DR Barometer
Shifting the needle

The Diabetic Retinopathy Barometer Report

Italy

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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 Italy.

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 and 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 so as to enable people with diabetes to maintain their health and ensure that the contribution 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 eight countries: Germany, Saudi Arabia, Japan, Romania, Mexico, Argentina, Uganda, and Bangladesh. The countries were purposively selected for variation across income level and region, as delineated by the World Health Organization (WHO) and the World Bank Income Groups (WBIGs).

Phase II was a multi-country quantitative study conducted in 41 countries to investigate the current level of awareness of the risk of DR and of the need for prevention, screening and management to 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 World Health Organization (WHO) and into World Bank Income Groups (WBIGs).

Study Populations

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

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

The results from this survey provide new evidence reflecting concerns from the voices of thousands of people with diabetes and health care professionals around the world. This study provides a rich resource for generating unique insights into the real-life experiences of people living with diabetes, 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 the three following 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% reported to 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 remainder were optometrists, nurses, health educators or other types of professionals.

Introduction
Italy Study

Demographic Characteristics[1,2]

Italy is the sixth most populous country in Europe and fourth most populous country in the European Union with a total population of approximately 60.7 million.

Italy has the most rapidly ageing population and the lowest birth rate in all of Europe. In addition, there are many more people retiring and less people working. Today some 14% of its population is under the age of 15 years while some 35% are 60 years or older, a trend which is projected to continue.

By 2050 it is projected that approximately 56% of the population will be at least 60 years old and only 13% of the population will be under the age of 15 years. This means that in just over 30 years the population of older people will almost double and reach an all-time high of approximately 19.9 million, with there being more adults 80 years older or older than children under 14 years of age.

Diabetes Profile[3]

There are 415 million people living with diabetes 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 Regions has the second-lowest age-adjusted comparative diabetes prevalence rate of any IDF region (after the Africa Region) there are still many countries with relatively high diabetes prevalence rates.

Italy has the fifth highest number of people with diabetes in the European Region at ~3.5 million (3,185.8-4,103.3‡) adults living with diabetes, which accounts to ~6% of this sub population in this region. It is important to note that Italy is the 10th top country in the world for diabetes-related health expenditure at $12 billion USD.

Diabetes national prevalence in Italy (20 -79 years) is 7.9% (7.1-9.2‡) and diabetes age-adjusted comparative prevalence is 5.1% (4.6-6.2‡).

Deaths attributed to diabetes in Italy in 2015 were 22,226, which accounts to ~4% of the diabetes related deaths experienced in this region. The estimated number of undiagnosed cases was ~1.3 million (1,650.9-2,126.3‡).

Study Populations: Italy

As reported by 71 adults with diabetes in Italy, 9.9% have been diagnosed with DED and a further 9.9% with DME.

Fifty health care professionals completed the survey in Italy. Of these, 11 were diabetes specialist providers (22%), 33 were ophthalmologists (67%), and 2 were primary care providers (4.1%). The remainder were either optometrists, nurses or other professionals.

The DR Barometer Study: **Italy Overview**

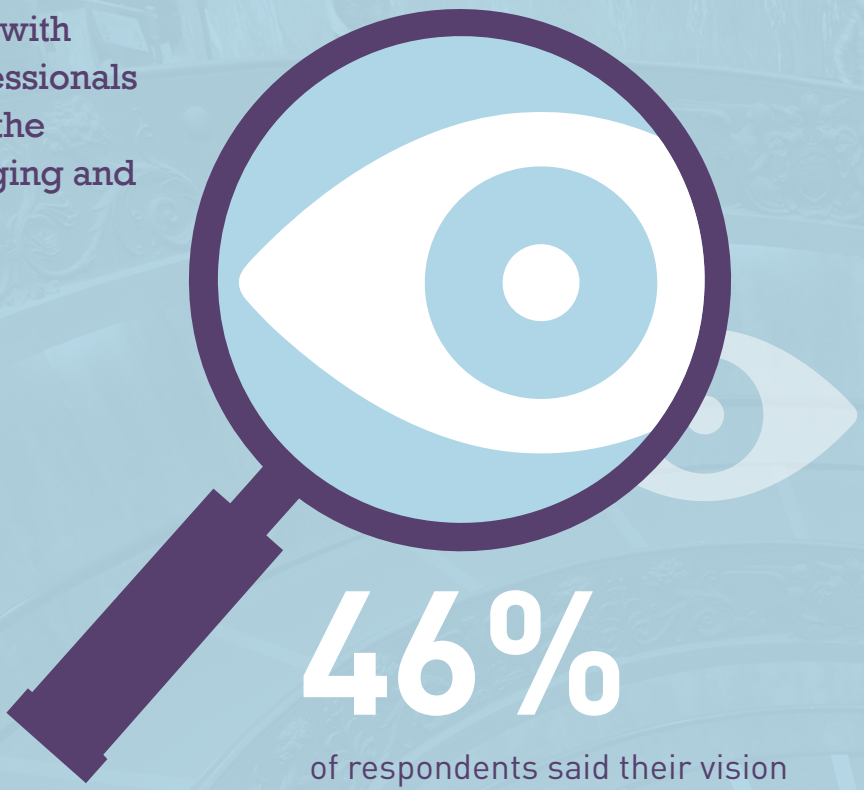
The DR Barometer study was conducted in 41 countries. In Italy, 71 adults with diabetes and 50 health care professionals provided new information about the experiences of living with, managing and treating diabetes, DR and DME.

