DR Barometer
Shifting the needle

The Diabetic Retinopathy Barometer Report

# Canada

IFA IAPB International Diabetes Federation BAYER

# Contents



For detailed information regarding methodology and limitations of the study please refer to the DR Barometer Global Results Report which can be found at **DRBarometer.com**

# Introduction
# Global Study

The International Federation on Ageing, the International Diabetes Federation, and the International Agency for the Prevention of Blindness undertook a comprehensive, two-phase, multi-country study to investigate the global and specific country issues surrounding diabetic eye disease (DED) primarily, diabetic retinopathy (DR) and diabetic macular edema (DME).

This report describes the specific findings from information gathered from adults with diabetes and health care professionals in Canada.

All people with type 1 and type 2 diabetes are at risk of developing DR, which can lead to a loss of vision and eventually to blindness. DME is a type of DR that is particularly associated with vision loss. DR is preventable by prompt diagnosis and appropriate management of diabetes.

Vision loss is preventable if DR is identified in its early stages by screening, as effective treatments are now available to prevent progression. Despite the serious risks of DR, little has been published regarding the global awareness of the risks, prevention, and effective management of diabetes associated vision impairment.

This research was made possible with support from Bayer AG. Bayer has funded and facilitated this research, acted as an advisor and will assist in the dissemination of the research findings.

## Goal

The DR Barometer Study sought, in broad terms, to assess the awareness of DED, and access and barriers to diabetes management, including screening for DED and timely treatment.

This new information from forty-one countries is vital to understanding the barriers to improved outcomes and the actions required to overcome such barriers.

Initiatives that address the gaps in the care pathway are essential to preventing unnecessary blindness and visual impairment to enable people with diabetes to maintain their health and ensure that the contributions that they can make to family and community are not compromised.

## Background

The DR Barometer study used a mixed methods approach. Phase I was a qualitative study comprising 120 semi-structured interviews with a small sample of people with diabetes (n = 9 per country) and health care professionals (n = 6 per country) in each of the eight countries: Germany, Saudi Arabia, Japan, Romania, Mexico, Argentina, Uganda, and Bangladesh. The countries were purposively selected for variation across income level and region, as delineated by the World Health Organization (WHO) and the World Bank Income Groups (WBIGs).

Phase II was a multi-country quantitative study conducted in 41 countries to investigate the current level of awareness of the risk of DR and of the need for prevention, screening and management to avert vision loss. The study also sought to better understand the nature of health services and supports available, related national and international policies and the social and economic burden of the disease through a systematic literature review.

In the quantitative component of the study, both adults with diabetes (patients) and health care professionals (providers) were surveyed. The patient survey consisted of 46 questions divided into four sections covering awareness and knowledge of current care for diabetes and eye complications, screening and treatment of DR and DME, and quality of life.

The provider survey comprised 43 questions covering provider and practice characteristics, and specific information from ophthalmologists. Globally, the patient survey had a total of 4,340 respondents and the provider survey 2,329 respondents.

In the global analysis, respondents from each country were grouped into regions as defined by the WHO and into the WBIGs.

## Study Populations

The people with diabetes who participated in the patient survey were self-selected, predominantly from patient organisations. Therefore, this population group comprises people who are more likely to be engaged and motivated in the management of their diabetes. Likewise, the provider respondents were self-selected and the same principle should be applied when interpreting the results.

Even though the sample is not representative of the broader population of people with diabetes and health care professionals, the findings illustrate important trends, and highlight areas of concern.

The results from this survey provide new evidence reflecting concerns from the voices of thousands of people with diabetes and health care professionals around the world. This study provides a rich resource for generating unique insights into the real-life experiences, and as such is a powerful tool to help improve the lives of current and future generations of people with diabetes.

For the purpose of understanding the impact of the progression of DED, responses to the patient survey, beyond "all respondents", are reported by three subgroups:

- Without DED: people with diabetes without any reported form of DED
- With DED: people with diabetes with reported DED but not DME
- With DME: people with diabetes with reported DED and DME

As reported by 4,340 adults with diabetes who responded to the survey, 20% were diagnosed with DED and a further 7.6% with DME.

Of the health care professionals who responded to the survey (n = 2,329), 37% were ophthalmologists, 17% were diabetes specialist providers and 16% were primary care providers. The remaining respondents were optometrists, nurses, health educators or other health professionals.

# Introduction
# Canada Study

## Demographic Characteristics[1]

Canada is the third most populous country in North America behind the United States and Mexico with a population of some 36.1 million.

One of the major influences in the region is that of population ageing which has serious policy and programme implications alongside the increased prevalence of many non-communicable diseases such as diabetes.

In 2016, Canada reached a significant demographic milestone, which will affect society for many decades to come. According to most recent Canadian statistics for the first time ever, there were more persons aged 65 years and older (16.1% or 5.7 million) than children aged 0 to 14 years (16% or 5.7 million).

By 2050, the population aged 65 years and older is expected to almost double, making up ~26.5% of the population while those 0-14 years of age will be only about 15% of the population. In just over thirty years Canada's aged population will reach an all-time high of ~ 11.4 million.

## Diabetes Profile[2]

There are 415 million people with diabetes in the world and approximately 44.3 million people in North America and Caribbean. By 2040, this number is expected to rise to 60.5 million.

Canada has over 2.5 million (2,399.8-3,479.5‡) people living with diabetes, which accounts for ~6% of people living with diabetes in this region. Diabetes national prevalence for 20-79 year olds is 9.5% (9.0-13.1‡) and the diabetes age-adjusted comparative prevalence is 7.4% (7.0-10.8‡).

Deaths attributed to diabetes in Canada in 2015 were 15,685, which accounts for ~5% of the diabetes related deaths in this region with an estimated number of undiagnosed cases of 705,500 (1,243.6-1,803.1‡).

Canada is the seventh country in the world for diabetes-related health expenditures at $17 billion USD and will occupy a place in the top ten countries in 2040 with an estimated expenditure of $22 billion USD.

## Study Populations: Canada

As reported by 58 respondents with diabetes in Canada, 17% were diagnosed with DED and a further 3.4% with DME.

One hundred and twenty health care professionals completed the survey in Canada. Of these, 11 were diabetes specialist providers (9.2%), 17 were ophthalmologists (14%), and two were primary care providers (1.7%). The remaining respondents were optometrists, nurses, health educators and other professionals.

# The DR Barometer Study: **Canada Overview**

The DR Barometer study was conducted in 41 countries. In Canada, 58 adults with diabetes and 120 health care professionals provided new information about the experiences of living with, managing and treating diabetes, DR and DME.

**23%**

of patients said that **cost** were a barrier to eye exams

**23%**

of all providers **did not have written protocols/guidelines** for detection and management of diabetes-related vision loss available

**DR:** Diabetic Retinopathy
**DME:** Diabetic Macular Edema

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# 75%

of patients with vision loss due to DR or DME said that their condition made everyday activities, **such as driving**, working and completing basic household tasks difficult and in some cases impossible

# 9%

of ophthalmologists **had not received specific training** in the treatment and diagnosis of DR and or DME

# 25%

of patients either **never discussed eye complications with their doctor** or did so only after the onset of symptoms

# Canada
# DR Barometer Findings:
## Adults with Diabetes

### Key Demographic Characteristics

Fifty-eight adults with diabetes completed the patient survey in Canada: 61% were female and 39% were male. Seventy percent lived in an urban setting and 30% in a non-urban setting (see Appendix Table 4.2).

The education level of respondents comprise 6.5% educated to a primary school level, 20% to a secondary school level, 48% to a college or university level, and 26% to a graduate or post-graduate level. Sixty-six percent were in paid employment, 17% were retired, and 11% were not working (see Appendix Table 4.3 and Table 4.4).

Most (59%) of the respondents were aged between 40 and 59 years, 29% were 18-39 years, 19% in the 60-79 year group, and 1.7% were 80 years and over. More than three-quarters (79%) were of traditional working age (18- 59 years) (see Table 1).

There was a reasonably even distribution of those with type 1 (43%) and type 2 (55%) diabetes in the sample surveyed (see Appendix Table 2.1).

Duration of diabetes was one of the characteristics influencing the nature of treatment decisions of health care professionals. In the patient survey almost one-third (32%) had been diagnosed 21 years ago or more, 22% for between 1 and 5 years, 19% 6-10 years ago, 14% 16-20 years, 8.6% 11-15 years, and 3% within the last year.

Consistent with findings in the global study a younger population tended to be associated with type 1 diabetes and the older cohort with type 2 diabetes. Amongst 18 to 39 year-olds, 94% had type 1 (5.9% type 2), in the 40-59 age group 31% had type 1 (66% type 2), and in the 60-79 year age group, no respondent had type 1 diabetes (11% type 2).

Most of those surveyed (72%) said that their diabetes was well controlled, yet there remains over one in four (28%) who felt their condition was not well controlled for various personal and systemic reasons.

## Table 1: Summary of key characteristics of adults with diabetes

| Group | Subgroup | All Respondents | Type 1 diabetes | Type 2 diabetes | With DED | With DME |
|---|---|---|---|---|---|---|
| **All respondents** | | 58 (100.0%) | 25 (43.1%) | 32 (55.2%) | 10 (17.2%) | 2 (3.4%) |
| **Gender** | Male | 18 (39.1%) | 6 (33.3%) | 12 (66.7%) | 4 (22.2%) | 1 (5.6%) |
| | Female | 28 (60.9%) | 13 (46.4%) | 14 (50.0%) | 5 (17.9%) | 1 (3.6%) |
| | Total Missing | 12 | 6 | 6 | 1 | 0 |
| **Age** | 18-39 yrs. | 17 (29.3%) | 16 (94.1%) | 1 (5.9%) | 4 (23.5%) | 0 (0.0%) |
| | 40-59 yrs. | 29 (50.0%) | 9 (31.0%) | 19 (65.5%) | 4 (13.8%) | 2 (6.9%) |
| | 60-79 yrs. | 11 (19.0%) | 0 (0.0%) | 11 (100.0%) | 2 (18.2%) | 0 (0.0%) |
| | 80 yrs. plus | 1 (1.7%) | 0 (0.0%) | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| **Time since diagnosis** | Within the last year | 2 (3.4%) | 0 (0.0%) | 2 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| | 1 - 5 yrs. | 13 (22.4%) | 0 (0.0%) | 12 (92.3%) | 0 (0.0%) | 0 (0.0%) |
| | 6 - 10 yrs. | 11 (19.0%) | 3 (27.3%) | 8 (72.7%) | 0 (0.0%) | 0 (0.0%) |
| | 11 - 15 yrs. | 5 (8.6%) | 1 (20.0%) | 4 (80.0%) | 1 (20.0%) | 0 (0.0%) |
| | 16 - 20 yrs. | 8 (13.8%) | 5 (62.5%) | 3 (37.5%) | 2 (25.0%) | 0 (0.0%) |
| | 21 yrs. plus | 18 (31.0%) | 16 (88.9%) | 2 (11.1%) | 7 (38.9%) | 2 (11.1%) |
| | Don't know/ Not sure | 1 (1.7%) | 0 (0.0%) | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| **Control of Diabetes** | Controlled | 37 (72.5%) | 20 (54.1%) | 17 (45.9%) | 9 (24.3%) | 2 (5.4%) |
| | Not controlled | 14 (27.5%) | 2 (14.3%) | 11 (78.6%) | 1 (7.1%) | 0 (0.0%) |
| | Total Missing | 7 | 3 | 4 | 0 | 0 |

NB [1]: Percentages for All Respondents category are calculated based on their respective group. All categories are calculated as row percentages.

NB [2]: Diabetes control is based on the respondents' perception of their own control. Diabetes control terms were grouped as follows; Controlled includes patients who selected 'Very Well' and 'Well'. Not Controlled includes patients who selected 'Not very well' and 'Not well at all'.

NB [3]: DED = respondents with DED = "Yes" minus respondents with DME= "Yes".

NB [4]: DME = respondents with DME = "Yes".

NB [5]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

## Knowledge and Management of Diabetes

Eighty-four percent of those surveyed saw a health care professional for their diabetes, with 81% seeing a diabetes specialist (average number of visits was 4.9 times per year) and 18% seeing a general/family doctor (average number of visits was 6.5 times per year) (see Appendix Table 2.3.1 and 2.3.2).

People were informed about their condition through a variety of channels. Seventy-nine percent received information from a doctor or nurse, 59% from a diabetes organisation or other health organisation. Of particular note is the increasing use of the internet as well as the nutritionist or dietician (see Table 2 and Appendix Table 2.4).

### Table 2: Source of information about diabetes

| Information Source | All Respondents (n=56) |
|---|---|
| Doctor or nurse | 53 (94.6%) |
| Nutritionist or dietician | 35 (62.5%) |
| Diabetes organisation or other health organisation | 34 (60.7%) |
| Health educator | 32 (57.1%) |
| Internet | 32 (57.1%) |
| Pharmacist | 28 (50.0%) |
| Family/Friends/Neighbours | 21 (37.5%) |
| Social media (e.g. Facebook, Twitter, blogs) | 20 (35.7%) |
| TV/Radio/Newspaper/Magazines | 14 (25.0%) |
| None of the above | 1 (1.8%) |

A range of strategies was used by respondents to manage their diabetes. For those with type 1 diabetes, apart from insulin, 67% managed their diabetes with diet, 63% with exercise and 13% with natural or herbal medicines. Of the respondents with type 2 diabetes, 77% managed with diet, 71% with oral medicine, 55% with exercise, and 32% with insulin.

Only 28% of those surveyed enrolled in diabetes management programmes, and of these 77% said that it included information on the importance of screening for diabetic eye complications (see Appendix Table 2.6).

The nature and frequency of tests that patients had included blood glucose and eye checks. For those who had eye checks (85%), these occurred less than 6 months ago (55%), 6 - 12 months ago (23%) and greater than 12 months (3.8%) (see Appendix Table 2.7).

The main challenges in controlling diabetes cited were: that it was too hard to eat the right things (55%), the high cost of care (39%), there were too many other things to do (29%), long wait times for an appointment to see their doctor or specialist (20%), and the stigma and discrimination associated with diabetes (18%) (see Appendix Table 2.9).

Support from family or friends (63%), health education and information (57%), free or low cost medicines or monitoring materials (55%), coordination of healthcare and services by a professional (35%), and support groups (12%) were viewed as important to improving the management of the respondents' condition. Ten percent said that none of the services listed were helpful (see Appendix Table 2.10).

## Nature and Information about Complications

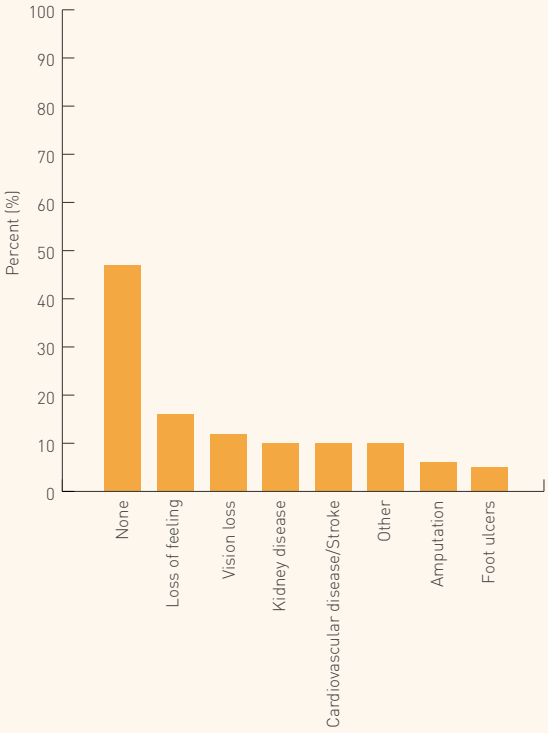
Eighty-six percent of respondents were aware that vision loss is a consequence of diabetes and other complications, such as: amputation (82%), neuropathy (80%), cardiovascular disease or stroke (76%), and foot ulcers (72%) were also associated with their condition (see Appendix Table 2.11).

Patients were at least three times more concerned about vision loss (50%) compared with other complications such as kidney disease (14%), cardiovascular disease or stroke (12%), and amputation (8%) (see Appendix Table 2.12).

Nearly half (47%) of respondents had no complications of diabetes. However, of those who did 16% had neuropathy, vision loss (12%), kidney disease (10%), cardiovascular disease or stroke (10%), and amputation (6.1%) (see Figure 1 and Appendix Table 2.13).

All those with DED and DME reported additional complications associated with their condition. Aside from vision loss, there was a slight increase in the frequency of those with DED and DME experiencing complications compared to those without DED although the number of respondents is notably very small (DED n=9 and DME n=2) (see Table 3 and Appendix EXP 1).

### Figure 1: Presence of complications



### Table 3: Presence of complications without DED, with DED or DME

| Complication | Without DED (n=38) | With DED (n=9) | With DME (n=2) |
|---|---|---|---|
| Any | 15 (39.5%) | 9 (100.0%) | 2 (100.0%) |
| Vision loss | 2 (5.3%) | 3 (33.3%) | 1 (50.0%) |
| Kidney disease | 1 (2.6%) | 3 (33.3%) | 1 (50.0%) |
| Cardiovascular disease/Stroke | 2 (5.3%) | 3 (33.3%) | 0 (0.0%) |
| Amputation | 0 (0.0%) | 2 (22.2%) | 1 (50.0%) |
| Loss of feeling in hands or toes (neuropathy) | 6 (15.8%) | 2 (22.2%) | 0 (0.0%) |
| Foot ulcers | 0 (0.0%) | 2 (22.2%) | 0 (0.0%) |
| Other | 3 (7.9%) | 2 (22.2%) | 0 (0.0%) |
| None | 23 (60.5%) | 0 (0.0%) | 0 (0.0%) |

NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.

