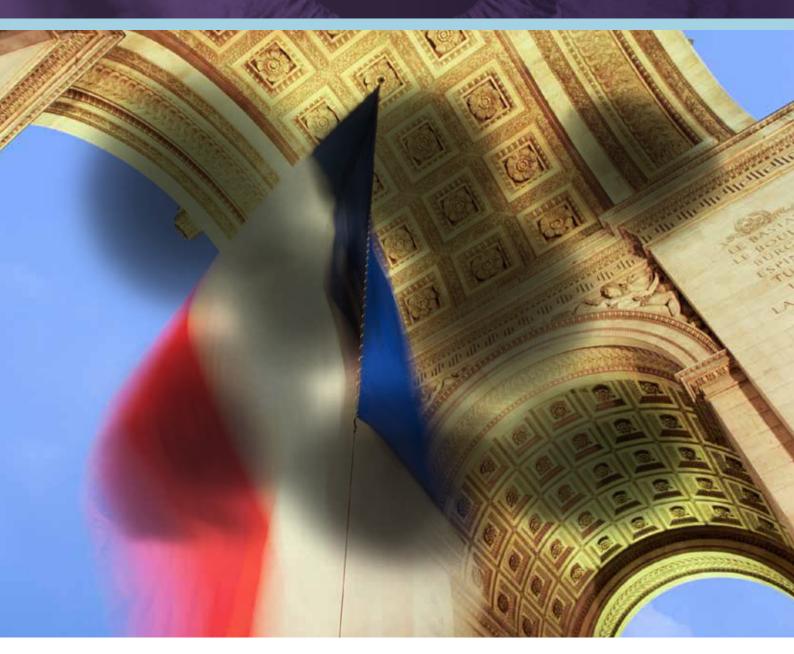


The Diabetic Retinopathy Barometer Report

France











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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 France.

All people with type 1 and type 2 diabetes are at risk of developing DR, which can lead to 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 the need for prevention, screening and management to prevent vision loss. The study also sought to better understand the nature of health services and supports available, 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, 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 had 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 adults 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 adults with diabetes and health care professionals around the world. This study provides a rich resource for generating unique insights into 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% have been 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 types of professionals.



Introduction France Study

Demographic Characteristics

France is the second most populous country in the European Union¹. In 2016, there were almost 67 million inhabitants².

Low fertility rates will continue to be a feature in the next two decades leading to a population decline. The ageing of the currently large middle-aged cohorts will lead to dramatic shifts in the age structure. In 2050, it is projected that 32% of the population will be at least 60 years old while only 22% of the population will be under the age of 20³.

The ageing process will be particularly reflected by an increase in the number of those aged 75 years and over. In 2015, the number of people aged 75 years and over was ~ 5.8 million, which was a share of 9% of the country's population. That number will increase continuously and reach an all-time high in 2050 to more than 10 million. Hence, about 16% of the population, or about every sixth person, can be expected to be 75 years or over in thirty years' time⁴.

Diabetes Profile⁵

There are 415 million people with diabetes in the world and more than 59.8 million people in the European region. By 2040, this number is expected to rise to 71.1 million.

Fifty-six countries comprise the European region with diverse populations ranging from Norway, the Russian Federation, Turkey, and Iceland. While the European region has the second-lowest age-adjusted comparative diabetes prevalence rate of any International Diabetes Federation (IDF) region (after Africa), there are still many countries with relatively high diabetes prevalence rates.

France has the sixth highest number of people living with diabetes in the European region at ~3.3 million (2,712.2-4,072.7‡), which accounts to ~6% of people living with diabetes in the region. It is important to note that France is the sixth country in the world for diabetes-related health expenditures at \$19 billion dollars USD. France will remain in the top ten countries for diabetes-related health expenditures in 2040 at an estimated \$22 billion dollars USD.

Diabetes national prevalence in France (20-79 years) is 7.4% (6.1-9.1‡) and diabetes age-adjusted comparative prevalence is 5.3% (4.4-6.6‡).

Deaths attributed to diabetes in France were 26,371, which accounted to ~4% of the diabetes-related deaths experienced in the region. The estimated number of undiagnosed cases was ~1.2 million (1,405.5-2,110.5‡).

Study Populations: France

As reported by 88 adults with diabetes in France, 16% of respondents have been diagnosed with DED and a further 15% with DMF

Forty-seven health care professionals completed the survey in France. Of these, eight were diabetes specialist providers (17%), 27 were ophthalmologists (57%), and two were primary care providers (4.3%). The remaining respondents were optometrists, nurses, health educators or other types of professionals.

The DR Barometer Study: France Overview

The DR Barometer study was conducted in 41 countries. In France, 88 adults with diabetes and 47 health care professionals provided new information about the experiences of living with, managing and treating diabetes, DR and DME.

85%

of patients said that **long wait times for an appointment** were
a barrier to eye exams



36%

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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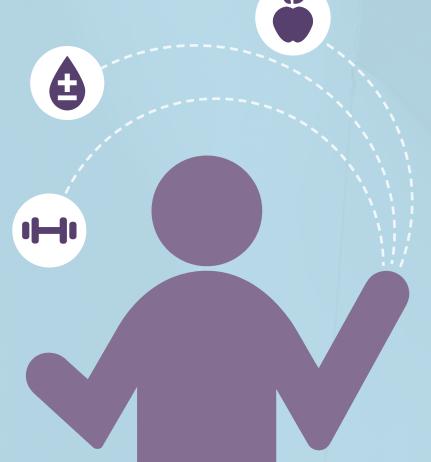








of respondents said their vision impairment due to DR or DME made it difficult to manage their diabetes







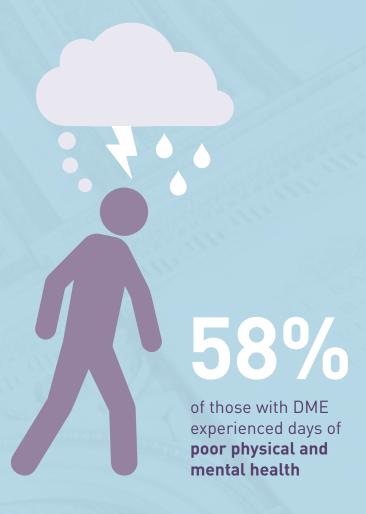
85%

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



20%

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



5%

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



France DR Barometer Findings:

Adults with Diabetes

Key Demographic Characteristics

Eighty-eight adults with diabetes completed the patients' survey in France: 48% were female and 52% were male (see Table 1). Eighty percent lived in an urban setting and 21% resided in a non-urban setting (see Appendix Table 4.2).

The education levels of all respondents was as follows: 2.4% did not complete primary school, 6% were educated to a primary school level, 30% to a secondary school level, 35% with a college or university level, and 27% with a graduate or post-graduate level (see Appendix Table 4.3).

Thirty-eight percent of all respondents were working for pay, 49% were retired, and 8.3% stated they were not working (see Appendix Table 4.4).

Most respondents (84%) were aged between 40 and 79 years (35% were 40-59 years and 49% were 60-79 years). Fortyseven percent were of traditional working age (18-59 years).

Of the respondents in France, 26% had been diagnosed with type 1 diabetes and 69% with type 2 diabetes. A further 4.5% of respondents were either unsure of or did not know their type of diabetes (see Appendix Table 2.1).

Eight percent of respondents were diagnosed with diabetes within the last year, 1 - 5 years ago (16%), 6 - 10 years ago (12%), 11 - 15 years ago (26%), 16 - 20 years ago (16%), and were diagnosed 21 years ago or more (20%) (see Appendix Table 2.2).

A younger population was more likely to be associated with type 1 diabetes, which was the opposite of those with type 2 diabetes, which tended to be an older population. Amongst 18 to 39-year-olds, all respondents had type 1 diabetes. In the 40-59 year age group, 36% had type 1 and 65% had type 2 diabetes, 4.7% of 60-79-year-olds had type 1 diabetes and 91% had type 2.

Sixteen percent (n=14) of respondents reported they have been diagnosed with DED and a further 15% (n=13) with DME.

In the 18-39 year age group, 20% had DED and no respondent reported having DME. For the 40-59 year age group, 26% had DED and 6.5% had DME. In the 60-79 year age group, 9.3% had DED and 21% had DME.

A particularly important trend noted in the findings was that the longer the time since diabetes was diagnosed, the greater the likelihood for DED and DME to be detected.

For those diagnosed with diabetes within the last five years 14% of respondents were diagnosed with DED and no respondent was diagnosed with DME. In those diagnosed with diabetes 21 years ago or more than a third of respondents had DED (35%) and 42% had DME.

While most (69%) respondents reported that their diabetes was well controlled, 28% felt that their diabetes was not well controlled. For those whose diabetes was controlled, 20% had DED and 6.8% had DME. In those, whose diabetes was not controlled 8.3% had DED and 33% had DME.



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		88 (100%)	23 (26.1%)	61 (69.3%)	14 (15.9%)	13 (14.8%)
Gender	Male	44 (52.4%)	10 (22.7%)	32 (72.7%)	9 (20.5%)	5 (11.4%)
	Female	40 (47.6%)	11 (27.5%)	27 (67.5%)	5 (12.5%)	8 (20.0%)
	Total Missing	4	2	2	0	0
Age	18-39 yrs.	10 (11.4%)	10 (100.0%)	0 (0.0%)	2 (20.0%)	0 (0.0%)
	40-59 yrs.	31 (35.2%)	11 (35.5%)	20 (64.5%)	8 (25.8%)	2 (6.5%)
	60-79 yrs.	43 (48.9%)	2 (4.7%)	39 (90.7%)	4 (9.3%)	9 (20.9%)
	80 yrs. plus	4 (4.5%)	0 (0.0%)	2 (50.0%)	0 (0.0%)	2 (50.0%)
Time since diagnosis	Within the last year	7 (8.1%)	1 (14.3%)	6 (85.7%)	1 (14.3%)	0 (0.0%)
	1 - 5 yrs.	14 (16.3%)	3 (21.4%)	11 (78.6%)	0 (0.0%)	0 (0.0%)
	6 - 10 yrs.	10 (11.6%)	2 (20.0%)	6 (60.0%)	1 (10.0%)	3 (30.0%)
	11 - 15 yrs.	22 (25.6%)	5 (22.7%)	16 (72.7%)	3 (13.6%)	3 (13.6%)
	16 - 20 yrs.	14 (16.3%)	5 (35.7%)	9 (64.3%)	3 (21.4%)	0 (0.0%)
	21 yrs. plus	17 (19.8%)	7 (41.2%)	10 (58.8%)	6 (35.3%)	7 (41.2%)
	Don't know/ Not sure	2 (2.3%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)
	Total Missing	2	0	2	0	0
Control of Diabetes	Controlled	59 (69.4%)	17 (28.8%)	40 (67.8%)	12 (20.3%)	4 (6.8%)
	Not controlled	24 (28.2%)	5 (20.8%)	18 (75.0%)	2 (8.3%)	8 (33.3%)
	Don't know/ Not sure	2 (2.4%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)
	Total Missing	3	1	2	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

All patients surveyed saw a health care professional for their diabetes, with 72% seeing a diabetes specialist (average number of visits was 2.4 times per year) and 25% seeing a general or family doctor (average number of visits was 3.5 times per year) (see Appendix Table 2.3.1 and 2.3.2).

Adults with diabetes were informed about their condition through a variety of channels. Ninety-nine percent received information from a doctor or nurse, 68% from a health educator, and 42% from a nutritionist or dietician. The internet, diabetes or other health organisations, traditional media and one's pharmacist was also seen as valuable sources of information (see Table 2 and Appendix Table 2.4).

Table 2: Source of information regarding diabetes

Information Source	All Respondents (n=84)
Doctor or nurse	83 (98.8%)
Health educator	57 (67.9%)
Nutritionist or dietician	35 (41.7%)
Internet	30 (35.7%)
Diabetes organisation or other health organisation	29 (34.5%)
TV/Radio/Newspaper/Magazines	26 (31.0%)
Pharmacist	24 (28.6%)
Family/Friends/Neighbours	13 (15.5%)
Social media (e.g. Facebook, Twitter, blogs)	6 (7.1%)

A range of strategies was used by respondents to manage their diabetes. For those with type 1 diabetes, apart from insulin, 82% managed their diabetes with diet, 68% with exercise, and 18% with oral medicine. Of the respondents with type 2 diabetes, 90% managed their condition with diet, 90% with oral medicine, 58% with exercise, and 29% with insulin.

Fifty-one percent of respondents were enrolled in a diabetes management programmes. Ninety-three percent of those said the programme included education on the importance of screening for diabetic eye complications (see Appendix Table 2.6).

The nature and frequency of tests that people with diabetes experienced included blood glucose checks and eye checks. Of the respondents that had eye checks (98%), these occurred at the following intervals: less than 6 months (31%), 6 - 12 months (46%), and greater than 12 months (19%) (see Appendix Table 2.7).

The main challenges in controlling diabetes cited by respondents were: it was too hard to eat the right things (46%), there were too many other things to do (33%), respondents did not know enough about their diabetes (21%), there were long wait times for an appointment for (15%), or difficulty travelling to, their doctor or specialist (9.4%) (see Appendix Table 2.9).

Free or low cost medicines or monitoring materials (85%), health education and information (76%), support from family or friends (56%), support groups (26%), and coordination of health care and services by a professional (20%) were identified as important to improving the management of a one's diabetes (see Appendix Table 2.10).



Nature and Information about Complications

Ninety-eight percent of respondents were aware of vision loss and other complications such as: kidney disease (88%), amputation (87%), cardiovascular disease or stroke (81%), and foot ulcers (66%) were also associated with diabetes (see Appendix Table 2.11).

Respondents were most concerned about: vision loss (39%) compared to other complications such as: cardiovascular disease or stroke (19%), kidney disease (17%), amputation (12%), and neuropathy (2.4%) (see Appendix Table 2.12).

Only ten percent of respondents reported that they have no complications of diabetes. However, of those who did report complications: 53% had vision loss, kidney disease (40%), cardiovascular disease or stroke (23%), foot ulcers (15%), and neuropathy (13%) (see Figure 1 and Appendix Table 2.13).

Aside from vision loss, there was a considerable increase in the frequency of people with DED and DME experiencing complications compared with people without DED. The frequency of kidney disease increased from 26% in those without DED to 58% in DED and 44% in DME. Likewise, the frequency of cardiovascular disease increased from 11% in people without DED to 33% in those with DED and 33% with DME (see Table 3 and Appendix EXP 1).