53%

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

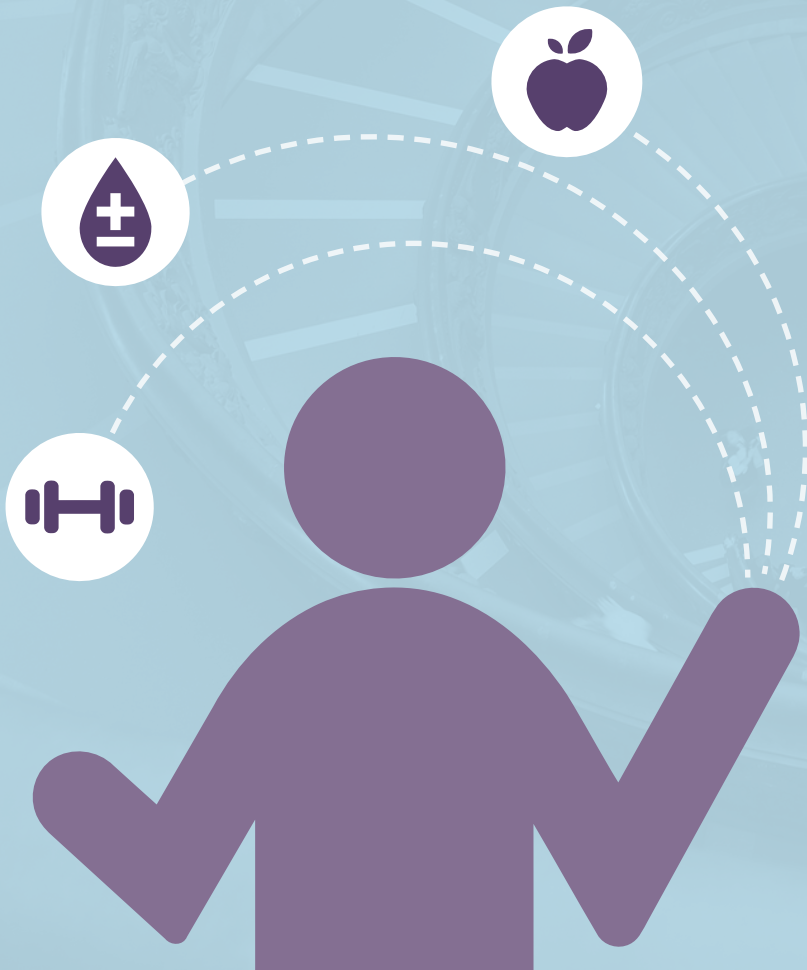
43%

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



46%

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



DR: Diabetic Retinopathy
DME: Diabetic Macular Edema

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91%

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

71%

of those with DME experienced days of **poor physical and mental health**

17%

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

14%

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

Italy
DR Barometer Findings:
Adults with Diabetes

Key Demographic Characteristics

Seventy-one adults with diabetes (patients) completed the patients' survey in Italy: 49% were female and 51% were male. Eighty-one percent lived in an urban setting and 19% in a non-urban setting (see Appendix Table 4.2).

The education levels of all respondents were as follows: 5.7% of respondents were educated to a primary school level, 47% to a secondary school level, 23% to a college/university level and 24% to a graduate or post-graduate level (see Appendix Table 4.3).

Sixty-eight percent of those surveyed were working for pay, 16% were retired and 7.2% stated they were not working (see Appendix Table 4.4).

