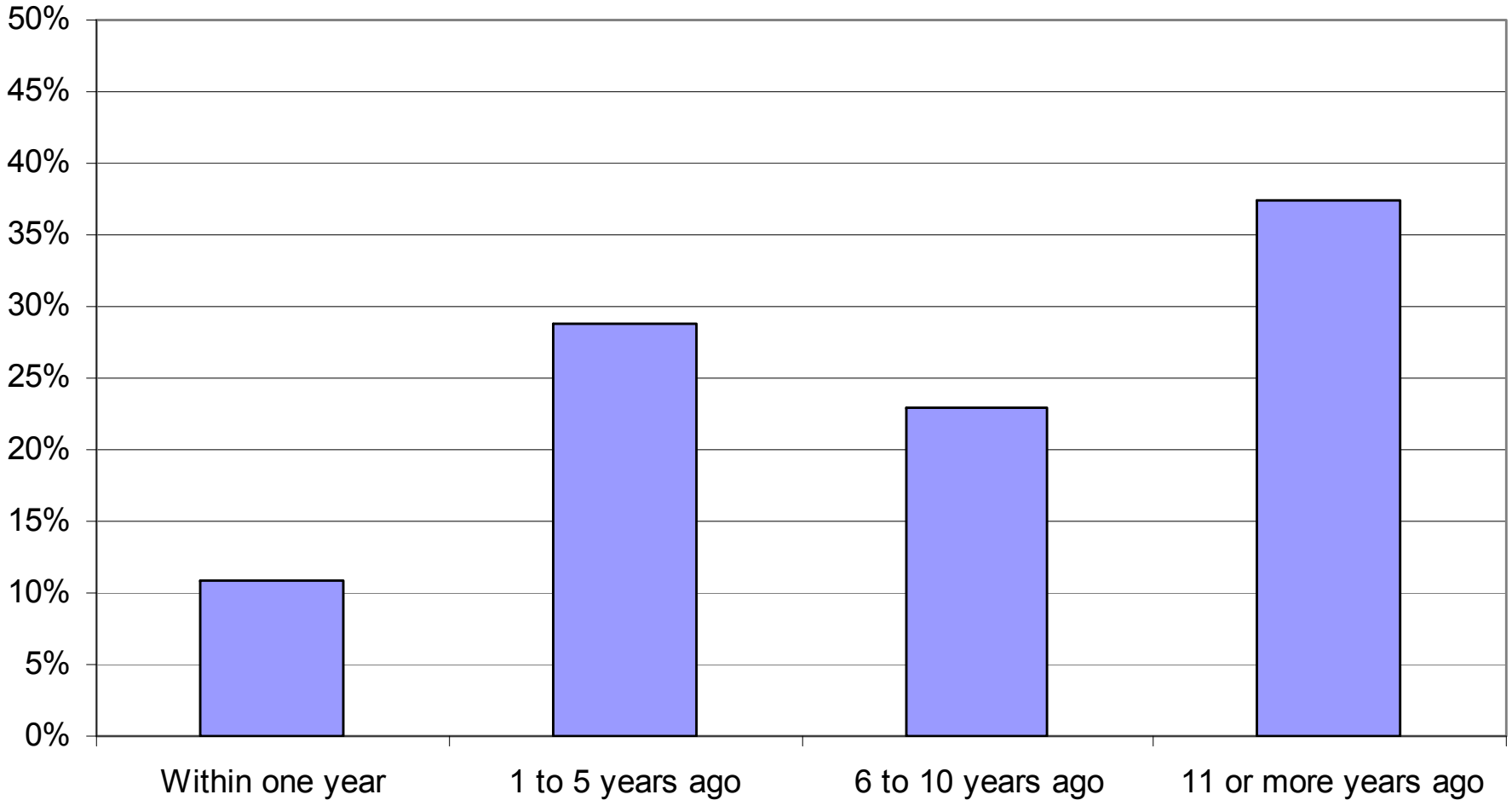
(n=226)

Do you have any other health problems?



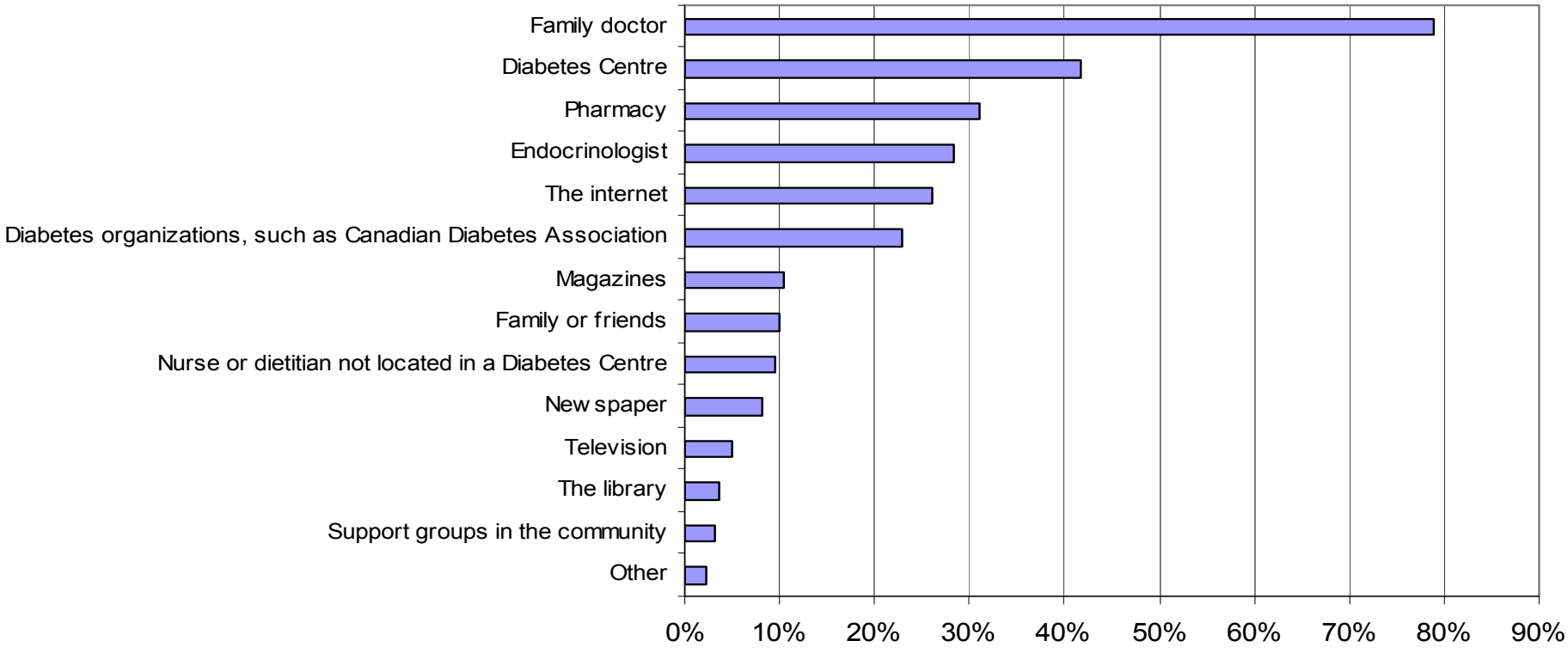
(n=206)

When were you first diagnosed with diabetes?



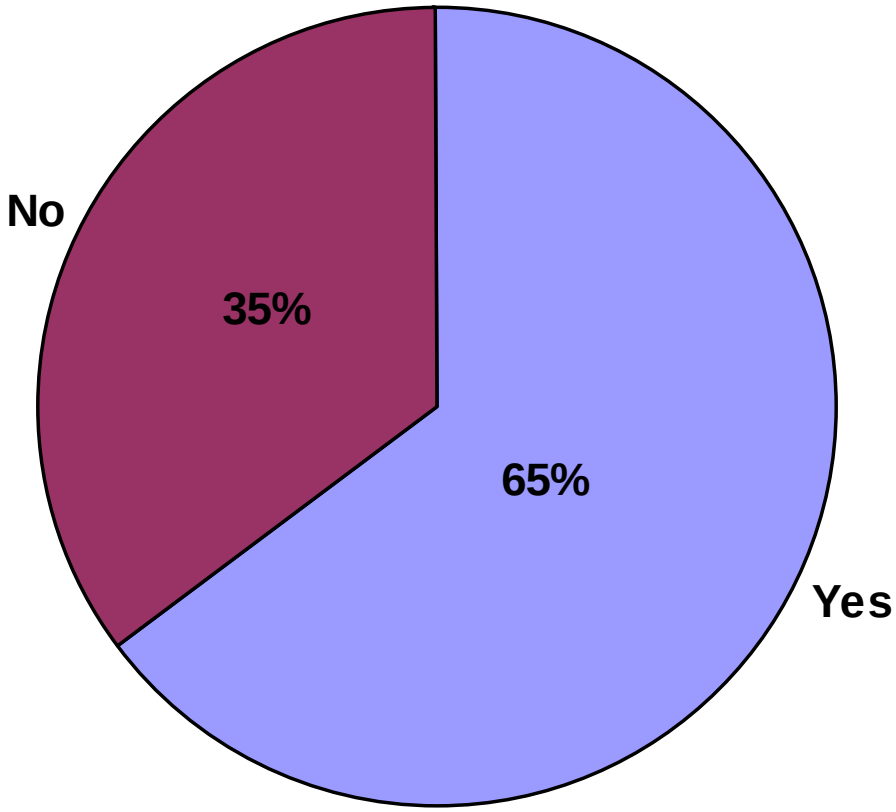
(n=222)

Where do you look for trusted health information about your diabetes or other medical conditions?



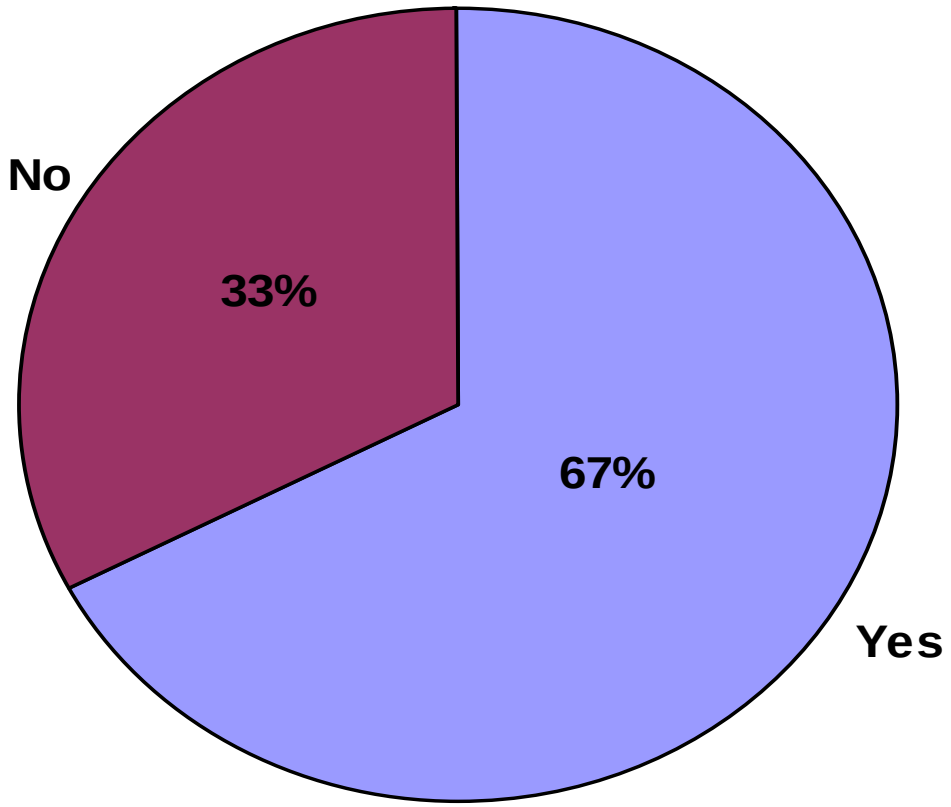
(n=219)

Are you aware of the Diabetes Centre in your region?