NB [2]: DED = respondents with DED = "Yes" minus respondents with DME = "Yes".

NB [3]: DME = respondents with DME = "Yes".

NB [4]: Percentages within groups are calculated from non-missing data for that question.

NB [5]: Not all responses have been presented in this table, but have been included under "Any". Please see Appendix Table EXP1 for the full list of responses.

## Information about Diabetic Eye Disease and Diabetic Macular Edema

While the majority (84%) of respondents had talked with their health care professional about eye complications almost one in four (24%), either had never discussed the topic (16%) or discussions only took place once symptoms arose (8.2%). The frequency of these specific conversations varied from every visit (22%), to multiple times a year (20%), and once a year (33%) (see Appendix Table 2.14).

A large proportion (92%) of those surveyed did what they could to prevent vision problems (e.g. having routine screenings and visiting specialists). Yet myths and misperceptions around vision changes were evident with 15% reporting that vision problems were a normal part of ageing and several respondents (4.2%) making no special effort to prevent vision impairment and loss (see Appendix Table 2.15).

Fifty-six percent of respondents received information about DR and DME with the doctor or nurse being the most common source (38%). There was also an increasing trend in the use of the internet (47%) followed by patient organisations, such as diabetes (35%). An unexpected finding was that 44% of those surveyed did not receive information from any of the sources listed, which may represent a gap in understanding the needs of patient and their family (see Appendix Table 3.9).

### Table 4: Source of information about DR and DME

| Source | All respondents (n=45) |
|---|---|
| Doctor/Nurse | 17 (37.8%) |
| Diabetes organisation or other health organisation | 10 (22.2%) |
| Internet | 10 (22.2%) |
| Health educator | 6 (13.3%) |
| Family/Friends/Neighbours | 4 (8.9%) |
| TV/Radio/Newspaper/ Magazines | 3 (6.7%) |
| Other | 1 (2.2%) |
| None of the above | 20 (44.4%) |

NB [1]: Not all respondents answered all questions in the survey; percentages are calculated from non-missing responses to the survey question..

## Screening for Diabetic Eye Disease

Most (86%) respondents have had an eye exam for DED, with 91% having it within the last year and a further 9.5% between one and two years ago. Though the rate of eye exams was high only 38% of those surveyed were aware of government sponsored screening programmes for DED (see Appendix Table 3.1 and Table 3.2).

While a large proportion (88%) thought they should have their eyes examined for DED once a year there were varied small numbers of people who thought that testing should happen every two years (see Appendix Table 3.4).

The biggest barriers to eye exams were the high cost (23%), a fear of the treatment and / or the results (23%), and the long wait times on the day of the appointment (21%) (see Table 5 and Appendix Table 3.5).

### Table 5: Barriers to eye examinations

| Identified Barriers | All Respondents (n=39) |
|---|---|
| They are expensive | 9 (23.1%) |
| Fear of treatment/results | 9 (23.1%) |
| Long wait time on the day of the visit | 8 (20.5%) |
| Too many other things to do or worry about | 6 (15.4%) |
| Long wait time for appointment | 5 (12.8%) |
| Limited access to diabetes specialists | 5 (12.8%) |
| Eye exams are not available near my home | 4 (10.3%) |
| Burden on my family/friends | 4 (10.3%) |
| Referral process is complicated or takes too long | 2 (5.1%) |
| Other | 7 (17.9%) |

## Treatment of Diabetic Eye Disease and Diabetic Macular Edema

Treatment was assessed separately for those with DED and DME. For those with DED (44%) all received laser treatment, which was ongoing for two people, and most (75%) felt that the treatment had been successful with either their vision improving (50%) or staying the same (25%) (see Table 6).

For the five respondents with DED who had not received treatment, the reason reported was their doctor did not make that recommendation.

The two respondents with DME had either laser or surgery and both believed it had been successful, as their vision had improved. There was a strong preference from those with DME to have a proactive approach to management and treatment to prevent further vision loss rather than a reactive approach once further vision loss occurred (see Appendix Table 3.8).

### Table 6: Treatment characteristics of patients with DED and DME

| Question | Response | With DED (n=9) | With DME (n=2) |
|---|---|---|---|
| Have you had any treatment for diabetic eye disease? | Yes | 4 (44.4%) | 2 (100.0%) |
| | No | 5 (55.6%) | 0 (0.0%) |
| What treatment did you receive? | Laser | 4 (100.0%) | 1 (50.0%) |
| | Anti-VEGF | 1 (25.0%) | 0 (0.0%) |
| | Surgery | 1 (25.0%) | 1 (50.0%) |
| | Other | 0 (0.0%) | 1 (50.0%) |
| Did you complete the treatment? | Yes | 2 (50.0%) | 2 (100.0%) |
| | Still receiving treatment | 2 (50.0%) | 0 (0.0%) |
| Do you feel that the treatment worked? | Yes, and vision improved | 2 (50.0%) | 2 (100.0%) |
| | Yes, but vision stayed the same | 1 (25.0%) | 0 (0.0%) |
| | Still waiting to know | 1 (25.0%) | 0 (0.0%) |
| What are the reason(s) that you have not had treatment for diabetic eye disease? | My doctor did not recommend any treatment | 4 (100.0%) | 0 (0.0%) |

NB [1]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".

NB [2]: DME = respondents with DME ="Yes".

NB [3]: Not all respondents answered all questions in the survey; percentages are calculated from non-missing responses to the survey question.

NB [4]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

## Impact of Diabetic Eye Disease and Diabetic Macular Edema

About three-quarters (73%) of those with DED or DME said that their vision was significantly (18%) or slightly affected (55%) (see Appendix Table 3.6).

Two-thirds of these respondents described how changes in vision affected their daily lives such as not being able to drive a vehicle (63%), be in paid employment or keep a job (38%), or undertake household responsibilities, such as cooking or cleaning (13%) (see Table 7).

### Table 7: Activities affected through vision impairment and loss

| | All Respondents (n=8) |
|---|---|
| Driving (a car/vehicle) | 5 (62.5%) |
| Work or keeping a job | 3 (37.5%) |
| Household responsibilities, such as cooking or cleaning | 1 (12.5%) |
| None | 2 (25.0%) |

Overall, the proportion receiving government assistance was relatively small but tended to be more likely in the subgroups with DME and DED than those without DED. In all subgroups, medical assistance was received 23% without DED, 50% with DME and DED.

While most (78%) of respondents had no trouble paying for food at any time during the past year there were still 22% (n=10) who recorded this as a problem, which ranked one of the highest in developed countries where the survey was conducted. In addition, 30% surveyed felt that their access to healthcare was affected, and for 32% it related to either where they were living or their income (see Appendix Table 4.6 and Table 4.7).

Health (46%), money (23%), and family (13%) were the top three 'worries' on the minds of the respondents (see Appendix Table 4.8).

## Table 8: Socio-economic profile of patients without DED, with DED or DME

| Question | Response | Without DED (n=36) | With DED (n=9) | With DME (n=2) |
|---|---|---|---|---|
| Are you currently working? | Working for pay | 25 (69.4%) | 5 (55.6%) | 1 (50.0%) |
| | Working without pay at home (e.g. housework, farming) | 1 (2.8%) | 1 (11.1%) | 0 (0.0%) |
| | Volunteering | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) |
| | Retired | 6 (16.7%) | 2 (22.2%) | 0 (0.0%) |
| | Not working | 4 (11.1%) | 1 (11.1%) | 0 (0.0%) |
| **Question** | **Response** | **Without DED (n=35)** | **With DED (n=8)** | **With DME (n=2)** |
| Do you receive assistance from the government? | Income assistance | 2 (5.7%) | 1 (12.5%) | 0 (0.0%) |
| | Medical assistance | 8 (22.9%) | 4 (50.0%) | 1 (50.0%) |
| | Food assistance | 1 (2.9%) | 0 (0.0%) | 1 (50.0%) |
| | Pension assistance | 5 (14.3%) | 2 (25.0%) | 0 (0.0%) |
| | None of the above | 24 (68.6%) | 4 (50.0%) | 1 (50.0%) |
| **Question** | **Response** | **Without DED (n=29)** | **With DED (n=6)** | **With DME (n=1)** |
| Did you have trouble paying for food at anytime during the past year? | Yes | 7 (19.4%) | 3 (33.3%) | 0 (0.0%) |
| | No | 29 (80.6%) | 6 (66.7%) | 1 (100.0%) |

NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.

NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".

NB [3]: DME = respondents with DME ="Yes".

NB [4]: Not all respondents answered all questions in the survey; percentages are calculated from non-missing responses to the survey question

NB [5]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

## Self-reported Quality of Life

The CDC HRQOL-4 Core Modules of the "Healthy Days Measure" was used to capture information on self-reported quality of life, based on the number of unhealthy days within the last 30 days from when the survey was taken. The reported health status varied depending on whether respondents had been diagnosed with DED or DME (see Table 9.)

Twenty-two percent of respondents with DED and half of those with DME reported that their health was poor compared with 40% of people without DED.

Two-thirds of those with DED had mentally unhealthy days compared with 50% of those without DED; and 71% of those with DED experienced days in which their activities were limited due to poor physical or mental health compared with 52% of those without DED.

Compared with 34% of those without DED, 56% of people with DED and 50% with DME experienced limitations to their daily activities because of an impairment or health problem. Where health or an associated condition impacted daily activities, the primary limitations were the management of their diabetic condition, mental or emotional problems and hypertension or high blood pressure (see Appendix EXP 2).

### Table 9: Self-reported healthy days of patients without DED, with DED or DME

| Health Status | Without DED | With DED | With DME |
|---|---|---|---|
| Self-rated health: Good | 21 (60.0%) | 7 (77.8%) | 1 (50.0%) |
| Self-rated health: Poor | 14 (40.0%) | 2 (22.2%) | 1 (50.0%) |
| Physically unhealthy days | 15 (60.0%) | 4 (44.4%) | 0 (0.0%) |
| Mentally unhealthy days | 12 (50.0%) | 6 (66.7%) | 0 (0.0%) |
| Unhealthy days | 18 (72.0%) | 8 (88.9%) | 0 (0.0%) |
| Activity limitation days | 12 (52.2%) | 5 (71.4%) | 0 (%) |

NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.
NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".
NB [3]: DME = respondents with DME ="Yes".
NB [4]: Not all respondents answered all questions in the survey; percentages are calculated from non-missing responses to the survey question.
NB [5]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

# Canada
# DR Barometer Findings:
## Health Care Professionals

### Key Demographic Characteristics

One hundred and twenty health care professionals answered at least one of the survey questions in Canada. Of these, two were primary care providers (1.7%), 11 were diabetes specialists (9.2%) and 17 were ophthalmologists (14%). The remaining respondents were optometrists, nurses, health educators or other professionals (see Appendix PT 1.3).

In this section of the report, data from health care professionals as a whole and then the ophthalmologist subgroup will be reported.

As a group, health care professionals had been practicing for an average of 18 years, with the ophthalmologist group an average of 15 years (see Appendix PT 1.5).

All providers were well educated (40% with graduate or advanced degree); 78% were female and 22% male; 36% were aged 50-59 years, 29% in the 40-49 year age group, and 13% were 60-69 years of age (see Table 10 and Appendix PT 3.1).

Table 10: Summary of key characteristics of health care professionals

| Group | Subgroup | All Respondents | Primary Care Provider | Diabetes Specialist | Ophthalmologist |
|---|---|---|---|---|---|
| **All respondents** | | 120 (100.0%) | 2 (1.7%) | 11 (9.2%) | 17 (14.2%) |
| **Age group** | 18 - 29 yrs. | 7 (8.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | 30 - 39 yrs. | 12 (13.8%) | 1 (100.0%) | 2 (20.0%) | 1 (8.3%) |
| | 40 - 49 yrs. | 25 (28.7%) | 0 (0.0%) | 4 (40.0%) | 2 (16.7%) |
| | 50 - 59 yrs. | 31 (35.6%) | 0 (0.0%) | 3 (30.0%) | 7 (58.3%) |
| | 60 - 69 yrs. | 11 (12.6%) | 0 (0.0%) | 1 (10.0%) | 1 (8.3%) |
| | 70 - 79 yrs. | 1 (1.1%) | 0 (0.0%) | 0 (0.0%) | 1 (8.3%) |
| **Gender** | Female | 68 (78.2%) | 1 (100.0%) | 7 (70.0%) | 1 (8.3%) |
| | Male | 19 (21.8%) | 0 (0.0%) | 3 (30.0%) | 11 (91.7%) |
| **Education** | Secondary School | 4 (4.6%) | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) |
| | College/University | 48 (55.2%) | 0 (0.0%) | 7 (70.0%) | 0 (0.0%) |
| | Graduate or advanced degree (e.g. PhD, MD, etc.) | 35 (40.2%) | 1 (100.0%) | 2 (20.0%) | 12 (100.0%) |

[NB [1]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

## Clinical Practice Characteristics

Forty-four percent of providers had their main practice setting in a diabetes clinic and for ophthalmologists only it was most commonly an eye clinic (71%) and hospital (24%) (see Appendix PT 2.1).

Notably 41% of the health care professionals were working in a non-urban setting, which is the highest in the countries surveyed in the study (see Appendix PT 2.2).

Most health care professionals worked in the government sector (60%), as did ophthalmologists (53%) who also practiced in combined or mixed (35%) and private (5.9%) sectors (see Appendix PT 2.3).

Over three-quarters (76%) of patients do not pay for services according to the health care professionals. Twenty-four percent pay through insurance and 12% pay out-of-pocket (full fees) for services. The situation was similar for ophthalmologists alone, where 63% of patients do not pay for services, 31% pay through insurance, and 13% pay some, while the insurance pays part (see Appendix PT 2.7).

On average, providers as a whole saw 68 patients per week and some 62% of these had diabetes. In striking contrast ophthalmologists alone saw an average of over three times as many patients per week (n=206) and less than one-third (29%) had diabetes (see Appendix PT 2.6).

For all health care professionals, the average waiting time for an appointment was usually between one week and a month (46%), or less than one week (16%). The waiting time for an ophthalmology appointment specifically was longer, with 35% of practices setting appointments between one and two months (see Table 11 and Appendix PT 2.5).

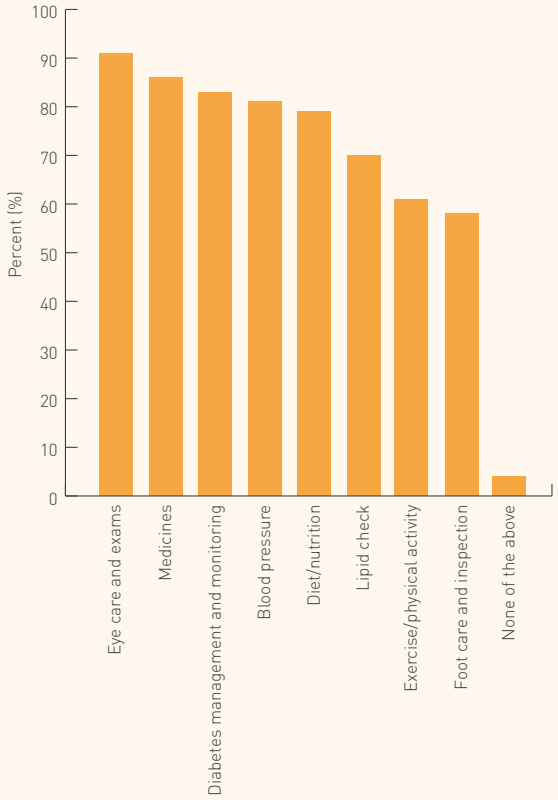
### Table 11: Average wait times to schedule an appointment

| Wait Time Intervals | All Respondents (n=104) | Ophthalmologist (n=17) |
|---|---|---|
| Less than 1 week | 17 (16.3%) | 1 (5.9%) |
| More than 1 week but less than 1 month | 48 (46.2%) | 7 (41.2%) |
| More than 1 month but less than 2 months | 17 (16.3%) | 6 (35.3%) |
| More than 2 months but less than 3 months | 6 (5.8%) | 2 (11.8%) |
| Six or more months | 2 (1.9%) | 0 (0.0%) |
| Do not take appointments | 2 (1.9%) | 0 (0.0%) |
| Other | 10 (9.6%) | 1 (5.9%) |
| Don't know/Not sure | 2 (1.9%) | 0 (0.0%) |

## Patient Education Information

A wide range of topics related to diabetes and its management were addressed by the health care professionals in a routine visit (see Figure 2 and Appendix PT 2.10).

### Figure 2: Health care topics discussed with patients during a routine visit




Health care professionals reported that written information about diabetes was available yet the adequacy of that related to eye complications varied.

Fifty percent of the providers said sufficient information on diabetes and potential eye complications was available, however 25% said it was insufficient and 8.6% had no information about eye complications. Twelve percent had no written information on diabetes (see Table 12 and Appendix PT 2.11).

Most ophthalmologists (86%) had written information about diabetes and potential eye complications, 14% had information on diabetes but insufficient information on eye complications.

## Guidelines and Protocols

Seventy percent of health care professionals, including 29% of ophthalmologists, had written protocols for the management of diabetes used by staff. However, 14% of the providers had no protocols available (see Appendix PT 2.12).

With respect to the management of diabetes-related vision issues, only 52% of health care professionals, including 57% of ophthalmologists, had written protocols for the detection and management of diabetes-related vision issues available, which were used by staff. A concerning finding was that protocols were not available as reported by 23% of providers and 29% of ophthalmologists (see Table 12 and Appendix PT 2.13).