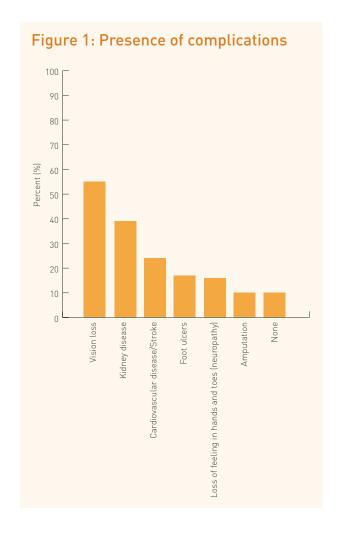


Table 3: Presence of complications without DED, with DED or DME

Complication	Without DED (n=19)	With DED (n=12)	With DME (n=9)
Any	15 (78.9%)	12 (100%)	9 (100%)
Vision loss	6 (31.6%)	8 (66.7%)	7 (77.8%)
Kidney disease	5 (26.3%)	7 (58.3%)	4 (44.4%)
Cardiovascular disease/Stroke	2 (10.5%)	4 (33.3%)	3 (33.3%)
Loss of feeling in hands or toes (neuropathy)	1 (5.3%)	3 (25.0%)	1 (11.1%)
Foot ulcers	2 (10.5%)	2 (16.7%)	2 (22.2%)
Amputation	2 (10.5%)	0 (0.0%)	2 (22.2%)
None	4 (21.1%)	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 EXP012 for the full list of responses.

Information about Diabetic Eye Disease and Diabetic Macular Edema

While eighty-six percent of respondents stated that eye complications were discussed with their health care professionals, 17% of respondents: either never discussed eye complications with their doctor (2.4%), did so only after the onset of symptoms (2.4%), or did not know (12%). The frequency of regular discussions varied from every visit (54%), multiple times a year (18%), and once a year (12%) (see Appendix Table 2.14).

Ninety-three percent of respondents said that they did what they could to prevent vision problems (e.g. get routine screenings, visit specialists), yet myths and perceptions around vision changes were evident with 6% believing that vision problems were a normal part of ageing (see Appendix Table 2.15).

Ninety percent of all respondents received information about DR and DME with the doctor or nurse being the most common source (85%). An important finding to note, one in ten of respondents did not receive such information from any of the listed sources, including their doctor or nurse (15%) (see Table 4 and Appendix Table 3.9).

Table 4: Source of information about DR and DME

Information Source	All Respondents (n=79)
Doctor/Nurse	67 (84.8%)
Health educator	38 (48.1%)
TV/Radio/Newspaper/Magazines	10 (12.7%)
Internet	9 (11.4%)
Diabetes organisation or other health organisation	8 (10.1%)
None of the above	8 (10.1%)

NB [1]: Not all respondents answered all questions in the survey; percentages are calculated from non-missing responses to the survey question $\frac{1}{2} \frac{1}{2} \frac{1}{$



Screening for Diabetic Eye Disease

Ninety-five percent of the respondents reported having an eye exam for DED, with 81% reporting to have had an eye exam within the last year and a further 16% more than one year ago but less than two years ago. Thirty-three percent of respondents were aware of government sponsored screening programmes for DED (see Appendix Table 3.1 and 3.2).

Ninety-three percent of those surveyed thought they should have their eyes examined for DED once a year, whereas six respondents said that testing should only happen every two years (see Appendix Table 3.4).

The biggest barriers to eye exams were: there were long wait times for an appointment (85%), the long wait times on the day of the visit (24%), and there were too many other things to do or worry about (11%) (see Table 5 and Appendix Table 3.5).

Table 5: Barriers to eye examinations

Identified Barriers	All Respondents (n=80)
Long wait time for appointment	68 (85.0%)
Long wait time on the day of the visit	19 (23.8%)
Too many other things to do or worry about	9 (11.3%)
Eye exams are not available near my home	4 (5.0%)
They are expensive	3 (3.8%)
Burden on my family/friends	2 (2.5%)
Limited access to diabetes specialists	2 (2.5%)
Other	4 (5.0%)

Treatment of Diabetic Eye Disease and Diabetic Macular Edema

Treatment was assessed separately in people with DED and in those with DME. For those with DED 64% (n=9) had received treatment, all respondents received laser treatment and 44% had surgery as well. Of those who received treatment, 78% (n=7) completed their treatment and one respondent was currently still receiving treatment. Sixty-three percent felt that treatment had been successful and either their vision had improved (50%) or for one respondent vision had stayed the same (13%). A little over a third of respondents were unsure if the treatment was successful (38%) (see Table 6).

For the four respondents (29%) with DED who had not received treatment, the reported reason for not receiving treatment was that their doctor did not recommend any treatment.

Eighty-eight percent (n=7) of respondents with DME had received treatment with all respondents having laser treatment and 57% (n=4) receiving anti-VEGF therapy. Eighty-six percent felt that treatment had been successful and either their vision had improved (43%) or had stayed the same (43%). For the one respondent with DME who had not received treatment, they reported that treatment would not be effective.

The majority (85%) of people with DME said they would prefer proactive treatment to prevent further vision loss rather than reactive treatment 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=14)	With DME (n=8)
Have you	Yes	9 (64.3%)	7 (87.5%)
had any treatment	No	4 (28.6%)	1 (12.5%)
for diabetic eye disease?	Don't know/ Not sure	1 (7.1%)	0 (0.0%)
What	Laser	9 (100.0%)	7 (100.0%)
treatment	Anti-VEGF	1 (11.1%)	4 (57.1%)
did you receive?	Surgery	4 (44.4%)	2 (28.6%)
	Other	1 (11.1%)	0 (0.0%)
Did you	Yes	7 (77.8%)	5 (71.4%)
complete the	No	1 (11.1%)	0 (0.0%)
treatment?	Still receiving treatment	1 (11.1%)	2 (28.6%)
Do you feel that the	Yes, and vision improved	4 (50.0%)	3 (42.9%)
treatment worked?	Yes, but vision stayed the same	1 (12.5%)	3 (42.9%)
	Still waiting to know	0 (0.0%)	1 (14.3%)
	Don't know/ Not sure	3 (37.5%)	0 (0.0%)
What are the reason(s) that you	My doctor did not recommend any treatment	4 (100.0%)	0 (0.0%)
have not had treatment for diabetic eye disease?	Treatment would not be effective	0 (0.0%)	1 (100.0%)

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

Fifty-nine percent of those diagnosed with DED or DME reported that their vision was affected (23% significantly, 36% slightly) (see Appendix Table 3.6).

Eighty-five percent of these respondents reported vision issues impacted their daily lives. Ways in which their lives were affected included: leisure activities or exercise (69%), driving a vehicle (54%), travelling (46%), social interactions with family or friends (46%), conducting household responsibilities, such as cooking or cleaning (39%), managing their underlying diabetes (31%), and working or keeping a job (7.7%) (see Table 7).

Table 7: Activities affected through vision impairment and loss

	All Respondents (n=13)
Leisure activities/exercise	9 (69.2%)
Driving (a car/vehicle)	7 (53.8%)
Travelling	6 (46.2%)
Social interactions with family/ friends	6 (46.2%)
Household responsibilities, such as cooking or cleaning	5 (38.5%)
Managing my diabetes	4 (30.8%)
Work or keeping a job	1 (7.7%)
Other	1 (7.7%)
None	2 (15.4%)

Fifteen percent of respondents with DME, 50% with DED, and 40% without DED were in paid employment and 77% of those with DME were retired (see Table 8 and EXP 5.1).

Sixty-nine percent of all respondents did not receive assistance from the government, respondents who had received such assistance increased more than two-fold in those with DME (61%) compared to those without DED (25%). Income assistance increased more than three-fold from 7% of patients without DED to 31% of patients with DME.

Ninety percent of all respondents said they had no trouble paying for food at any time during the past year (see Appendix Table 4.6). This rose from 7.1% (n=4) in those without DED to 23% (n=3) in those with DME.

The majority of respondents (89%) said that they did not feel their access to health care was affected by any factors, yet 5% reported that it was affected by their income (see Appendix Table 4.7).

Sixty percent of all respondents worried about their health, 13% about their family, and 5% about food and housing (see Appendix Table 4.8).

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

Question	Response	Without DED (n=57)	With DED (n=14)	With DME (n=13)
Are you currently working?	Working for pay	23 (40.4%)	7 (50.0%)	2 (15.4%)
	Volunteering	1 (1.8%)	1 (7.1%)	0 (0.0%)
	Retired	27 (47.4%)	4 (28.6%)	10 (76.9%)
	Student	1 (1.8%)	1 (7.1%)	0 (0.0%)
	Not working	5 (8.8%)	1 (7.1%)	1 (7.7%)
Question	Response	Without DED (n=57)	With DED (n=13)	With DME (n=13)
Do you receive assistance from the government?	Income assistance	4 [7.0%]	1 (7.7%)	4 (30.8%)
	Medical assistance	7 (12.3%)	4 (30.8%)	3 (23.1%)
	Food assistance	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Housing assistance	2 (3.5%)	1 (7.7%)	1 (7.7%)
	Pension assistance	5 (8.8%)	1 (7.7%)	2 (15.4%)
	None of the above	43 (75.4%)	9 (69.2%)	5 (38.5%)
Question	Response	Without DED (n=56)	With DED (n=13)	With DME (n=14)
Did you have trouble paying for food at any time during the past year?	Yes	4 [7.1%]	1 [7.1%]	3 (23.1%)
	No	52 (92.9%)	13 (92.9%)	10 (76.9%)

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).

Almost one in two respondents with DED (46%) and more than two-thirds with DME (69%) reported their overall health as poor compared with a little over a quarter of those without DED (27%). There were a greater number of physical and mentally unhealthy days experienced by those with DME (50% and 40% respectively) compared to those without DED (25% and 17% respectively).

Respondents with DED and DME experienced more unhealthy days when compared to those without DED. Over half of those with DME (58%) and a third of people with DED (33%) experienced a series of overall unhealthy days compared to over a quarter of those without DED (28%).

Compared with over a quarter of those without DED (27%), more than half of those with DED (54%) and those with DME (54%) experienced limitations of their daily activities as a result of poor health. Where health, or an associated condition, impacted daily activities, the primary limitations were: hypertension or high blood pressure, walking problems, back or neck problems, and mental or emotional health.

People living with DME were more likely to have certain impairments beyond vision loss. In particular, there was a marked increase in heart problems, mental or emotional health and occurrence of stroke (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	40 (72.7%)	6 (54.5%)	4 (30.8%)
Self-rated health: Poor	15 (27.3%)	5 (45.5%)	9 (69.2%)
Physically unhealthy days	11 (25.0%)	3 (25.0%)	6 (50.0%)
Mentally unhealthy days	8 (17.4%)	2 (16.7%)	4 (40.0%)
Unhealthy days	12 (27.9%)	4 (33.3%)	7 (58.3%)
Activity limitation days	7 (53.8%)	2 (40.0%)	5 (71.4%)

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.

France DR Barometer Findings:

Health Care Professionals

Key Demographic Characteristics

There were 47 health care professionals who answered at least one of the survey questions in France. Of these, two were primary care providers (4.3%), eight were diabetes specialist providers (17%), and 27 were ophthalmologists (57%). The remaining respondents were optometrists, nurses, health educators or other types of 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.

Health care professionals, as a group, had been practicing for an average of 15 years, with the ophthalmologist group practicing for an average of 12 years (see Appendix PT 1.5).

All were well educated (88% with graduate or advanced degree), 60% were female and 40% male, and varied in age with 28% between 30 - 39 years (see Table 10 and Appendix PT 3.1).

Table 10: Summary of key characteristics of health care professionals

Group	Subgroup	All Respondents	Primary Care	Diabetes Specialist	Ophthalmologist
All respondents		47 (100.0%)	2 (4.3%)	8 (17.0%)	27 (57.4%)
Age group	18 - 29 yrs.	8 (20.0%)	1 (100.0%)	0 (0.0%)	7 (29.2%)
	30 - 39 yrs.	11 (27.5%)	0 (0.0%)	0 (0.0%)	8 (33.3%)
	40 - 49 yrs.	8 (20.0%)	0 (0.0%)	1 (14.3%)	5 (20.8%)
	50 - 59 yrs.	9 (22.5%)	0 (0.0%)	3 (42.9%)	3 (12.5%)
	60 - 69 yrs.	3 (7.5%)	0 (0.0%)	2 (28.6%)	1 (4.2%)
	70 - 79 yrs.	1 (2.5%)	0 (0.0%)	1 (14.3%)	0 (0.0%)
Gender	Female	24 (60.0%)	1 (100.0%)	4 (57.1%)	13 (54.2%)
	Male	16 (40.0%)	0 (0.0%)	3 (42.9%)	11 (45.8%)
Education	Secondary School	1 (2.5%)	0 (0.0%)	0 (0.0%)	1 (4.2%)
	College/University	4 (10.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Graduate or advanced degree (e.g. PhD, MD, etc.)	35 (87.5%)	1 (100.0%)	7 (100.0%)	23 (95.8%)

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

Sixty percent of all health care professionals have their main practice setting at a hospital and for ophthalmologists it was either in a hospital (69%) or an eye clinic (23%). Ninety-three percent of health care professionals worked in an urban setting (see Appendix PT 2.1 and 2.2).

Most health care professionals worked in the government sector (56%) and ophthalmologists worked mainly in the government (69%) and private (23%) sector (see Appendix PT 2.3).

The health care professionals reported that 51% of patients do not pay for services, 21% of patients pay through insurance, and 19% of patients pay out-of-pocket (full fees). The situation was similar for ophthalmologists: 48% of patients do not pay for services, 24% of patients pay a reduced or subsidised rate, and 24% of patients pay through insurance (see Appendix PT 2.7).

Health care professionals reported, on average, seeing 95 patients per week, of which an estimated 37% of these patients had diabetes. Ophthalmologists saw an average of 125 patients per week and 24% of their patient population had diabetes (see Appendix PT 2.6).

For all health care professionals, the average waiting time for an appointment was either more than one week but less than one month (43%) or more than one month but less than two months (16%).

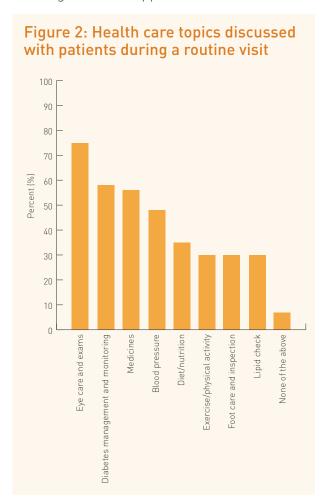
The average wait time for an appointment for an ophthalmologist was more than one week but less than one month in 42% of practices. In a further 38% of practices, the average wait time was between one and three months to schedule an appointment. For one in ten clinics (11.5%) the average wait time was more than three months, including one ophthalmologist reporting longer than six months for an appointment (see Table 11 and Appendix PT 2.5).

Table 11: Average wait times to schedule an appointment

Wait Time Intervals	All Respondents (n=44)	Ophthalmologist (n=26)		
Less than 1 week	4 (9.1%)	0 (0.0%)		
More than 1 week but less than 1 month	19 (43.2%)	11 (42.3%)		
More than 1 month but less than 2 months	7 (15.9%)	7 (26.9%)		
More than 2 months but less than 3 months	7 (15.9%)	3 (11.5%)		
More than 3 months but less than 6 months	3 (6.8%)	2 (7.7%)		
Six or more months	2 (4.5%)	1 (3.8%)		
Don't know/Not sure	2 (4.5%)	2 (7.7%)		

Patient Education Information

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



Health care professionals stated that written information about diabetes is available yet the adequacy of that which was related to eye complications varies.