Most respondents (45%) were aged between 40 and 59 years, 41% between 18-39 years and 14% 60-79 years of age. Eighty-six percent were of traditional working age (18-59 years) (see Table 1).

Of the respondents in Italy, 28% were diagnosed with type 1 diabetes and 72% with type 2 diabetes (see Appendix Table 2.1).

Ten percent of respondents (n=7) reported being diagnosed with DED and a further 9.9% (n=7) with DME.

Six percent of those surveyed were diagnosed with diabetes within the last year, 1 - 5 years ago (38%), 6 - 10 years ago (31%), 11 - 15 years ago (11%), 16 - 20 years ago (5.6%) and 21 years ago or more (8.5%) (see Appendix Table 2.2).

A younger population was more likely to be associated with type 1 diabetes which was the opposite for those with type 2 diabetes which tended to be an older population. Amongst 18 to 39-year-olds, 41% had type 1 and 59% had type 2 diabetes. In the 40-59 age group, 22% had type 1 and 78% had type 2 diabetes, 10% of 60-79-year-olds had type 1 diabetes and 90% had type 2.

In people aged 18-39 years, 10% had DED and 14% had DME. In those aged 40-59 years, 9.4% had DED and 6.3% for DME and for people aged 60-79 years 10% had DED and 10% had DME.

Time since diagnosis appeared to be associated with eye complications. For those diagnosed with diabetes between 1 and 5 years ago, 7.4% had DED and 15% had DME. This increased substantively for patients diagnosed 21 years ago or more with one in three (33%) having DED and 17% with DME.

While most (84%) respondents said that their diabetes was well controlled there was some 14% that felt that their condition was not well controlled. For the subgroup of respondents who felt their diabetes was controlled, 8.5% had DED and 10% had DME. In contrast patients who reported that their condition was not controlled 20% had DED and 10% 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		71 (100.0%)	20 (28.2%)	51 (71.8%)	7 (9.9%)	7 (9.9%)
Gender	Male	35 (50.7%)	13 (37.1%)	22 (62.9%)	4 (11.4%)	3 (8.6%)
	Female	34 (49.3%)	6 (17.6%)	28 (82.4%)	3 (8.8%)	4 (11.8%)
	Total Missing	2	1	1	0	0
Age	18-39 yrs.	29 (40.8%)	12 (41.4%)	17 (58.6%)	3 (10.3%)	4 (13.8%)
	40-59 yrs.	32 (45.1%)	7 (21.9%)	25 (78.1%)	3 (9.4%)	2 (6.3%)
	60-79 yrs.	10 (14.1%)	1 (10.0%)	9 (90.0%)	1 (10.0%)	1 (10.0%)
Time since diagnosis	Within the last year	4 (5.6%)	1 (25.0%)	3 (75.0%)	0 (0.0%)	0 (0.0%)
	1 - 5 yrs.	27 (38.0%)	9 (33.3%)	18 (66.7%)	2 (7.4%)	4 (14.8%)
	6 - 10 yrs.	22 (31.0%)	3 (13.6%)	19 (86.4%)	2 (9.1%)	1 (4.5%)
	11 - 15 yrs.	8 (11.3%)	2 (25.0%)	6 (75.0%)	0 (0.0%)	1 (12.5%)
	16 - 20 yrs.	4 (5.6%)	1 (25.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)
	21 yrs. plus	6 (8.5%)	4 (66.7%)	2 (33.3%)	2 (33.3%)	1 (16.7%)
Control of Diabetes	Controlled	59 (84.3%)	16 (27.1%)	43 (72.9%)	5 (8.5%)	6 (10.2%)
	Not controlled	10 (14.3%)	4 (40.0%)	6 (60.0%)	2 (20.0%)	1 (10.0%)
	Don't know/ Not sure	1 (1.4%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total Missing	1	0	1	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".

Knowledge and Management of Diabetes

All respondents reported seeing a health care professional for their diabetes, with 82% seeing a diabetes specialist (average number of visits was 4 times per year) and 18% seeing a general/family doctor (average number of visits was 4.2 times per year) (see Appendix Table 2.3.1 and 2.3.2).

People were informed about their condition through a variety of channels. Eighty-two percent received information from a doctor or nurse, 52% from the internet and 41% from a nutritionist or dietician (see Table 2 and Appendix Table 2.4).