### Table 12: Availability and use of information and protocols

| Question | Response | All Respondents (n=93) | Ophthalmologist (n=14) |
|---|---|---|---|
| Is there written information about diabetes available for patients in your main practice? | Yes, and information on eye complications is sufficient | 46 (49.5%) | 12 (85.7%) |
| | Yes, but information on eye complications is not sufficient | 23 (24.7%) | 2 (14.3%) |
| | Yes, but no information on eye complications is included | 8 (8.6%) | 0 (0.0%) |
| | No written information is available for patients | 11 (11.8%) | 0 (0.0%) |
| | Don't know/Not sure | 5 (5.4%) | 0 (0.0%) |
| **Question** | **Response** | **All Respondents (n=92)** | **Ophthalmologist (n=14)** |
| Do you have written protocols/guidelines for detection and management of diabetes-related vision issue available in your main practice? | Yes, available and used by staff | 48 (52.2%) | 8 (57.1%) |
| | Yes, available but not used by staff | 6 (6.5%) | 1 (7.1%) |
| | Not available | 21 (22.8%) | 4 (28.6%) |
| | Don't know/Not sure | 17 (18.5%) | 1 (7.1%) |

NB [1]: This table is a summary of various questions. For a detailed breakdown for each question, please refer to the Appendices.

## Screening Protocols and Barriers in the Care Pathway

Recommendations for the timing of the initial eye exam for persons with diabetes varied depending upon the type of diabetes as reported by all providers.

For patients with type 1 diabetes 43% of providers recommended an initial exam at the time of diagnosis, 7% after a predetermined number of years but for 11% of providers there was no standard practice, it varied from case to case. Eighty-four percent of providers recommended an initial eye exam at the time of diagnosis for those with type 2 diabetes (see Appendix PT 2.14).

Most health care professionals (82%) and ophthalmologists (85%) agreed that follow-up eye examinations should be conducted every year. Seventy-nine percent of ophthalmologists screened patients for DR while 22% did not (see Appendix PT 2.15 and PT 2.16).

Two-thirds (67%) of health care professionals, including 50% of ophthalmology practices, send appointment reminders to patients. Health care professionals (89%), including ophthalmologists (92%), shared patient information with colleagues to optimise patient care management (see Appendix PT 2.19 and PT 2.20).

The most common patient characteristics influencing the referral process for eye complications for health professionals were: diabetes duration (65%), high glucose levels (55%), the presence of comorbidities such as hypertension (51%), the patient's age (48%), and the patient's ability to adhere to recommendations (22%) (see Appendix PT 2.17).

The major barriers, from the perspective of the health care professional, to optimising eye health were the patient's lack of knowledge and/or awareness (46%), the patients feeling that eye complications are unlikely (37%), or that eye exams are not important (37%). Ophthalmologists, like health care professionals, reported similar such barriers (see Table 13 and Appendix PT 2.18).

## Table 13: Major barriers to optimising eye health

| Response | All Respondents (n=84) | Ophthalmologists (n=12) |
|---|---|---|
| Lack of knowledge and/or awareness | 39 (46.4%) | 7 (58.3%) |
| Patients fear of treatment/results | 30 (35.7%) | 7 (58.3%) |
| Patients feel eye exams are not important | 31 (36.9%) | 5 (41.7%) |
| Proximity to care | 24 (28.6%) | 4 (33.3%) |
| Patients feel eye complications are unlikely | 31 (36.9%) | 4 (33.3%) |
| Referral process | 22 (26.2%) | 3 (25.0%) |
| Limited access to eye specialists | 20 (23.8%) | 3 (25.0%) |
| Cost of care | 19 (22.6%) | 2 (16.7%) |
| Long wait time for appointment | 12 (14.3%) | 2 (16.7%) |
| Long wait time on the day of visit | 6 (7.1%) | 2 (16.7%) |
| Patients feel they are a burden on family/friends | 8 (9.5%) | 2 (16.7%) |
| Limited access to diabetes specialists | 10 (11.9%) | 2 (16.7%) |
| Patients have competing responsibilities and priorities | 29 (34.5%) | 2 (16.7%) |
| Clinic too small or lack necessary equipment/staff | 5 (6.0%) | 0 (0.0%) |
| Other | 7 (8.3%) | 0 (0.0%) |

# Canada
# DR Barometer Findings:
## Ophthalmologists

### Screening

Ten ophthalmologists answered at least one of the supplementary questions (see Appendix PT 4.1 to PT 4.14) in the DR Barometer Study.

### Treatment and Challenges

Fifty-eight percent of ophthalmologists reported there was no wait time from time of screening to diagnosis. A further 25% said that the wait time was between a week and a month (see Appendix PT 4.4).

On average 28% of patients seen by the ophthalmologists had DR and 16% were diagnosed with DME (see Appendix PT 4.1 and PT 4.2).

Most (91%) ophthalmologists administer treatment for DR and the common factors influencing treatment were: high glucose levels (60%), the presence of comorbidities such as hypertension (50%), and insurance restrictions (50%) (see Appendix PT 4.6 and PT 4.7).

The most common outreach venues for screening for DED were at mobile screening centres (30%) and vision centres (30%) (see Appendix PT 4.13).

Most (82%) ophthalmologists screen patients for DR using optical coherence tomography. In addition, 73% use fundoscopy through dilated pupils, 64% use fluorescein angiography, and 46% use retinal photos. Ninety-one percent treat DR and DME based on both visual and anatomical outcomes (see Appendix PT 4.8 and PT 4.9).

Fifty-five percent (n=6) of ophthalmologists said that most patients present when visual problems have already occurred while 46% (n=5) said that they present "in time" for screening (see Appendix PT 4.10).

Specific training on the treatment and diagnosis of DR and / or DME had been taken by 91% of the ophthalmologists, with 67% being training within the past year and 33% five years ago or more. More than half (55%) were interested in online education and certification on DME, angiogenesis and anti-VEGF therapies (see Appendix PT 4.11 and PT 4.12).

Late diagnosis (70%) and complex or inadequate referral pathways (60%) were viewed by ophthalmologists as the greatest challenges for improving patient outcomes in DED (see Table 14 and PT 4.14).

## Table 14: Challenges for improving outcomes in DED

| Question | Response | Ophthalmologist (n=10) |
|---|---|---|
| What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease? | Late diagnosis | 7 (70.0%) |
| | Referral pathways | 6 (60.0%) |
| | Limited access to patient education on diabetic retinopathy and diabetic macular edema | 3 (30.0%) |
| | Government/insurance not able to cover patient costs | 3 (30.0%) |
| | Multi-disciplinary team integration is poor | 3 (30.0%) |
| | Ineffective screening services | 3 (30.0%) |
| | Reimbursement/restrictions on approved therapy | 2 (20.0%) |
| | No universal guidelines on referral/ screening | 0 (0.0%) |
| | No universal guideline on when to treat | 0 (0.0%) |
| | Other | 0 (0.0%) |

# Canada
# DR Barometer Summary

In Canada, 58 adults with diabetes and 120 health care professionals provided insights about their experiences of living with, managing and treating diabetes, DR and DME. The results of the DR Barometer Study, Canada aim to help improve the level of awareness around diabetes and eye complications, and access and barriers to diabetes management, including screening and timely treatment for those diagnosed with DED and DME.

Canada is the third most populous country in North America behind the United States and Mexico with a population of some 36.1 million. One of the major influences in the region is that of population ageing which has serious policy and programme implications alongside the increased prevalence of many non-communicable diseases such as diabetes. By 2050, 26% of the total population will be aged 65 years and older while those aged 0-14 years of age will make up only 15%.

Alongside the demographic changes, the prevalence of people with diabetes is climbing rapidly. Today Canada has over 2.5 million people living with diabetes, which accounts for some 6% of people living with diabetes in this region. Canada will continue to be in the top ten countries for diabetes-related health expenditures in 2040 at an estimated $22 billion USD.

The DR Barometer Study findings suggest that overall a younger population was more likely to be associated with type 1 diabetes, and an older population with type 2 diabetes. Ninety-four percent of those in the youngest age group (18-39 years) had type 1 diabetes (5.9% type 2) and in the 40 – 59 age group 31% had type 1 and 66% reported type 2. This is an important yet well-known finding in the context of Canada's rapidly ageing population.

Health professionals such as the doctor, nurse, or nutritionist most commonly informed patients about their condition. Diabetes and other health organisations, the health educator and the pharmacist also played important roles and were viewed as valuable sources of information. A trend globally, which was strongly reflected in the Canadian study, was the increasing use of the internet by over half (57%) of the respondents.

Only one in four respondents were enrolled in a diabetes management programme and most (77%) said that there was information about the importance of screening for eye complications.

Many of those surveyed struggled with the basic management of their diabetic condition with issues that were within their control such as eating the right foods and balancing the responsibilities of family and work without compromising their only health. In addition, the high cost of care, and long wait times for appointments were challenges. An unexpected finding in Canada was the stigma and discrimination that some experienced with having the diagnosis of diabetes.

There was a relatively high awareness of the complications associated with diabetes. Vision loss (50%) was by far the most concerning followed by kidney disease and cardiovascular disease. Though nearly half (46%) of those surveyed had no complications there was a significant proportion who reported serious complications such as neuropathy, kidney disease, and vision loss. All those with DED and DME had complications that in addition to those outlined above included amputation and foot ulcers.

Knowing that diabetic-related vision loss is preventable addressing barriers to eye screening is an important policy issue. In large part, respondents had received an eye exam, which is understandable considering the purposeful sample however, there remained many barriers including the high costs of exams, a fear of treatment or the results, and long wait times on the day of the appointment.

Evidence shows that the relationship between the patient and the health care professional is critical to ensure realistic and optimal patient outcomes. It was therefore surprising that nearly a quarter of patients surveyed had either never had a conversation about eye complications with their health professional or it only took place only once symptoms were present.

Equally concerning is the myths and perceptions around vision changes with 15% reporting that vision problems were a normal part of ageing and some respondents not making any special effort to prevent vision problems.

Most people diagnosed with DED or DME said that their vision was slightly or significantly affected which in turn affected their health, lifestyle, and life choices with many experiencing difficulty in driving a vehicle, working or keeping a job, and undertaking household responsibilities, such as cooking or cleaning.

One-third of respondents with DED said that some days they felt mentally unhealthy and most experienced days where activities were limited because of either their poor physical or mental health. Comparisons with the sub group of those without DED could not reflect trends because of the notably small sample size.

Respondents with DME said that they preferred a proactive approach to prevent further vision loss rather than only receiving treatment when their vision deteriorated. While most respondents had no trouble accessing healthcare services a small proportion felt that where they actually lived and their income level negatively influenced their care. Health, money, and family were the top three 'worries' on the minds of the respondents.

Patient education is very much at the heart of a proactive approach so it was somewhat unexpected to find that over 25% of providers said that the written information diabetes and eye complications available was insufficient. Furthermore, only 52% of providers, including 57% of ophthalmologists, had written protocols for the detection and management of diabetes-related vision issues, which were used by staff. In some practices, education material and necessary protocols did not exist.

Recommendations for the timing of the initial eye exam for persons with diabetes varied depending upon the type of diabetes and the provider. For patients with type 1 diabetes 43% of providers recommended an exam at the time of diagnosis, 7% after a predetermined number of years but for 11% of the providers there was no standard practice, it varied from case to case. Eighty-four percent of providers recommended an initial eye exam at the time of diagnosis for those with type 2 diabetes.

Certain factors influenced the referral process for respondents with eye complications, the main being, diabetes duration, high glucose levels, presence of comorbidities such as hypertension and the patient's age. Late diagnosis (for a myriad of reasons), complex or inadequate referral pathways, and insurance restrictions were viewed by ophthalmologists as some of the greatest challenges for improving patient outcomes in DED

In large part, the patients and providers who participated in the study were self-selected, and therefore this population group is more likely to be engaged and motivated in the management of their diabetes hence a possible explanation for the rates of awareness and screening.

Even though the sample is not representative of the broader population, and as such may not truly reflect the national situation, the findings illustrate important trends, and certainly highlight specific areas of concern and potential calls for policy action in Canada.

# References and Acknowledgement

[1] The World Bank. (2016). *Health nutrition and population statistics: Population estimates and projections* (World Data Bank). Washington, D.C.: The World Bank. Retrieved from http://databank.worldbank.org/data/reports.aspx?source=Health%20Nutrition%20and%20Population%20Statistics:%20Population%20estimates%20and%20projections

[2] International Diabetes Federation. (2015). *IDF Diabetes Atlas.* Accessed from: http://www.diabetesatlas.org/

The IFA, IDF and IAPB would like to acknowledge and thank the many organisations and health care professionals from Canada that assisted in the dissemination of patient and provider surveys, your contributions were pivotal to the success of the DR Barometer Study.

# Appendices

# The Diabetic Retinopathy Barometer Survey: Appendices for Canada

## APPENDIX 1 : National Results

**Table 1.1**

| Survey Information | Number of Respondents (%) |
|---|---|
| All valid respondents [1] | 73 (100.0%) |
| Respondents aged 18 or over | 71 (97.3%) |
| Respondents with diabetes | 58 (79.5%) |

*NB [1]: valid respondents are those with country information*

**Table 1.2**

| Survey Information | Number of Respondents (%) |
|---|---|
| All valid respondents | 73 (100.0%) |
| Included in Diabetic Analysis Set | 58 (79.5%) |
| Excluded from Diabetic Analysis Set | 15 (20.5%) |
| Reasons for exclusion from diabetic analysis set | . |
| Under 18 years of age | 2 |
| Not diagnosed with diabetes | 13 |

**Table 1.3**

| Survey Information | Number of Respondents (%) |
|---|---|
| Diabetic Analysis Set | 58 (100.0%) |
| World Bank Income Group: High Income | 58 (100.0%) |
| Persons with diabetic eye disease (DED) | 10 (17.2%) |
| Persons with diabetic macular edema (DME) | 2 (3.4%) |
| Persons with Type I diabetes | 25 (43.1%) |
| Persons with Type II diabetes | 32 (55.2%) |
| Persons not seeing health care professional for diabetes | 3 (5.2%) |
| Persons seeing health care professional for diabetes | 55 (94.8%) |
| Persons with eye disease & not received treatment | 5 (8.6%) |
| Persons with eye disease & received treatment | 6 (10.3%) |

**Table 2.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| With which type of diabetes have you been diagnosed? | Type I | 25 (43.1) |
| | Type II | 32 (55.2) |
| | Don't know/Not sure | 1 (1.7) |
| | Total Valid Response | 58 (100.0) |

**Table 2.2**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| When was your diabetes diagnosed? | Within the last year | 2 (3.4) |
| | 1 - 5 years ago | 13 (22.4) |
| | 6 - 10 years ago | 11 (19.0) |
| | 11 - 15 years ago | 5 (8.6) |
| | 16 - 20 years ago | 8 (13.8) |
| | 21 years ago or longer | 18 (31.0) |
| | Don't know/Not sure | 1 (1.7) |
| | Total Valid Response | 58 (100.0) |

**Table 2.3.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Do you see a health care professional for your diabetes? | Yes | 55 (94.8) |
| | No | 3 (5.2) |
| | Total Valid Response | 58 (100.0) |
| What kind of health care professional? | General/Family Doctor | 28 (50.9) |
| | Nurse | 1 (1.8) |
| | Diabetes Specialist | 25 (45.5) |
| | Other | 1 (1.8) |
| | Total Valid Response | 55 (100.0) |
| | Total missing | 3 |

**Table 2.3.2**

| Type of health care professional | Times per year seen for diabetes | Value |
|---|---|---|
| General/Family Doctor | Total valid numeric response (n) | 25 |
| | Mean | 4.2 |
| | SD | 2.7 |
| | Median | 3.0 |
| | Min | 1 |
| | Max | 12 |
| | Don't know/Not sure | 2 |
| | Total missing | 1 |
| Nurse | Don't know/Not sure | 1 |
| Diabetes Specialist | Total valid numeric response (n) | 20 |
| | Mean | 3.2 |
| | SD | 1.3 |
| | Median | 3.0 |
| | Min | 1 |
| | Max | 6 |
| | Don't know/Not sure | 1 |
| | Total missing | 4 |
| Other | Total valid numeric response (n) | 1 |
| | Mean | 4.0 |
| | SD | |
| | Median | 4.0 |
| | Min | 4 |
| | Max | 4 |

**Table 2.4**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How have you received information about diabetes? | Doctor or nurse | 53 (94.6%) |
| | Health educator | 32 (57.1%) |
| | Nutritionist or dietitian | 35 (62.5%) |
| | Diabetes organization or other health | 34 (60.7%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | organization | |
| | Family/Friends/Neighbors | 21 (37.5%) |
| | TV/Radio/Newspaper/Magazines | 14 (25.0%) |
| | Internet | 32 (57.1%) |
| | Social media (e.g. Facebook, Twitter, blogs) | 20 (35.7%) |
| | Pharmacist | 28 (50.0%) |
| | None of the above | 1 (1.8%) |
| | Total Valid Response | 56 (100.0%) |
| | Total missing | 2 |

**Table 2.5**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How do you manage your diabetes? | Diet | 41 (73.2%) |
| | Oral medicine | 23 (41.1%) |
| | Exercise | 33 (58.9%) |
| | Insulin | 35 (62.5%) |
| | Natural/Herbal medicine | 4 (7.1%) |
| | None of the above | 1 (1.8%) |
| | Total Valid Response | 56 (100.0%) |
| | Total missing | 2 |

**Table 2.6**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Are you currently enrolled in a diabetes patient management support programme? | Yes | 15 (26.8) |
| | No | 41 (73.2) |
| | Total Valid Response | 56 (100.0) |
| | Total missing | 2 |
| Who sponsors the programme? | Hospital support program | 7 (50.0) |
| | Clinic support program | 1 (7.1) |
| | Pharmaceutical support | 1 (7.1) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | program | |
| | Patient organization support program | 2 (14.3) |
| | Don't know/Not sure | 3 (21.4) |
| | Total Valid Response | 14 (100.0) |
| | Total missing | 44 |
| Does the programme include education on the importance of screening for diabetic eye complications? | Yes | 10 (76.9) |
| | No | 3 (23.1) |
| | Total Valid Response | 13 (100.0) |
| | Total missing | 45 |