Only a third (34%) of all health care professionals reported that they had sufficient information on eye complications, 12% had information on diabetes, but that which is on eye complications, was insufficient. Overall, 39% of all providers had no written information available for their patients (see Table 8 and Appendix PT 2.11).

Half of the ophthalmologists (52%) did not have written information available for their patients. Some ophthalmologists (26%) had sufficient information, while 13% had information on diabetes, but that, which is on eye complications was reported to be insufficient.



Guidelines and Protocols

Forty-one percent of all providers, including 42% of ophthalmologists, had written protocols for the management of diabetes available, which were used by staff. However, 36% of all providers had no such protocols (see Appendix PT 2.12).

With respect to the management of diabetes-related vision issues, more than one in three providers (36%) did not have written protocols available. Forty-one percent of health care professionals had written protocols available, which were used by, staff and 4.8% had protocols available but not used by staff (see Table 12 and Appendix PT 2.13).

For ophthalmologists, 36% had written protocols available, which were used by staff. Similar to all providers, 36% of ophthalmologists did not have access to protocols on diabetes-related vision issues.

Table 12: Availability and use of information and protocols

Question	Response	All Respondents (n=41)	Ophthalmologist (n=23)
Is there written information about diabetes available for patients in your main practice?	Yes, and information on eye complications is sufficient	14 (34.1%)	6 (26.1%)
	Yes, but information on eye complications is not sufficient	5 (12.2%)	3 (13.0%)
	Yes, but no information on eye complications is included	2 (4.9%)	0 (0.0%)
	No written information is available for patients	16 (39.0%)	12 (52.2%)
	Don't know/Not sure	4 (9.8%)	2 (8.7%)
Question	Response	All Respondents (n=42)	Ophthalmologist (n=25)
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	17 (40.5%)	9 (36.0%)
	Yes, available but not used by staff	2 [4.8%]	2 (8.0%)
	Not available	15 (35.7%)	9 (36.0%)
	Don't know/Not sure	8 (19.0%)	5 (20.0%)

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.

Most providers, for patients with either type 1 (49%) or type 2 (85%) diabetes, reported that the initial eye exam should occur at the time of the diagnosis of diabetes. Around a third (34%) of all providers recommend an intial screening for type 1 diabetes to occur after a pre-determined number of years from diagnosis (average 5.7 years) (see Appendix PT 2.14).

Overall, 98% of health care professionals, including 96% of ophthalmologists, reported that follow-up eye examinations should be conducted every year. Most providers (95%), including all of the ophthalmologists, screened patients for DR (see Appendix PT 2.15 and 2.16).

An important finding to note for all health care professionals, only 27% reported to send appointment reminders. All of the providers, including all ophthalmologists, reported to share information 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 were: the duration of diabetes (95%), the presence of comorbidities such as hypertension (85%), high glucose levels (82%), a patient's age (62%), and a patient's ability to adhere to recommendations (31%) (see Table 13 and Appendix PT 2.17).

As reported by health care professionals, the major barriers to optimising eye health faced by patients with diabetes were: a general lack of knowledge or awareness (49%), the long wait times for an appointment (42%), the long wait times on the day of the visit (32%), and the patient feels that eye exams are not important (32%) (see Table 13 and Appendix PT 2.18).



Table 13: Major barriers to optimising eye health

Response	All Respondents (n=41)	Ophthalmologists (n=25)
Lack of knowledge and/or awareness	20 (48.8%)	12 (48.0%)
Patients feel eye exams are not important	13 (31.7%)	11 (44.0%)
Long wait time on the day of visit	13 (31.7%)	9 (36.0%)
Long wait time for appointment	17 (41.5%)	8 (32.0%)
Patients feel eye complications are unlikely	10 (24.4%)	7 (28.0%)
Proximity to care	11 (26.8%)	6 (24.0%)
Patients fear of treatment/results	9 (22.0%)	5 (20.0%)
Limited access to eye specialists	8 (19.5%)	4 (16.0%)
Patients have competing responsibilities and priorities	6 (14.6%)	4 (16.0%)
Other	4 (9.8%)	4 (16.0%)
Limited access to diabetes specialists	7 (17.1%)	3 (12.0%)
Cost of care	6 (14.6%)	1 [4.0%]
Referral process	2 (4.9%)	0 (0.0%)
Recommended treatments are not available	1 (2.4%)	0 (0.0%)
Patients they are a burden on family/ friends	2 (4.9%)	0 (0.0%)
Clinic too small or lack necessary equipment/staff	2 (4.9%)	0 (0.0%)

France DR Barometer Findings:

Ophthalmologists

Screening

There were twenty-two ophthalmologists who answered at least one of the supplementary questions (see Appendix PT 4.1 to PT 4.14).

Ophthalmologists reported that an average of 16% of their patients had DR and 9% had DME (see Appendix PT 4.1 and PT 4.2).

The most common wait time for a screening appointment for DED was between one and two months (54%) while 21% stated that some patients waited less than a month. Sixteen percent reported a wait time between two and six months. Eighty-three percent of ophthalmologists reported that there was no wait from the time of screening to diagnosis, 13% (n=3) reported a wait time of less than one week (see Appendix PT 4.3 and PT 4.4).

Treatment and Challenges

Eighty-eight percent of ophthalmologists personally administer treatment for diabetic retinopathy. The most common factors influencing how ophthalmologists treat patients with DR or DME are: the presence of comorbidities such as hypertension (86%), duration of diabetes (81%), high glucose levels (81%), a patient's ability to adhere to recommendations (71%), a patient's age (57%), and a patient's educational level (33%) (see Appendix PT 4.6 and 4.7).

The most common outreach venues for screening for DED were reported to be at vision centres (30%), mobile screening centres (26%), other (22%), health fairs for all (17%), and health fairs for people with diabetes (13%) (see Appendix PT 4.13).

Eighty-eight percent ophthalmologists reported that they screen patients for DR based on a fundoscopy through dilated pupils. Additionally, 67% use retinal photo, 67% optical coherence tomography, and 50% fluorescein angiography. Ninety-two percent of ophthalmologists reported that they treat DR and DME based on both visual and anatomical outcomes (see Appendix PT 4.8 and PT 4.9).

Fifty-four percent of ophthalmologists said that the majority of their patients present for an eye exam when visual problems have already occurred, while 42% reported that patients present in time for the screening, and 4.2% (n=1) reported that patients present too late for effective treatment (see Appendix PT 4.10).

Eighty percent of ophthalmologists had received specific training in the treatment and diagnosis of DR and or DME, of which seventy-five percent had received training within the past. Forty-eight percent would be interested in online education and certification on DME, angiogenesis and anti-VEGF therapies (see Appendix PT 4.11 and 4.12).

Ophthalmologists reported that the greatest challenges for improving patient outcomes in DED as: limited access to patient education on DR and DME (55%), late diagnosis (36%), and poor multi-disciplinary integration and referral pathways (27%) (see Table 14 and Appendix PT 4.14).



Table 14: Challenges for improving outcomes in DED

Question	Response	Ophthalmologist (n=22)
What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye	Limited access to patient education on diabetic retinopathy and diabetic macular edema	12 (54.5%)
disease?	Late diagnosis	8 (36.4%)
	Referral pathways	6 (27.3%)
	Multi-disciplinary team integration is poor	6 (27.3%)
	Ineffective screening services	5 (22.7%)
	Reimbursement/restrictions on approved therapy	3 (13.6%)
	No universal guidelines on referral/ screening	3 [13.6%]
	No universal guideline on when to treat	2 (9.1%)
	No universal guidelines on how to treat	1 (4.5%)
	Government/insurance not able to cover patient costs	0 (0.0%)
	Other	2 (9.1%)

France DR Barometer Summary

In France, 88 adults with diabetes and 47 health care professionals have provided insight about their experiences of living with, managing and treating diabetes, diabetic eye disease (DR) and DME. The results help to improve the levels of awareness, as well as the nature of the management and services available in France.

France is the second most populous country in the European Union⁶ and has the sixth highest number of people living with diabetes in the region. In 2016, there were almost 67 million inhabitants⁷ of which an estimated ~3.3 million (2,712.2-4,072.7‡) living with diabetes.

Low fertility rates will continue to be a feature in the next two decades leading to a population decline. In 2050, it is projected that 32% of the population will be at least 60 years old while only 22% of the population will be under the age of 208. The ageing process will be particularly reflected by an increase in the number of those aged 75 years and over, about 16% of the population, or about every sixth person, can be expected to be 75 years or over in thirty years' time9.

It is important to note that France is the sixth country in the world for diabetes-related health expenditures at \$19 billion dollars USD. France will remain in the top ten countries for diabetes-related health expenditures in 2040 at an estimated \$22 billion dollars USD. Deaths attributed to diabetes in France were 26,371, which accounted to ~4% of the diabetes related deaths experienced in this region. The estimated number of undiagnosed cases was ~1.2 million (1,405.5-2,110.5‡)¹⁰.

The DR Barometer findings indicate a younger population was more likely to be associated with type 1 diabetes, which was the opposite of those with type 2 diabetes, which tended to be an older population. Another particularly important trend, noted in the findings, was that the longer the time since diabetes was diagnosed, the greater the likelihood for DED and DME to be detected was. Both of these well-known findings are important in the context of France's rapidly ageing population.

People were most often informed about their diabetes condition from their health care professionals, such as a doctor, nurse, health educator, and nutritionists. A trend globally, which was reflected in the French study, was the increasing usage of the internet for information by over a third (36%) of all respondents.

Many of those surveyed struggled with the management of their diabetic condition with some issues that were beyond their personal control such as long wait times for an appointment and travel to their regular doctor or specialist was difficult.

There was not only relatively high awareness of the various complications of diabetes but vision loss was feared two times more than any other complication, including cardiovascular disease or stroke.

Aside from vision loss, there was also a considerable increase in the frequency of people with DED and DME experiencing serious and life changing complications compared to people without DED. The frequency of kidney disease increased from 26% in those without DED to 58% in DED and 44% in DME. Likewise, the frequency of cardiovascular disease increased from 11% in people without DED to 33% in those with DED and with DME.



The relationship between the patient and health care professional is critical to realistic and optimal patient outcomes. Indeed, health education and information was reported by three-quarters of patients as an important tool to manage one's diabetes yet one in ten respondents did not receive any information on eye complications from traditional sources, such as their doctor or nurse.

Likewise, around one in two providers reported a lack of knowledge and awareness on behalf of the patient as the major barrier to optimising eye health yet only a third had sufficient information on diabetes and eye complications available for their patients.

Knowledge and guidance was not only an issue for patients, as one in three providers, including 36% of ophthalmologists, said that they did not have any written protocols or guidelines available in the management of diabetes-related vision issues.

Sixteen percent (n=14) of respondents reported they have been diagnosed with DED and a further 15% (n=13) with DME. Over half (59%) of those diagnosed said that their vision was impaired, either slightly or significantly, due to DED or DME. Of these, eighty-five percent reported ways in which their lives were directly affected, including: leisure activities or exercise, driving a vehicle, travelling, social interactions with family or friends, conducting household responsibilities, managing their underlying diabetes, and working or keeping a job.

People with DED and DME also experienced more unhealthy days when compared to those without DED. A third of people with DED and over half of those with DME experienced unhealthy days, compared to a little over a quarter of those without DED. People living with DME were more likely to have certain impairments beyond vision loss. In particular, there was a marked increase in heart problems, mental or emotional health, and occurrence of stroke.

A proactive treatment approach to prevent further vision loss was preferred by a majority of patients with DME rather than a reactive treatment once further vision loss occurred

Knowing that diabetes-related vision loss is preventable, addressing barriers to eye screening is an important policy issue. While most respondents had received an eye exam, which is understandable considering the purposeful sample, there remained many barriers, primarily those associated with clinical capacities, such as long wait times to schedule an appointment, and subsequent long wait times on the day of the visit. It is also important to note only 27% of all providers send reminders to their patients for follow-up appointments.

Eight out of ten patients confirmed, reporting the greatest barrier for completing an eye exam was the long wait time to schedule an appointment. The most common wait time for a screening appointment for DED, as reported by ophthalmologists, was between one and two months, but for some the wait time was up to six months.

The top patient characteristics influencing the referral process for eye care across providers and ophthalmologists, was diabetes duration, the presence of comorbidities such as hypertension, high glucose levels, a patient's age, and a patient's ability to adhere to recommendations.

Fifty-four percent of these ophthalmologists stated the majority of their patients present for screening when visual problems have already occurred rather than in time for the screening. Furthermore, a third of ophthalmologists also cited late diagnosis as one of the greatest challenges for improving outcomes in DED, along with poor multidisciplinary integration and referral pathways.

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 action in France.