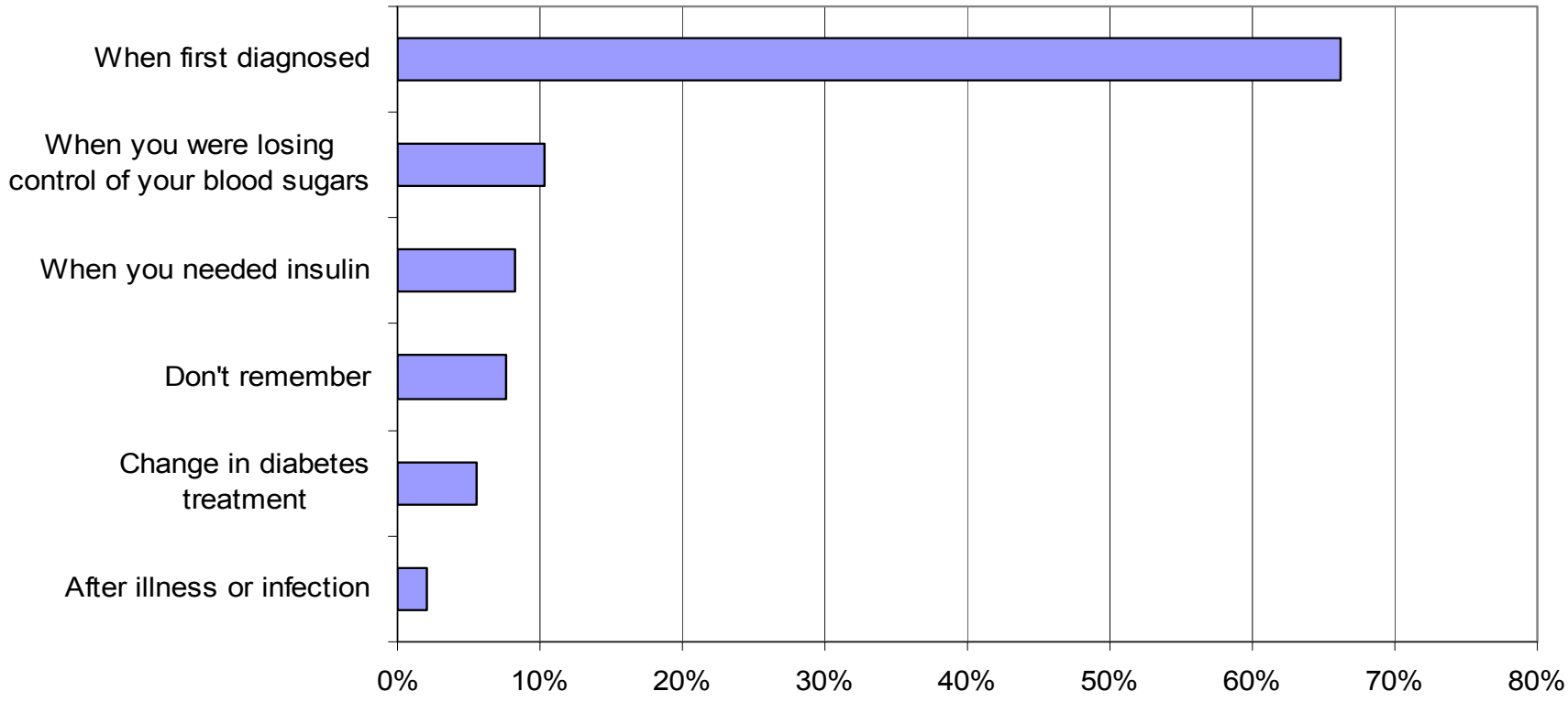
(n=219)

Have you ever attended a Diabetes Centre?



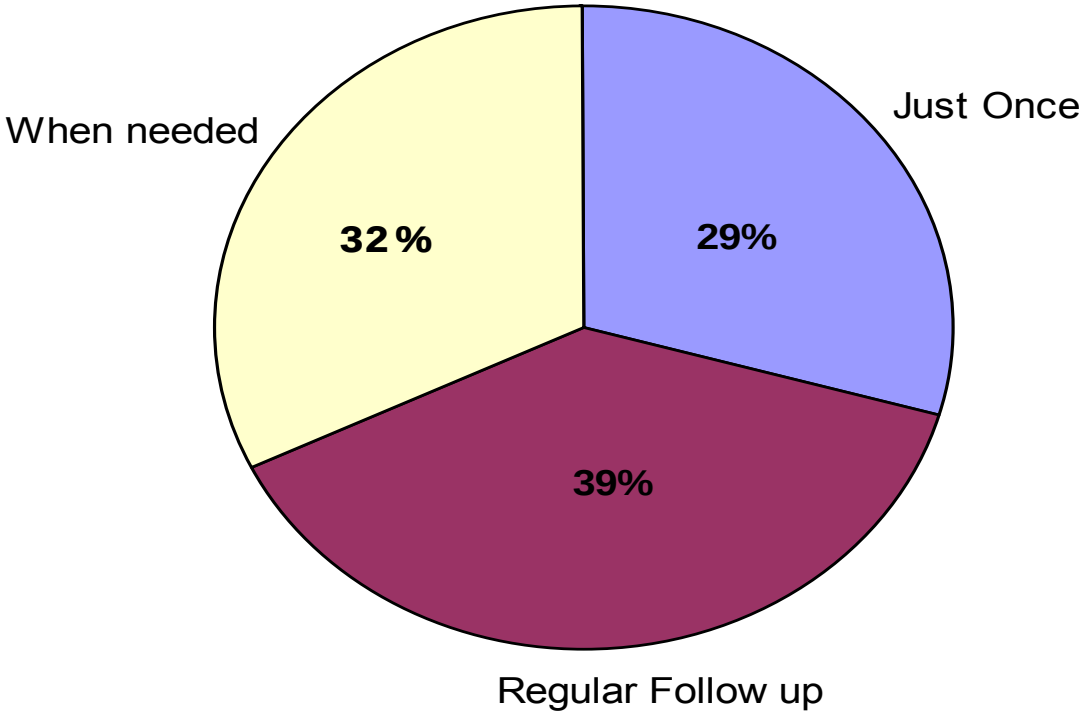
(n=211)

When did you first go to a Diabetes Centre?



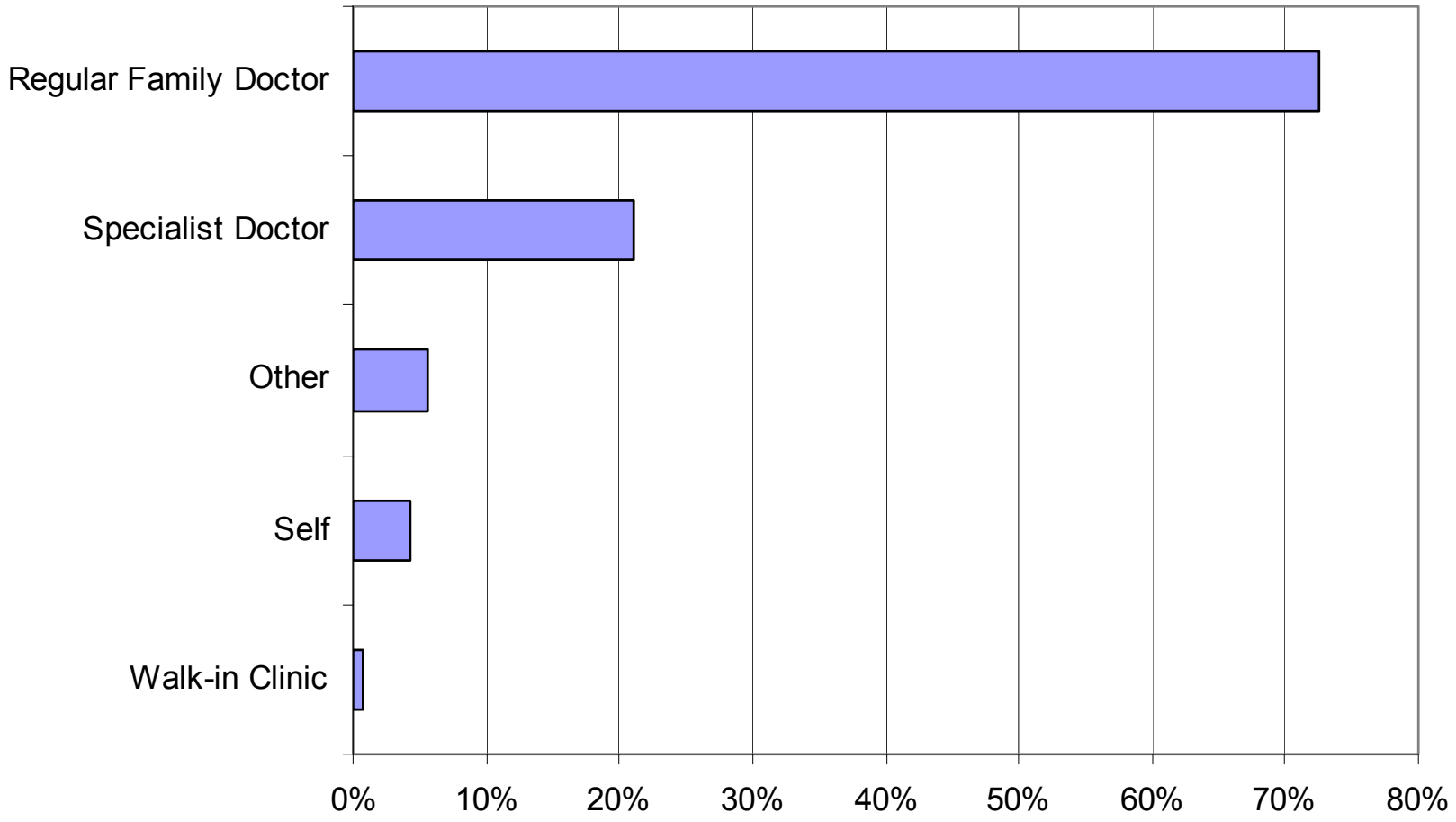
(n=145)

How many times have you attended the Diabetes Centre?