**Table 2.7**

| Test | Response | Number of Respondents (%) |
|---|---|---|
| Have you ever had the following tests in a doctor's office or clinic? | | |
| Blood glucose test | Yes | 47 (87.0%) |
| | Less than 6 months | 36 (66.7%) |
| | 6 - 12 months | 8 (14.8%) |
| | Total valid response | 44 (81.5%) |
| | Total missing | 14 |
| | No | 7 (13.0%) |
| | Total valid response | 54 (100.0%) |
| | Total missing | 4 |
| Urine check | Yes | 48 (88.9%) |
| | Less than 6 months | 30 (55.6%) |
| | 6 - 12 months | 11 (20.4%) |
| | Greater than 12 months | 6 (11.1%) |
| | Total valid | 47 (87.0%) |

| Test | Response | Number of Respondents (%) |
|---|---|---|
| | response | |
| | Total missing | 11 |
| | No | 5 (9.3%) |
| | Don't know/Not sure | 1 (1.9%) |
| | Total valid response | 54 (100.0%) |
| | Total missing | 4 |
| Weight check | Yes | 53 (98.1%) |
| | Less than 6 months | 40 (74.1%) |
| | 6 - 12 months | 7 (13.0%) |
| | Greater than 12 months | 4 (7.4%) |
| | Total valid response | 51 (94.4%) |
| | Total missing | 7 |
| | No | 1 (1.9%) |
| | Total valid response | 54 (100.0%) |
| | Total missing | 4 |
| Blood pressure check | Yes | 52 (98.1%) |
| | Less than 6 months | 47 (88.7%) |
| | 6 - 12 months | 3 (5.7%) |
| | Greater than 12 months | 1 (1.9%) |
| | Total valid response | 51 (96.2%) |
| | Total missing | 7 |
| | No | 1 (1.9%) |
| | Total valid response | 53 (100.0%) |
| | Total missing | 5 |
| Foot check | Yes | 41 (78.8%) |
| | Less than 6 | 25 (48.1%) |

| Test | Response | Number of Respondents (%) |
|---|---|---|
| | months | |
| | 6 - 12 months | 6 (11.5%) |
| | Greater than 12 months | 8 (15.4%) |
| | Total valid response | 39 (75.0%) |
| | Total missing | 19 |
| | No | 11 (21.2%) |
| | Total valid response | 52 (100.0%) |
| | Total missing | 6 |
| Eye check | Yes | 45 (84.9%) |
| | Less than 6 months | 29 (54.7%) |
| | 6 - 12 months | 12 (22.6%) |
| | Greater than 12 months | 2 (3.8%) |
| | Total valid response | 43 (81.1%) |
| | Total missing | 15 |
| | No | 8 (15.1%) |
| | Total valid response | 53 (100.0%) |
| | Total missing | 5 |

**Table 2.8**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How well do you think your diabetes is controlled? | Very well | 8 (15.7%) |
| | Well | 29 (56.9%) |
| | Not very well | 12 (23.5%) |
| | Not well at all | 2 (3.9%) |
| | Total Valid Response | 51 (100.0%) |
| | Total missing | 7 |

**Table 2.9**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| What are the main challenges you face in controlling your diabetes? | High cost of care | 20 (39.2%) |
| | No insurance | 7 (13.7%) |
| | Travel to my regular doctor or specialist is difficult | 7 (13.7%) |
| | Long wait time for an appointment to see my doctor or specialist | 10 (19.6%) |
| | Health services needed are not available | 1 (2.0%) |
| | Don't know enough about diabetes | 6 (11.8%) |
| | Too hard to eat the right things | 28 (54.9%) |
| | Too many other things to do | 15 (29.4%) |
| | Stigma or discrimination because of diabetes | 9 (17.6%) |
| | Don't want to think about having diabetes | 6 (11.8%) |
| | Other | 10 (19.6%) |
| | Total Valid Response | 51 (100.0%) |
| | Total missing | 7 |

**Table 2.10**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Which of the following services currently help you better manage your diabetes? | Free or low cost medicines or monitoring materials | 27 (55.1%) |
| | Support groups | 6 (12.2%) |
| | Support from family or friends | 31 (63.3%) |
| | Health education and information | 28 (57.1%) |
| | Coordination of healthcare and services by a professional | 17 (34.7%) |
| | Emergency helpline | 1 (2.0%) |
| | Other | 6 (12.2%) |
| | None | 5 (10.2%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total Valid Response | 49 (100.0%) |
| | Total missing | 9 |

**Table 2.11**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| What complications (or problems), to your knowledge, arise from diabetes? | Amputation | 41 (82.0%) |
| | Foot ulcers | 36 (72.0%) |
| | Increased risk of broken bones or fractures | 15 (30.0%) |
| | Loss of feeling in hands or toes (neuropathy) | 40 (80.0%) |
| | Vision loss | 43 (86.0%) |
| | Irritable bowel disease | 15 (30.0%) |
| | Kidney disease | 36 (72.0%) |
| | Cardiovascular disease/Stroke | 38 (76.0%) |
| | Other | 6 (12.0%) |
| | Don't know/Not sure | 2 (4.0%) |
| | None | 3 (6.0%) |
| | Total Valid Response | 50 (100.0%) |
| | Total missing | 8 |

**Table 2.12**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Which complication of diabetes are you most concerned about? | Amputation | 4 (8.0) |
| | Increased risk of broken bones or fractures | 1 (2.0) |
| | Loss of feeling in hands or toes (neuropathy) | 1 (2.0) |
| | Vision loss | 25 (50.0) |
| | Kidney disease | 7 (14.0) |
| | Cardiovascular disease/Stroke | 6 (12.0) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Other | 1 (2.0) |
| | Don't know/Not sure | 5 (10.0) |
| | Total Valid Response | 50 (100.0) |
| | Total missing | 8 |

**Table 2.13**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Which of the following complications of diabetes do you have? | Amputation | 3 (6.1%) |
| | Foot ulcers | 2 (4.1%) |
| | Broken bones or fractures | 1 (2.0%) |
| | Loss of feeling in hands or toes (neuropathy) | 8 (16.3%) |
| | Vision loss | 6 (12.2%) |
| | Irritable bowel disease | 3 (6.1%) |
| | Kidney disease | 5 (10.2%) |
| | Cardiovascular disease/Stroke | 5 (10.2%) |
| | Other | 5 (10.2%) |
| | Don't know/Not sure | 4 (8.2%) |
| | None | 23 (46.9%) |
| | Total Valid Response | 49 (100.0%) |
| | Total missing | 9 |

**Table 2.14**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How often do you discuss the possibility of eye complications with your health care professional? | Every visit | 11 (22.4%) |
| | Multiple times per year | 10 (20.4%) |
| | Once per year | 16 (32.7%) |
| | Only when symptoms arise | 4 (8.2%) |
| | Never | 8 (16.3%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total Valid Response | 49 (100.0%) |
| | Total missing | 9 |

**Table 2.15**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Which of the following best describes your attitude to vision issues? | I think that vision problems are a normal part of ageing | 7 (14.6%) |
| | I do what I can to prevent vision problems (e.g. get routine screenings, visit specialists) | 44 (91.7%) |
| | I do not make any special effort to prevent vision problems | 2 (4.2%) |
| | Total Valid Response | 48 (100.0%) |
| | Total missing | 10 |

**Table 2.16**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| What type of health insurance do you have? | Public | 10 (20.4) |
| | Public - Private | 22 (44.9) |
| | Private | 14 (28.6) |
| | None | 3 (6.1) |
| | Total Valid Response | 49 (100.0) |
| | Total missing | 9 |

**Table 2.17**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Most often, how do you pay for the following types of medical care and services? | | |
| General doctor visits (e.g. primary care doctor) | Care is free | 38 (77.6) |
| | Insurance pays total cost | 1 (2.0) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 8 (16.3) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Out-of-pocket only (pay cash for all care) | 1 (2.0) |
| | Don't know/Not Sure | 1 (2.0) |
| | Total Valid Response | 49 (100.0) |
| | Total missing | 9 |
| Specialist medical visits (e.g. eye doctor, gynecologist, urologist) | Care is free | 33 (67.3) |
| | Insurance pays total cost | 3 (6.1) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 9 (18.4) |
| | Out-of-pocket only (pay cash for all care) | 3 (6.1) |
| | Don't know/Not Sure | 1 (2.0) |
| | Total Valid Response | 49 (100.0) |
| | Total missing | 9 |
| Medicines | Care is free | 1 (2.1) |
| | Insurance pays total cost | 7 (14.9) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 33 (70.2) |
| | Out-of-pocket only (pay cash for all care) | 5 (10.6) |
| | Don't know/Not Sure | 1 (2.1) |
| | Total Valid Response | 47 (100.0) |
| | Total missing | 11 |
| Medical supplies (e.g. blood glucose meter/strips) | Care is free | 3 (6.1) |
| | Insurance pays total cost | 9 (18.4) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 28 (57.1) |
| | Out-of-pocket only (pay cash for all care) | 8 (16.3) |
| | Do not use service | 1 (2.0) |
| | Total Valid Response | 49 (100.0) |
| | Total missing | 9 |
| Procedures | Care is free | 27 (57.4) |
| | Insurance and out-of- | 10 (21.3) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | pocket/cash (e.g. co-pays) | |
| | Out-of-pocket only (pay cash for all care) | 1 (2.1) |
| | Do not use service | 3 (6.4) |
| | Don't know/Not Sure | 6 (12.8) |
| | Total Valid Response | 47 (100.0) |
| | Total missing | 11 |
| Tests/screenings | Care is free | 32 (68.1) |
| | Insurance pays total cost | 3 (6.4) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 8 (17.0) |
| | Out-of-pocket only (pay cash for all care) | 2 (4.3) |
| | Don't know/Not Sure | 2 (4.3) |
| | Total Valid Response | 47 (100.0) |
| | Total missing | 11 |
| Health education | Care is free | 27 (58.7) |
| | Insurance pays total cost | 3 (6.5) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 1 (2.2) |
| | Out-of-pocket only (pay cash for all care) | 3 (6.5) |
| | Do not use service | 6 (13.0) |
| | Don't know/Not Sure | 6 (13.0) |
| | Total Valid Response | 46 (100.0) |
| | Total missing | 12 |
| Counseling | Care is free | 15 (32.6) |
| | Insurance pays total cost | 2 (4.3) |
| | Insurance and out-of-pocket/cash (e.g. co-pays) | 7 (15.2) |
| | Out-of-pocket only (pay cash for all care) | 1 (2.2) |
| | Do not use service | 15 (32.6) |
| | Don't know/Not Sure | 6 (13.0) |
| | Total Valid Response | 46 (100.0) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total missing | 12 |

**Table 3.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Are you aware of any government sponsored screening programs for diabetic eye disease (diabetic retinopathy)? | Yes | 19 (38.0%) |
| | No | 31 (62.0%) |
| | Total valid response | 50 (100.0%) |
| | Total missing | 8 |

**Table 3.2**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you ever had an eye exam for diabetic eye disease? | Yes | 43 (86.0%) |
| | No | 7 (14.0%) |
| | Total valid response | 50 (100.0%) |
| | Total missing | 8 |
| How long ago was your last eye exam? | Within the last year | 38 (90.5%) |
| | More than 1 year ago but less than 2 years | 4 (9.5%) |
| | Total valid response | 42 (100.0%) |
| | Total missing | 16 |
| Who did the last exam? | Eye doctor/Eye clinic | 42 (100.0%) |
| | Total valid response | 42 (100.0%) |
| | Total missing | 16 |

**Table 3.3**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you ever had a dilated eye exam, where your eyes are examined after eye drops? | Yes | 45 (93.8%) |
| | No | 2 (4.2%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Don't know/Not sure | 1 (2.1%) |
| | Total valid response | 48 (100.0%) |
| | Total missing | 10 |

**Table 3.4**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Based on what you know, how often should you get your eyes examined for diabetic eye disease? | Once a year | 43 (87.8%) |
| | Every two years | 4 (8.2%) |
| | Don't know/Not sure | 2 (4.1%) |
| | Total valid response | 49 (100.0%) |
| | Total missing | 9 |

**Table 3.5**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| For you, what are the biggest barriers to eye exams? | They are expensive | 9 (23.1%) |
| | Eye exams are not available near my home | 4 (10.3%) |
| | Long wait time for appointment | 5 (12.8%) |
| | Long wait time on the day of the visit | 8 (20.5%) |
| | Referral process is complicated or takes too long | 2 (5.1%) |
| | Fear of treatment/results | 9 (23.1%) |
| | Burden on my family/friends | 4 (10.3%) |
| | Limited access to diabetes specialists | 5 (12.8%) |
| | Too many other things to do or worry about | 6 (15.4%) |
| | Other | 7 (17.9%) |
| | Total valid response | 39 (100.0%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total missing | 19 |

**Table 3.6**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you been diagnosed with diabetic eye disease? | Yes | 12 (24.5%) |
| | No | 37 (75.5%) |
| | Total valid response | 49 (100.0%) |
| | Total missing | 9 |
| Has your diabetic eye disease affected your vision? | Yes, slightly | 6 (54.5%) |
| | Yes, significantly | 2 (18.2%) |
| | No | 3 (27.3%) |
| | Total valid response | 11 (100.0%) |
| | Total missing | 47 |
| Have vision issues caused you to have difficulty with any of the following? | Household responsibilities, such as cooking or cleaning | 1 (12.5%) |
| | Work or keeping a job | 3 (37.5%) |
| | None | 2 (25.0%) |
| | Driving (a car/vehicle) | 5 (62.5%) |
| | Total valid response | 8 (100.0%) |
| | Total missing | 50 |

**Table 3.7**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you had any treatment for diabetic eye disease? | Yes | 6 (54.5%) |
| | No | 5 (45.5%) |
| | Total valid response | 11 (100.0%) |
| | Total missing | 47 |
| What treatment did you receive? | Laser | 5 (83.3%) |
| | Injection in the eye (Anti-VEGF) | 1 (16.7%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Surgery | 2 (33.3%) |
| | Other | 1 (16.7%) |
| | Total valid response | 6 (100.0%) |
| | Total missing | 52 |
| Did you complete the treatment? | Yes | 4 (66.7%) |
| | Still receiving treatment | 2 (33.3%) |
| | Total valid response | 6 (100.0%) |
| | Total missing | 52 |
| Do you feel that the treatment worked? | Yes, and vision improved | 4 (66.7%) |
| | Yes, but vision stayed the same | 1 (16.7%) |
| | Still waiting to know | 1 (16.7%) |
| | Total valid response | 6 (100.0%) |
| | Total missing | 52 |
| What is/are the reason(s) that you did not complete the treatment? | Total missing | 58 |
| What are the reason(s) that you have not had treatment for diabetic eye disease? | My doctor did not recommend any treatment | 4 (100.0%) |
| | Total valid response | 4 (100.0%) |
| | Total missing | 54 |

**Table 3.8**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you been diagnosed with diabetic macular edema? | Yes | 2 (4.3%) |
| | No | 40 (85.1%) |
| | Don't know/Not sure | 5 (10.6%) |
| | Total valid response | 47 (100.0%) |
| | Total missing | 11 |
| If Yes, which of the following would you prefer | Treatment to prevent further vision loss | 2 (100.0%) |
| | Total valid response | 2 (100.0%) |
| | Total missing | 56 |

**Table 3.9**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Have you received information about diabetic retinopathy or diabetic macular edema from any of the following sources? | Doctor/Nurse | 17 (37.8%) |
| | Health educator | 6 (13.3%) |
| | Diabetes organization or other health organization | 10 (22.2%) |
| | Family/Friends/Neighbors | 4 (8.9%) |
| | TV/Radio/Newspaper/Magazines | 3 (6.7%) |
| | Internet | 10 (22.2%) |
| | Other | 1 (2.2%) |
| | None of the above | 20 (44.4%) |
| | Total valid response | 45 (100.0%) |
| | Total missing | 13 |

**Table 4.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| What is your gender? | Female | 28 (60.9) |
| | Male | 18 (39.1) |
| | Total Valid Response | 46 (100.0) |
| | Total missing | 12 |
| Please indicate your age | 18 - 29 | 6 (10.3) |
| | 30 - 39 | 11 (19.0) |
| | 40 - 49 | 14 (24.1) |
| | 50 - 59 | 15 (25.9) |
| | 60 - 69 | 7 (12.1) |
| | 70 - 79 | 4 (6.9) |
| | 80 - 89 | 1 (1.7) |
| | Total Valid Response | 58 (100.0) |

**Table 4.2**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Where do you live? | Urban setting | 32 (69.6) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Non-urban setting | 14 (30.4) |
| | Total Valid Response | 46 (100.0) |
| | Total missing | 12 |

**Table 4.3**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| What is the highest level of education you completed? | Primary school | 3 (6.5) |
| | Secondary school | 9 (19.6) |
| | College/University | 22 (47.8) |
| | Graduate or post-graduate | 12 (26.1) |
| | Total valid response | 46 (100.0) |
| | Total missing | 12 |

**Table 4.4**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Are you currently working? | Working for pay | 31 (66.0) |
| | Working without pay at home (e.g. housework, farming) | 2 (4.3) |
| | Volunteering | 1 (2.1) |
| | Retired | 8 (17.0) |
| | Not working | 5 (10.6) |
| | Total Valid Response | 47 (100.0) |
| | Total missing | 11 |

**Table 4.5**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Do you receive assistance from the government? | Income assistance | 3 (6.7%) |
| | Medical assistance | 13 (28.9%) |
| | Food assistance | 2 (4.4%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Pension assistance | 7 (15.6%) |
| | None of the above | 29 (64.4%) |
| | Total valid response | 45 (100.0%) |
| | Total missing | 13 |