References and Acknowledgement

- ¹ European Union. (2016). Living in the EU: Size and population. Retrieved from https://europa.eu/european-union/abouteu/figures/living_en#tab-1-3
- ² Institut national de la statistique et des études économiques (Insee). (2016). Démographie: Population au début du mois - France (inclus Mayotte à partir de 2014). Retrieved from http://www.insee. fr/fr/bases-de-donnees/bsweb/serie. asp?idbank=001641607
- ³ Institut national de la statistique et des études économiques (Insee). (2015). *Population forecasts 2005-2050 for Metropolitan France*. Retrieved from http://www.insee.fr/en/themes/document. asp?ref_id=projpop0550
- ⁴ Institut national de la statistique et des études économiques (Insee). (2015). Population by sex and age on 1st January 2016, France. Retrieved from http://www.insee.fr/en/themes/detail.asp?ref_id=bilan-demo&page=donnees-detaillees/bilan-demo/pop_age2b.htm
- International Diabetes Federation. IDF Diabetes Atlas. 2016. Accessed 5th August 2016 http://www.diabetesatlas.org/
- ⁶ European Union. (2016). Living in the EU: Size and population. Retrieved from https://europa.eu/european-union/abouteu/figures/living_en#tab-1-3
- ⁷ Institut national de la statistique et des études économiques (Insee). (2016). Démographie: Population au début du mois - France (inclus Mayotte à partir de 2014). Retrieved from http://www.insee. fr/fr/bases-de-donnees/bsweb/serie. asp?idbank=001641607

- 8 Institut national de la statistique et des études économiques (Insee). (2015). Population forecasts 2005-2050 for Metropolitan France. Retrieved from http://www.insee.fr/en/themes/document. asp?ref_id=projpop0550
- Institut national de la statistique et des études économiques (Insee). (2015). Population by sex and age on 1st January 2016, France. Retrieved from http://www.insee.fr/en/themes/detail. asp?ref_id=bilan-demo&page=donneesdetaillees/bilan-demo/pop_age2b.htm
- ¹⁰ Institut national de la statistique et des études économiques (Insee). (2016). Démographie: Population au début du mois - France (inclus Mayotte à partir de 2014). Retrieved from http://www.insee. fr/fr/bases-de-donnees/bsweb/serie. asp?idbank=001641607

The IFA, IDF and IAPB would like to acknowledge and thank the many organisations and health care professionals from France 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 France

APPENDIX 1: National Results

Table 1.1

Survey Information	Number of Respondents (%)
All valid respondents [1]	95 (100.0%)
Respondents aged 18 or over	94 (98.9%)
Respondents with diabetes	88 (92.6%)

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

Table 1.2

Survey Information	Number of Respondents (%)
All valid respondents	95 (100.0%)
Included in Diabetic Analysis Set	88 (92.6%)
Excluded from Diabetic Analysis Set	7 (7.4%)
Reasons for exclusion from diabetic analysis set	•
Under 18 years of age	1
Not diagnosed with diabetes	4
Missing information on diabetes diagnosis	2

Table 1.3

Survey Information	Number of Respondents (%)
Diabetic Analysis Set	88 (100.0%)
World Bank Income Group: High Income	88 (100.0%)
Persons with diabetic eye disease (DED)	14 (15.9%)
Persons with diabetic macular edema (DME)	13 (14.8%)
Persons with Type I diabetes	23 (26.1%)
Persons with Type II diabetes	61 (69.3%)
Persons seeing health care professional for diabetes	86 (97.7%)
Persons with eye disease & not received treatment	5 (5.7%)
Persons with eye disease & received treatment	16 (18.2%)

Table 2.1

Question	Response	Number of Respondents (%)
With which type of diabetes have you been diagnosed?	Type I	23 (26.1)
	Type II	61 (69.3)
	Don't know/Not sure	4 (4.5)
	Total Valid Response	88 (100.0)

Table 2.2

Question	Response	Number of Respondents (%)
When was your diabetes diagnosed?	Within the last year	7 (8.1)
	1 - 5 years ago	14 (16.3)
	6 - 10 years ago	10 (11.6)
	11 - 15 years ago	22 (25.6)
	16 - 20 years ago	14 (16.3)
	21 years ago or longer	17 (19.8)
	Don't know/Not sure	2 (2.3)
	Total Valid Response	86 (100.0)
	Total missing	2

Table 2.3.1

Question	Response	Number of Respondents (%)
Do you see a health care professional for your diabetes?	Yes	86 (100.0)
	Total Valid Response	86 (100.0)
	Total missing	2
What kind of health care professional?	General/Family Doctor	21 (24.7)
	Nurse	1 (1.2)
	Diabetes Specialist	61 (71.8)
	Other	2 (2.4)
	Total Valid Response	85 (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)	18
	Mean	3.5
	SD	1.2
	Median	4.0
	Min	1
	Max	5
	Don't know/Not sure	3
Nurse	Total valid numeric response (n)	1
	Mean	5.0
	SD	
	Median	5.0
	Min	5
	Max	5
Diabetes Specialist	Total valid numeric response (n)	58
	Mean	2.4
	SD	0.8
	Median	2.0
	Min	1
	Max	4
	Total missing	3
Other	Total valid numeric response (n)	2
	Mean	3.0
	SD	1.4
	Median	3.0
	Min	2
	Max	4

Table 2.4

Question	Response	Number of Respondents (%)
How have you received	Doctor or nurse	83 (98.8%)

Question	Response	Number of Respondents (%)
information about diabetes?		
	Health educator	57 (67.9%)
	Nutritionist or dietitian	35 (41.7%)
	Diabetes organization or other health organization	29 (34.5%)
	Family/Friends/Neighbors	13 (15.5%)
	TV/Radio/Newspaper/Magazines	26 (31.0%)
	Internet	30 (35.7%)
	Social media (e.g. Facebook, Twitter, blogs)	6 (7.1%)
	Pharmacist	24 (28.6%)
	Total Valid Response	84 (100.0%)
	Total missing	4

Table 2.5

Question	Response	Number of Respondents (%)
How do you manage your diabetes?	Diet	74 (87.1%)
	Oral medicine	61 (71.8%)
	Exercise	50 (58.8%)
	Insulin	39 (45.9%)
	Natural/Herbal medicine	1 (1.2%)
	Total Valid Response	85 (100.0%)
	Total missing	3

Table 2.6

Question	Response	Number of Respondents (%)
Are you currently enrolled in a diabetes patient management support programme?	Yes	43 (50.6)
	No	42 (49.4)
	Total Valid Response	85 (100.0)
	Total missing	3
Who sponsors the programme?	Hospital support program	36 (83.7)



Question	Response	Number of Respondents (%)
	Patient organization support program	2 (4.7)
	Don't know/Not sure	5 (11.6)
	Total Valid Response	43 (100.0)
	Total missing	45
Does the programme include education on the importance of screening for diabetic eye complications?	Yes	39 (92.9)
	No	3 (7.1)
	Total Valid Response	42 (100.0)
	Total missing	46

Table 2.7

Test	Response	Number of Respondents (%)
Have you ever had the following tests in a doctors office of clinic? And if yes, how long ago		
Blood glucose test	Yes	82 (97.6%)
	Less than 6 months	74 (88.1%)
	6 - 12 months	5 (6.0%)
	Greater than 12 months	1 (1.2%)
	Total valid response	80 (95.2%)
	Total missing	8
	No	2 (2.4%)
	Total valid response	84 (100.0%)
	Total missing	4
Urine check	Yes	55 (66.3%)
	Less than 6 months	32 (38.6%)
	6 - 12 months	20 (24.1%)
	Greater than 12 months	2 (2.4%)

Test	Response	Number of Respondents (%)
Have you ever had the following tests in a doctors office of clinic? And if yes, how long ago		
	Total valid response	54 (65.1%)
	Total missing	34
	No	20 (24.1%)
	Don't know/Not sure	8 (9.6%)
	Total valid response	83 (100.0%)
	Total missing	5
Weight check	Yes	83 (98.8%)
	Less than 6 months	68 (81.0%)
	6 - 12 months	11 (13.1%)
	Greater than 12 months	2 (2.4%)
	Total valid response	81 (96.4%)
	Total missing	7
	No	1 (1.2%)
	Total valid response	84 (100.0%)
	Total missing	4
Blood pressure check	Yes	82 (98.8%)
	Less than 6 months	73 (88.0%)
	6 - 12 months	7 (8.4%)
	Greater than 12 months	1 (1.2%)
	Total valid response	81 (97.6%)
	Total missing	7
	No	1 (1.2%)
	Total valid response	83 (100.0%)
	Total missing	5



Test	Response	Number of Respondents (%)
Have you ever had the following tests in a doctors office of clinic? And if yes, how long ago		
Foot check	Yes	70 (84.3%)
	Less than 6 months	31 (37.3%)
	6 - 12 months	24 (28.9%)
	Greater than 12 months	14 (16.9%)
	Total valid response	69 (83.1%)
	Total missing	19
	No	8 (9.6%)
	Don't know/Not sure	5 (6.0%)
	Total valid response	83 (100.0%)
	Total missing	5
Eye check	Yes	81 (97.6%)
	Less than 6 months	26 (31.3%)
	6 - 12 months	38 (45.8%)
	Greater than 12 months	16 (19.3%)
	Total valid response	80 (96.4%)
	Total missing	8
	No	2 (2.4%)
	Total valid response	83 (100.0%)
	Total missing	5

Question	Response	Number of Respondents (%)
How well do you think your diabetes is controlled?	Very well	10 (11.8%)
	Well	49 (57.6%)

Question	Response	Number of Respondents (%)
	Not very well	19 (22.4%)
	Not well at all	5 (5.9%)
	Don't know/Not sure	2 (2.4%)
	Total Valid Response	85 (100.0%)
	Total missing	3

Question	Response	Number of Respondents (%)
What are the main challenges you face in controlling your diabetes?	High cost of care	1 (1.2%)
	No insurance	1 (1.2%)
	Travel to my regular doctor or specialist is difficult	8 (9.4%)
	Long wait time for an appointment to see my doctor or specialist	13 (15.3%)
	Health services needed are not available	2 (2.4%)
	Don't know enough about diabetes	18 (21.2%)
	Too hard to eat the right things	39 (45.9%)
	Too many other things to do	28 (32.9%)
	Stigma or discrimination because of diabetes	2 (2.4%)
	Don't want to think about having diabetes	8 (9.4%)
	Other	4 (4.7%)
	Total Valid Response	85 (100.0%)
	Total missing	3

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	71 (84.5%)



Question	Response	Number of Respondents (%)
	Support groups	22 (26.2%)
	Support from family or friends	47 (56.0%)
	Health education and information	64 (76.2%)
	Mobile services (services that travel to or near your home)	7 (8.3%)
	Coordination of healthcare and services by a professional	17 (20.2%)
	Other	1 (1.2%)
	None	1 (1.2%)
	Total Valid Response	84 (100.0%)
	Total missing	4

Question	Response	Number of Respondents (%)
What complications (or problems), to your knowledge, arise from diabetes?	Amputation	74 (87.1%)
	Foot ulcers	56 (65.9%)
	Increased risk of broken bones or fractures	3 (3.5%)
	Loss of feeling in hands or toes (neuropathy)	44 (51.8%)
	Vision loss	83 (97.6%)
	Irritable bowel disease	2 (2.4%)
	Kidney disease	75 (88.2%)
	Cardiovascular disease/Stroke	69 (81.2%)
	Other	5 (5.9%)
	Don't know/Not sure	1 (1.2%)
	Total Valid Response	85 (100.0%)
	Total missing	3

Question	Response	Number of
		Respondents (%)

Question	Response	Number of Respondents (%)
Which complication of diabetes are you most concerned about?	Amputation	10 (11.9)
	Foot ulcers	1 (1.2)
	Increased risk of broken bones or fractures	1 (1.2)
	Loss of feeling in hands or toes (neuropathy)	2 (2.4)
	Vision loss	33 (39.3)
	Irritable bowel disease	1 (1.2)
	Kidney disease	14 (16.7)
	Cardiovascular disease/Stroke	16 (19.0)
	Don't know/Not sure	5 (6.0)
	None	1 (1.2)
	Total Valid Response	84 (100.0)
	Total missing	4

Table 2.13

Question	Response	Number of Respondents (%)
Which of the following complications of diabetes do you have?	Amputation	4 (10.0%)
	Foot ulcers	6 (15.0%)
	Broken bones or fractures	1 (2.5%)
	Loss of feeling in hands or toes (neuropathy)	5 (12.5%)
	Vision loss	21 (52.5%)
	Kidney disease	16 (40.0%)
	Cardiovascular disease/Stroke	9 (22.5%)
	Don't know/Not sure	10 (25.0%)
	None	4 (10.0%)
	Total Valid Response	40 (100.0%)
	Total missing	48

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	45 (53.6%)
	Multiple times per year	15 (17.9%)
	Once per year	10 (11.9%)
	Only when symptoms arise	2 (2.4%)
	Never	2 (2.4%)
	Don't know/Not sure	10 (11.9%)
	Total Valid Response	84 (100.0%)
	Total missing	4

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	5 (6.0%)
	I do what I can to prevent vision problems (e.g. get routine screenings, visit specialists)	78 (92.9%)
	I do not make any special effort to prevent vision problems	1 (1.2%)
	Total Valid Response	84 (100.0%)
	Total missing	4

Table 2.16

Question	Response	Number of Respondents (%)
What type of health insurance do you have?	Public	57 (68.7)
	Public - Private	26 (31.3)
	Total Valid Response	83 (100.0)
	Total missing	5

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	9 (11.1)
	Insurance pays total cost	65 (80.2)
	Insurance and out-of- pocket/cash (e.g. co-pays)	7 (8.6)
	Total Valid Response	81 (100.0)
	Total missing	7
Specialist medical visits (e.g. eye doctor, gynecologist, urologist)	Care is free	7 (9.0)
	Insurance pays total cost	63 (80.8)
	Insurance and out-of- pocket/cash (e.g. co-pays)	7 (9.0)
	Don't know/Not Sure	1 (1.3)
	Total Valid Response	78 (100.0)
	Total missing	10
Medicines	Care is free	8 (10.4)
	Insurance pays total cost	63 (81.8)
	Insurance and out-of- pocket/cash (e.g. co-pays)	4 (5.2)
	Do not use service	1 (1.3)
	Don't know/Not Sure	1 (1.3)
	Total Valid Response	77 (100.0)
	Total missing	11
Medical supplies (e.g. blood glucose meter/strips)	Care is free	9 (11.5)
	Insurance pays total cost	60 (76.9)
	Insurance and out-of- pocket/cash (e.g. co-pays)	3 (3.8)
	Out-of-pocket only (pay cash for all care)	3 (3.8)
	Do not use service	3 (3.8)
	Total Valid Response	78 (100.0)
	Total missing	10
Procedures	Care is free	7 (9.1)
	Insurance pays total cost	12 (15.6)



Question	Response	Number of Respondents (%)
Most often, how do you pay for the following types of medical care and services?		
	Insurance and out-of- pocket/cash (e.g. co-pays)	1 (1.3)
	Do not use service	11 (14.3)
	Don't know/Not Sure	46 (59.7)
	Total Valid Response	77 (100.0)
	Total missing	11
Tests/screenings	Care is free	9 (11.8)
	Insurance pays total cost	63 (82.9)
	Insurance and out-of- pocket/cash (e.g. co-pays)	3 (3.9)
	Do not use service	1 (1.3)
	Total Valid Response	76 (100.0)
	Total missing	12
Health education	Care is free	55 (72.4)
	Insurance pays total cost	9 (11.8)
	Insurance and out-of- pocket/cash (e.g. co-pays)	2 (2.6)
	Do not use service	4 (5.3)
	Don't know/Not Sure	6 (7.9)
	Total Valid Response	76 (100.0)
	Total missing	12
Counseling	Care is free	8 (11.0)
	Insurance pays total cost	3 (4.1)
	Insurance and out-of- pocket/cash (e.g. co-pays)	1 (1.4)
	Do not use service	17 (23.3)
	Don't know/Not Sure	44 (60.3)
	Total Valid Response	73 (100.0)
	Total missing	15

Question	Response	Number of
		Respondents (%)

Question	Response	Number of Respondents (%)
Are you aware of any government sponsored screening programs for diabetic eye disease (diabetic retinopathy)?	Yes	28 (33.3%)
	No	56 (66.7%)
	Total valid response	84 (100.0%)
	Total missing	4

Question	Response	Number of Respondents (%)
Have you ever had an eye exam for diabetic eye disease?	Yes	80 (95.2%)
	No	4 (4.8%)
	Total valid response	84 (100.0%)
	Total missing	4
How long ago was your last eye exam?	Within the last year	65 (81.3%)
	More than 1 year ago but less than 2 years	13 (16.3%)
	More than 2 years ago but less than 3 years	2 (2.5%)
	Total valid response	80 (100.0%)
	Total missing	8
Who did the last exam?	General/Family practitioner	3 (3.8%)
	Eye doctor/Eye clinic	74 (93.7%)
	Don't know/Not sure	2 (2.5%)
	Total valid response	79 (100.0%)
	Total missing	9