Table 2: Source of information regarding diabetes

Information Source	All Respondents (n=71)
Doctor or nurse	58 (81.7%)
Internet	37 (52.1%)
Nutritionist or dietician	29 (40.8%)
Family/Friends/Neighbours	24 (33.8%)
Diabetes organisation or other health organisation	19 (26.8%)
TV/Radio/Newspaper/Magazines	11 (15.5%)
Health educator	10 (14.1%)
Pharmacist	10 (14.1%)
Social media (e.g. Facebook, Twitter, blogs)	8 (11.3%)

A range of strategies were used by respondents to manage their diabetes. For those with type 1 diabetes, apart from insulin, 75% managed their diabetes with diet, 55% with exercise and 40% with oral medicine. Of the respondents with type 2 diabetes, 84% managed their condition with diet, 70% with oral medicine, 54% with insulin, 40% with exercise, and 12% with natural/herbal medicine.

Only 34% of the respondents were enrolled in diabetes management programmes however 91% of these 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. For the respondents that had eye checks (96%), these occurred at the following intervals: less than 6 months (53%), 6 - 12 months (31%) and greater than 12 months (11%) (see Appendix Table 2.7).

The main challenges in controlling diabetes cited by respondents were: it was too hard to eat the right things (51%), there were long wait times for an appointment to see their doctor or specialist (33%), some respondents didn't want to think about having diabetes (26%), there were too many other things to do (23%) and the cost of care was high (20%) (see Appendix Table 2.9).

Free or low cost medicines or monitoring materials (71%), health education and information (42%), support from family or friends (32%), coordination of healthcare and services by a professional (25%) and support groups (20%) were identified as important to improving the management of the patients' diabetes (see Appendix Table 2.10).

Nature and Information about Complications

Seventy-seven percent of respondents were aware of vision loss as a possible consequence of diabetes and believed other complications such as: neuropathy (54%), amputation (53%), foot ulcers (51%) and cardiovascular disease/stroke (51%) were all associated with diabetes (see Appendix Table 2.11).

Respondents were most concerned about vision loss (36%), cardiovascular disease/ stroke (19%), amputation (17%), kidney disease (10%) and increased risk of broken bones or fractures (2.9%) (see Appendix Table 2.12).

Less than half (49%) of all respondents said they had no complications of diabetes. However, of those who reported complications these included 21% had vision loss, neuropathy (11%), cardiovascular disease/stroke (8.6%), kidney disease (5.7%) and foot ulcers (4.3%) (see Figure 1 and Appendix Table 2.13).

All respondents with DED and DME reported that they had complications (see Table 3). Aside from vision loss, there was a considerable increase in the frequency of people with DED and DME compared to those without DED.

The frequency of neuropathy increased from 5.4% in those without DED to 29% in DED and 43% in DME. Similarly only 3.6% of those without DED reported cardiovascular disease compared with 29% of those with DED and the same for DME.

Figure 1: Presence of complications

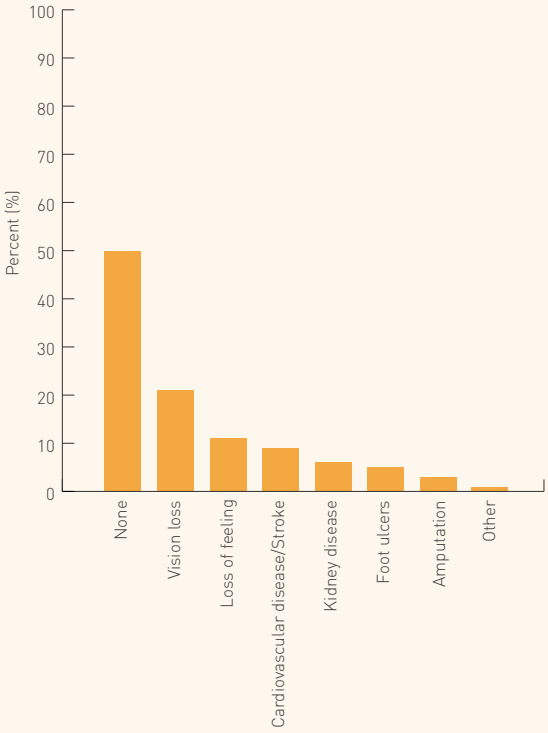


Table 3: Presence of complications without DED, with DED or DME

Complication	Without DED (n=56)	With DED (n=7)	With DME (n=7)
Any	22 (39.3%)	7 (100.0%)	7 (100.0%)
Vision loss	6 (10.7%)	4 (57.1%)	5 (71.4%)
Loss of feeling in hands or toes (neuropathy)	3 (5.4%)	2 (28.6%)	3 (42.9%)
Kidney disease	1 (1.8%)	2 (28.6%)	1 (14.3%)
Cardiovascular disease/Stroke	2 (3.6%)	2 (28.6%)	2 (28.6%)
Amputation	2 (3.6%)	0 (0.0%)	0 (0.0%)
Foot ulcers	3 (5.4%)	0 (0.0%)	0 (0.0%)
Other	0 (0.0%)	1 (14.3%)	0 (0.0%)
None	34 (60.7%)	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 EXP01 for the full list of responses.