**Table 4.6**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Did you have trouble paying for food at anytime during the past year? | Yes | 10 (21.7) |
| | No | 36 (78.3) |
| | Total Valid Response | 46 (100.0) |
| | Total missing | 12 |

**Table 4.7**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Do you feel that your access to health care is negatively affected by any of the following? | Age | 5 (10.9) |
| | Ethnicity | 1 (2.2) |
| | Gender | 1 (2.2) |
| | Income | 7 (15.2) |
| | Language you speak | 1 (2.2) |
| | Place of birth | 1 (2.2) |
| | Place where you live | 8 (17.4) |
| | Race | 1 (2.2) |
| | Sexual orientation | 1 (2.2) |
| | None of the above | 32 (69.6) |
| | Total valid response | 46 (100.0) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total missing | 12 |

**Table 4.8**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Which of the following do you worry about most? | Food | 3 (6.4) |
| | Housing | 2 (4.3) |
| | Money | 11 (23.4) |
| | Health | 22 (46.8) |
| | Family | 6 (12.8) |
| | None of the above | 3 (6.4) |
| | Total Valid Response | 47 (100.0) |
| | Total missing | 11 |

**Table 5.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| In general, would you say your health is: | Excellent | 1 (2.2%) |
| | Very good | 5 (10.9%) |
| | Good | 23 (50.0%) |
| | Total good health | 29 (63.0%) |
| | Fair | 14 (30.4%) |
| | Poor | 3 (6.5%) |
| | Fair or poor health | 17 (37.0%) |
| | Total valid response | 46 (100.0%) |
| | Total missing | 12 |

**Table 5.2**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How many days during last 30 days was your physical health not good | Any unhealthy days | 19 (54.3%) |
| | 1-5 unhealthy days | 10 (28.6%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | 6-10 unhealthy days | 5 (14.3%) |
| | 11-20 unhealthy days | 3 (8.6%) |
| | 21-30 unhealthy days | 1 (2.9%) |
| | No unhealthy days | 16 (45.7%) |
| | Total valid response | 35 (100.0%) |
| | Total missing | 23 |

**Table 5.3.1**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How many days during last 30 days was your mental health not good | Any unhealthy days | 18 (52.9%) |
| | 1-5 unhealthy days | 5 (14.7%) |
| | 6-10 unhealthy days | 5 (14.7%) |
| | 11-20 unhealthy days | 4 (11.8%) |
| | 21-30 unhealthy days | 4 (11.8%) |
| | No unhealthy days | 16 (47.1%) |
| | Total valid response | 34 (100.0%) |
| | Total missing | 24 |

**Table 5.3.2**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Unhealthy days (physically or mentally unhealthy, max 30) | Any unhealthy days | 26 (74.3%) |
| | 1-5 unhealthy days | 7 (20.0%) |
| | 6-10 unhealthy | 7 (20.0%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | days | |
| | 11-20 unhealthy days | 4 (11.4%) |
| | 21-30 unhealthy days | 8 (22.9%) |
| | No unhealthy days | 9 (25.7%) |
| | Total valid response | 35 (100.0%) |

**Table 5.4**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| How many days during last 30 days did poor health limit your usual activities | Any unhealthy days | 17 (56.7%) |
| | 1-5 unhealthy days | 6 (20.0%) |
| | 6-10 unhealthy days | 3 (10.0%) |
| | 11-20 unhealthy days | 4 (13.3%) |
| | 21-30 unhealthy days | 4 (13.3%) |
| | No unhealthy days | 13 (43.3%) |
| | Total valid response | 30 (100.0%) |
| | Total missing | 28 |

**Table 5.5**

| Question | Response | Number of Respondents (%) |
|---|---|---|
| Are you limited in any way in any activities because of any impairment or health problem? | Yes | 18 (40.0%) |
| | No | 27 (60.0%) |
| | Total valid response | 45 (100.0%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total missing | 13 |
| Which impairment or health problem, if any, limits your activities? | | |
| a) Arthritis/rheumatism | Yes | 5 (41.7%) |
| | No | 7 (58.3%) |
| | Total valid response | 12 (100.0%) |
| | Total missing | 46 |
| b) Back or neck problem | Yes | 4 (40.0%) |
| | No | 6 (60.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 48 |
| c) Fractures, bone/joint injury | Yes | 3 (30.0%) |
| | No | 7 (70.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 48 |
| d) Walking problem | Yes | 5 (45.5%) |
| | No | 5 (45.5%) |
| | Don't know/Not sure | 1 (9.1%) |
| | Total valid response | 11 (100.0%) |
| | Total missing | 47 |
| e) Lung/breathing problem | Yes | 5 (41.7%) |
| | No | 6 (50.0%) |
| | Don't know/Not sure | 1 (8.3%) |
| | Total valid response | 12 (100.0%) |
| | Total missing | 46 |
| f) Hearing problem | Yes | 2 (20.0%) |
| | No | 8 (80.0%) |
| | Total valid response | 10 (100.0%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | Total missing | 48 |
| g) Eye/vision problem | Yes | 4 (40.0%) |
| | No | 6 (60.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 48 |
| h) Heart problem | Yes | 2 (22.2%) |
| | No | 6 (66.7%) |
| | Don't know/Not sure | 1 (11.1%) |
| | Total valid response | 9 (100.0%) |
| | Total missing | 49 |
| i) Stroke problem | Yes | 1 (11.1%) |
| | No | 7 (77.8%) |
| | Don't know/Not sure | 1 (11.1%) |
| | Total valid response | 9 (100.0%) |
| | Total missing | 49 |
| j) Hypertension/high blood pressure | Yes | 6 (60.0%) |
| | No | 3 (30.0%) |
| | Don't know/Not sure | 1 (10.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 48 |
| k) Diabetes | Yes | 15 (100.0%) |
| | Total valid response | 15 (100.0%) |
| | Total missing | 43 |
| l) Cancer | No | 8 (100.0%) |
| | Total valid response | 8 (100.0%) |
| | Total missing | 50 |
| m) Mental or emotional health | Yes | 7 (70.0%) |

| Question | Response | Number of Respondents (%) |
|---|---|---|
| | No | 1 (10.0%) |
| | Don't know/Not sure | 2 (20.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 48 |

**PT 1.2**

| Analysis Sets | Number of Respondents (%) |
|---|---|
| All valid respondents | 120 (100.0%) |
| Included in Provider Analysis Set (PAS) | 120 (100.0%) |
| Excluded in Provider Analysis Set (PAS) | 0 (0.0%) |
| Reasons for exclusion from Provider Analysis Set: | |
| No other valid survey data | 0 |
| Provider Analysis Set | 120 |
| Included in the Eye Care Professional Set (Eye Specialist) | 33 (27.5%) |
| Excluded in the Eye Care Professional Set (Eye Specialist) | 87 (72.5%) |
| Reasons for exclusion from Eye Care Professional Set: | |
| Missing required speciality | 87 |
| No valid (non-missing) response for the supplemental eye questionnaire | 0 |

**PT 1.3**

| Subgroups | Number of Respondents (%) |
|---|---|
| Provider Analysis Set | 120 (100.0%) |
| Primary Care Provider | 2 (1.7%) |
| Diabetes Specialist Provider | 11 (9.2%) |
| Eye Care Professional | 33 (27.5%) |
| Ophthalmologist | 17 (14.2%) |

*NB [1]: Primary Care Provider = General Practitioner/Family practitioner (but not diabetes specialist or eye care professional)*
*NB [2]: Diabetes specialist provider = Diabetes specialist (but not eye care professional)*
*NB [4]: Ophthalmologist = General ophthalmologist or retinal specialist*
*NB [5]: Note that providers may have selected more than one specialty*

**PT 1.4**

| Item | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What is your specialty? | General primary care/Family practitioner | 2 (100.0%) | 0 (0.0%) | 0 (0.0%) | 2 (1.7%) |
| | Diabetes specialist | 0 (0.0%) | 11 (100.0%) | 0 (0.0%) | 11 (9.2%) |
| | General ophthalmologist | 0 (0.0%) | 0 (0.0%) | 2 (11.8%) | 2 (1.7%) |
| | Optometrist | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 16 (13.3%) |
| | Retinal specialist | 0 (0.0%) | 0 (0.0%) | 15 (88.2%) | 15 (12.5%) |
| | Nurse | 0 (0.0%) | 4 (36.4%) | 0 (0.0%) | 42 (35.0%) |
| | Health educator | 0 (0.0%) | 5 (45.5%) | 0 (0.0%) | 27 (22.5%) |
| | None of the above | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 21 (17.5%) |
| | Total valid response | 2 (100.0%) | 11 (100.0%) | 17 (100.0%) | 120 (100.0%) |
| | Total missing | 0 | 0 | 0 | 0 |

**PT 1.5**

| Item | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| How long have you been practicing in this profession? | Total valid response (n) | 2 | 10 | 17 | 117 |
| | Mean | 13.0 | 12.2 | 14.8 | 17.5 |
| | SD | 9.9 | 11.4 | 9.7 | 12.5 |
| | Median | 13.0 | 9.5 | 14.0 | 16.0 |
| | Min. | 6 | 1 | 1 | 0 |
| | Max. | 20 | 35 | 30 | 47 |
| | Total missing | 0 | 1 | 0 | 3 |

**PT 2.1**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What is your main practice setting? | Diabetes clinic/practice | 0 (0.0%) | 6 (54.5%) | 0 (0.0%) | 50 (43.5%) |
| | Eye clinic/practice | 0 (0.0%) | 0 (0.0%) | 12 (70.6%) | 30 (26.1%) |
| | General medical clinic/practice | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) | 4 (3.5%) |
| | Hospital | 0 (0.0%) | 4 (36.4%) | 4 (23.5%) | 19 (16.5%) |
| | Other | 0 (0.0%) | 1 (9.1%) | 1 (5.9%) | 12 (10.4%) |
| | Total Valid Response | 1 (100.0%) | 11 (100.0%) | 17 (100.0%) | 115 (100.0%) |
| | Total missing | 1 | 0 | 0 | 5 |

**PT 2.2**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Where is your main practice located? | Urban setting | 0 (0.0%) | 7 (63.6%) | 16 (94.1%) | 68 (59.1%) |
| | Non-urban setting | 1 (100.0%) | 4 (36.4%) | 1 (5.9%) | 47 (40.9%) |
| | Total Valid Response | 1 (100.0%) | 11 (100.0%) | 17 (100.0%) | 115 (100.0%) |
| | Total missing | 1 | 0 | 0 | 5 |

**PT 2.3**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| In which sector is your main practice? | Government | 0 (0.0%) | 9 (81.8%) | 9 (52.9%) | 69 (60.0%) |
| | Private | 1 (100.0%) | 1 (9.1%) | 1 (5.9%) | 15 (13.0%) |
| | Non profit | 0 (0.0%) | 0 (0.0%) | 1 (5.9%) | 13 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | | | | | (11.3%) |
| | Combined/mixed | 0 (0.0%) | 1 (9.1%) | 6 (35.3%) | 18 (15.7%) |
| | Total Valid Response | 1 (100.0%) | 11 (100.0%) | 17 (100.0%) | 115 (100.0%) |
| | Total missing | 1 | 0 | 0 | 5 |

**PT 2.4**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Is your main practice limited to certain populations? | No | 1 (100.0%) | 10 (90.9%) | 16 (94.1%) | 87 (75.7%) |
| | Yes, limited by age | 0 (0.0%) | 1 (9.1%) | 0 (0.0%) | 19 (16.5%) |
| | Yes, limited to persons in the military or veterans | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (0.9%) |
| | Yes, other | 0 (0.0%) | 0 (0.0%) | 1 (5.9%) | 8 (7.0%) |
| | Total valid response | 1 (100.0%) | 11 (100.0%) | 17 (100.0%) | 115 (100.0%) |
| | Total missing | 1 | 0 | 0 | 5 |

**PT 2.5**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What is the average wait time for an appointment in your main practice? | Less than 1 week | 1 (100.0%) | 2 (20.0%) | 1 (5.9%) | 17 (16.3%) |
| | More than 1 week but less than 1 month | 0 (0.0%) | 5 (50.0%) | 7 (41.2%) | 48 (46.2%) |
| | More than 1 month but less | 0 (0.0%) | 3 (30.0%) | 6 (35.3%) | 17 (16.3%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | than 2 months | | | | |
| | More than 2 months but less than 3 months | 0 (0.0%) | 0 (0.0%) | 2 (11.8%) | 6 (5.8%) |
| | Six or more months | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (1.9%) |
| | Do not take appointments | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (1.9%) |
| | Other | 0 (0.0%) | 0 (0.0%) | 1 (5.9%) | 10 (9.6%) |
| | Don't know/Not sure | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (1.9%) |
| | Total Valid Response | 1 (100.0%) | 10 (100.0%) | 17 (100.0%) | 104 (100.0%) |
| | Total missing | 1 | 1 | 0 | 16 |

**PT 2.6**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| On average, how many patients do you see per week in your main practice [n patients] | Total valid response (n) | 1 | 10 | 16 | 100 |
| | Mean | 50 | 34.7 | 206 | 67.8 |
| | SD | . | 15.2 | 83 | 77.3 |
| | Median | 50 | 37.5 | 200 | 40 |
| | Min. | 50 | 2 | 1 | 0 |
| | Max. | 50 | 50 | 300 | 300 |
| | Total missing | 1 | 1 | 1 | 20 |
| What percentage of the patients in your main practice have diabetes [% patients] | Total valid response (n) | 1 | 10 | 16 | 102 |
| | Mean | 10 | 82.5 | 28.5 | 61.5 |
| | SD | . | 27.2 | 18.7 | 39.7 |
| | Median | 10 | 97.5 | 25 | 82.5 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Min. | 10 | 20 | 1 | 1 |
| | Max. | 10 | 100 | 85 | 100 |
| | Total missing | 1 | 1 | 1 | 18 |

**PT 2.7**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| In your main practice, how do patients pay for the care and services that you provide? | Don't pay | 0 (0.0%) | 8 (80.0%) | 10 (62.5%) | 77 (75.5%) |
| | Pay a reduced/subsidized rate | 0 (0.0%) | 0 (0.0%) | 1 (6.3%) | 5 (4.9%) |
| | Pay out-of-pocket (full fees) | 0 (0.0%) | 0 (0.0%) | 1 (6.3%) | 12 (11.8%) |
| | Pay through insurance | 0 (0.0%) | 2 (20.0%) | 5 (31.3%) | 24 (23.5%) |
| | Patient pays some, insurance pays some | 0 (0.0%) | 0 (0.0%) | 2 (12.5%) | 12 (11.8%) |
| | Other | 1 (100.0%) | 0 (0.0%) | 2 (12.5%) | 9 (8.8%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 16 (100.0%) | 102 (100.0%) |
| | Total missing | 1 | 1 | 1 | 18 |

**PT 2.8**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| In addition to your main practice, do you work in another practice setting? | Yes | | 2 (20.0%) | 6 (35.3%) | 32 (30.8%) |
| | No | 1 | 8 (80.0%) | 11 (64.7%) | 72 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | | (100.0%) | | | (69.2%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 17 (100.0%) | 104 (100.0%) |
| | Total missing | 1 | 1 | | 16 |
| In which other practice setting(s) do you work? | Hospital | | 1 (50.0%) | 3 (50.0%) | 10 (31.3%) |
| | General medical clinic/practice | | 1 (50.0%) | | 5 (15.6%) |
| | Diabetes clinic/practice | | 2 (100.0%) | | 4 (12.5%) |
| | Eye clinic/practice | | | 3 (50.0%) | 7 (21.9%) |
| | Other | | | | 10 (31.3%) |
| | Total valid response | | 2 (100.0%) | 6 (100.0%) | 32 (100.0%) |
| | Total missing | 2 | 9 | 11 | 88 |
| In which sector(s) is(are) the practice(s)? | Government | | | 2 (33.3%) | 10 (31.3%) |
| | Private | | 1 (50.0%) | 1 (16.7%) | 12 (37.5%) |
| | Non profit | | | | 3 (9.4%) |
| | Combined/mixed | | 1 (50.0%) | 3 (50.0%) | 7 (21.9%) |
| | Total valid response | | 2 (100.0%) | 6 (100.0%) | 32 (100.0%) |
| | Total missing | 2 | 9 | 11 | 88 |
| Is there a major difference between your practices with respect to how diabetic eye disease is screened and managed? | Yes | | 1 (50.0%) | | 6 (18.8%) |
| | No | | 1 (50.0%) | 6 (100.0%) | 26 (81.3%) |
| | Total valid | | 2 (100.0%) | 6 (100.0%) | 32 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | response | | | | (100.0%) |
| | Total missing | 2 | 9 | 11 | 88 |

**PT 2.9**

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| Blood glucose | Yes | | 1 (100.0%) | 7 (77.8%) | 5 (41.7%) | 66 (71.7%) |
| | | Total valid numeric response (n) | 1 (100.0%) | 7 (77.8%) | 5 (41.7%) | 59 (64.1%) |
| | | Mean | 4.0 | 3.7 | 7.2 | 3.6 |
| | | SD | | 0.5 | 8.5 | 5.2 |
| | | Median | 4.0 | 4.0 | 2.0 | 3.0 |
| | | Min | 4 | 3 | 1 | 0 |
| | | Max | 4 | 4 | 20 | 36 |
| | | Total missing | 1 | 4 | 12 | 61 |
| | No | | | 2 (22.2%) | 7 (58.3%) | 26 (28.3%) |
| | Total valid response | | 1 (100.0%) | 9 (100.0%) | 12 (100.0%) | 92 (100.0%) |
| | Total missing | | 1 | 2 | 5 | 28 |
| HbA1c | Yes | | 1 (100.0%) | 8 (88.9%) | 4 (33.3%) | 63 (70.8%) |
| | | Total valid numeric response (n) | 1 (100.0%) | 8 (88.9%) | 4 (33.3%) | 57 (64.0%) |
| | | Mean | 4.0 | 3.6 | 2.3 | 2.8 |
| | | SD | | 0.5 | 1.3 | 1.3 |
| | | Median | 4.0 | 4.0 | 2.0 | 3.0 |
| | | Min | 4 | 3 | 1 | 0 |
| | | Max | 4 | 4 | 4 | 4 |