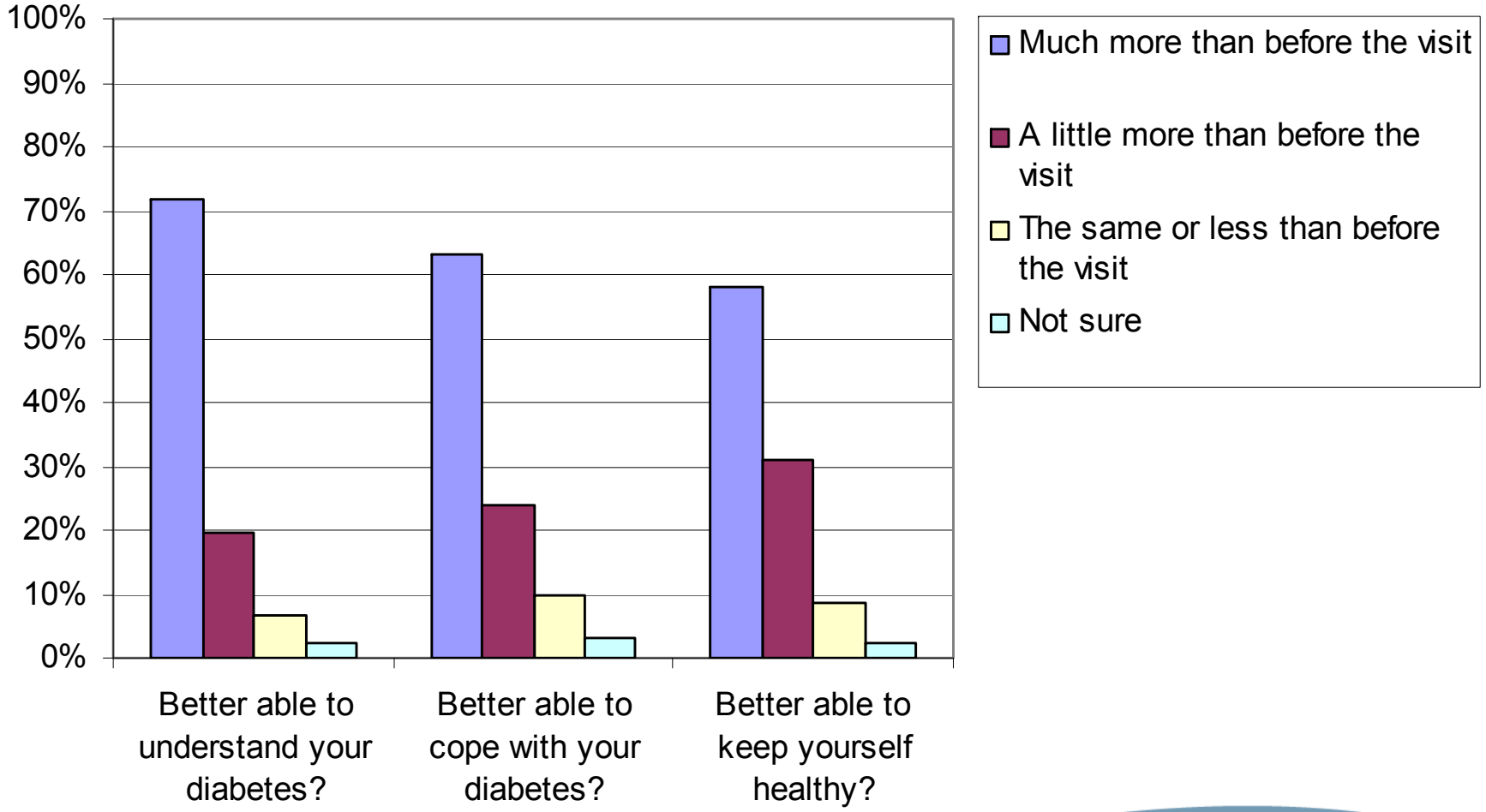
(n=143)

Who referred you to the Diabetes Centre?



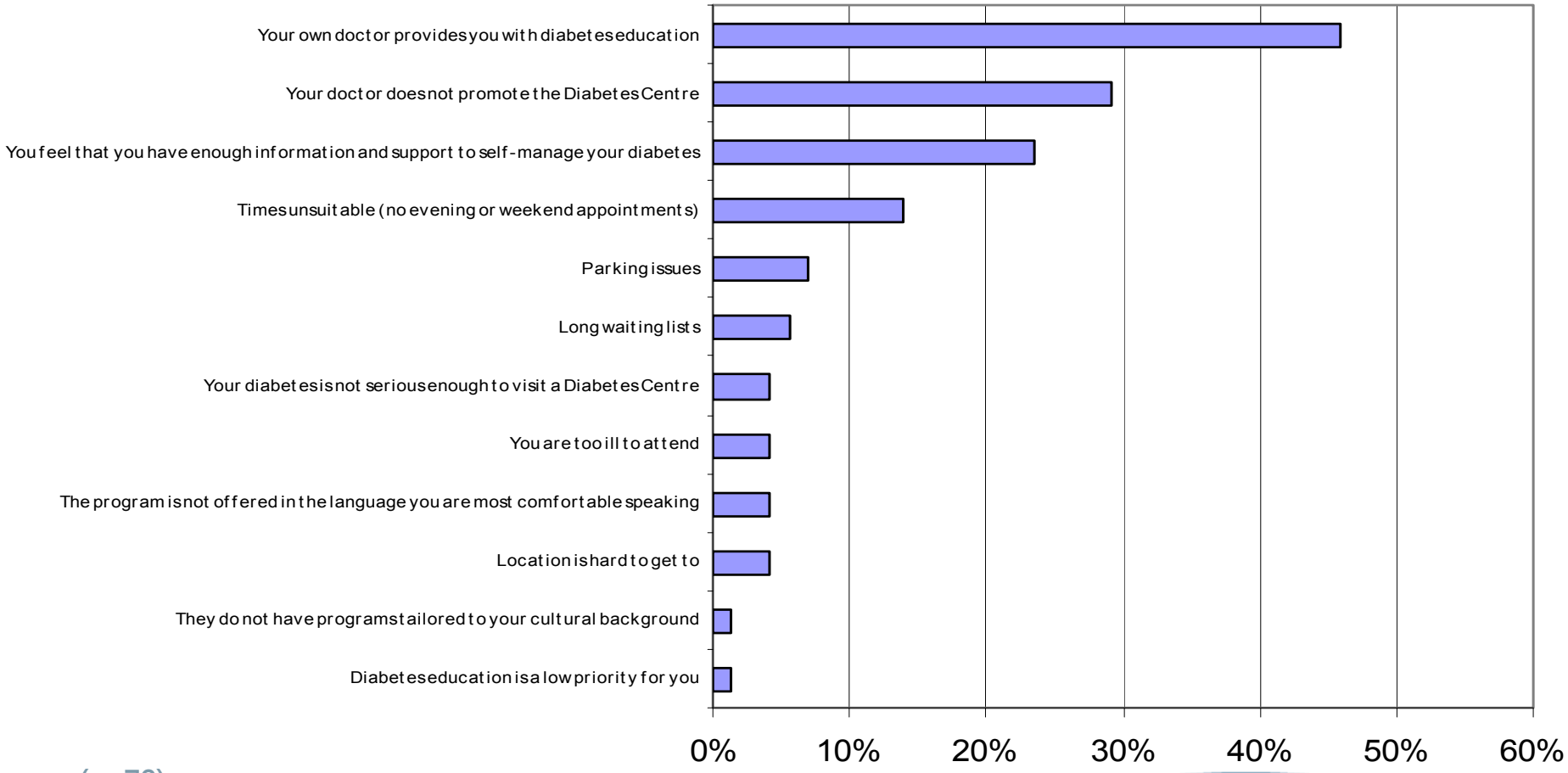
(n=142)

After visiting the Diabetes Centre, you were:



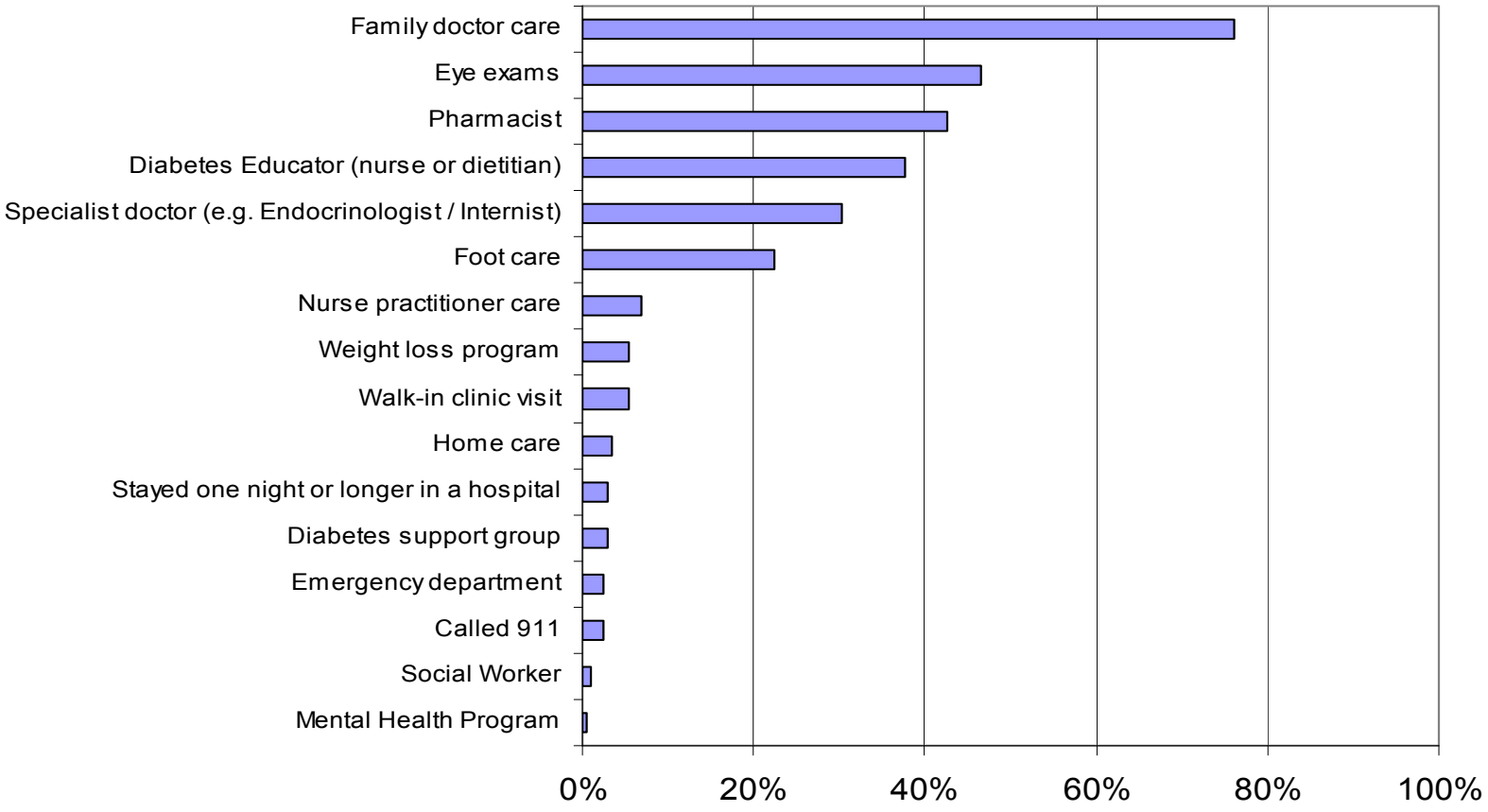
(n=142)