Question	Response	Number of Respondents (%)
Have you ever had a dilated eye exam, where your eyes are examined after eye drops?	Yes	80 (96.4%)
	Don't know/Not sure	3 (3.6%)
	Total valid	83 (100.0%)



Question	Response	Number of Respondents (%)
	response	
	Total missing	5

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	78 (92.9%)
	Every two years	6 (7.1%)
	Total valid response	84 (100.0%)
	Total missing	4

Table 3.5

Question	Response	Number of Respondents (%)
For you, what are the biggest barriers to eye exams?	They are expensive	3 (3.8%)
	Eye exams are not available near my home	4 (5.0%)
	Long wait time for appointment	68 (85.0%)
	Long wait time on the day of the visit	19 (23.8%)
	Burden on my family/friends	2 (2.5%)
	Limited access to diabetes specialists	2 (2.5%)
	Too many other things to do or worry about	9 (11.3%)
	Other	4 (5.0%)
	Total valid response	80 (100.0%)
	Total missing	8

Question	Response	Number of
		Respondents (%)

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic eye disease?	Yes	22 (26.2%)
	No	62 (73.8%)
	Total valid response	84 (100.0%)
	Total missing	4
Has your diabetic eye disease affected your vision?	Yes, slightly	8 (36.4%)
	Yes, significantly	5 (22.7%)
	No	9 (40.9%)
	Total valid response	22 (100.0%)
	Total missing	66
Have vision issues caused you to have difficulty with any of the following?	Traveling	6 (46.2%)
	Household responsibilities, such as cooking or cleaning	5 (38.5%)
	Social interactions with family/friends	6 (46.2%)
	Leisure activities/exercise	9 (69.2%)
	Work or keeping a job	1 (7.7%)
	Managing my diabetes	4 (30.8%)
	Other	1 (7.7%)
	None	2 (15.4%)
	Driving (a car/vehicle)	7 (53.8%)
	Total valid response	13 (100.0%)
	Total missing	75

Table 3.7

Question	Response	Number of Respondents (%)
Have you had any treatment for diabetic eye disease?	Yes	16 (72.7%)
	No	5 (22.7%)
	Don't know/Not sure	1 (4.5%)
	Total valid response	22 (100.0%)
	Total missing	66



Question	Response	Number of Respondents (%)
What treatment did you receive?	Laser	16 (100.0%)
	Injection in the eye (Anti- VEGF)	5 (31.3%)
	Surgery	6 (37.5%)
	Other	1 (6.3%)
	Total valid response	16 (100.0%)
	Total missing	72
Did you complete the treatment?	Yes	12 (75.0%)
	No	1 (6.3%)
	Still receiving treatment	3 (18.8%)
	Total valid response	16 (100.0%)
	Total missing	72
Do you feel that the treatment worked?	Yes, and vision improved	7 (46.7%)
	Yes, but vision stayed the same	4 (26.7%)
	Still waiting to know	1 (6.7%)
	Don't know/Not sure	3 (20.0%)
	Total valid response	15 (100.0%)
	Total missing	73
What is/are the reason(s) that you did not complete the treatment?	Total missing	88
What are the reason(s) that you have not had treatment for diabetic eye disease?	My doctor did not recommend any treatment	4 (80.0%)
	Treatment would not be effective	1 (20.0%)
	Total valid response	5 (100.0%)
	Total missing	83

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic macular edema?	Yes	13 (15.5%)
	No	66 (78.6%)
	Don't know/Not sure	5 (6.0%)

Question	Response	Number of Respondents (%)
	Total valid response	84 (100.0%)
	Total missing	4
If Yes, which of the following would you prefer	Treatment to prevent further vision loss	11 (84.6%)
	Don't know/Not sure	2 (15.4%)
	Total valid response	13 (100.0%)
	Total missing	75

Question	Response	Number of Respondents (%)
Have you received information about diabetic retinopathy or diabetic macular edema from any of the following sources?	Doctor/Nurse	67 (84.8%)
	Health educator	38 (48.1%)
	Diabetes organization or other health organization	8 (10.1%)
	TV/Radio/Newspaper/Magazines	10 (12.7%)
	Internet	9 (11.4%)
	None of the above	8 (10.1%)
	Total valid response	79 (100.0%)
	Total missing	9

Table 4.1

Question	Response	Number of Respondents (%)
What is your gender?	Female	40 (47.6)
	Male	44 (52.4)
	Total Valid Response	84 (100.0)
	Total missing	4
Please indicate your age	18 - 29	5 (5.7)
	30 - 39	5 (5.7)
	40 - 49	7 (8.0)
	50 - 59	24 (27.3)
	60 - 69	20 (22.7)



Question	Response	Number of Respondents (%)
	70 - 79	23 (26.1)
	80 - 89	4 (4.5)
	Total Valid Response	88 (100.0)

Table 4.2

Question	Response	Number of Respondents (%)
Where do you live?	Urban setting	66 (79.5)
	Non-urban setting	17 (20.5)
	Total Valid Response	83 (100.0)
	Total missing	5

Table 4.3

Question	Response	Number of Respondents (%)
What is the highest level of education you completed?	Did not complete primary school	2 (2.4)
	Primary school	5 (6.0)
	Secondary school	25 (29.8)
	College/University	29 (34.5)
	Graduate or post-graduate	23 (27.4)
	Total valid response	84 (100.0)
	Total missing	4

Table 4.4

Question	Response	Number of Respondents (%)
Are you currently working?	Working for pay	32 (38.1)
	Volunteering	2 (2.4)
	Retired	41 (48.8)
	Student	2 (2.4)
	Not working	7 (8.3)
	Total Valid Response	84 (100.0)
	Total missing	4

Table 4.5

Question	Response	Number of Respondents (%)
Do you receive assistance from the government?	Income assistance	9 (10.8%)
	Medical assistance	14 (16.9%)
	Food assistance	1 (1.2%)
	Housing assistance	4 (4.8%)
	Pension assistance	8 (9.6%)
	None of the above	57 (68.7%)
	Total valid response	83 (100.0%)
	Total missing	5

Table 4.6

Question	Response	Number of Respondents (%)
Did you have trouble paying for food at anytime during the past year?	Yes	8 (9.6)
	No	75 (90.4)
	Total Valid Response	83 (100.0)
	Total missing	5

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?	Income	4 (5.0)
	Language you speak	3 (3.8)
	Place where you live	1 (1.3)
	Sexual orientation	1 (1.3)
	None of the above	71 (88.8)
	Total valid response	80 (100.0)
	Total missing	8



Table 4.8

Question	Response	Number of Respondents (%)
Which of the following do you worry about most?	Food	4 (4.8)
	Housing	4 (4.8)
	Money	2 (2.4)
	Health	50 (60.2)
	Family	11 (13.3)
	None of the above	12 (14.5)
	Total Valid Response	83 (100.0)
	Total missing	5

Table 5.1

Question	Response	Number of Respondents (%)
In general, would you say your health is:	Very good	10 (12.7%)
	Good	40 (50.6%)
	Total good health	50 (63.3%)
	Fair	23 (29.1%)
	Poor	6 (7.6%)
	Fair or poor health	29 (36.7%)
	Total valid response	79 (100.0%)
	Total missing	9

Table 5.2

Question	Response	Number of Respondents (%)
How many days during last 30 days was your physical health not good	Any unhealthy days	20 (29.4%)
	1-5 unhealthy days	3 (4.4%)
	6-10 unhealthy days	6 (8.8%)
	11-20 unhealthy days	2 (2.9%)

Question	Response	Number of Respondents (%)
	21-30 unhealthy days	9 (13.2%)
	No unhealthy days	48 (70.6%)
	Total valid response	68 (100.0%)
	Total missing	20

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	14 (20.6%)
	1-5 unhealthy days	4 (5.9%)
	6-10 unhealthy days	2 (2.9%)
	11-20 unhealthy days	1 (1.5%)
	21-30 unhealthy days	7 (10.3%)
	No unhealthy days	54 (79.4%)
	Total valid response	68 (100.0%)
	Total missing	20

Table 5.3.2

Question	Response	Number of Respondents (%)
Unhealthy days (physically or mentally unhealthy, max 30)	Any unhealthy days	23 (34.3%)
	1-5 unhealthy days	4 (6.0%)
	6-10 unhealthy days	3 (4.5%)
	11-20 unhealthy days	5 (7.5%)
	21-30 unhealthy	11 (16.4%)



Question	Response	Number of Respondents (%)
	days	
	No unhealthy days	44 (65.7%)
	Total valid response	67 (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	14 (56.0%)
	1-5 unhealthy days	3 (12.0%)
	6-10 unhealthy days	5 (20.0%)
	11-20 unhealthy days	1 (4.0%)
	21-30 unhealthy days	5 (20.0%)
	No unhealthy days	11 (44.0%)
	Total valid response	25 (100.0%)
	Total missing	63

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	29 (37.7%)
	No	48 (62.3%)
	Total valid response	77 (100.0%)
	Total missing	11
Which impairment or health problem, if any, limits your activities?		
a) Arthritis/rheumatism	Yes	14 (50.0%)

Question	Response	Number of Respondents (%)
	No	13 (46.4%)
	Don't know/Not sure	1 (3.6%)
	Total valid response	28 (100.0%)
	Total missing	60
b) Back or neck problem	Yes	15 (51.7%)
	No	13 (44.8%)
	Don't know/Not sure	1 (3.4%)
	Total valid response	29 (100.0%)
	Total missing	59
c) Fractures, bone/joint injury	Yes	6 (20.0%)
	No	23 (76.7%)
	Don't know/Not sure	1 (3.3%)
	Total valid response	30 (100.0%)
	Total missing	58
d) Walking problem	Yes	16 (53.3%)
	No	14 (46.7%)
	Total valid response	30 (100.0%)
	Total missing	58
e) Lung/breathing problem	Yes	2 (6.7%)
	No	28 (93.3%)
	Total valid response	30 (100.0%)
	Total missing	58
f) Hearing problem	Yes	8 (26.7%)
	No	22 (73.3%)
	Total valid response	30 (100.0%)
	Total missing	58
g) Eye/vision problem	Yes	14 (42.4%)



Question	Response	Number of Respondents (%)
	No	19 (57.6%)
	Total valid response	33 (100.0%)
	Total missing	55
h) Heart problem	Yes	10 (32.3%)
	No	21 (67.7%)
	Total valid response	31 (100.0%)
	Total missing	57
i) Stroke problem	Yes	5 (17.2%)
	No	24 (82.8%)
	Total valid response	29 (100.0%)
	Total missing	59
j) Hypertension/high blood pressure	Yes	17 (54.8%)
	No	13 (41.9%)
	Don't know/Not sure	1 (3.2%)
	Total valid response	31 (100.0%)
	Total missing	57
k) Diabetes	Yes	30 (93.8%)
	No	2 (6.3%)
	Total valid response	32 (100.0%)
	Total missing	56
I) Cancer	Yes	4 (13.3%)
	No	26 (86.7%)
	Total valid response	30 (100.0%)
	Total missing	58
m) Mental or emotional health	Yes	10 (34.5%)
	No	16 (55.2%)
	Don't know/Not sure	3 (10.3%)

Question	Response	Number of Respondents (%)
	Total valid response	29 (100.0%)
	Total missing	59

PT 1.2

Analysis Sets	Number of Respondents (%)
All valid respondents	47 (100.0%)
Included in Provider Analysis Set (PAS)	47 (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	47
Included in the Eye Care Professional Set (Eye Specialist)	29 (61.7%)
Excluded in the Eye Care Professional Set (Eye Specialist)	18 (38.3%)
Reasons for exclusion from Eye Care Professional Set:	
Missing required speciality	18
No valid (non-missing) response for the supplemental eye questionnaire	0

PT 1.3

Subgroups	Number of Respondents (%)
Provider Analysis Set	47 (100.0%)
Primary Care Provider	2 (4.3%)
Diabetes Specialist Provider	8 (17.0%)
Eye Care Professional	29 (61.7%)
Ophthalmologist	27 (57.4%)

NB [1]: Primary Care Provider = General Practitioner/Family practitioner (but not diabetes specialist or eye care professional)

PT 1.4

	Item	Response	Primary	Diabetes	Ophthalmologist	PAS
			Care	Specialist		
			Provider	Provider		
L						

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



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 (4.3%)
	Diabetes specialist	0 (0.0%)	8 (100.0%)	1 (3.7%)	9 (19.1%)
	General ophthalmologist	0 (0.0%)	0 (0.0%)	17 (63.0%)	17 (36.2%)
	Optometrist	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (4.3%)
	Retinal specialist	0 (0.0%)	0 (0.0%)	12 (44.4%)	12 (25.5%)
	Nurse	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (8.5%)
	Health educator	0 (0.0%)	1 (12.5%)	0 (0.0%)	3 (6.4%)
	None of the above	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (6.4%)
	Total valid response	2 (100.0%)	8 (100.0%)	27 (100.0%)	47 (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	8	26	46
	Mean	2.0	26.3	11.7	14.9
	SD	2.8	10.2	8.5	11.4
	Median	2.0	28.5	10.0	10.0
	Min.	0	9	2	0
	Max.	4	44	30	44
	Total missing	0	0	1	1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is your main practice	Diabetes clinic/practice	0 (0.0%)	4 (50.0%)	0 (0.0%)	4 (8.9%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
setting?					
	Eye clinic/practice	0 (0.0%)	0 (0.0%)	6 (23.1%)	8 (17.8%)
	General medical clinic/practice	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Hospital	1 (100.0%)	3 (37.5%)	18 (69.2%)	27 (60.0%)
	Other	0 (0.0%)	1 (12.5%)	2 (7.7%)	6 (13.3%)
	Total Valid Response	1 (100.0%)	8 (100.0%)	26 (100.0%)	45 (100.0%)
	Total missing	1	0	1	2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Where is your main practice located?	Urban setting	1 (100.0%)	8 (100.0%)	25 (96.2%)	42 (93.3%)
	Non-urban setting	0 (0.0%)	0 (0.0%)	1 (3.8%)	3 (6.7%)
	Total Valid Response	1 (100.0%)	8 (100.0%)	26 (100.0%)	45 (100.0%)
	Total missing	1	0	1	2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In which sector is your main practice?	Government	0 (0.0%)	3 (37.5%)	18 (69.2%)	25 (55.6%)
	Private	0 (0.0%)	3 (37.5%)	6 (23.1%)	11 (24.4%)
	Non profit	1 (100.0%)	1 (12.5%)	1 (3.8%)	7 (15.6%)
	Combined/mixed	0 (0.0%)	1 (12.5%)	1 (3.8%)	2 (4.4%)
	Total Valid Response	1 (100.0%)	8 (100.0%)	26 (100.0%)	45 (100.0%)