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| | | Total missing | 1 | 3 | 13 | 63 |
| | No | | | 1 (11.1%) | 8 (66.7%) | 26 (29.2%) |
| | Total valid response | | 1 (100.0%) | 9 (100.0%) | 12 (100.0%) | 89 (100.0%) |
| | Total missing | | 1 | 2 | 5 | 31 |
| Urine check | Yes | | 1 (100.0%) | 6 (75.0%) | 1 (8.3%) | 51 (58.0%) |
| | | Total valid numeric response (n) | 1 (100.0%) | 6 (75.0%) | 1 (8.3%) | 47 (53.4%) |
| | | Mean | 4.0 | 2.2 | 12.0 | 2.3 |
| | | SD | | 1.5 | | 3.7 |
| | | Median | 4.0 | 1.5 | 12.0 | 1.0 |
| | | Min | 4 | 1 | 12 | 0 |
| | | Max | 4 | 4 | 12 | 24 |
| | | Total missing | 1 | 5 | 16 | 73 |
| | No | | | 2 (25.0%) | 11 (91.7%) | 37 (42.0%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 12 (100.0%) | 88 (100.0%) |
| | Total missing | | 1 | 3 | 5 | 32 |
| Weight check | Yes | | 1 (100.0%) | 9 (90.0%) | 3 (25.0%) | 65 (71.4%) |
| | | Total valid numeric response (n) | 1 (100.0%) | 9 (90.0%) | 3 (25.0%) | 60 (65.9%) |
| | | Mean | 4.0 | 3.0 | 126.0 | 9.0 |
| | | SD | | 1.1 | 207.1 | 46.8 |
| | | Median | 4.0 | 3.0 | 12.0 | 3.0 |
| | | Min | 4 | 1 | 1 | 0 |

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| | | Max | 4 | 4 | 365 | 365 |
| | | Total missing | 1 | 2 | 14 | 60 |
| | No | | | 1 (10.0%) | 9 (75.0%) | 26 (28.6%) |
| | Total valid response | | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 91 (100.0%) |
| | Total missing | | 1 | 1 | 5 | 29 |
| Blood pressure check | Yes | | 1 (100.0%) | 9 (90.0%) | 4 (30.8%) | 69 (72.6%) |
| | | Total valid numeric response (n) | 1 (100.0%) | 9 (90.0%) | 4 (30.8%) | 63 (66.3%) |
| | | Mean | 4.0 | 3.3 | 94.8 | 9.5 |
| | | SD | | 0.7 | 180.2 | 45.9 |
| | | Median | 4.0 | 3.0 | 6.5 | 3.0 |
| | | Min | 4 | 2 | 1 | 0 |
| | | Max | 4 | 4 | 365 | 365 |
| | | Total missing | 1 | 2 | 13 | 57 |
| | No | | | 1 (10.0%) | 9 (69.2%) | 26 (27.4%) |
| | Total valid response | | 1 (100.0%) | 10 (100.0%) | 13 (100.0%) | 95 (100.0%) |
| | Total missing | | 1 | 1 | 4 | 25 |
| Foot check | Yes | | 1 (100.0%) | 9 (90.0%) | | 59 (64.1%) |
| | | | 1 (100.0%) | 8 (80.0%) | 0 (0.0%) | 56 (60.9%) |
| | | Mean | 4.0 | 1.4 | | 1.5 |
| | | SD | | 1.1 | | 3.1 |
| | | Median | 4.0 | 1.0 | | 1.0 |
| | | Min | 4 | 1 | | 0 |

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| | | Max | 4 | 4 | | 24 |
| | | Total missing | 1 | 3 | 17 | 64 |
| | No | | | 1 (10.0%) | 12 (100.0%) | 33 (35.9%) |
| | Total valid response | | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 92 (100.0%) |
| | Total missing | | 1 | 1 | 5 | 28 |
| Eye examination - Un-dilated | Yes | | | 1 (12.5%) | 7 (58.3%) | 30 (35.7%) |
| | | Total valid numeric response (n) | 0 (0.0%) | 1 (12.5%) | 7 (58.3%) | 26 (31.0%) |
| | | Mean | | 1.0 | 5.6 | 20.2 |
| | | SD | | | 7.5 | 71.9 |
| | | Median | | 1.0 | 2.0 | 1.0 |
| | | Min | | 1 | 1 | 0 |
| | | Max | | 1 | 20 | 365 |
| | | Total missing | 2 | 10 | 10 | 94 |
| | No | | 1 (100.0%) | 7 (87.5%) | 5 (41.7%) | 54 (64.3%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 12 (100.0%) | 84 (100.0%) |
| | Total missing | | 1 | 3 | 5 | 36 |
| Eye examination - Optical Coherence Tomography | Yes | | | | 15 (100.0%) | 27 (32.5%) |
| | | Total valid numeric response (n) | 0 (0.0%) | 0 (0.0%) | 14 (93.3%) | 24 (28.9%) |
| | | Mean | | | 81.4 | 50.2 |

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| | | SD | | | 153.8 | 122.0 |
| | | Median | | | 4.0 | 2.0 |
| | | Min | | | 1 | 0 |
| | | Max | | | 365 | 365 |
| | | Total missing | 2 | 11 | 3 | 96 |
| | No | | 1 (100.0%) | 8 (100.0%) | | 56 (67.5%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 15 (100.0%) | 83 (100.0%) |
| | Total missing | | 1 | 3 | 2 | 37 |
| Eye examination - Fundoscopy | Yes | | | 1 (12.5%) | 15 (100.0%) | 38 (43.7%) |
| | | Total valid numeric response (n) | 0 (0.0%) | 1 (12.5%) | 14 (93.3%) | 33 (37.9%) |
| | | Mean | | 1.0 | 81.6 | 58.9 |
| | | SD | | | 153.6 | 131.8 |
| | | Median | | 1.0 | 4.0 | 1.0 |
| | | Min | | 1 | 1 | 0 |
| | | Max | | 1 | 365 | 365 |
| | | Total missing | 2 | 10 | 3 | 87 |
| | No | | 1 (100.0%) | 7 (87.5%) | | 49 (56.3%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 15 (100.0%) | 87 (100.0%) |
| | Total missing | | 1 | 3 | 2 | 33 |
| Eye examination - Fluorescein Angiography | Yes | | | | 13 (92.9%) | 15 (18.3%) |
| | | Total valid | 0 (0.0%) | 0 (0.0%) | 12 (85.7%) | 14 |

| Type of Test | Yes/No | How often/year | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|---|
| | | numeric response (n) | | | | (17.1%) |
| | | Mean | | | 82.6 | 70.8 |
| | | SD | | | 149.9 | 141.1 |
| | | Median | | | 1.0 | 1.0 |
| | | Min | | | 0 | 0 |
| | | Max | | | 365 | 365 |
| | | Total missing | 2 | 11 | 5 | 106 |
| | No | | 1 (100.0%) | 8 (100.0%) | 1 (7.1%) | 67 (81.7%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 14 (100.0%) | 82 (100.0%) |
| | Total missing | | 1 | 3 | 3 | 38 |
| Eye examination - Lipid check | Yes | | | 1 (12.5%) | 5 (38.5%) | 18 (21.4%) |
| | | Total valid numeric response (n) | 0 (0.0%) | 1 (12.5%) | 5 (38.5%) | 17 (20.2%) |
| | | Mean | | 4.0 | 76.0 | 23.2 |
| | | SD | | | 161.6 | 88.1 |
| | | Median | | 4.0 | 1.0 | 1.0 |
| | | Min | | 4 | 1 | 0 |
| | | Max | | 4 | 365 | 365 |
| | | Total missing | 2 | 10 | 12 | 103 |
| | No | | 1 (100.0%) | 7 (87.5%) | 8 (61.5%) | 66 (78.6%) |
| | Total valid response | | 1 (100.0%) | 8 (100.0%) | 13 (100.0%) | 84 (100.0%) |
| | Total missing | | 1 | 3 | 4 | 36 |

**PT 2.10**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| In your main practice, what topics do you cover during a routine visit with a patient who has diabetes? | Diabetes management and monitoring | 1 (100.0%) | 9 (90.0%) | 11 (78.6%) | 84 (90.3%) |
| | Diet/nutrition | 1 (100.0%) | 9 (90.0%) | 5 (35.7%) | 75 (80.6%) |
| | Exercise/physical activity | 1 (100.0%) | 9 (90.0%) | 5 (35.7%) | 76 (81.7%) |
| | Medicines | 1 (100.0%) | 9 (90.0%) | 5 (35.7%) | 73 (78.5%) |
| | Foot care and inspection | 1 (100.0%) | 8 (80.0%) | 0 (0.0%) | 54 (58.1%) |
| | Blood pressure | 1 (100.0%) | 9 (90.0%) | 5 (35.7%) | 64 (68.8%) |
| | Eye care and exams | 1 (100.0%) | 9 (90.0%) | 13 (92.9%) | 79 (84.9%) |
| | Lipid check | 1 (100.0%) | 9 (90.0%) | 3 (21.4%) | 57 (61.3%) |
| | None of the above | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 3 (3.2%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 14 (100.0%) | 93 (100.0%) |
| | Total missing | 1 | 1 | 3 | 27 |

**PT 2.11**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Is there written information about diabetes available for patients in your main practice? | Yes, and information on eye complications is sufficient | 0 (0.0%) | 4 (40.0%) | 12 (85.7%) | 46 (49.5%) |
| | Yes, but information on eye complications is not sufficient | 0 (0.0%) | 4 (40.0%) | 2 (14.3%) | 23 (24.7%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Yes, but no information on eye complications is included | 0 (0.0%) | 2 (20.0%) | 0 (0.0%) | 8 (8.6%) |
| | No written information is available for patients | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) | 11 (11.8%) |
| | Don't know/Not sure | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 5 (5.4%) |
| | Total Valid Response | 1 (100.0%) | 10 (100.0%) | 14 (100.0%) | 93 (100.0%) |
| | Total missing | 1 | 1 | 3 | 27 |

**PT 2.12**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Do you have written protocols/guidelines available in your main practice for the management of diabetes? | Yes, available and used by staff | 1 (100.0%) | 9 (90.0%) | 4 (28.6%) | 65 (69.9%) |
| | Yes, available but not used by staff | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (4.3%) |
| | Not available | 0 (0.0%) | 0 (0.0%) | 8 (57.1%) | 13 (14.0%) |
| | Don't know/Not sure | 0 (0.0%) | 1 (10.0%) | 2 (14.3%) | 11 (11.8%) |
| | Total Valid Response | 1 (100.0%) | 10 (100.0%) | 14 (100.0%) | 93 (100.0%) |
| | Total missing | 1 | 1 | 3 | 27 |

**PT 2.13**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Do you have written protocols/guidelines for detection and management of diabetes-related vision issue available in your main practice? | Yes, available and used by staff | 1 (100.0%) | 5 (55.6%) | 8 (57.1%) | 48 (52.2%) |
| | Yes, available but not used by staff | 0 (0.0%) | 0 (0.0%) | 1 (7.1%) | 6 (6.5%) |
| | Not available | 0 (0.0%) | 3 (33.3%) | 4 (28.6%) | 21 (22.8%) |
| | Don't know/Not sure | 0 (0.0%) | 1 (11.1%) | 1 (7.1%) | 17 (18.5%) |
| | Total Valid Response | 1 (100.0%) | 9 (100.0%) | 14 (100.0%) | 92 (100.0%) |
| | Total missing | 1 | 2 | 3 | 28 |

**PT 2.14**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What is the protocol in your main practice for timing of initial eye exams for persons with diabetes - Type I? | After a predetermined number of years (numeric response) (n) | 0 (0.0%) | 1 (11.1%) | 7 (53.8%) | 22 (24.7%) |
| | Mean | | 5.0 | 4.0 | 4.5 |
| | SD | | | 1.7 | 1.9 |
| | Median | | 5.0 | 5.0 | 5.0 |
| | Min | | 5 | 1 | 1 |
| | Max | | 5 | 5 | 10 |
| | After a predetermined age (numeric response) | 0 (0.0%) | 1 (11.1%) | 1 (7.7%) | 6 (6.7%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | (n) | | | | |
| | Mean | | 12.0 | 15.0 | 13.3 |
| | SD | | | | 4.5 |
| | Median | | 12.0 | 15.0 | 15.0 |
| | Min | | 12 | 15 | 5 |
| | Max | | 12 | 15 | 18 |
| | As soon as they are diagnosed | 1 (100.0%) | 5 (55.6%) | 3 (23.1%) | 38 (42.7%) |
| | When a patient reports eye/vision problems | | | 1 (7.7%) | 1 (1.1%) |
| | No standard practice, timing varies case by case | | 1 (11.1%) | | 10 (11.2%) |
| | Don't know/Not sure | | 1 (11.1%) | | 7 (7.9%) |
| | Other | | | 1 (7.7%) | 5 (5.6%) |
| | Total valid response | 1 (100.0%) | 9 (100.0%) | 13 (100.0%) | 89 (100.0%) |
| | Total missing | 1 | 2 | 4 | 31 |
| What is the protocol in your main practice for timing of initial eye exams for persons with diabetes - Type II? | After a predetermined number of years (numeric response) (n) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (2.2%) |
| | Mean | | | | 1.5 |
| | SD | | | | 0.7 |
| | Median | | | | 1.5 |
| | Min | | | | 1 |
| | Max | | | | 2 |
| | After a predetermined age (numeric response) (n) | 0 (0.0%) | 0 (0.0%) | 1 (7.7%) | 1 (1.1%) |
| | Mean | | | 45.0 | 45.0 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | SD | | | | |
| | Median | | | 45.0 | 45.0 |
| | Min | | | 45 | 45 |
| | Max | | | 45 | 45 |
| | As soon as they are diagnosed | 1 (100.0%) | 8 (80.0%) | 12 (92.3%) | 76 (83.5%) |
| | When a patient reports eye/vision problems | | | | 1 (1.1%) |
| | No standard practice, timing varies case by case | | | | 4 (4.4%) |
| | Don't know/Not sure | | 1 (10.0%) | | 4 (4.4%) |
| | Other | | 1 (10.0%) | | 3 (3.3%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 13 (100.0%) | 91 (100.0%) |
| | Total missing | 1 | 1 | 4 | 29 |

**PT 2.15**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What is the protocol in your main practice for timing of follow-up eye examinations for persons with diabetes? | Once a year | 1 (100.0%) | 8 (80.0%) | 11 (84.6%) | 74 (82.2%) |
| | Every two years | 0 (0.0%) | 1 (10.0%) | 1 (7.7%) | 7 (7.8%) |
| | Only when symptoms are present | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (2.2%) |
| | Other | 0 (0.0%) | 0 (0.0%) | 1 (7.7%) | 4 (4.4%) |
| | Don't know/Not sure | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 3 (3.3%) |
| | Total Valid | 1 (100.0%) | 10 (100.0%) | 13 (100.0%) | 90 |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Response | | | | (100.0%) |
| | Total missing | 1 | 1 | 4 | 30 |

**PT 2.16**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Do you screen patients for DR? | Yes | 1 (100.0%) | 1 (10.0%) | 11 (78.6%) | 34 (37.0%) |
| | No | | 9 (90.0%) | 3 (21.4%) | 58 (63.0%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 14 (100.0%) | 92 (100.0%) |
| | Total missing | 1 | 1 | 3 | 28 |
| Where do you screen patients? | In clinic | | | 10 (100.0%) | 26 (78.8%) |
| | Outreach | | | 2 (20.0%) | 10 (30.3%) |
| | Other | 1 (100.0%) | 1 (100.0%) | | 2 (6.1%) |
| | Total valid response | 1 (100.0%) | 1 (100.0%) | 10 (100.0%) | 33 (100.0%) |
| | Total missing | 1 | 10 | 7 | 87 |

**PT 2.17**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What patient characteristics influence your vision care and/or vision referrals? | Diabetes duration | 0 (0.0%) | 5 (50.0%) | 10 (83.3%) | 56 (65.1%) |
| | Patient's age | 0 (0.0%) | 3 (30.0%) | 5 (41.7%) | 41 (47.7%) |
| | Patient's gender | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (4.7%) |
| | Presence of comorbidities such as hypertension, etc. | 0 (0.0%) | 3 (30.0%) | 7 (58.3%) | 44 (51.2%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | High glucose levels | 0 (0.0%) | 4 (40.0%) | 6 (50.0%) | 47 (54.7%) |
| | Ability or inability to pay | 0 (0.0%) | 2 (20.0%) | 0 (0.0%) | 7 (8.1%) |
| | Insurance restrictions | 0 (0.0%) | 2 (20.0%) | 1 (8.3%) | 6 (7.0%) |
| | Patient educational level | 0 (0.0%) | 0 (0.0%) | 1 (8.3%) | 5 (5.8%) |
| | Patient adherence to recommendations | 0 (0.0%) | 2 (20.0%) | 2 (16.7%) | 19 (22.1%) |
| | None of the above | 1 (100.0%) | 0 (0.0%) | 1 (8.3%) | 8 (9.3%) |
| | Not applicable | 0 (0.0%) | 3 (30.0%) | 1 (8.3%) | 17 (19.8%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 86 (100.0%) |
| | Total missing | 1 | 1 | 5 | 34 |