If you have never attended a Diabetes Centre, please tell us why:



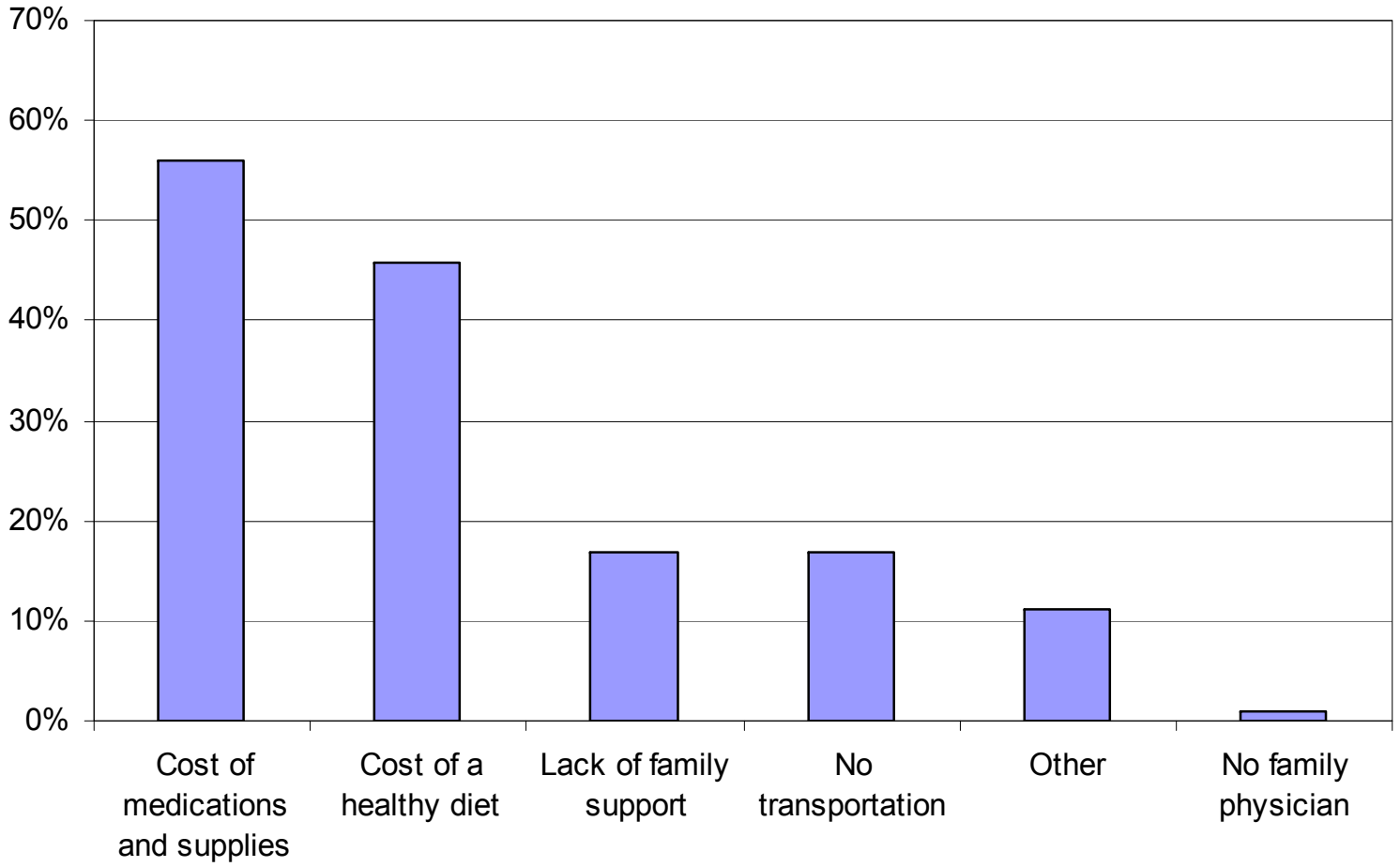
(n=72)

In the past 12 months, have you used any of the following services due to your diabetes?



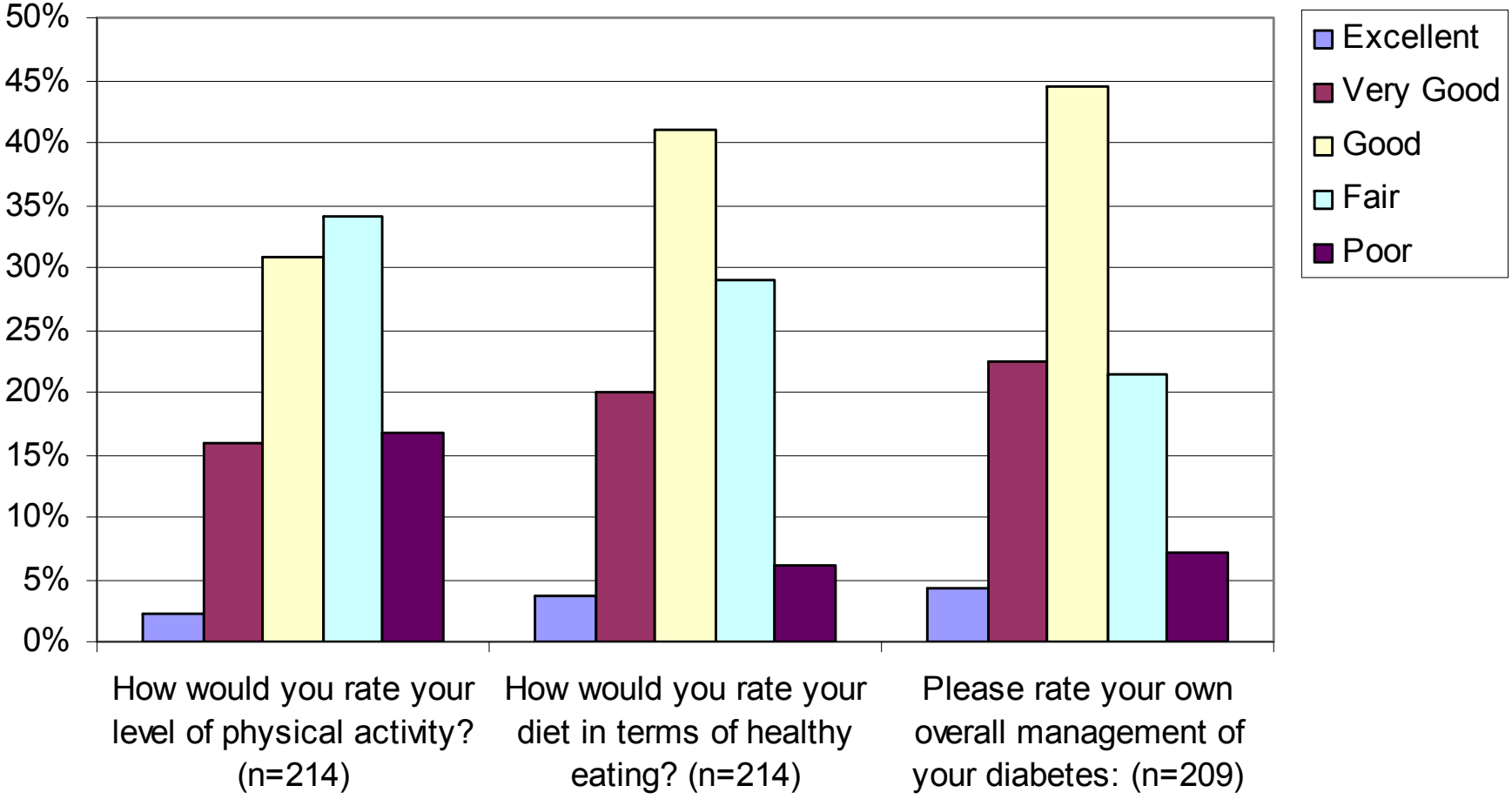
(n=202)

Do any of the following make diabetes care more difficult for you?

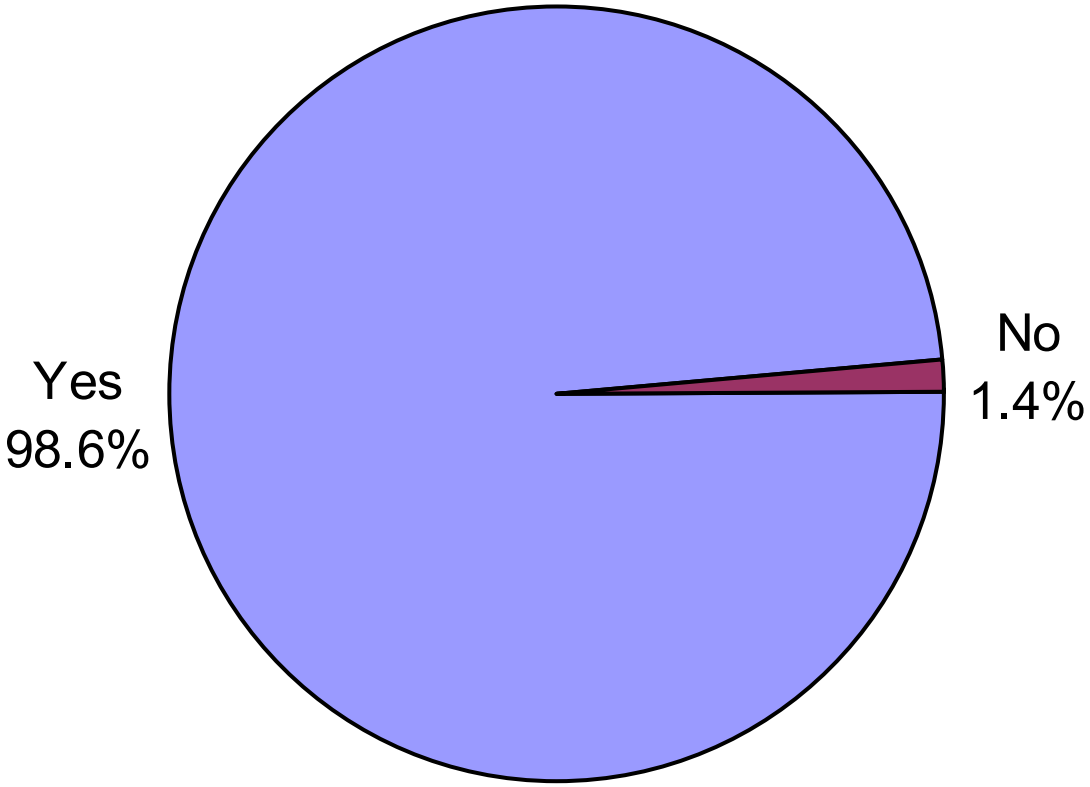


(n=107)