Information about Diabetic Eye Disease and Diabetic Macular Edema

While ninety-three percent of respondents stated that eye complications were discussed with their health care professionals, 17.1% had either never had this conversation or it only took place only when symptoms arose. The frequency of regular discussions varied from every visit (20%), multiple times a year (34%) and once a year (29%) (see Appendix Table 2.14).

Seventy-seven percent of patients did what they could to prevent vision problems (e.g. get routine screenings, visit specialists), but more than a quarter (29%) thought that vision problems were a normal part of ageing and 8.6% did not make any special effort to prevent vision problems (see Appendix Table 2.15).

Seventy-seven percent of respondents received information about DR and DME with the doctor or nurse being the most common source (51%) (see Appendix Table 3.9).

Table 4: Source of information about DR and DME

Source	All respondents (n=70)
Doctor/Nurse	36 (51.4%)
Internet	17 (24.3%)
Diabetes organisation or other health organisation	12 (17.1%)
Health educator	8 (11.4%)
Family/Friends/ Neighbours	7 (10.0%)
TV/Radio/Newspaper/ Magazines	3 (4.3%)
None of the above	16 (22.9%)

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

Screening for Diabetic Eye Disease

Eighty-one percent of the respondents reported having an eye exam for DED, with 83% having an exam within the last year and a further 11% more than one year ago but less than two years ago (see Appendix Table 3.2). Forty-four percent of those surveyed were aware of government sponsored screening programmes for DED (see Appendix Table 3.1).

While 71% reported that they should have their eyes examined for DED once a year, 19% said that it should only happen every two years and there were varied smaller numbers that thought that testing should happen less than every two years and only when symptoms occur (see Appendix Table 3.4).

The biggest barriers to eye exams were the long wait times for an appointment (53%), the fear of treatment and /or the results (27%) and the high cost of exams (25%) (see Table 5).

Table 5: Barriers to eye examinations

Identified Barriers	All Respondents (n=68)
Long wait time for appointment	36 (52.9%)
Fear of treatment/results	18 (26.5%)
They are expensive	17 (25.0%)
Long wait time on the day of the visit	17 (25.0%)
Limited access to diabetes specialists	12 (17.6%)
Eye exams are not available near my home	8 (11.8%)
Burden on my family/friends	8 (11.8%)
Too many other things to do or worry about	7 (10.3%)
Don't know much about my condition	6 (8.8%)
Recommended treatments for eye problems are not available	3 (4.4%)
I'm not likely to have eye complications	3 (4.4%)
Referral process is complicated or takes too long	2 (2.9%)
Clinics are too small or lack necessary equipment/staff	2 (2.9%)
Eye exams are not important	1 (1.5%)
Other	6 (8.8%)

Treatment of Diabetic Eye Disease and Diabetic Macular Edema

Treatment was assessed separately in people with DED and in those with DME. Seventy-one percent of those with DED received treatment which was most commonly laser treatment (60%). Of those who received treatment 40% (n=2) completed the treatments and 60% (n=3) were still receiving treatment. Sixty percent felt that treatment had been successful and their vision had improved (see Table 6).

Eighty percent of patients with DME (n=4) had received treatment and the most common treatment was also laser (75%). Three respondents had completed their treatment and one was still receiving treatment. While there were very few respondents most felt that treatment had been successful and either their vision had improved (50%, n=2) or their vision had stayed the same (25%, n=1).

Most people (71%) with DME preferred proactive treatment to prevent further vision loss rather than reactive treatment once further vision loss occurred (29%) (see Appendix Table 3.8).