**PT 2.18**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| What are the major barriers to optimizing eye health faced by patients with diabetes in your main practice? | Cost of care | 0 (0.0%) | 1 (10.0%) | 2 (16.7%) | 19 (22.6%) |
| | Proximity to care | 0 (0.0%) | 1 (10.0%) | 4 (33.3%) | 24 (28.6%) |
| | Long wait time for appointment | 0 (0.0%) | 3 (30.0%) | 2 (16.7%) | 12 (14.3%) |
| | Long wait time on the day of visit | 0 (0.0%) | 0 (0.0%) | 2 (16.7%) | 6 (7.1%) |
| | Referral process | 0 (0.0%) | 4 (40.0%) | 3 (25.0%) | 22 (26.2%) |
| | Lack of knowledge and/or awareness | 0 (0.0%) | 7 (70.0%) | 7 (58.3%) | 39 (46.4%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Patients fear of treatment/results | 1 (100.0%) | 2 (20.0%) | 7 (58.3%) | 30 (35.7%) |
| | Patients they are a burden on family/friends | 0 (0.0%) | 0 (0.0%) | 2 (16.7%) | 8 (9.5%) |
| | Limited access to diabetes specialists | 0 (0.0%) | 4 (40.0%) | 2 (16.7%) | 10 (11.9%) |
| | Limited access to eye specialists | 0 (0.0%) | 5 (50.0%) | 3 (25.0%) | 20 (23.8%) |
| | Patients feel eye complications are unlikely | 1 (100.0%) | 2 (20.0%) | 4 (33.3%) | 31 (36.9%) |
| | Patients feel eye exams are not important | 1 (100.0%) | 3 (30.0%) | 5 (41.7%) | 31 (36.9%) |
| | Patients have competing responsibilities and priorities | 0 (0.0%) | 4 (40.0%) | 2 (16.7%) | 29 (34.5%) |
| | Clinic too small or lack necessary equipment/staff | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 5 (6.0%) |
| | Other | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 7 (8.3%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 84 (100.0%) |
| | Total missing | 1 | 1 | 5 | 36 |

**PT 2.19**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| In your main practice, are patients contacted with reminders for general follow-up appointments? | Yes | 0 (0.0%) | 5 (50.0%) | 6 (50.0%) | 59 (67.0%) |
| | No | 1 (100.0%) | 5 (50.0%) | 6 (50.0%) | 27 (30.7%) |
| | Don't know/Not sure | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (2.3%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Total Valid Response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 88 (100.0%) |
| | Total missing | 1 | 1 | 5 | 32 |

**PT 2.20**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Do you share relevant patient information with other health care professionals involved in the patients care e.g. his or her general practitioner, ophthalmologist, podiastrist? | Yes | 1 (100.0%) | 9 (90.0%) | 11 (91.7%) | 78 (88.6%) |
| | No | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 7 (8.0%) |
| | Don't know/Not sure | 0 (0.0%) | 0 (0.0%) | 1 (8.3%) | 3 (3.4%) |
| | Total Valid Response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 88 (100.0%) |
| | Total missing | 1 | 1 | 5 | 32 |

**PT 3.1**

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| Please indicate your age: | 18 - 29 | | | | 7 (8.0%) |
| | 30 - 39 | 1 (100.0%) | 2 (20.0%) | 1 (8.3%) | 12 (13.8%) |
| | 40 - 49 | | 4 (40.0%) | 2 (16.7%) | 25 (28.7%) |
| | 50 - 59 | | 3 (30.0%) | 7 (58.3%) | 31 (35.6%) |
| | 60 - 69 | | 1 (10.0%) | 1 (8.3%) | 11 (12.6%) |
| | 70 - 79 | | | 1 (8.3%) | 1 (1.1%) |

| Question | Response | Primary Care Provider | Diabetes Specialist Provider | Ophthalmologist | PAS |
|---|---|---|---|---|---|
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 87 (100.0%) |
| | Total missing | 1 | 1 | 5 | 33 |
| What is your gender? | Female | 1 (100.0%) | 7 (70.0%) | 1 (8.3%) | 68 (78.2%) |
| | Male | | 3 (30.0%) | 11 (91.7%) | 19 (21.8%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 87 (100.0%) |
| | Total missing | 1 | 1 | 5 | 33 |
| What is your highest level of education completed? | Secondary School | | 1 (10.0%) | | 4 (4.6%) |
| | College/University | | 7 (70.0%) | | 48 (55.2%) |
| | Graduate or advanced degree (e.g. PhD, MD, etc) | 1 (100.0%) | 2 (20.0%) | 12 (100.0%) | 35 (40.2%) |
| | Total valid response | 1 (100.0%) | 10 (100.0%) | 12 (100.0%) | 87 (100.0%) |
| | Total missing | 1 | 1 | 5 | 33 |

**PT 4.1**

| Question | Response | Ophthalmologist |
|---|---|---|
| What percentage of your patients have diabetic retinopathy | Total valid numeric response (n) | 12 |
| | Mean | 28.3 |
| | SD | 20.9 |
| | Median | 25.0 |
| | Min | 10 |
| | Max | 85 |
| | Total missing | 5 |

**PT 4.2**

| Question | Response | Ophthalmologist |
|---|---|---|

| Question | Response | Ophthalmologist |
|---|---|---|
| What percentage of your patients have diabetic macular edema? | Total valid numeric response (n) | 12 |
| | Mean | 16.4 |
| | SD | 14.1 |
| | Median | 13.5 |
| | Min | 1 |
| | Max | 50 |
| | Total missing | 5 |

**PT 4.3**

| Question | Response | Ophthalmologist |
|---|---|---|
| What is the average amount of time your patients wait for an appointment to be screened for diabetic eye disease in your practice? | Less than 1 week | 1 (8.3%) |
| | More than 1 week but less than 1 month | 3 (25.0%) |
| | More than 1 month but less than 2 months | 6 (50.0%) |
| | More than 2 months but less than 3 months | 2 (16.7%) |
| | Total Valid Response | 12 (100.0%) |
| | Total missing | 5 |

**PT 4.4**

| Question | Response | Ophthalmologist |
|---|---|---|
| From the time a patient is screened, what is the average length of time he/she waits for diagnosis? | Less than 1 week | 1 (8.3%) |
| | More than 1 week but less than 1 month | 1 (8.3%) |
| | More than 1 month but less than 2 months | 2 (16.7%) |
| | More than 2 months but less than 3 months | 1 (8.3%) |
| | Don't know/Not sure | 0 (0.0%) |
| | There is not wait, diagnosis | 7 (58.3%) |

| Question | Response | Ophthalmologist |
|---|---|---|
| | is given when screened | |
| | Total Valid Response | 12 (100.0%) |
| | Total missing | 5 |

**PT 4.5**

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| Laser photocoagulation | Is the treatment available? | Available within country | |
| | | Available locally | 2 (16.7%) |
| | | Available in practice | 10 (83.3%) |
| | | Total valid response | 12 (100.0%) |
| | | Total missing | 5 |
| | What is the average amount of time your patients wait for a consultation appointment? (weeks) | Total valid numeric response (n) | 9 (90.0%) |
| | | Mean | 3.2 |
| | | SD | 3.5 |
| | | Median | 2.0 |
| | | Min | 0 |
| | | Max | 10 |
| | | Don't know/not sure | 1 (10.0%) |
| | | Total valid response | 10 (100.0%) |
| | | Total missing | 7 |
| | What is the average amount of time your patients wait for a first treatment?(weeks) | Total valid numeric response (n) | 8 (88.9%) |
| | | Mean | 2.4 |
| | | SD | 2.6 |
| | | Median | 1.5 |
| | | Min | 0 |
| | | Max | 8 |
| | | Don't know/not sure | |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | | Not applicable | 1 (11.1%) |
| | | Total valid response | 9 (100.0%) |
| | | Total missing | 8 |
| | What is the average amount of time your patients wait for a second treatment?(weeks) | Total valid numeric response (n) | 9 (81.8%) |
| | | Mean | 3.8 |
| | | SD | 3.5 |
| | | Median | 2.0 |
| | | Min | 1 |
| | | Max | 12 |
| | | Don't know/not sure | 1 (9.1%) |
| | | Not applicable | 1 (9.1%) |
| | | Total valid response | 11 (100.0%) |
| | | Total missing | 6 |
| Anti-VEGF therapies | Is the treatment available? | Available within country | |
| | | Available locally | 1 (8.3%) |
| | | Available in practice | 11 (91.7%) |
| | | Total valid response | 12 (100.0%) |
| | | Total missing | 5 |
| | What is the average amount of time your patients wait for a consultation appointment? (weeks) | Total valid numeric response (n) | 9 (90.0%) |
| | | Mean | 1.9 |
| | | SD | 1.7 |
| | | Median | 1.0 |
| | | Min | 0 |
| | | Max | 4 |
| | | Don't know/not sure | 1 (10.0%) |
| | | Total valid | 10 (100.0%) |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | | response | |
| | | Total missing | 7 |
| | What is the average amount of time your patients wait for a first treatment?(weeks) | Total valid numeric response (n) | 9 (90.0%) |
| | | Mean | 1.2 |
| | | SD | 0.8 |
| | | Median | 1.0 |
| | | Min | 0 |
| | | Max | 2 |
| | | Don't know/not sure | |
| | | Not applicable | 1 (10.0%) |
| | | Total valid response | 10 (100.0%) |
| | | Total missing | 7 |
| | What is the average amount of time your patients wait for a second treatment?(weeks) | Total valid numeric response (n) | 9 (81.8%) |
| | | Mean | 3.1 |
| | | SD | 1.4 |
| | | Median | 4.0 |
| | | Min | 1 |
| | | Max | 4 |
| | | Don't know/not sure | 1 (9.1%) |
| | | Not applicable | 1 (9.1%) |
| | | Total valid response | 11 (100.0%) |
| | | Total missing | 6 |
| Intravitreal steroid | Is the treatment available? | Available within country | |
| | | Available locally | 1 (9.1%) |
| | | Available in practice | 10 (90.9%) |
| | | Total valid response | 11 (100.0%) |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | | Total missing | 6 |
| | What is the average amount of time your patients wait for a consultation appointment? (weeks) | Total valid numeric response (n) | 9 (100.0%) |
| | | Mean | 2.1 |
| | | SD | 2.1 |
| | | Median | 1.0 |
| | | Min | 0 |
| | | Max | 6 |
| | | Don't know/not sure | |
| | | Total valid response | 9 (100.0%) |
| | | Total missing | 8 |
| | What is the average amount of time your patients wait for a first treatment?(weeks) | Total valid numeric response (n) | 9 (100.0%) |
| | | Mean | 1.7 |
| | | SD | 1.5 |
| | | Median | 1.0 |
| | | Min | 0 |
| | | Max | 4 |
| | | Don't know/not sure | |
| | | Total valid response | 9 (100.0%) |
| | | Total missing | 8 |
| | What is the average amount of time your patients wait for a second treatment?(weeks) | Total valid numeric response (n) | 8 (80.0%) |
| | | Mean | 6.8 |
| | | SD | 5.8 |
| | | Median | 5.0 |
| | | Min | 1 |
| | | Max | 16 |
| | | Don't know/not sure | |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | | Not applicable | 2 (20.0%) |
| | | Total valid response | 10 (100.0%) |
| | | Total missing | 7 |
| Uncomplicated vitrectomy | Is the treatment available? | Available within country | 1 (8.3%) |
| | | Available locally | 3 (25.0%) |
| | | Available in practice | 8 (66.7%) |
| | | Total valid response | 12 (100.0%) |
| | | Total missing | 5 |
| | What is the average amount of time your patients wait for a consultation appointment? (weeks) | Total valid numeric response (n) | 8 (88.9%) |
| | | Mean | 3.8 |
| | | SD | 2.1 |
| | | Median | 4.0 |
| | | Min | 1 |
| | | Max | 8 |
| | | Don't know/not sure | 1 (11.1%) |
| | | Total valid response | 9 (100.0%) |
| | | Total missing | 8 |
| | What is the average amount of time your patients wait for a first treatment?(weeks) | Total valid numeric response (n) | 10 (90.9%) |
| | | Mean | 3.7 |
| | | SD | 1.9 |
| | | Median | 4.0 |
| | | Min | 1 |
| | | Max | 8 |
| | | Don't know/not sure | |
| | | Not applicable | 1 (9.1%) |
| | | Total valid | 11 (100.0%) |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | | response | |
| | | Total missing | 6 |
| | What is the average amount of time your patients wait for a second treatment?(weeks) | Total valid numeric response (n) | 6 (54.5%) |
| | | Mean | 6.3 |
| | | SD | 6.2 |
| | | Median | 4.0 |
| | | Min | 1 |
| | | Max | 16 |
| | | Don't know/not sure | 2 (18.2%) |
| | | Not applicable | 3 (27.3%) |
| | | Total valid response | 11 (100.0%) |
| | | Total missing | 6 |
| Complex vitreo-retinal surgery | Is the treatment available? | Available within country | |
| | | Available locally | 4 (33.3%) |
| | | Available in practice | 8 (66.7%) |
| | | Total valid response | 12 (100.0%) |
| | | Total missing | 5 |
| | What is the average amount of time your patients wait for a consultation appointment? (weeks) | Total valid numeric response (n) | 8 (88.9%) |
| | | Mean | 3.5 |
| | | SD | 2.1 |
| | | Median | 3.5 |
| | | Min | 1 |
| | | Max | 8 |
| | | Don't know/not sure | 1 (11.1%) |
| | | Total valid response | 9 (100.0%) |
| | | Total missing | 8 |

| Type of Treatment | Question | Response/time | Ophthalmologist |
|---|---|---|---|
| | What is the average amount of time your patients wait for a first treatment?(weeks) | Total valid numeric response (n) | 10 (90.9%) |
| | | Mean | 3.0 |
| | | SD | 2.2 |
| | | Median | 2.5 |
| | | Min | 1 |
| | | Max | 8 |
| | | Don't know/not sure | |
| | | Not applicable | 1 (9.1%) |
| | | Total valid response | 11 (100.0%) |
| | | Total missing | 6 |
| | What is the average amount of time your patients wait for a second treatment?(weeks) | Total valid numeric response (n) | 6 (54.5%) |
| | | Mean | 4.0 |
| | | SD | 4.1 |
| | | Median | 3.0 |
| | | Min | 1 |
| | | Max | 12 |
| | | Don't know/not sure | 2 (18.2%) |
| | | Not applicable | 3 (27.3%) |
| | | Total valid response | 11 (100.0%) |
| | | Total missing | 6 |

**PT 4.6**

| Question | Response | Ophthalmologist |
|---|---|---|
| Do you personally administer treatment for diabetic retinopathy? | Yes | 10 (90.9%) |
| | No | 1 (9.1%) |
| | Total valid response | 11 (100.0%) |
| | Total missing | 6 |

| Question | Response | Ophthalmologist |
|---|---|---|
| Who administer it? | Refer to a provider at another facility | 1 (100.0%) |
| | Total valid response | 1 (100.0%) |
| | Total missing | 16 |

**PT 4.7**

| Question | Response | Ophthalmologist |
|---|---|---|
| Do any of the following influence how you treat diabetic retinopathy or diabetic macular edema? | Diabetes duration | 3 (30.0%) |
| | Patient's age | 3 (30.0%) |
| | Presence of comorbidities such as hypertension, etc. | 5 (50.0%) |
| | High glucose levels | 6 (60.0%) |
| | Ability or inability to pay | 3 (30.0%) |
| | Insurance restrictions | 5 (50.0%) |
| | Patient educational level | 1 (10.0%) |
| | Patient adherence to recommendations | 3 (30.0%) |
| | None of the above | 2 (20.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 7 |

**PT 4.8**

| Question | Response | Ophthalmologist |
|---|---|---|
| Do you treat diabetic retinopathy and diabetic macular edema based on: | Visual outcome | 1 (9.1%) |
| | Both | 10 (90.9%) |
| | Other | 0 (0.0%) |
| | Total Valid Response | 11 (100.0%) |
| | Total missing | 6 |

**PT 4.9**

| Question | Response | Ophthalmologist |
|---|---|---|
| How are your patients with diabetes screened for | Fundoscopy undilated | |

| Question | Response | Ophthalmologist |
|---|---|---|
| diabetic eye disease? | | |
| | Fundoscopy dilated | 8 (72.7%) |
| | Retinal photo | 5 (45.5%) |
| | Optical Coherence Tomography | 9 (81.8%) |
| | Fluorescein Angiography | 7 (63.6%) |
| | Other | |
| | Total valid response | 11 (100.0%) |
| | Total missing | 6 |

**PT 4.10**

| Question | Response | Ophthalmologist |
|---|---|---|
| In your opinion, do the majority of your patients present: | In time for screening | 5 (45.5%) |
| | When visual problems have already occurred | 6 (54.5%) |
| | Total Valid Response | 11 (100.0%) |
| | Total missing | 6 |

**PT 4.11**

| Question | Response | Ophthalmologist |
|---|---|---|
| Have you received training specifically on treatment and diagnosis of diabetic retinopathy and/or clinically significant diabetic macular edema? | Yes | 10 (90.9%) |
| | No | 1 (9.1%) |
| | Total valid response | 11 (100.0%) |
| | Total missing | 6 |
| If yes, When was your last training? | Five or more years ago | 3 (33.3%) |
| | Greater than 1 year ago but less than 5 years | |
| | Within the past year | 6 (66.7%) |
| | Total valid response | 9 (100.0%) |
| | Total missing | 8 |

**PT 4.12**

| Question | Response | Ophthalmologist |
|---|---|---|
| Would you be interested in online education and certification on DME, Angiogenesis and Anti-VEGF therapies? | Yes | 6 (54.5%) |
| | No | 5 (45.5%) |
| | Total Valid Response | 11 (100.0%) |
| | Total missing | 6 |