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total missing	1	0	1	2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Is your main practice limited to certain populations?	No	1 (100.0%)	5 (62.5%)	23 (88.5%)	37 (82.2%)
	Yes, limited by age	0 (0.0%)	2 (25.0%)	3 (11.5%)	6 (13.3%)
	Yes, limited to persons with health insurance	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.2%)
	Yes, limited to low income or uninsured persons	0 (0.0%)	1 (12.5%)	0 (0.0%)	2 (4.4%)
	Yes, limited to persons who pay out-of-pocket	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.2%)
	Yes, other	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.2%)
	Total valid response	1 (100.0%)	8 (100.0%)	26 (100.0%)	45 (100.0%)
	Total missing	1	0	1	2

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	0 (0.0%)	2 (28.6%)	0 (0.0%)	4 (9.1%)
	More than 1 week but less than 1 month	0 (0.0%)	3 (42.9%)	11 (42.3%)	19 (43.2%)
	More than 1 month but less	0 (0.0%)	0 (0.0%)	7 (26.9%)	7

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	than 2 months				(15.9%)
	More than 2 months but less than 3 months	1 (100.0%)	1 (14.3%)	3 (11.5%)	7 (15.9%)
	More than 3 months but less than 6 months	0 (0.0%)	1 (14.3%)	2 (7.7%)	3 (6.8%)
	Six or more months	0 (0.0%)	0 (0.0%)	1 (3.8%)	2 (4.5%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	2 (7.7%)	2 (4.5%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	26 (100.0%)	44 (100.0%)
	Total missing	1	1	1	3

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	7	26	41
	Mean	60	38.6	124.6	94.9
	SD		15.7	62.7	64.7
	Median	60	40	100	80
	Min.	60	20	50	10
	Max.	60	60	300	300
	Total missing	1	1	1	6
What percentage of the patients in your main practice have diabetes [% patients]	Total valid response (n)	1	7	25	41
	Mean	40	80	23.6	36.5
	SD		28.3	21.4	33.2



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Median	40	90	15	20
	Min.	40	30	5	1
	Max.	40	100	90	100
	Total missing	1	1	2	6

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	1 (100.0%)	3 (42.9%)	12 (48.0%)	22 (51.2%)
	Pay a reduced/subsidized rate	0 (0.0%)	1 (14.3%)	6 (24.0%)	7 (16.3%)
	Pay out-of-pocket (full fees)	0 (0.0%)	4 (57.1%)	4 (16.0%)	8 (18.6%)
	Pay through insurance	0 (0.0%)	1 (14.3%)	6 (24.0%)	9 (20.9%)
	Patient pays some, insurance pays some	0 (0.0%)	1 (14.3%)	4 (16.0%)	7 (16.3%)
	Other	0 (0.0%)	0 (0.0%)	3 (12.0%)	4 (9.3%)
	Total valid response	1 (100.0%)	7 (100.0%)	25 (100.0%)	43 (100.0%)
	Total missing	1	1	2	4

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In addition to your main practice, do you work in another practice setting?	Yes	1 (100.0%)	2 (28.6%)	7 (26.9%)	12 (27.3%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	No		5 (71.4%)	19 (73.1%)	32 (72.7%)
	Total valid response	1 (100.0%)	7 (100.0%)	26 (100.0%)	44 (100.0%)
	Total missing	1	1	1	3
In which other practice setting(s) do you work?	Hospital		2 (100.0%)	3 (42.9%)	6 (50.0%)
	Diabetes clinic/practice		1 (50.0%)	1 (14.3%)	2 (16.7%)
	Eye clinic/practice			2 (28.6%)	2 (16.7%)
	Other	1 (100.0%)		2 (28.6%)	4 (33.3%)
	Total valid response	1 (100.0%)	2 (100.0%)	7 (100.0%)	12 (100.0%)
	Total missing	1	6	20	35
In which sector(s) is(are) the practice(s)?	Government		1 (50.0%)	2 (28.6%)	4 (33.3%)
	Private	1 (100.0%)		4 (57.1%)	6 (50.0%)
	Combined/mixed		1 (50.0%)	1 (14.3%)	2 (16.7%)
	Total valid response	1 (100.0%)	2 (100.0%)	7 (100.0%)	12 (100.0%)
	Total missing	1	6	20	35
Is there a major difference between your practices with respect to how diabetic eye disease is screened and managed?	Yes		1 (50.0%)	3 (42.9%)	4 (33.3%)
	No	1 (100.0%)	1 (50.0%)	4 (57.1%)	8 (66.7%)
	Total valid response	1 (100.0%)	2 (100.0%)	7 (100.0%)	12 (100.0%)
	Total missing	1	6	20	35



Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Blood glucose	Yes			7 (100.0%)	5 (20.0%)	17 (41.5%)
		Total valid numeric response (n)	0 (0.0%)	7 (100.0%)	5 (20.0%)	16 (39.0%)
		Mean		49.3	4.4	23.6
		SD		116.3	2.3	77.2
		Median	-	4.0	4.0	4.0
		Min	<u>-</u>	1	2	0
		Max	<u>-</u>	313	8	313
		Total missing	2	1	22	31
	No		1 (100.0%)		20 (80.0%)	24 (58.5%)
	Total valid response		1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing		1	1	2	6
HbA1c	Yes		1 (100.0%)	7 (100.0%)	14 (56.0%)	29 (70.7%)
		Total valid numeric response (n)	1 (100.0%)	7 (100.0%)	14 (56.0%)	28 (68.3%)
		Mean	1.0	3.6	3.4	3.2
		SD		0.8	1.2	1.3
		Median	1.0	4.0	4.0	4.0
		Min	1	2	1	0
		Max	1	4	5	5
		Total missing	1	1	13	19
	No				11 (44.0%)	12 (29.3%)
	Total valid response		1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total missing		1	1	2	6
Urine check	Yes			6 (85.7%)	2 (8.0%)	13 (31.7%)
		Total valid numeric response (n)	0 (0.0%)	6 (85.7%)	2 (8.0%)	13 (31.7%)
		Mean		16.0	4.5	8.5
		SD		31.1	0.7	21.4
		Median	-	2.5	4.5	1.0
		Min	<u>-</u>	1	4	1
		Max	-	79	5	79
		Total missing	2	2	25	34
	No		1 (100.0%)	1 (14.3%)	23 (92.0%)	28 (68.3%)
	Total valid response		1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing		1	1	2	6
Weight check	Yes			7 (100.0%)	4 (16.0%)	16 (39.0%)
		Total valid numeric response (n)	0 (0.0%)	7 (100.0%)	4 (16.0%)	16 (39.0%)
		Mean		48.6	5.5	23.4
		SD	-	116.6	6.5	77.3
		Median	-	4.0	3.0	4.0
		Min	1	3	1	1
		Max	1	313	15	313
		Total missing	2	1	23	31
	No		1 (100.0%)		21 (84.0%)	25 (61.0%)
	Total valid		1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)



Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	response					
	Total missing		1	1	2	6
Blood pressure check	Yes			7 (100.0%)	11 (44.0%)	24 (58.5%)
		Total valid numeric response (n)	0 (0.0%)	7 (100.0%)	11 (44.0%)	24 (58.5%)
		Mean		48.1	9.8	19.3
		SD	-	116.8	17.1	63.7
		Median	-	4.0	4.0	4.0
		Min	-	1	0	0
		Max	-	313	60	313
		Total missing	2	1	16	23
	No		1 (100.0%)		14 (56.0%)	17 (41.5%)
	Total valid response		1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing		1	1	2	6
Foot check	Yes			7 (100.0%)	2 (8.0%)	14 (34.1%)
		Total valid numeric response (n)	0 (0.0%)	7 (100.0%)	2 (8.0%)	14 (34.1%)
		Mean		47.7	5.0	25.2
		SD	1	117.0	7.1	82.9
		Median	1	4.0	5.0	2.5
		Min	1	1	0	0
		Max	1	313	10	313
		Total missing	2	1	25	33
	No		1 (100.0%)		23 (92.0%)	27 (65.9%)
	Total	1	1	7 (100.0%)	25 (100.0%)	41

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	valid response		(100.0%)			(100.0%)
	Total missing		1	1	2	6
Eye examination - Un-dilated	Yes		1 (100.0%)	4 (57.1%)	21 (80.8%)	30 (73.2%)
		Total valid numeric response (n)	1 (100.0%)	4 (57.1%)	21 (80.8%)	30 (73.2%)
		Mean	2.0	79.3	2.1	15.6
		SD		155.8	2.6	59.0
		Median	2.0	1.5	1.0	1.0
		Min	2	1	0	0
		Max	2	313	12	313
		Total missing	1	4	6	17
	No			3 (42.9%)	5 (19.2%)	11 (26.8%)
	Total valid response		1 (100.0%)	7 (100.0%)	26 (100.0%)	41 (100.0%)
	Total missing		1	1	1	6
Eye examination - Optical Coherence Tomography	Yes		1 (100.0%)	1 (14.3%)	24 (92.3%)	29 (70.7%)
		Total valid numeric response (n)	1 (100.0%)	1 (14.3%)	24 (92.3%)	28 (68.3%)
		Mean	2.0	1.0	2.2	15.0
		SD			2.5	68.6
		Median	2.0	1.0	1.0	1.0
		Min	2	1	0	0
		Max	2	1	12	365
		Total	1	7	3	19



Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		missing				
	No			6 (85.7%)	2 (7.7%)	12 (29.3%)
	Total valid response		1 (100.0%)	7 (100.0%)	26 (100.0%)	41 (100.0%)
	Total missing		1	1	1	6
Eye examination - Fundoscopy	Yes		1 (100.0%)	4 (57.1%)	24 (92.3%)	34 (81.0%)
		Total valid numeric response (n)	1 (100.0%)	4 (57.1%)	23 (88.5%)	32 (76.2%)
		Mean	1.0	0.8	2.2	13.2
		SD		0.5	2.6	64.2
		Median	1.0	1.0	1.0	1.0
		Min	1	0	0	0
		Max	1	1	12	365
		Total missing	1	4	4	15
	No			3 (42.9%)	2 (7.7%)	8 (19.0%)
	Total valid response		1 (100.0%)	7 (100.0%)	26 (100.0%)	42 (100.0%)
	Total missing		1	1	1	5
Eye examination - Fluorescein Angiography	Yes		1 (100.0%)	2 (28.6%)	23 (88.5%)	30 (73.2%)
		Total valid numeric response (n)	1 (100.0%)	2 (28.6%)	23 (88.5%)	30 (73.2%)
		Mean	1.0	157.0	1.2	14.8
		SD		220.6	0.9	59.1
		Median	1.0	157.0	1.0	1.0

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		Min	1	1	0	0
		Max	1	313	4	313
		Total missing	1	6	4	17
	No			5 (71.4%)	3 (11.5%)	11 (26.8%)
	Total valid response		1 (100.0%)	7 (100.0%)	26 (100.0%)	41 (100.0%)
	Total missing		1	1	1	6
Eye examination - Lipid check	Yes		1 (100.0%)	5 (71.4%)	9 (36.0%)	17 (42.5%)
		Total valid numeric response (n)	1 (100.0%)	5 (71.4%)	9 (36.0%)	17 (42.5%)
		Mean	1.0	63.6	2.6	20.2
		SD		139.4	3.0	75.5
		Median	1.0	1.0	1.0	1.0
		Min	1	1	1	0
		Max	1	313	10	313
		Total missing	1	3	18	30
	No			2 (28.6%)	16 (64.0%)	23 (57.5%)
	Total valid response		1 (100.0%)	7 (100.0%)	25 (100.0%)	40 (100.0%)
	Total missing		1	1	2	7

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, what	Diabetes management and	0 (0.0%)	7 (100.0%)	11 (45.8%)	24 (57.1%)



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
topics do you cover during a routine visit with a patient who has diabetes?	monitoring				
	Diet/nutrition	0 (0.0%)	7 (100.0%)	3 (12.5%)	14 (33.3%)
	Exercise/physical activity	0 (0.0%)	6 (85.7%)	2 (8.3%)	12 (28.6%)
	Medicines	0 (0.0%)	7 (100.0%)	10 (41.7%)	22 (52.4%)
	Foot care and inspection	0 (0.0%)	6 (85.7%)	2 (8.3%)	12 (28.6%)
	Blood pressure	0 (0.0%)	6 (85.7%)	9 (37.5%)	19 (45.2%)
	Eye care and exams	1 (100.0%)	3 (42.9%)	20 (83.3%)	31 (73.8%)
	Lipid check	0 (0.0%)	6 (85.7%)	4 (16.7%)	12 (28.6%)
	None of the above	0 (0.0%)	0 (0.0%)	1 (4.2%)	3 (7.1%)
	Total valid response	1 (100.0%)	7 (100.0%)	24 (100.0%)	42 (100.0%)
	Total missing	1	1	3	5

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%)	3 (42.9%)	6 (26.1%)	14 (34.1%)
	Yes, but information on eye complications is not sufficient	0 (0.0%)	2 (28.6%)	3 (13.0%)	5 (12.2%)
	Yes, but no information on eye complications is included	0 (0.0%)	2 (28.6%)	0 (0.0%)	2 (4.9%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	No written information is available for patients	1 (100.0%)	0 (0.0%)	12 (52.2%)	16 (39.0%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	2 (8.7%)	4 (9.8%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	23 (100.0%)	41 (100.0%)
	Total missing	1	1	4	6

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	0 (0.0%)	6 (85.7%)	5 (20.8%)	17 (40.5%)
	Yes, available but not used by staff	0 (0.0%)	0 (0.0%)	1 (4.2%)	1 (2.4%)
	Not available	1 (100.0%)	1 (14.3%)	10 (41.7%)	15 (35.7%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	8 (33.3%)	9 (21.4%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	24 (100.0%)	42 (100.0%)
	Total missing	1	1	3	5

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you have written protocols/guidelines for	Yes, available	0 (0.0%)	3 (50.0%)	9 (36.0%)	17 (40.5%)



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
detection and management of diabetes-related vision issue available in your main practice?	and used by staff				
	Yes, available but not used by staff	0 (0.0%)	0 (0.0%)	2 (8.0%)	2 (4.8%)
	Not available	1 (100.0%)	3 (50.0%)	9 (36.0%)	15 (35.7%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	5 (20.0%)	8 (19.0%)
	Total Valid Response	1 (100.0%)	6 (100.0%)	25 (100.0%)	42 (100.0%)
	Total missing	1	2	2	5

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%)	3 (42.9%)	9 (36.0%)	14 (34.1%)
	Mean		4.3	5.8	5.7
	SD		1.2	1.7	2.0
	Median		5.0	5.0	5.0
	Min		3	5	3
	Max		5	10	10
	After a predetermined age (numeric response) (n)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed	1 (100.0%)	3 (42.9%)	14 (56.0%)	20 (48.8%)
	When a patient reports eye/vision problems		1 (14.3%)		2 (4.9%)
	No standard practice, timing varies case by case			2 (8.0%)	3 (7.3%)
	Don't know/Not sure				1 (2.4%)
	Other				1 (2.4%)
	Total valid response	1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing	1	1	2	6
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%)	2 (8.3%)	2 (5.0%)
	Mean			7.5	7.5
	SD			3.5	3.5
	Median			7.5	7.5
	Min			5	5
	Max			10	10
	After a predetermined age (numeric response) (n)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				
	SD]			
	Median				