Diabetes Management

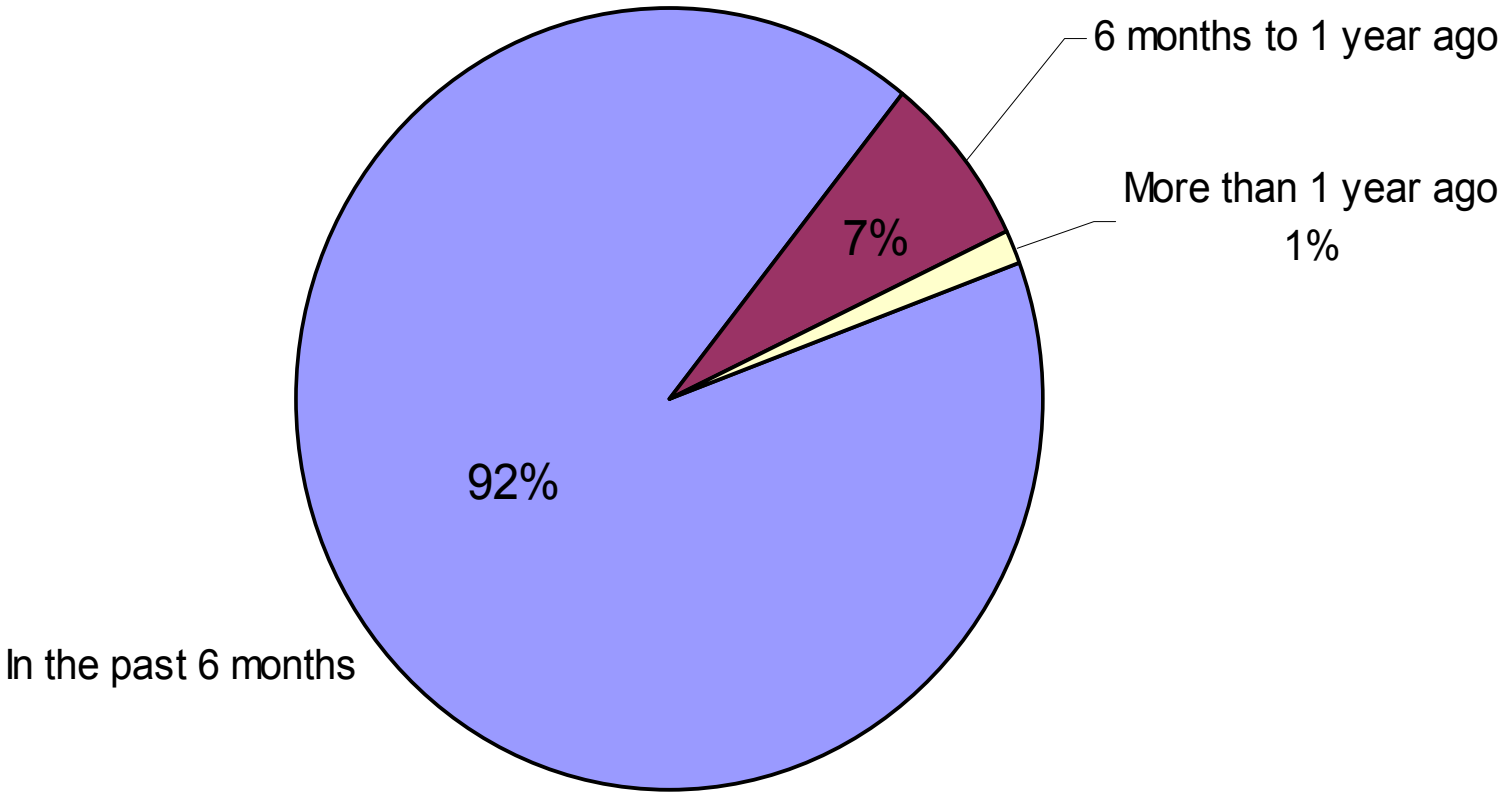


Do you have a regular family doctor?



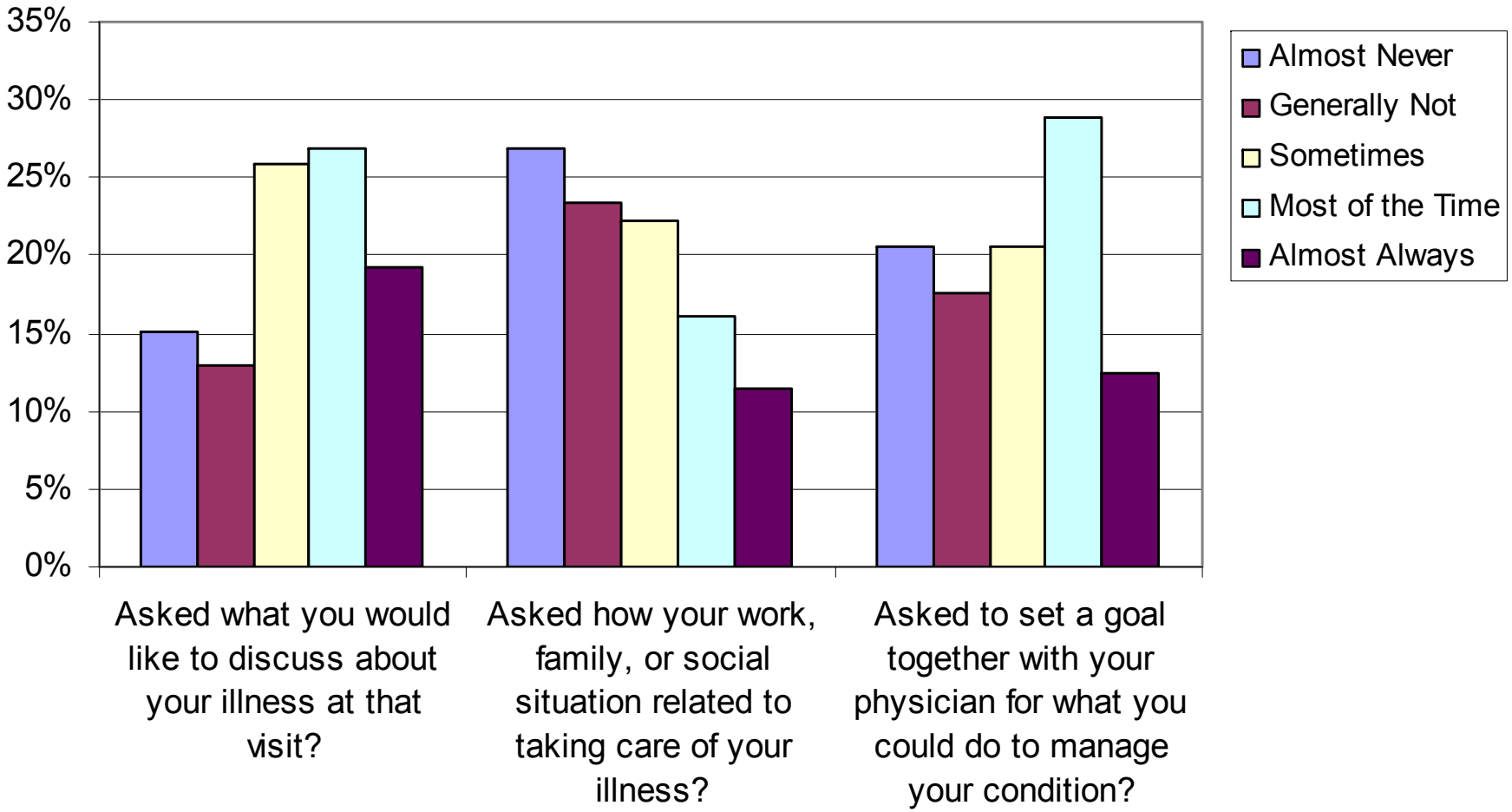
(n=211)

When did you last see your doctor for diabetes?



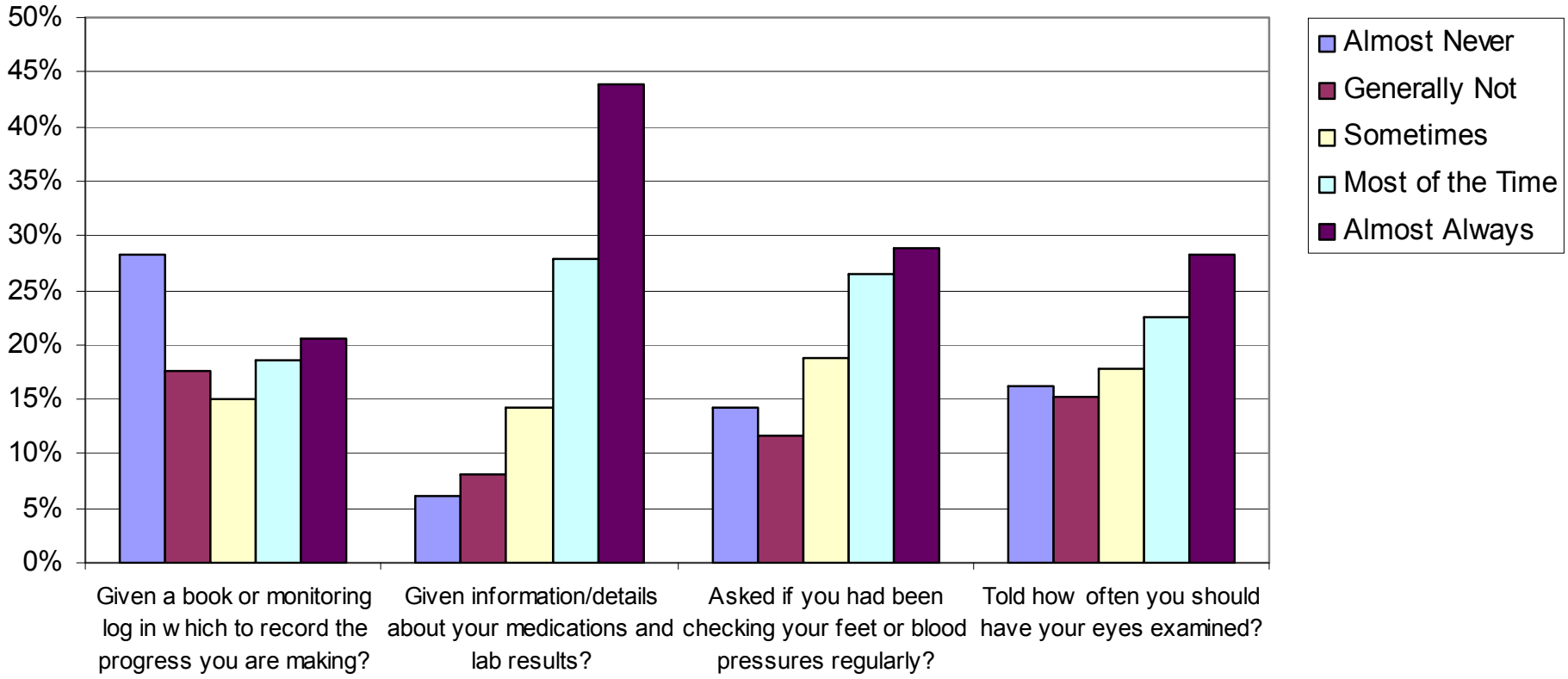
(n=212)

Over the past 12 months, when receiving medical care from your doctor for your diabetes, were you:



(n=206)