Table 6: Treatment characteristics of patients with DED and DME

Question	Response	With DED (n=7)	With DME (n=7)
Have you had any treatment for diabetic eye disease?	Yes	5 (71.4%)	4 (80.0%)
	No	2 (28.6%)	1 (20.0%)
What treatment did you receive?	Laser	3 (60.0%)	3 (75.0%)
	Anti-VEGF	1 (20.0%)	2 (50.0%)
	Surgery	1 (20.0%)	1 (25.0%)
Did you complete the treatment?	Yes	2 (40.0%)	3 (75.0%)
	Still receiving treatment	3 (60.0%)	1 (25.0%)
Do you feel that the treatment worked?	Yes, and vision improved	3 (60.0%)	2 (50.0%)
	Yes, but vision stayed the same	0 (0.0%)	1 (25.0%)
	Still waiting to know	1 (20.0%)	0 (0.0%)
	Don't know/ Not sure	1 (20.0%)	1 (25.0%)
What are the reason(s) that you have not had treatment for diabetic eye disease?	My doctor did not recommend any treatment	1 (50.0%)	1 (100.0%)
	Still waiting for treatment	1 (50.0%)	0 (0.0%)
	I'm fearful of treatment	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.

Impact of Diabetic Eye Disease and Diabetic Macular Edema

Ninety-two percent of those with DED or DME said that their vision was affected (17% significantly, 75% slightly) (see Appendix Table 3.6).

Every person surveyed said that vision issues impacted their daily lives in various ways such as driving a vehicle (73%), managing their condition (46%), leisure activities/ exercise (27%), social interactions with family/friends (18%) and working or keeping a job (18%) (see Table 7).

Table 7: Activities affected through vision impairment and loss

	All Respondents (n=11)
Driving (a car/vehicle)	8 (72.7%)
Managing my diabetes	5 (45.5%)
Leisure activities/exercise	3 (27.3%)
Social interactions with family/ friends	2 (18.2%)
Work or keeping a job	2 (18.2%)
Other	1 (9.1%)

Forty-six percent of respondents with DED and 71% with DME were in paid employment compared with 66% of respondents without DED (see Table 8). Patients with vision complications reported difficulties with work or keeping a job (18%).

Overall 44% of those surveyed did not receive assistance from the government while 49% received medical assistance (see Appendix Table 4.5). In the three sub groups 71% those DED and 86% with DME received assistance compared with 50% of respondents without DED.

Seventy-eight percent of respondents said they had no trouble paying for food at any time during the past year (see Appendix Table 4.6). Some 36%% stated that their access to healthcare was affected, and for more than one-quarter (25%) it was affected by income (see Appendix Table 4.7).

Fifty-seven percent of respondents said they worried about their health and 8.7% about their family (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=7)	With DME (n=7)
Are you currently working?	Working for pay	36 (65.5%)	6 (85.7%)	5 (71.4%)
	Working without pay at home (e.g. housework, farming)	4 (7.3%)	0 (0.0%)	0 (0.0%)
	Volunteering	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Retired	9 (16.4%)	1 (14.3%)	1 (14.3%)
	Student	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Not working	4 (7.3%)	0 (0.0%)	1 (14.3%)
Do you receive assistance from the government?	Income assistance	1 (1.9%)	0 (0.0%)	1 (14.3%)
	Medical assistance	23 (44.2%)	5 (71.4%)	4 (57.1%)
	Food assistance	1 (1.9%)	0 (0.0%)	2 (28.6%)
	Housing assistance	0 (0.0%)	1 (14.3%)	0 (0.0%)
	Pension assistance	4 (7.7%)	0 (0.0%)	1 (14.3%)
	None of the above	26 (50.0%)	2 (28.6%)	1 (14.3%)
Did you have trouble paying for food at anytime during the past year?	Yes	10 (18.5%)	3 (42.9%)	2 (28.6%)
	No	44 (81.5%)	4 (57.1%)	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.

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.)

Eighty-three percent of people with DED and 71% of those with DME reported their overall health as poor compared with 63% of people without DED. People with DED and DME also experienced a greater negative impact on their physical and mental health.

Only 47% of those without DED reported physically unhealthy days compared with 85% of those with DED and 71% DME. The same was evident with respect to mentally unhealthy days where 38% of those without DED reported this compared with 86% of those with DED and 57% with DME.

Compared with 21% of those without DED, 86% of people with DED and 71% of people with DME experienced limitations to their daily activities as a result of poor health. Where health or an associated condition impacted daily activities, the primary limitations were: diabetes, back or neck problems and hypertension or high blood pressure.

People living with DED and DME had a higher proportion for some impairments, including vision problems and hypertension or high blood pressure.