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Min				
	Max				
	As soon as they are diagnosed	1 (100.0%)	7 (100.0%)	20 (83.3%)	34 (85.0%)
	No standard practice, timing varies case by case			2 (8.3%)	2 (5.0%)
	Other				2 (5.0%)
	Total valid response	1 (100.0%)	7 (100.0%)	24 (100.0%)	40 (100.0%)
	Total missing	1	1	3	7

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%)	7 (100.0%)	24 (96.0%)	40 (97.6%)
	Other	0 (0.0%)	0 (0.0%)	1 (4.0%)	1 (2.4%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing	1	1	2	6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you screen patients for DR?	Yes	1 (100.0%)	6 (85.7%)	25 (100.0%)	40 (95.2%)
	No		1 (14.3%)		2 (4.8%)
	Total valid response	1 (100.0%)	7 (100.0%)	25 (100.0%)	42 (100.0%)
	Total missing	1	1	2	5

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Where do you screen patients?	In clinic		5 (83.3%)	14 (56.0%)	20 (50.0%)
	Outreach			2 (8.0%)	5 (12.5%)
	Other	1 (100.0%)	1 (16.7%)	10 (40.0%)	17 (42.5%)
	Total valid response	1 (100.0%)	6 (100.0%)	25 (100.0%)	40 (100.0%)
	Total missing	1	2	2	7

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%)	7 (100.0%)	24 (96.0%)	37 (94.9%)
	Patient's age	0 (0.0%)	4 (57.1%)	17 (68.0%)	24 (61.5%)
	Patient's gender	0 (0.0%)	0 (0.0%)	3 (12.0%)	4 (10.3%)
	Presence of comorbidities such as hypertension, etc.	0 (0.0%)	6 (85.7%)	21 (84.0%)	33 (84.6%)
	High glucose levels	0 (0.0%)	4 (57.1%)	22 (88.0%)	32 (82.1%)
	Ability or inability to pay	0 (0.0%)	1 (14.3%)	1 (4.0%)	2 (5.1%)
	Patient educational level	0 (0.0%)	1 (14.3%)	6 (24.0%)	8 (20.5%)
	Patient adherence to recommendations	0 (0.0%)	0 (0.0%)	11 (44.0%)	12 (30.8%)
	None of the above	0 (0.0%)	0 (0.0%)	1 (4.0%)	1 (2.6%)
	Not applicable	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.6%)
	Total valid response	0	7 (100.0%)	25 (100.0%)	39 (100.0%)
	Total missing	2	1	2	8



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%)	3 (42.9%)	1 (4.0%)	6 (14.6%)
	Proximity to care	0 (0.0%)	3 (42.9%)	6 (24.0%)	11 (26.8%)
	Long wait time for appointment	1 (100.0%)	4 (57.1%)	8 (32.0%)	17 (41.5%)
	Long wait time on the day of visit	0 (0.0%)	1 (14.3%)	9 (36.0%)	13 (31.7%)
	Referral process	0 (0.0%)	1 (14.3%)	0 (0.0%)	2 (4.9%)
	Recommended treatments are not available	0 (0.0%)	1 (14.3%)	0 (0.0%)	1 (2.4%)
	Lack of knowledge and/or awareness	0 (0.0%)	1 (14.3%)	12 (48.0%)	20 (48.8%)
	Patients fear of treatment/results	0 (0.0%)	1 (14.3%)	5 (20.0%)	9 (22.0%)
	Patients they are a burden on family/friends	0 (0.0%)	1 (14.3%)	0 (0.0%)	2 (4.9%)
	Limited access to diabetes specialists	0 (0.0%)	1 (14.3%)	3 (12.0%)	7 (17.1%)
	Limited access to eye specialists	0 (0.0%)	3 (42.9%)	4 (16.0%)	8 (19.5%)
	Patients feel eye complications are unlikely	0 (0.0%)	0 (0.0%)	7 (28.0%)	10 (24.4%)
	Patients feel eye exams are not important	0 (0.0%)	0 (0.0%)	11 (44.0%)	13 (31.7%)
	Patients have competing responsibilities and priorities	0 (0.0%)	0 (0.0%)	4 (16.0%)	6 (14.6%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Clinic too small or lack necessary equipment/staff	0 (0.0%)	2 (28.6%)	0 (0.0%)	2 (4.9%)
	Other	0 (0.0%)	0 (0.0%)	4 (16.0%)	4 (9.8%)
	Total valid response	1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing	1	1	2	6

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%)	2 (28.6%)	4 (16.0%)	11 (26.8%)
	No	1 (100.0%)	5 (71.4%)	19 (76.0%)	27 (65.9%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	2 (8.0%)	3 (7.3%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total missing	1	1	2	6

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%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total Valid Response	1 (100.0%)	7 (100.0%)	25 (100.0%)	41 (100.0%)
	Total	1	1	2	6



Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	missing				

PT 3.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Please indicate your age:	18 - 29	1 (100.0%)		7 (29.2%)	8 (20.0%)
	30 - 39			8 (33.3%)	11 (27.5%)
	40 - 49		1 (14.3%)	5 (20.8%)	8 (20.0%)
	50 - 59		3 (42.9%)	3 (12.5%)	9 (22.5%)
	60 - 69	-	2 (28.6%)	1 (4.2%)	3 (7.5%)
	70 - 79	-	1 (14.3%)		1 (2.5%)
	Total valid response	1 (100.0%)	7 (100.0%)	24 (100.0%)	40 (100.0%)
	Total missing	1	1	3	7
What is your gender?	Female	1 (100.0%)	4 (57.1%)	13 (54.2%)	24 (60.0%)
	Male		3 (42.9%)	11 (45.8%)	16 (40.0%)
	Total valid response	1 (100.0%)	7 (100.0%)	24 (100.0%)	40 (100.0%)
	Total missing	1	1	3	7
What is your highest level of education completed?	Secondary School			1 (4.2%)	1 (2.5%)
	College/University				4 (10.0%)
	Graduate or advanced degree (e.g. PhD, MD, etc)	1 (100.0%)	7 (100.0%)	23 (95.8%)	35 (87.5%)
	Total valid response	1 (100.0%)	7 (100.0%)	24 (100.0%)	40 (100.0%)
	Total missing	1	1	3	7

Question	Response	Ophthalmologist
What percentage of your patients have diabetic retinopathy	Total valid numeric response (n)	24
	Mean	16.4
	SD	20.8
	Median	10.0
	Min	0
	Max	90
	Total missing	3

PT 4.2

Question	Response	Ophthalmologist
What percentage of your patients have diabetic macular edema?	Total valid numeric response (n)	24
	Mean	9.0
	SD	8.6
	Median	5.0
	Min	0
	Max	30
	Total missing	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 (4.2%)
	More than 1 week but less than 1 month	5 (20.8%)
	More than 1 month but less than 2 months	13 (54.2%)
	More than 2 months but less than 3 months	2 (8.3%)
	More than 3 months but less than 6	2 (8.3%)



Question	Response	Ophthalmologist
	months	
	Six or more months	1 (4.2%)
	Total Valid Response	24 (100.0%)
	Total missing	3

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	3 (12.5%)
	More than 2 months but less than 3 months	1 (4.2%)
	There is not wait, diagnosis is given when screened	20 (83.3%)
	Total Valid Response	24 (100.0%)
	Total missing	3

Type of Treatment	Question	Response/time	Ophthalmologist
Laser photocoagulation	Is the treatment available?	Available within country	10 (41.7%)
		Available locally	8 (33.3%)
		Available in practice	20 (83.3%)
		Total valid response	24 (100.0%)
		Total missing	3
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	16 (80.0%)
		Mean	2.2
		SD	1.4
		Median	2.0
		Min	0
		Max	4
		Don't know/not sure	4 (20.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Total valid response	20 (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)	13 (68.4%)
		Mean	2.1
		SD	1.3
		Median	2.0
		Min	1
		Max	4
		Don't know/not sure	5 (26.3%)
		Not applicable	1 (5.3%)
		Total valid response	19 (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)	16 (80.0%)
		Mean	3.0
		SD	1.3
		Median	3.5
		Min	1
		Max	5
		Don't know/not sure	3 (15.0%)
		Not applicable	1 (5.0%)
		Total valid response	20 (100.0%)
		Total missing	7
Anti-VEGF therapies	Is the treatment available?	Available within country	10 (41.7%)
		Available locally	8 (33.3%)
		Available in practice	20 (83.3%)
		Total valid	24 (100.0%)



Type of Treatment	Question	Response/time	Ophthalmologist
		response	
		Total missing	3
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	16 (88.9%)
		Mean	1.3
		SD	0.7
		Median	1.0
		Min	0
		Max	3
		Don't know/not sure	2 (11.1%)
		Total valid response	18 (100.0%)
		Total missing	9
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	16 (88.9%)
		Mean	1.3
		SD	0.6
		Median	1.0
		Min	1
		Max	3
		Don't know/not sure	1 (5.6%)
		Not applicable	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	9
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	18 (90.0%)
		Mean	2.2
		SD	1.4
		Median	1.5
		Min	1
		Max	5

Type of Treatment	Question	Response/time	Ophthalmologist
		Don't know/not sure	1 (5.0%)
		Not applicable	1 (5.0%)
		Total valid response	20 (100.0%)
		Total missing	7
Intravitreal steroid	Is the treatment available?	Available within country	10 (41.7%)
		Available locally	8 (33.3%)
		Available in practice	19 (79.2%)
		Not available	1 (4.2%)
		Total valid response	24 (100.0%)
		Total missing	3
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	14 (82.4%)
		Mean	2.0
		SD	2.4
		Median	1.0
		Min	0
		Max	10
		Don't know/not sure	2 (11.8%)
		Not applicable	1 (5.9%)
		Total valid response	17 (100.0%)
		Total missing	10
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	14 (77.8%)
		Mean	1.4
		SD	0.6
		Median	1.0
		Min	1
		Max	3



Type of Treatment	Question	Response/time	Ophthalmologist
		Don't know/not sure	2 (11.1%)
		Not applicable	2 (11.1%)
		Total valid response	18 (100.0%)
		Total missing	9
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	16 (84.2%)
		Mean	4.6
		SD	6.0
		Median	2.0
		Min	1
		Max	20
		Don't know/not sure	1 (5.3%)
		Not applicable	2 (10.5%)
		Total valid response	19 (100.0%)
		Total missing	8
Uncomplicated vitrectomy	Is the treatment available?	Available within country	10 (41.7%)
		Available locally	10 (41.7%)
		Available in practice	18 (75.0%)
		Total valid response	24 (100.0%)
		Total missing	3
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	15 (75.0%)
		Mean	2.3
		SD	1.9
		Median	2.0
		Min	0
		Max	8
		Don't know/not	3 (15.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		sure	
		Not applicable	2 (10.0%)
		Total valid response	20 (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)	13 (65.0%)
		Mean	2.6
		SD	2.0
		Median	2.0
		Min	0
		Max	8
		Don't know/not sure	4 (20.0%)
		Not applicable	3 (15.0%)
		Total valid response	20 (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)	14 (70.0%)
		Mean	3.1
		SD	2.9
		Median	2.0
		Min	1
		Max	12
		Don't know/not sure	3 (15.0%)
		Not applicable	3 (15.0%)
		Total valid response	20 (100.0%)
		Total missing	7
Complex vitreo- retinal surgery	Is the treatment available?	Available within country	10 (41.7%)
		Available locally	11 (45.8%)
		Available in	17 (70.8%)



Type of Treatment	Question	Response/time	Ophthalmologist
		practice	
		Total valid response	24 (100.0%)
		Total missing	3
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	14 (73.7%)
		Mean	2.0
		SD	1.3
		Median	2.0
		Min	0
		Max	4
		Don't know/not sure	3 (15.8%)
		Not applicable	2 (10.5%)
		Total valid response	19 (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)	13 (65.0%)
		Mean	2.3
		SD	1.4
		Median	3.0
		Min	0
		Max	4
		Don't know/not sure	4 (20.0%)
		Not applicable	3 (15.0%)
		Total valid response	20 (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)	13 (68.4%)
		Mean	2.7
		SD	2.1

Type of Treatment	Question	Response/time	Ophthalmologist
		Median	2.0
		Min	0
		Max	8
		Don't know/not	4 (21.1%)
		sure	
		Not applicable	2 (10.5%)
		Total valid	19 (100.0%)
		response	
		Total missing	8

Question	Response	Ophthalmologist
Do you personally administer treatment for diabetic retinopathy?	Yes	22 (88.0%)
	No	3 (12.0%)
	Total valid response	25 (100.0%)
	Total missing	2
Who administer it?	Another provider in your practice	3 (100.0%)
	Total valid response	3 (100.0%)
	Total missing	24

Question	Response	Ophthalmologist
Do any of the following influence how you treat diabetic retinopathy or diabetic macular edema?	Diabetes duration	17 (81.0%)
	Patient's age	12 (57.1%)
	Patient's gender	2 (9.5%)
	Presence of comorbidities such as hypertension, etc.	18 (85.7%)
	High glucose levels	17 (81.0%)
	Ability or inability to pay	1 (4.8%)
	Insurance restrictions	2 (9.5%)
	Patient educational level	7 (33.3%)
	Patient adherence to	15 (71.4%)



Question	Response	Ophthalmologist
	recommendations	
	Total valid response	21 (100.0%)
	Total missing	6

Question	Response	Ophthalmologist
Do you treat diabetic retinopathy and diabetic macular edema based on:	Visual outcome	1 (4.2%)
	Both	22 (91.7%)
	Other	1 (4.2%)
	Total Valid Response	24 (100.0%)
	Total missing	3

PT 4.9

Question	Response	Ophthalmologist
How are your patients with diabetes screened for diabetic eye disease?	Fundoscopy undilated	3 (12.5%)
	Fundoscopy dilated	21 (87.5%)
	Retinal photo	16 (66.7%)
	Optical Coherence Tomography	16 (66.7%)
	Fluorescein Angiography	12 (50.0%)
	Total valid response	24 (100.0%)
	Total missing	3

Question	Response	Ophthalmologist
In your opinion, do the majority of your patients present:	In time for screening	10 (41.7%)
	When visual problems have already occurred	13 (54.2%)
	Too late for effective treatment	1 (4.2%)
	Total Valid Response	24 (100.0%)
	Total missing	3

Question	Response	Ophthalmologist
Have you received training specifically on treatment and diagnosis of diabetic retinopathy and/or clinically significant diabetic macular edema?	Yes	20 (80.0%)
	No	5 (20.0%)
	Total valid response	25 (100.0%)
	Total missing	2
If yes, When was your last training?	Don't know/Not sure	1 (5.0%)
	Greater than 1 year ago but less than 5 years	4 (20.0%)
	Within the past year	15 (75.0%)
	Total valid response	20 (100.0%)
	Total missing	7