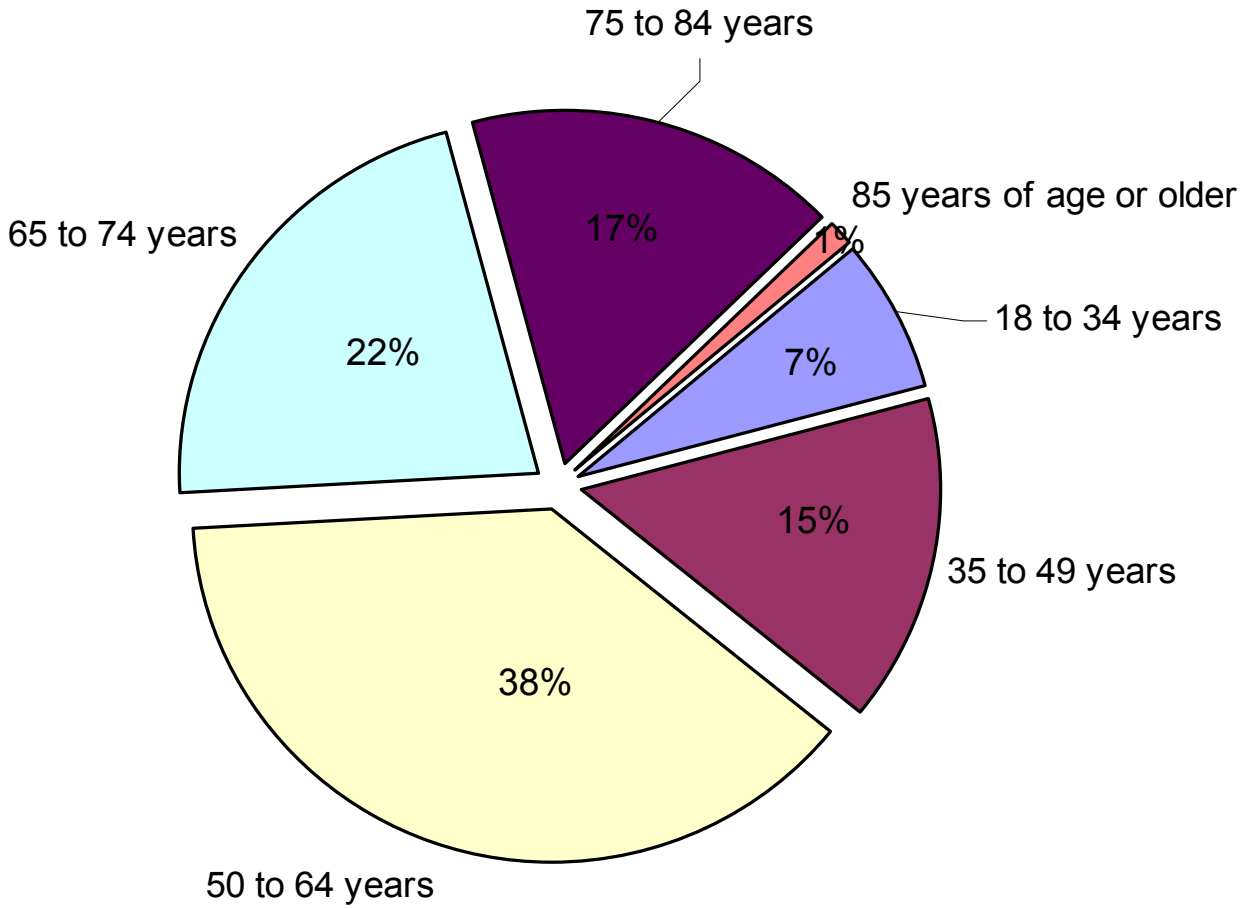
Over the past 12 months, when receiving medical care from your doctor for your diabetes, were you:



(n=206)

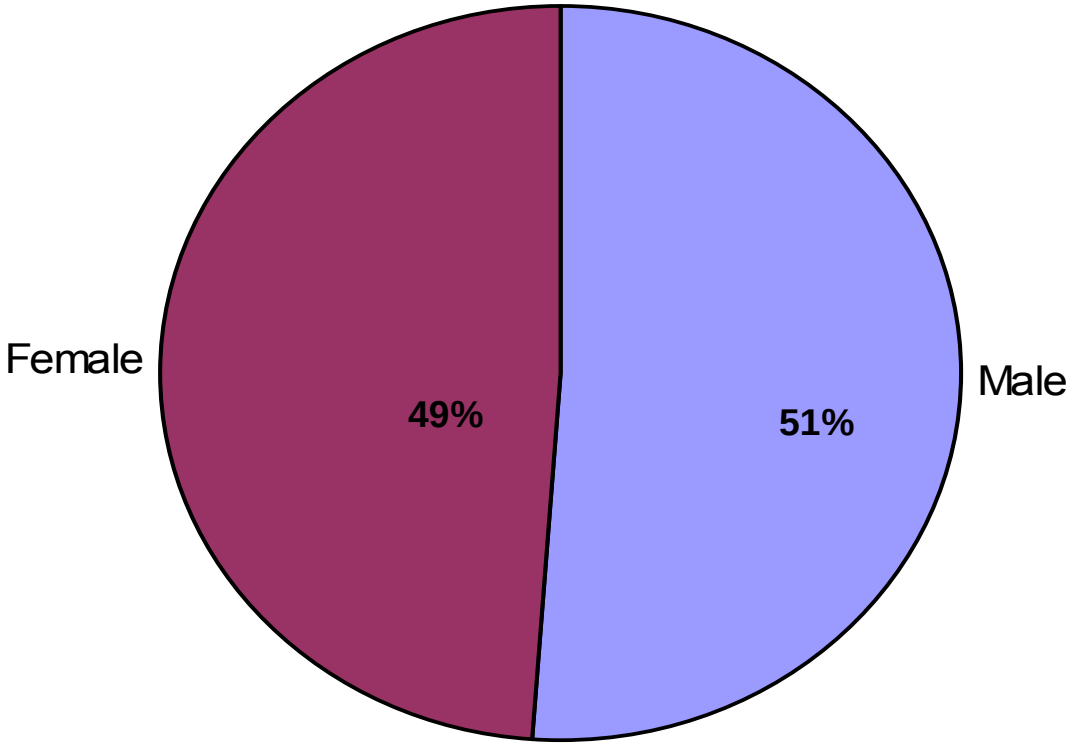
Demographics

Your age is:



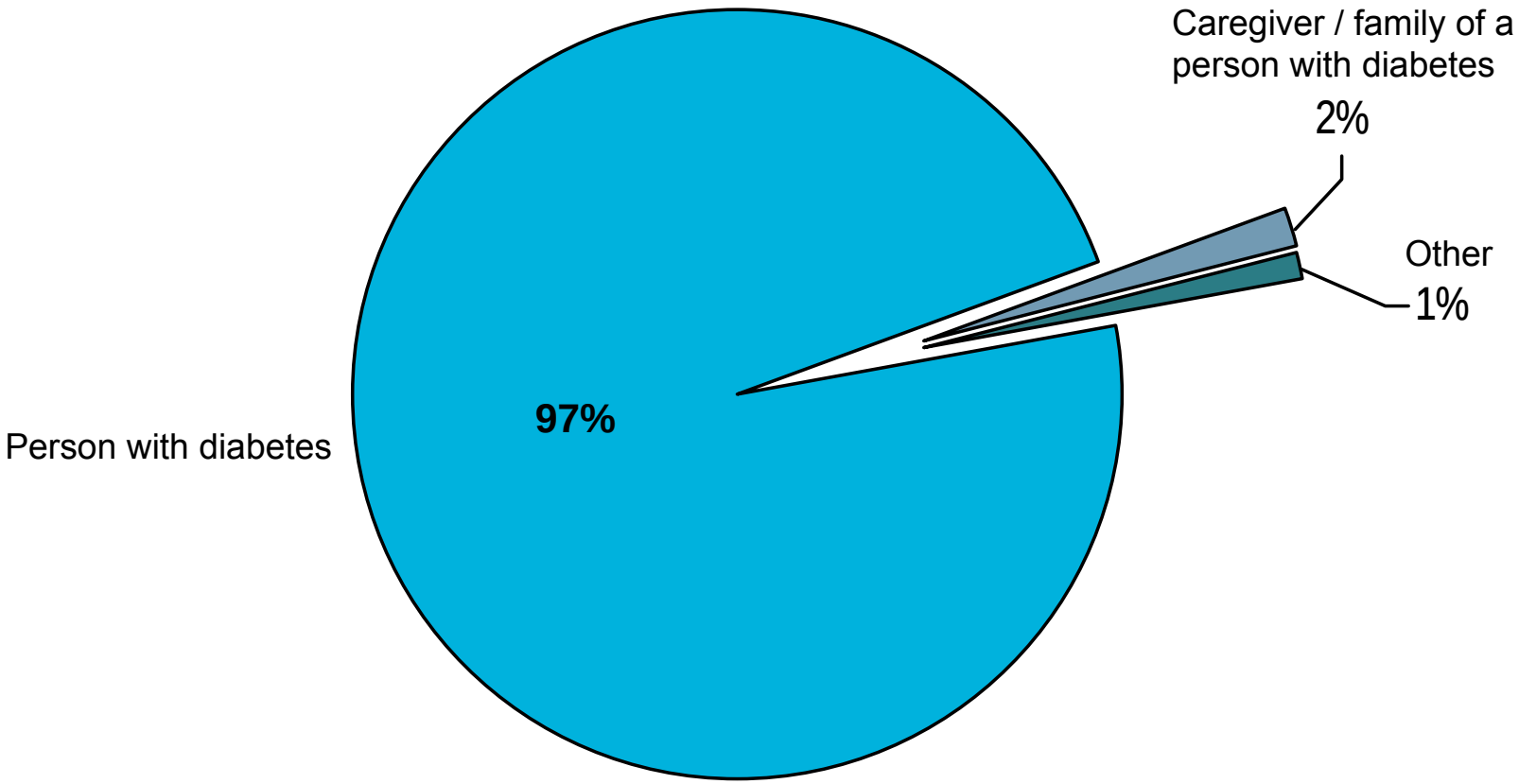
(n=206)

Gender:



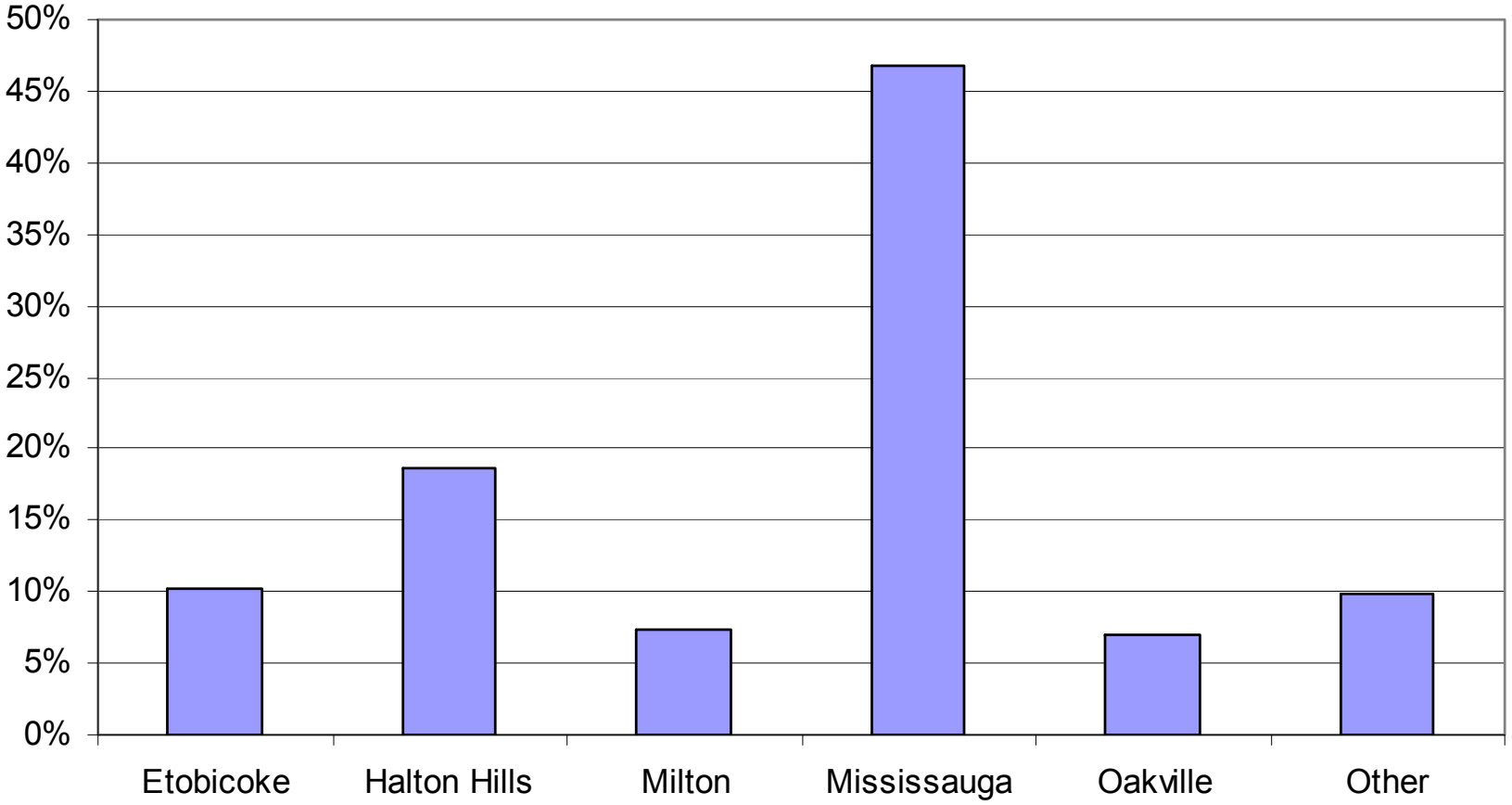
(n=203)

You are a:



(n=206)

Where do you live?



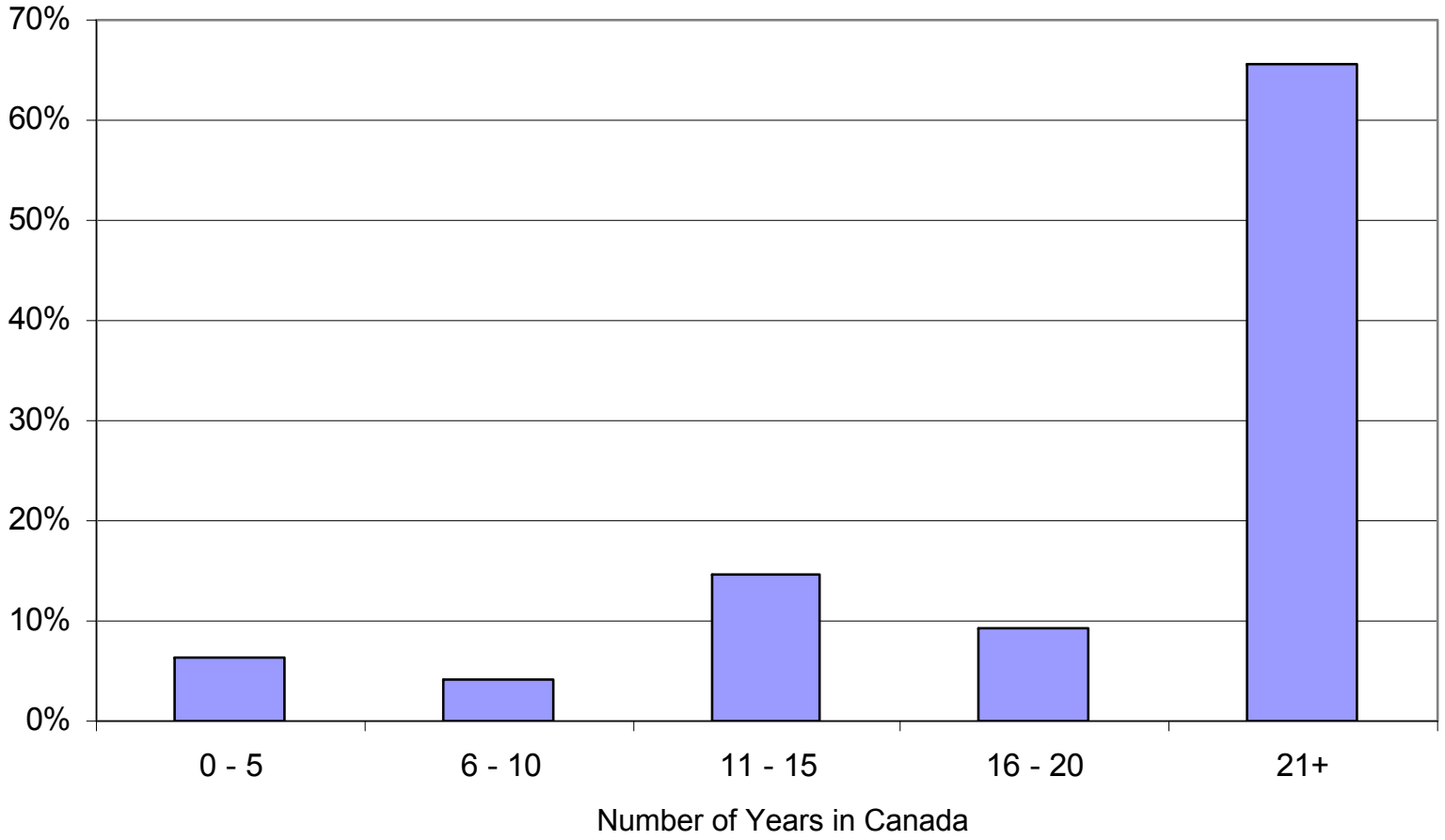
(n=203)

What country were you born in?

Country	#	Country	#
Canada	111	Croatia	1
India	32	Curacao	1
Philippine	8	East Africa - Tanzania	1
Scotland	6	Germany	1
Guyana	5	Hong Kong	1
Sri Lanka	4	Italy	1
Holland	3	Kenya	1
Pakistan	3	Korea	1
United States	3	Lebanon	1
China	2	Netherlands	1
Egypt	2	Portugal	1
England	2	Serbia	1
Hungary	2	South Africa	1
Malaysia	2	St. Kitts - West Indies	1
Poland	2	Trinidad	1
UK	2	West Germany	1
Azores, Portugal	1	Zimbabwe	1
Ceylon	1		

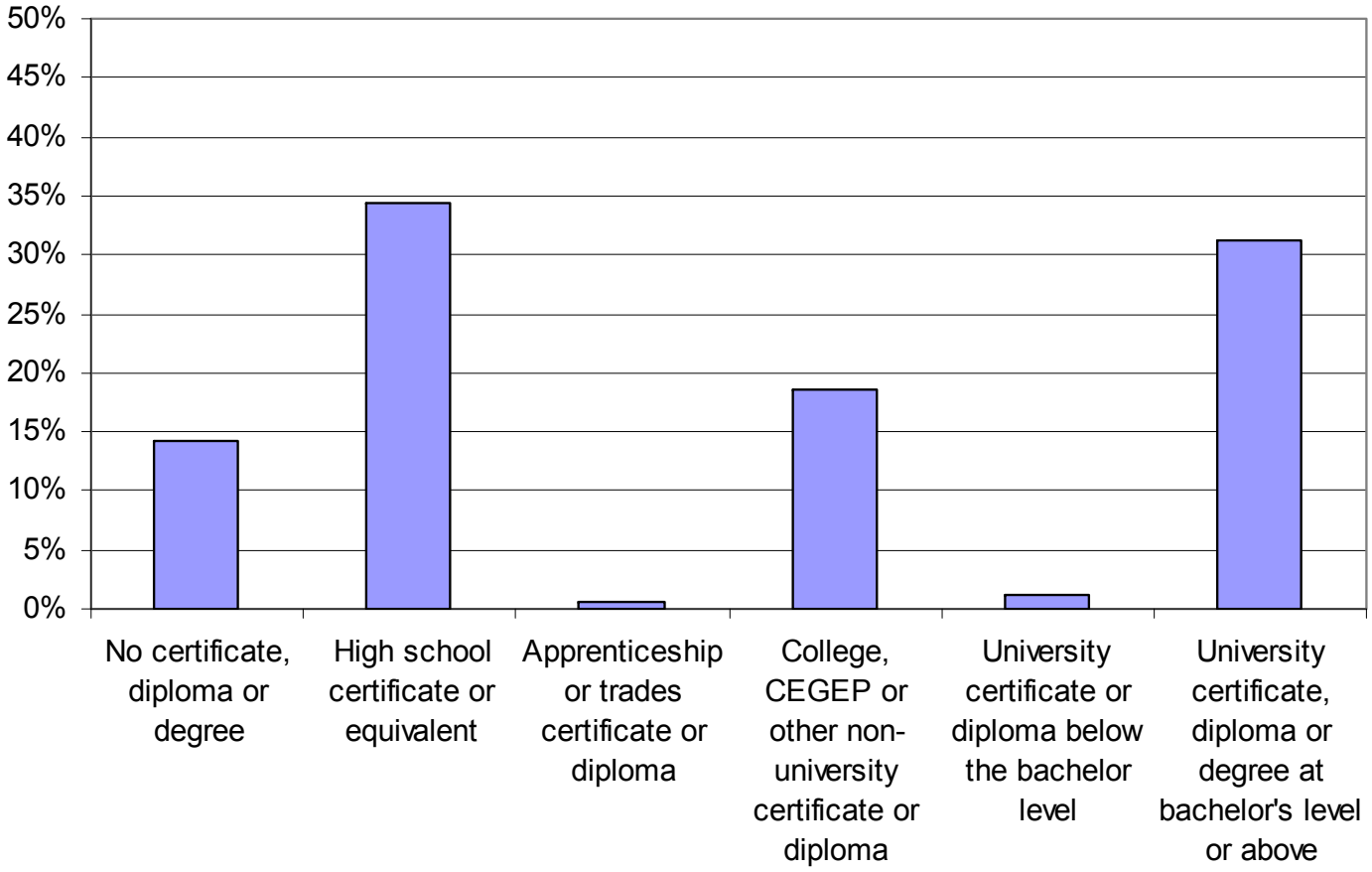
(n=208)

If you were not born in Canada, how long have you lived here?