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

Health Status	Without DED (n=57)	With DED (n=7)	With DME (n=7)
Self-rated health: Good	86 (59.7%)	23 (39.0%)	15 (39.5%)
Self-rated health: Poor	58 (40.3%)	36 (61.0%)	23 (60.5%)
Physically unhealthy days	69 (57.5%)	37 (74.0%)	25 (73.5%)
Mentally unhealthy days	58 (45.3%)	27 (55.1%)	21 (60.0%)
Unhealthy days	84 (67.7%)	41 (78.8%)	26 (76.5%)
Activity limitation days	48 (50.5%)	22 (55.0%)	14 (48.3%)

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.

Italy
DR Barometer Findings:
Health Care Professionals

Key Demographic Characteristics

There were 49 health care professionals (providers) who answered at least one of the survey questions in Italy. Of these, two were primary care providers (4.1%), 11 were diabetes specialists (22%) and 33 were ophthalmologists (67%). The remainder were optometrists, nurses or other professionals (see Appendix PT 1.3).

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

Health care professionals as a group had been practicing for an average of 18 years, with the ophthalmologist group an average of 17 years (see Appendix PT 1.5). All were well educated (89% with graduate or advanced degree); 43% were female and 57% male; and varied in age with 43% being in the 50 - 59 year age group (see Appendix PT 3.1 and Table 10).

Table 10: Summary of key characteristics of health care professionals

Group	Subgroup	All Respondents (n=49)	Primary Care Provider (n=2)	Diabetes Specialist Provider (n=11)	Ophthalmologist (n=33)
All respondents		49 (100.0%)	2 (4.1%)	11 (22.4%)	33 (67.3%)
Age group	30 - 39 yrs.	9 (32.1%)	0 (0.0%)	2 (28.6%)	6 (30.0%)
	40 - 49 yrs.	6 (21.4%)	0 (0.0%)	2 (28.6%)	4 (20.0%)
	50 - 59 yrs.	12 (42.9%)	0 (0.0%)	2 (28.6%)	10 (50.0%)
	60 - 69 yrs.	1 (3.6%)	0 (0.0%)	1 (14.3%)	0 (0.0%)
Gender	Female	12 (42.9%)	0 (0.0%)	4 (57.1%)	7 (35.0%)
	Male	16 (57.1%)	0 (0.0%)	3 (42.9%)	13 (65.0%)
Education	College/University	3 (10.7%)	0 (0.0%)	2 (28.6%)	1 (5.0%)
	Graduate or advanced degree (e.g. PhD, MD, etc.)	25 (89.3%)	0 (0.0%)	5 (71.4%)	19 (95.0%)

Clinical Practice Characteristics

Seventy-two percent of all providers had their main practice setting in a hospital and for ophthalmologists only it varied from a hospital (81%), an eye clinic/practice (13%), and other (6.5%) (see Appendix PT 2.1). Ninety-four percent of providers worked in an urban setting (see Appendix PT 2.2).

Most providers worked in the government sector (67%) (see Appendix PT 2.3) and ophthalmologists worked mainly in the government (61%), combined/mixed (23%), and private (16%) sectors (see Appendix PT 2.3).

Health care professionals reported that 40% of patients don't pay for services, 26% pay a reduced/subsidized rate for services and 16% pay out-of-pocket (full fees) for services. The situation was similar for ophthalmologists: 33% of patients don't pay for services, 26% pay a reduced/subsidized rate for services and 19% pay some, while the insurance pays for some services (see Appendix PT 2.7).

Health care professionals reported that an average of 74 patients were seen per week and 38% of these had diabetes whereas ophthalmologists saw an average of 67 patients per week and 26% of their patient population had diabetes (see Appendix PT 2.6).

For all health care professionals, the average waiting time for an appointment was mostly more than 1 week but less than 1 month (50%), or less than 1 week (20%) (see Appendix PT 2.5).

The average wait time for an appointment with an ophthalmologist was more than 1 week but less than 1 month in 61% of practices. In a further 21% of practices, the average wait time was more than 1 month but less than 2 months (see Table 11).