**PT 4.13**

| Question | Response | Ophthalmologist |
|---|---|---|
| How is outreach for screening for diabetic eye disease done in your main practice? | Health fairs for all | 0 (0.0%) |
| | Health fairs for people with diabetes | 0 (0.0%) |
| | Mobile screening centers | 3 (30.0%) |
| | At vision centers | 3 (30.0%) |
| | Other | 1 (10.0%) |
| | Not done | 2 (20.0%) |
| | Don't know/Not sure | 2 (20.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 7 |

**PT 4.14**

| Question | Response | Ophthalmologist |
|---|---|---|
| What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease? | Reimbursement/restrictions on approved therapy | 2 (20.0%) |
| | Late diagnosis | 7 (70.0%) |
| | Referral pathways | 6 (60.0%) |
| | Limited access to patient education on diabetic retinopathy and diabetic macular edema | 3 (30.0%) |
| | No universal guidelines on referral/screening | 0 (0.0%) |
| | No universal guideline on when to treat | 0 (0.0%) |
| | Government/insurance not able to cover | 3 (30.0%) |

| Question | Response | Ophthalmologist |
|---|---|---|
| | patient costs | |
| | Multi-disciplinary team integration is poor | 3 (30.0%) |
| | Ineffective screening services | 3 (30.0%) |
| | Other | 0 (0.0%) |
| | Total valid response | 10 (100.0%) |
| | Total missing | 7 |

**EXP 1**

| Question | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Which of the following complications of diabetes do you have? | Kidney disease | 1 (2.6%) | 3 (33.3%) | 1 (50.0%) |
| | Vision loss | 2 (5.3%) | 3 (33.3%) | 1 (50.0%) |
| | Amputation | 0 (0.0%) | 2 (22.2%) | 1 (50.0%) |
| | Cardiovascular disease/Stroke | 2 (5.3%) | 3 (33.3%) | 0 (0.0%) |
| | Broken bones or fractures | 0 (0.0%) | 1 (11.1%) | 0 (0.0%) |
| | Loss of feeling in hands or toes (neuropathy) | 6 (15.8%) | 2 (22.2%) | 0 (0.0%) |
| | Foot ulcers | 0 (0.0%) | 2 (22.2%) | 0 (0.0%) |
| | Irritable bowel disease | 3 (7.9%) | 0 (0.0%) | 0 (0.0%) |
| | Other | 3 (7.9%) | 2 (22.2%) | 0 (0.0%) |
| | None | 23 (60.5%) | 0 (0.0%) | 0 (0.0%) |
| | Don't know/Not sure | 3 (7.9%) | 1 (11.1%) | 0 (0.0%) |
| | Total Valid Response | 38 (100.0%) | 9 (100.0%) | 2 (100.0%) |
| | Total missing | 8 | 1 | 0 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*
*NB [4]: Percentages within groups are calculated from non-missing data for that question.*

**EXP 2**

| Limitations | Without DED n (%) | With DED n (%) | With DME n (%) |
|---|---|---|---|
| Limited in any way in any activities because of impairment or health problem | 12 (34.3%) | 5 (55.6%) | 1 (50.0%) |

| Limitations | Without DED n (%) | With DED n (%) | With DME n (%) |
|---|---|---|---|
| Impairment or health problem | | | |
| Diabetes | 10 (100.0%) | 4 (100.0%) | 1 (100.0%) |
| Mental or emotional health | 6 (75.0%) | 0 (0.0%) | 1 (100.0%) |
| Hypertension/high blood pressure | 4 (57.1%) | 1 (50.0%) | 1 (100.0%) |
| Arthritis/rheumatism | 5 (50.0%) | 0 (0.0%) | 0 (0.0%) |
| Back or neck problem | 4 (50.0%) | 0 (0.0%) | 0 (0.0%) |
| Lung/breathing problem | 5 (50.0%) | 0 (0.0%) | 0 (0.0%) |
| Walking problem | 3 (37.5%) | 1 (50.0%) | 1 (100.0%) |
| Eye/vision problem | 3 (37.5%) | 0 (0.0%) | 1 (100.0%) |
| Fractures, bone/joint injury | 2 (25.0%) | 0 (0.0%) | 1 (100.0%) |
| Hearing problem | 2 (25.0%) | 0 (0.0%) | 0 (0.0%) |
| Heart problem | 1 (16.7%) | 1 (50.0%) | 0 (0.0%) |
| Stroke problem | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*
*NB [4]: Percentages within groups are calculated from non-missing data for that question.*

**EXP 3**

| Health Status | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|
| Self-rated health: Good | 21 (60.0%) | 7 (77.8%) | 1 (50.0%) |
| Self-rated health: Poor | 14 (40.0%) | 2 (22.2%) | 1 (50.0%) |
| Physically unhealthy days | 15 (60.0%) | 4 (44.4%) | 0 (0.0%) |
| Mentally unhealthy days | 12 (50.0%) | 6 (66.7%) | 0 (0.0%) |
| Unhealthy days | 18 (72.0%) | 8 (88.9%) | 0 (0.0%) |
| Activity limitation days | 12 (52.2%) | 5 (71.4%) | 0 (0.0%) |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*

**EXP 4**

| Item | Response | All respondents | Respondents with Type I diabetes | Respondents with Type II diabetes |
|---|---|---|---|---|
| How do you manage your diabetes? | Diet | 41 (73.2%) | 16 (66.7%) | 24 (77.4%) |
| | Oral medicine | 23 (41.1%) | 1 (4.2%) | 22 (71.0%) |

| Item | Response | All respondents | Respondents with Type I diabetes | Respondents with Type II diabetes |
|---|---|---|---|---|
| | Exercise | 33 (58.9%) | 15 (62.5%) | 17 (54.8%) |
| | Insulin | 35 (62.5%) | 24 (100.0%) | 10 (32.3%) |
| | Natural/Herbal medicine | 4 (7.1%) | 3 (12.5%) | 1 (3.2%) |
| | None of the above | 1 (1.8%) | | 1 (3.2%) |

*NB [1]: Percentages within groups are calculated from non-missing data for that question.*

**EXP 5.1**

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Are you currently working? | Working for pay | 25 (69.4%) | 5 (55.6%) | 1 (50.0%) |
| | Working without pay at home (e.g. housework, farming) | 1 (2.8%) | 1 (11.1%) | 0 (0.0%) |
| | Volunteering | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) |
| | Retired | 6 (16.7%) | 2 (22.2%) | 0 (0.0%) |
| | Not working | 4 (11.1%) | 1 (11.1%) | 0 (0.0%) |
| | Total Valid Response | 36 (100.0%) | 9 (100.0%) | 2 (100.0%) |
| | Total missing | 10 | 1 | 0 |
| Do you receive assistance from the government? | Income assistance | 2 (5.7%) | 1 (12.5%) | 0 (0.0%) |
| | Medical assistance | 8 (22.9%) | 4 (50.0%) | 1 (50.0%) |
| | Food assistance | 1 (2.9%) | 0 (0.0%) | 1 (50.0%) |
| | Pension assistance | 5 (14.3%) | 2 (25.0%) | 0 (0.0%) |
| | None of the above | 24 (68.6%) | 4 (50.0%) | 1 (50.0%) |
| | Total valid response | 35 (100.0%) | 8 (100.0%) | 2 (100.0%) |
| | Total missing | 11 | 2 | 0 |
| Did you have trouble paying for food at anytime during the past year? | Yes | 7 (19.4%) | 3 (33.3%) | 0 (0.0%) |
| | No | 29 (80.6%) | 6 (66.7%) | 1 (100.0%) |
| | Total Valid Response | 36 (100.0%) | 9 (100.0%) | 1 (100.0%) |

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| | Total missing | 10 | 1 | 1 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*
*NB [4]: Percentages within groups are calculated from non-missing data for that question.*

**EXP 5.2: Age group 18-39 years**

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Are you currently working? | Working for pay | 9 (90.0%) | 3 (100.0%) | 0 (0.0%) |
| | Not working | 1 (10.0%) | 0 (0.0%) | 0 (0.0%) |
| | Total Valid Response | 10 (100.0%) | 3 (100.0%) | 0 (0.0%) |
| | Total missing | 3 | 1 | 0 |
| Do you receive assistance from the government? | Medical assistance | 4 (44.4%) | 0 (0.0%) | 0 (0.0%) |
| | Pension assistance | 1 (11.1%) | 0 (0.0%) | 0 (0.0%) |
| | None of the above | 5 (55.6%) | 2 (100.0%) | 0 (0.0%) |
| | Total valid response | 9 (100.0%) | 2 (100.0%) | 0 |
| | Total missing | 4 | 2 | 0 |
| Did you have trouble paying for food at anytime during the past year? | Yes | 1 (10.0%) | 1 (33.3%) | 0 (0.0%) |
| | No | 9 (90.0%) | 2 (66.7%) | 0 (0.0%) |
| | Total Valid Response | 10 (100.0%) | 3 (100.0%) | 0 (0.0%) |
| | Total missing | 3 | 1 | 0 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*

**EXP 5.3: Age group 40-59 years**

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Are you currently working? | Working for pay | 12 (66.7%) | 2 (50.0%) | 1 (50.0%) |
| | Working without pay at home (e.g. housework, | 1 (5.6%) | 1 (25.0%) | 0 (0.0%) |

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| | farming) | | | |
| | Volunteering | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) |
| | Retired | 2 (11.1%) | 0 (0.0%) | 0 (0.0%) |
| | Not working | 3 (16.7%) | 1 (25.0%) | 0 (0.0%) |
| | Total Valid Response | 18 (100.0%) | 4 (100.0%) | 2 (100.0%) |
| | Total missing | 5 | 0 | 0 |
| Do you receive assistance from the government? | Income assistance | 1 (5.6%) | 1 (25.0%) | 0 (0.0%) |
| | Medical assistance | 3 (16.7%) | 2 (50.0%) | 1 (50.0%) |
| | Food assistance | 1 (5.6%) | 0 (0.0%) | 1 (50.0%) |
| | Pension assistance | 2 (11.1%) | 0 (0.0%) | 0 (0.0%) |
| | None of the above | 13 (72.2%) | 2 (50.0%) | 1 (50.0%) |
| | Total valid response | 18 (100.0%) | 4 (100.0%) | 2 (100.0%) |
| | Total missing | 5 | 0 | 0 |
| Did you have trouble paying for food at anytime during the past year? | Yes | 6 (33.3%) | 2 (50.0%) | 0 (0.0%) |
| | No | 12 (66.7%) | 2 (50.0%) | 1 (100.0%) |
| | Total Valid Response | 18 (100.0%) | 4 (100.0%) | 1 (100.0%) |
| | Total missing | 5 | 0 | 1 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*

**EXP 5.4: Age group 60-79 years**

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Are you currently working? | Working for pay | 4 (50.0%) | 0 (0.0%) | 0 (0.0%) |
| | Retired | 4 (50.0%) | 2 (100.0%) | 0 (0.0%) |
| | Total Valid Response | 8 (100.0%) | 2 (100.0%) | 0 (0.0%) |
| | Total missing | 1 | 0 | 0 |
| Do you receive assistance from the | Income | 1 (12.5%) | 0 (0.0%) | 0 (0.0%) |

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| government? | assistance | | | |
| | Medical assistance | 1 (12.5%) | 2 (100.0%) | 0 (0.0%) |
| | Pension assistance | 2 (25.0%) | 2 (100.0%) | 0 (0.0%) |
| | None of the above | 6 (75.0%) | 0 (0.0%) | 0 (0.0%) |
| | Total valid response | 8 (100.0%) | 2 (100.0%) | 0 |
| | Total missing | 1 | 0 | 0 |
| Did you have trouble paying for food at anytime during the past year? | No | 8 (100.0%) | 2 (100.0%) | 0 (0.0%) |
| | Total Valid Response | 8 (100.0%) | 2 (100.0%) | 0 (0.0%) |
| | Total missing | 1 | 0 | 0 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*

**EXP 5.5: Age group 80+ years**

| Item | Response | Without DED (%) | With DED (%) | With DME (%) |
|---|---|---|---|---|
| Are you currently working? | Total Valid Response | 0 | 0 (0.0%) | 0 (0.0%) |
| | Total missing | 1 | 0 | 0 |
| Do you receive assistance from the government? | Total valid response | 0 | 0 | 0 |
| | Total missing | 1 | 0 | 0 |
| Did you have trouble paying for food at anytime during the past year? | Total Valid Response | 0 | 0 (0.0%) | 0 (0.0%) |
| | Total missing | 1 | 0 | 0 |

*NB [1]: Without DED = respondents who did not select "Yes" for both DED and DME.*
*NB [2]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [3]: DME = respondents with DME ="Yes".*

**EXP 6**

| Group | Subgroup | All respondents | Type 1 diabetes | Type 2 diabetes | With DED (%) | With DME (%) |
|---|---|---|---|---|---|---|
| All respondents | | 58 (100%) | 25 (43.1%) | 32 (55.2%) | 10 (17.2%) | 2 (3.4%) |

| Group | Subgroup | All respondents | Type 1 diabetes | Type 2 diabetes | With DED (%) | With DME (%) |
|---|---|---|---|---|---|---|
| Gender | Male | 18 (39.1%) | 6 (33.3%) | 12 (66.7%) | 4 (22.2%) | 1 (5.6%) |
| | Female | 28 (60.9%) | 13 (46.4%) | 14 (50.0%) | 5 (17.9%) | 1 (3.6%) |
| | Total Missing | 12 | 6 | 6 | 1 | 0 |
| Age | 18-39 yrs | 17 (29.3%) | 16 (94.1%) | 1 (5.9%) | 4 (23.5%) | 0 (0.0%) |
| | 40-59 yrs | 29 (50.0%) | 9 (31.0%) | 19 (65.5%) | 4 (13.8%) | 2 (6.9%) |
| | 60-79 yrs | 11 (19.0%) | 0 (0.0%) | 11 (100.0%) | 2 (18.2%) | 0 (0.0%) |
| | 80 yrs and over | 1 (1.7%) | 0 (0.0%) | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| Time since diagnosis | Within the last year | 2 (3.4%) | 0 (0.0%) | 2 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| | 1 - 5 years ago | 13 (22.4%) | 0 (0.0%) | 12 (92.3%) | 0 (0.0%) | 0 (0.0%) |
| | 6 - 10 years ago | 11 (19.0%) | 3 (27.3%) | 8 (72.7%) | 0 (0.0%) | 0 (0.0%) |
| | 11 - 15 years ago | 5 (8.6%) | 1 (20.0%) | 4 (80.0%) | 1 (20.0%) | 0 (0.0%) |
| | 16 - 20 years ago | 8 (13.8%) | 5 (62.5%) | 3 (37.5%) | 2 (25.0%) | 0 (0.0%) |
| | 21 years ago or longer | 18 (31.0%) | 16 (88.9%) | 2 (11.1%) | 7 (38.9%) | 2 (11.1%) |
| | Don't know/Not sure | 1 (1.7%) | 0 (0.0%) | 1 (100.0%) | 0 (0.0%) | 0 (0.0%) |
| Control of Diabetes | Controlled | 37 (72.5%) | 20 (54.1%) | 17 (45.9%) | 9 (24.3%) | 2 (5.4%) |
| | Not controlled | 14 (27.5%) | 2 (14.3%) | 11 (78.6%) | 1 (7.1%) | 0 (0.0%) |
| | Total Missing | 7 | 3 | 4 | 0 | 0 |

*NB [1]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [2]: DME = respondents with DME ="Yes".*
*NB [3]: Percentages within groups are calculated from non-missing data for that question.*

**EXP 7**

| Question | Response | With DED n (%) | With DME n (%) |
|---|---|---|---|
| Have you had any treatment for diabetic eye disease? | Yes | 4 (44.4%) | 2 (100.0%) |
| | No | 5 (55.6%) | 0 (0.0%) |
| | Total valid response | 9 (100.0%) | 2 (100.0%) |

| Question | Response | With DED n (%) | With DME n (%) |
|---|---|---|---|
| | Total missing | 1 | 0 |
| What treatment did you receive? | Laser | 4 (100.0%) | 1 (50.0%) |
| | Anti-VEGF | 1 (25.0%) | 0 (0.0%) |
| | Surgery | 1 (25.0%) | 1 (50.0%) |
| | Other | 0 (0.0%) | 1 (50.0%) |
| | Total valid response | 4 (100.0%) | 2 (100.0%) |
| | Total missing | 6 | 0 |
| Did you complete the treatment? | Yes | 2 (50.0%) | 2 (100.0%) |
| | Still receiving treatment | 2 (50.0%) | 0 (0.0%) |
| | Total valid response | 4 (100.0%) | 2 (100.0%) |
| | Total missing | 6 | 0 |
| Do you feel that the treatment worked? | Yes, and vision improved | 2 (50.0%) | 2 (100.0%) |
| | Yes, but vision stayed the same | 1 (25.0%) | 0 (0.0%) |
| | Still waiting to know | 1 (25.0%) | 0 (0.0%) |
| | Total valid response | 4 (100.0%) | 2 (100.0%) |
| | Total missing | 6 | 0 |
| What is/are the reason(s) that you did not complete the treatment? | Total valid response | 0 (0.0%) | 0 (0.0%) |
| | Total missing | 10 | 2 |
| What are the reason(s) that you have not had treatment for diabetic eye disease? | My doctor did not recommend any treatment | 4 (100.0%) | 0 (0.0%) |
| | Total valid response | 4 (100.0%) | 0 (0.0%) |
| | Total missing | 6 | 2 |

*NB [1]: DED = respondents with DED ="Yes" minus respondents with DME ="Yes".*
*NB [2]: DME = respondents with DME ="Yes".*
*NB [3]: Percentages within groups are calculated from non-missing data for that question.*

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