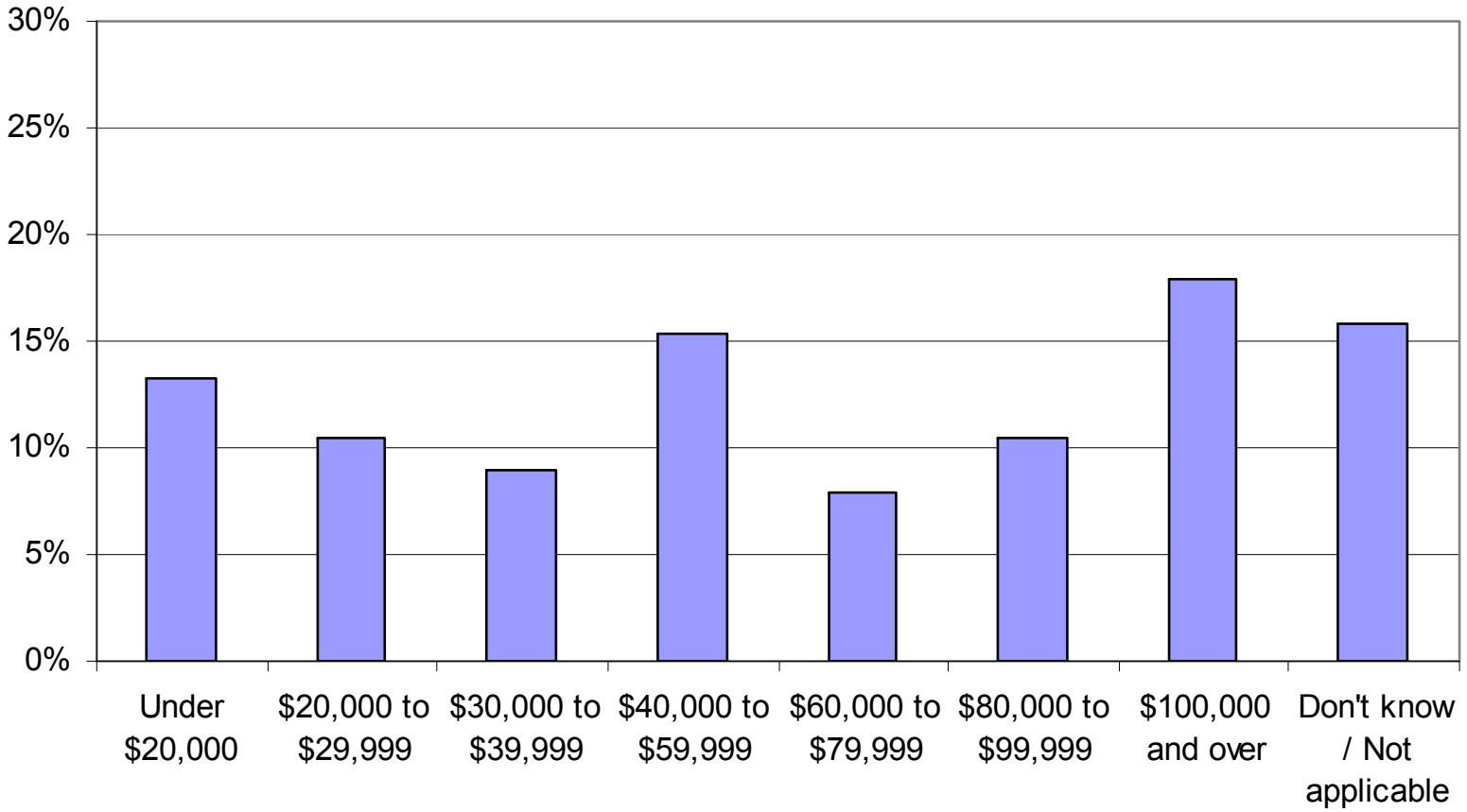
(n=96)

What is the highest level of education you have reached?



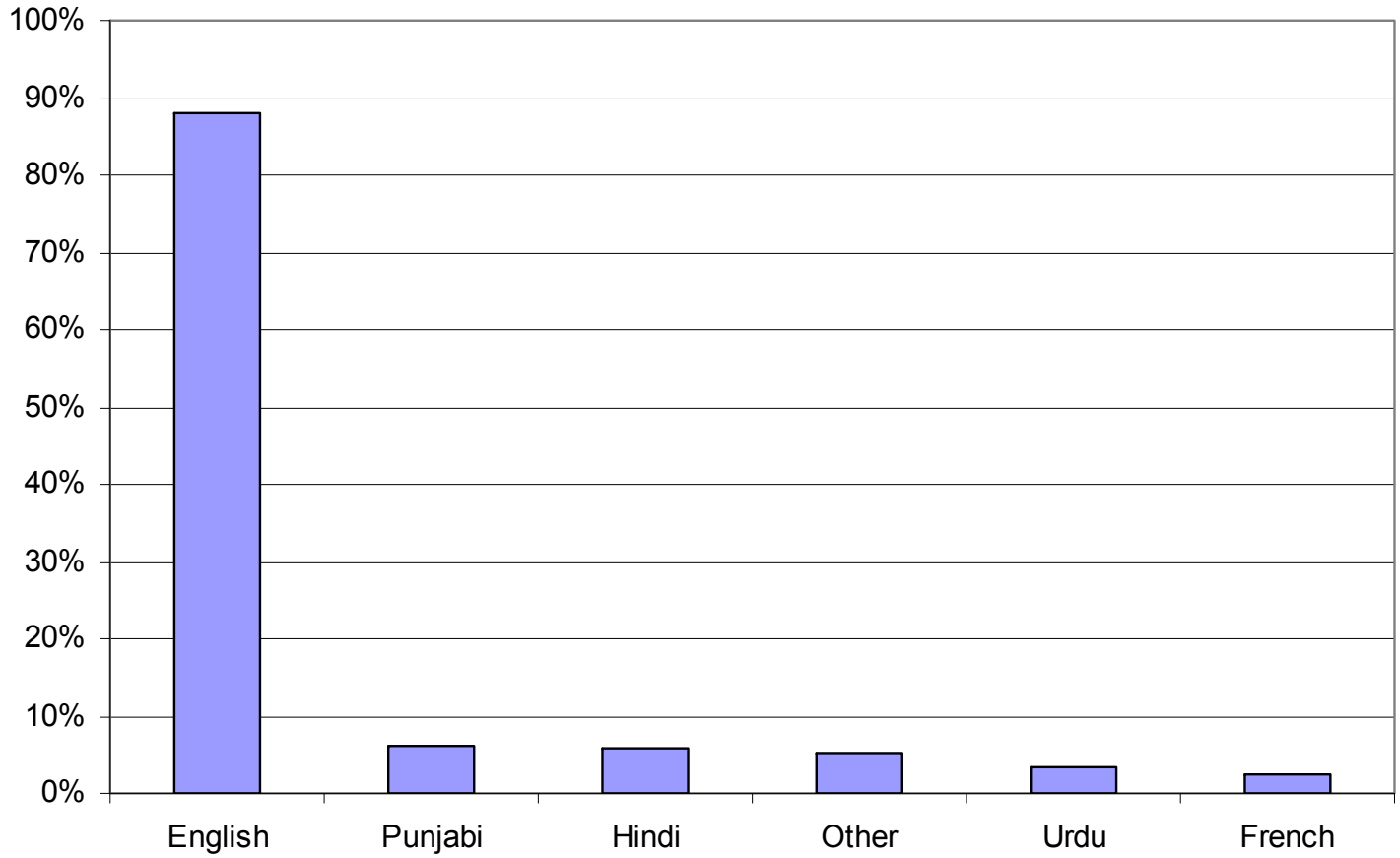
(n=183)

Which of the following best corresponds to the total annual income (before taxes) of all members of your household for 2007?



(n=190)

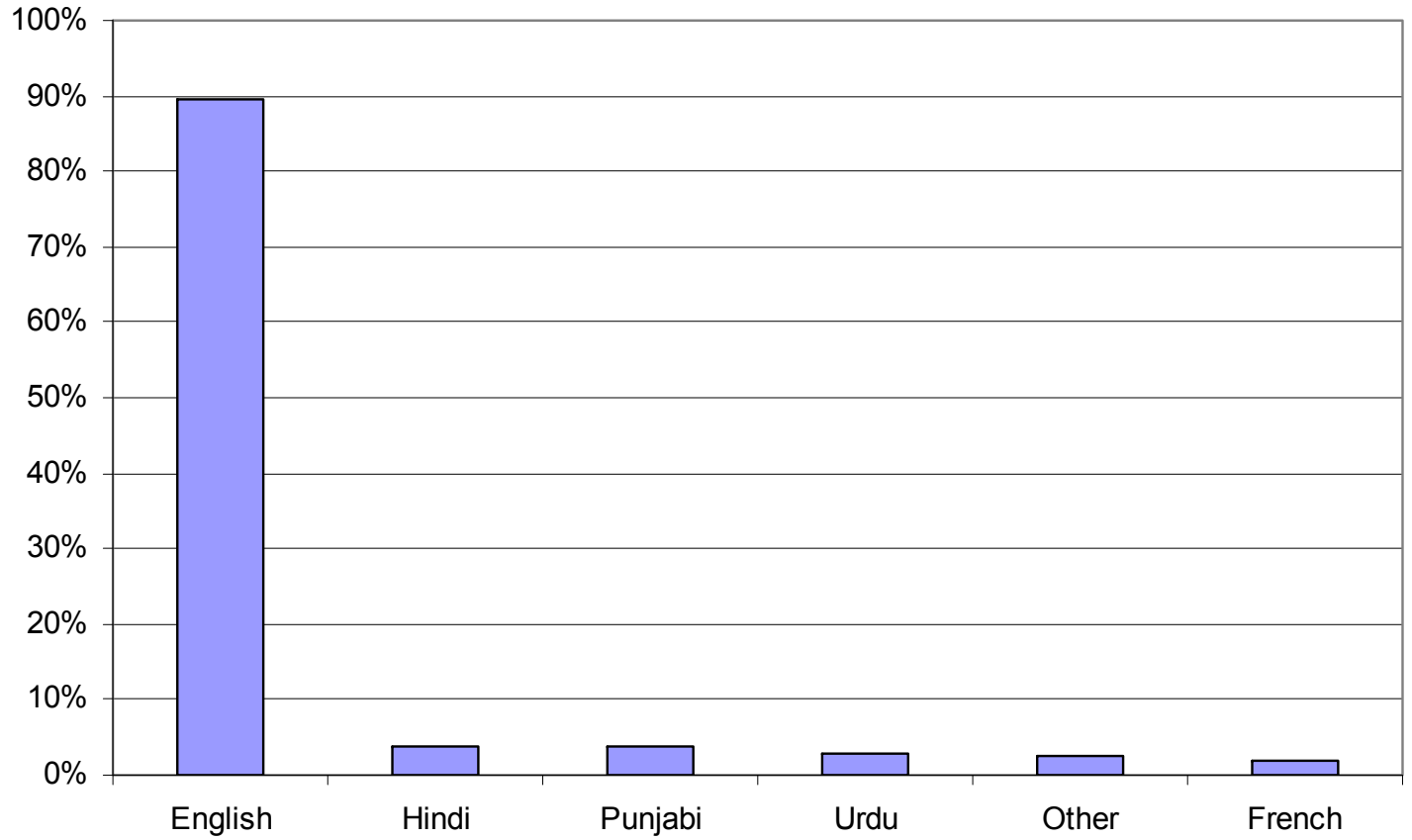
What is your preferred language for hearing health care information?*



(n=210)

** Top six answers shown.*

What is your preferred language for reading health care information?*



(n=208)

** Top six answers shown.*

Internet usage