PT 4.12

Question	Response	Ophthalmologist
Would you be interested in online education and certification on DME, Angiogenesis and Anti-VEGF therapies?	Yes	12 (48.0%)
	No	13 (52.0%)
	Total Valid Response	25 (100.0%)
	Total missing	2

Question	Response	Ophthalmologist
How is outreach for screening for diabetic eye disease done in your main practice?	Health fairs for all	4 (17.4%)
	Health fairs for people with diabetes	3 (13.0%)
	Mobile screening centers	6 (26.1%)
	At vision centers	7 (30.4%)
	Other	5 (21.7%)
	Not done	3 (13.0%)
	Don't know/Not sure	3 (13.0%)
	Total valid response	23 (100.0%)



Question	Response	Ophthalmologist
	Total missing	4

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	3 (13.6%)
	Late diagnosis	8 (36.4%)
	Referral pathways	6 (27.3%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	12 (54.5%)
	No universal guidelines on referral/screening	3 (13.6%)
	No universal guidelines on how to treat	1 (4.5%)
	No universal guideline on when to treat	2 (9.1%)
	Government/insurance not able to cover patient costs	0 (0.0%)
	Multi-disciplinary team integration is poor	6 (27.3%)
	Ineffective screening services	5 (22.7%)
	Other	2 (9.1%)
	Total valid response	22 (100.0%)
	Total missing	5

Question	Response	Without DED (%)	With DED (%)	With DME (%)
Which of the following complications of diabetes do you have?	Cardiovascular disease/Stroke	2 (10.5%)	4 (33.3%)	3 (33.3%)
	Foot ulcers	2 (10.5%)	2 (16.7%)	2 (22.2%)
	Kidney disease	5 (26.3%)	7 (58.3%)	4 (44.4%)
	Loss of feeling in hands or toes (neuropathy)	1 (5.3%)	3 (25.0%)	1 (11.1%)
	Vision loss	6 (31.6%)	8 (66.7%)	7 (77.8%)
	Amputation	2 (10.5%)	0 (0.0%)	2 (22.2%)

Question	Response	Without DED (%)	With DED (%)	With DME (%)
	Broken bones or fractures	0 (0.0%)	0 (0.0%)	1 (11.1%)
	None	4 (21.1%)	0 (0.0%)	0 (0.0%)
	Don't know/Not sure	6 (31.6%)	2 (16.7%)	2 (22.2%)
	Total Valid Response	19 (100.0%)	12 (100.0%)	9 (100.0%)
	Total missing	42	2	4

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

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Limited in any way in any activities because of impairment or health problem	15 (26.8%)	7 (53.8%)	7 (53.8%)
Impairment or health problem			
Diabetes	17 (94.4%)	6 (85.7%)	7 (100.0%)
Back or neck problem	9 (50.0%)	2 (33.3%)	4 (80.0%)
Hypertension/high blood pressure	9 (50.0%)	3 (42.9%)	5 (83.3%)
Walking problem	8 (44.4%)	4 (66.7%)	4 (66.7%)
Arthritis/rheumatism	7 (41.2%)	3 (50.0%)	4 (80.0%)
Mental or emotional health	5 (29.4%)	1 (16.7%)	4 (66.7%)
Heart problem	4 (22.2%)	2 (28.6%)	4 (66.7%)
Stroke problem	2 (11.8%)	1 (16.7%)	2 (33.3%)
Fractures, bone/joint injury	2 (11.1%)	3 (50.0%)	1 (16.7%)
Hearing problem	2 (11.1%)	2 (33.3%)	4 (66.7%)
Eye/vision problem	2 (11.1%)	5 (62.5%)	7 (100.0%)
Cancer	2 (11.1%)	2 (33.3%)	0 (0.0%)
Lung/breathing problem	1 (5.6%)	1 (16.7%)	0 (0.0%)

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

Health Status	Without DED (%)	With DED (%)	With DME (%)

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

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

 $^{{\}it NB~[4]: Percentages~within~groups~are~calculated~from~non-missing~data~for~that~question.}$

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

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

 $[\]textit{NB [4]: Percentages within groups are calculated from non-missing data for that question.} \\$



Health Status	Without DED (%)	With DED (%)	With DME (%)
Self-rated health: Good	40 (72.7%)	6 (54.5%)	4 (30.8%)
Self-rated health: Poor	15 (27.3%)	5 (45.5%)	9 (69.2%)
Physically unhealthy days	11 (25.0%)	3 (25.0%)	6 (50.0%)
Mentally unhealthy days	8 (17.4%)	2 (16.7%)	4 (40.0%)
Unhealthy days	12 (27.9%)	4 (33.3%)	7 (58.3%)
Activity limitation days	7 (53.8%)	2 (40.0%)	5 (71.4%)

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".

Item	Response	All respondents	Respondents with Type I diabetes	Respondents with Type II diabetes
How do you manage your diabetes?	Diet	74 (87.1%)	18 (81.8%)	53 (89.8%)
	Oral medicine	61 (71.8%)	4 (18.2%)	53 (89.8%)
	Exercise	50 (58.8%)	15 (68.2%)	34 (57.6%)
	Insulin	39 (45.9%)	21 (95.5%)	17 (28.8%)
	Natural/Herbal medicine	1 (1.2%)		1 (1.7%)

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	23 (40.4%)	7 (50.0%)	2 (15.4%)
	Volunteering	1 (1.8%)	1 (7.1%)	0 (0.0%)
	Retired	27 (47.4%)	4 (28.6%)	10 (76.9%)
	Student	1 (1.8%)	1 (7.1%)	0 (0.0%)
	Not working	5 (8.8%)	1 (7.1%)	1 (7.7%)
	Total Valid Response	57 (100.0%)	14 (100.0%)	13 (100.0%)
	Total missing	4	0	0
Do you receive assistance from the government?	Income assistance	4 (7.0%)	1 (7.7%)	4 (30.8%)
	Medical assistance	7 (12.3%)	4 (30.8%)	3 (23.1%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Food assistance	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Housing assistance	2 (3.5%)	1 (7.7%)	1 (7.7%)
	Pension assistance	5 (8.8%)	1 (7.7%)	2 (15.4%)
	None of the above	43 (75.4%)	9 (69.2%)	5 (38.5%)
	Total valid response	57 (100.0%)	13 (100.0%)	13 (100.0%)
	Total missing	4	1	0
Did you have trouble paying for food at anytime during the past year?	Yes	4 (7.1%)	1 (7.1%)	3 (23.1%)
	No	52 (92.9%)	13 (92.9%)	10 (76.9%)
	Total Valid Response	56 (100.0%)	14 (100.0%)	13 (100.0%)
	Total missing	5	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 5.2: Age group 18-39 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	6 (85.7%)	1 (50.0%)	0 (0.0%)
	Student	1 (14.3%)	1 (50.0%)	0 (0.0%)
	Total Valid Response	7 (100.0%)	2 (100.0%)	0 (0.0%)
	Total missing	1	0	0
Do you receive assistance from the government?	Medical assistance	1 (14.3%)	0 (0.0%)	0 (0.0%)
	Housing assistance	1 (14.3%)	0 (0.0%)	0 (0.0%)
	None of the above	5 (71.4%)	2 (100.0%)	0 (0.0%)
	Total valid response	7 (100.0%)	2 (100.0%)	0
	Total missing	1	0	0

 $^{{\}it NB~[4]: Percentages~within~groups~are~calculated~from~non-missing~data~for~that~question.}$



Item	Response	Without DED (%)	With DED (%)	With DME (%)
Did you have trouble paying for food at anytime during the past year?	No	7 (100.0%)	2 (100.0%)	0 (0.0%)
	Total Valid Response	7 (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.

EXP 5.3: Age group 40-59 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	14 (73.7%)	6 (75.0%)	1 (50.0%)
	Volunteering	1 (5.3%)	1 (12.5%)	0 (0.0%)
	Retired	1 (5.3%)	0 (0.0%)	1 (50.0%)
	Not working	3 (15.8%)	1 (12.5%)	0 (0.0%)
	Total Valid Response	19 (100.0%)	8 (100.0%)	2 (100.0%)
	Total missing	2	0	0
Do you receive assistance from the government?	Income assistance	1 (5.3%)	1 (14.3%)	1 (50.0%)
	Medical assistance	3 (15.8%)	2 (28.6%)	0 (0.0%)
	Housing assistance	0 (0.0%)	1 (14.3%)	0 (0.0%)
	None of the above	16 (84.2%)	5 (71.4%)	1 (50.0%)
	Total valid response	19 (100.0%)	7 (100.0%)	2 (100.0%)
	Total missing	2	1	0
Did you have trouble paying for food at anytime during the past year?	Yes	1 (5.3%)	1 (12.5%)	1 (50.0%)
	No	18 (94.7%)	7 (87.5%)	1 (50.0%)
	Total Valid Response	19 (100.0%)	8 (100.0%)	2 (100.0%)
	Total missing	2	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 [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	3 (10.3%)	0 (0.0%)	1 (11.1%)
	Retired	24 (82.8%)	4 (100.0%)	8 (88.9%)
	Not working	2 (6.9%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	29 (100.0%)	4 (100.0%)	9 (100.0%)
	Total missing	1	0	0
Do you receive assistance from the government?	Income assistance	3 (10.3%)	0 (0.0%)	3 (33.3%)
	Medical assistance	3 (10.3%)	2 (50.0%)	3 (33.3%)
	Food assistance	1 (3.4%)	0 (0.0%)	0 (0.0%)
	Housing assistance	1 (3.4%)	0 (0.0%)	1 (11.1%)
	Pension assistance	4 (13.8%)	1 (25.0%)	1 (11.1%)
	None of the above	21 (72.4%)	2 (50.0%)	3 (33.3%)
	Total valid response	29 (100.0%)	4 (100.0%)	9 (100.0%)
	Total missing	1	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	3 (10.7%)	0 (0.0%)	2 (22.2%)
	No	25 (89.3%)	4 (100.0%)	7 (77.8%)
	Total Valid Response	28 (100.0%)	4 (100.0%)	9 (100.0%)
ND [1]. Without DED - respondents who did not select "V	Total missing	2	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?	Retired	2 (100.0%)	0 (0.0%)	1 (50.0%)
	Not working	0 (0.0%)	0 (0.0%)	1 (50.0%)



Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Total Valid Response	2 (100.0%)	0 (0.0%)	2 (100.0%)
Do you receive assistance from the government?	Pension assistance	1 (50.0%)	0 (0.0%)	1 (50.0%)
	None of the above	1 (50.0%)	0 (0.0%)	1 (50.0%)
	Total valid response	2 (100.0%)	0	2 (100.0%)
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	No	2 (100.0%)	0 (0.0%)	2 (100.0%)
	Total Valid Response	2 (100.0%)	0 (0.0%)	2 (100.0%)

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

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
All respondents		88 (100%)	23 (26.1%)	61 (69.3%)	14 (15.9%)	13 (14.8%)
Gender	Male	44 (52.4%)	10 (22.7%)	32 (72.7%)	9 (20.5%)	5 (11.4%)
	Female	40 (47.6%)	11 (27.5%)	27 (67.5%)	5 (12.5%)	8 (20.0%)
	Total Missing	4	2	2	0	0
Age	18-39 yrs	10 (11.4%)	10 (100.0%)	0 (0.0%)	2 (20.0%)	0 (0.0%)
	40-59 yrs	31 (35.2%)	11 (35.5%)	20 (64.5%)	8 (25.8%)	2 (6.5%)
	60-79 yrs	43 (48.9%)	2 (4.7%)	39 (90.7%)	4 (9.3%)	9 (20.9%)
	80 yrs and over	4 (4.5%)	0 (0.0%)	2 (50.0%)	0 (0.0%)	2 (50.0%)
Time since diagnosis	Within the last year	7 (8.1%)	1 (14.3%)	6 (85.7%)	1 (14.3%)	0 (0.0%)
	1 - 5 years ago	14 (16.3%)	3 (21.4%)	11 (78.6%)	0 (0.0%)	0 (0.0%)
	6 - 10 years ago	10 (11.6%)	2 (20.0%)	6 (60.0%)	1 (10.0%)	3 (30.0%)
	11 - 15 years ago	22 (25.6%)	5 (22.7%)	16 (72.7%)	3 (13.6%)	3 (13.6%)
	16 - 20 years	14 (16.3%)	5 (35.7%)	9 (64.3%)	3 (21.4%)	0 (0.0%)

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

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

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
	ago					
	21 years ago or longer	17 (19.8%)	7 (41.2%)	10 (58.8%)	6 (35.3%)	7 (41.2%)
	Don't know/Not sure	2 (2.3%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)
	Total Missing	2	0	2	0	0
Control of Diabetes	Controlled	59 (69.4%)	17 (28.8%)	40 (67.8%)	12 (20.3%)	4 (6.8%)
	Not controlled	24 (28.2%)	5 (20.8%)	18 (75.0%)	2 (8.3%)	8 (33.3%)
	Don't know/Not sure	2 (2.4%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)
	Total Missing	3	1	2	0	0

Question	Response	With DED n (%)	With DME n (%)
Have you had any treatment for diabetic eye disease?	Yes	9 (64.3%)	7 (87.5%)
	No	4 (28.6%)	1 (12.5%)
	Don't know/Not sure	1 (7.1%)	0 (0.0%)
	Total valid response	14 (100.0%)	8 (100.0%)
	Total missing	0	5
What treatment did you receive?	Laser	9 (100.0%)	7 (100.0%)
	Anti-VEGF	1 (11.1%)	4 (57.1%)
	Surgery	4 (44.4%)	2 (28.6%)
	Other	1 (11.1%)	0 (0.0%)
	Total valid response	9 (100.0%)	7 (100.0%)
	Total missing	5	6
Did you complete the treatment?	Yes	7 (77.8%)	5 (71.4%)
	No	1 (11.1%)	0 (0.0%)
	Still receiving treatment	1 (11.1%)	2 (28.6%)

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.



Question	Response	With DED n (%)	With DME n (%)
	Total valid response	9 (100.0%)	7 (100.0%)
	Total missing	5	6
Do you feel that the treatment worked? Yes, and vision improved		4 (50.0%)	3 (42.9%)
	Yes, but vision stayed the same	1 (12.5%)	3 (42.9%)
	Still waiting to know	0 (0.0%)	1 (14.3%)
	Don't know/Not sure	3 (37.5%)	0 (0.0%)
	Total valid response	8 (100.0%)	7 (100.0%)
	Total missing	6	6
What is/are the reason(s) that you did not complete the treatment?	Total valid response	0 (0.0%)	0 (0.0%)
	Total missing	14	13
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%)
	Treatment would not be effective	0 (0.0%)	1 (100.0%)
	Total valid response	4 (100.0%)	1 (100.0%)
	Total missing	10	12

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.