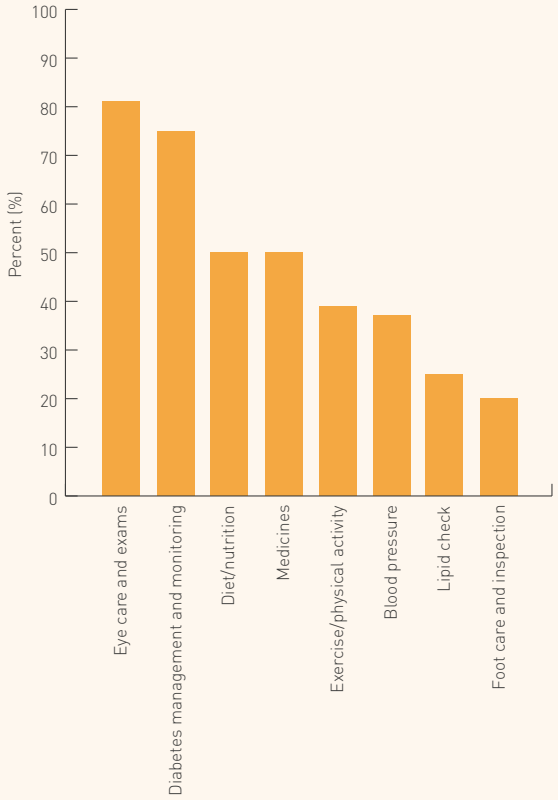
Table 11: Average wait times to schedule an appointment

Wait Time Intervals	All Respondents (n=40)	Ophthalmologist (n=28)
Less than 1 week	8 (20.0%)	4 (14.3%)
More than 1 week but less than 1 month	20 (50.0%)	17 (60.7%)
More than 1 month but less than 2 months	6 (15.0%)	6 (21.4%)
More than 2 months but less than 3 months	2 (5.0%)	0 (0.0%)
More than 3 months but less than 6 months	1 (2.5%)	0 (0.0%)
Do not take appointments	1 (2.5%)	0 (0.0%)
Other	2 (5.0%)	1 (3.6%)

Patient Education Information

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

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



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

Thirty-two percent said that they had sufficient information about eye complications, 14% had information on diabetes but information on eye complications was not sufficient and 3.6% said information on eye complications was not included. Over a third (36%) of all providers had no written information (see Appendix PT 2.11).

About a third of ophthalmologists (30%) had written information about diabetes and potential eye complications, 10% had information on diabetes but information on eye complications was not sufficient. Forty percent of ophthalmologists said there was no written information available.

Guidelines and Protocols

Forty-three percent of all providers and 42% ophthalmologists had written protocols for the management of diabetes and these were used by staff. However, 29% had no protocols (see Appendix PT 2.12).

Forty-six percent of all providers had written protocols for the detection and management of diabetes-related vision issues which were used by staff and 7.1% had protocols but these were not used by staff. Forty-three percent said that protocols on the management of diabetes-related vision didn't exist (see Appendix PT 2.13).

For ophthalmologists, 47% had written protocols for detection and management of diabetes-related vision issues available which were used by staff. As with the all provider group some 42% did not have protocols (see Table 12).

Table 12: Availability and use of information and protocols

Question	Response	All Respondents (n=49)	Ophthalmologist (n=33)
Is there written information about diabetes available for patients in your main practice?	Yes, and information on eye complications is sufficient	9 (32.1%)	6 (30.0%)
	Yes, but information on eye complications is not sufficient	4 (14.3%)	2 (10.0%)
	Yes, but no information on eye complications is included	1 (3.6%)	0 (0.0%)
	No written information is available for patients	10 (35.7%)	8 (40.0%)
	Don't know/Not sure	4 (14.3%)	4 (20.0%)
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	13 (46.4%)	9 (47.4%)
	Yes, available but not used by staff	2 (7.1%)	1 (5.3%)
	Not available	12 (42.9%)	8 (42.1%)
	Don't know/Not sure	1 (3.6%)	1 (5.3%)

Screening Protocols and Barriers in the Care Pathway

Timing for 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 both type 1 (73%) and type 2 (85%) diabetes reported that the initial eye exam should occur at time of the diagnosis of diabetes (see Appendix PT 2.14).

Overall, 71% of health care professionals and 70% of ophthalmologists reported that follow-up eye examinations were conducted every year (see Appendix PT 2.15). Most ophthalmologists (82%) and providers (84%) screen patients for DR (see Appendix PT 2.16).

For all health care professionals, 93% reported send appointment reminders and 7.1% do not (see Appendix PT 2.19). Eighty-nine percent of the providers and 90% of ophthalmologists shared information to optimize patient care management (see Appendix PT 2.20).

The most common patient characteristics influencing the referral process for eye complications for health professionals and ophthalmologists respectively were: diabetes duration (92%) (100%), the presence of comorbidities such as hypertension (81%) (89%), high glucose levels (73%) (83%), the patient's age (65%), and patient adherence to recommendations (35%) (39%) (see Appendix PT 2.17).

As reported by health care professionals, the major barriers to optimizing eye health faced by patients with diabetes were long wait times for an appointment (44%), a lack of knowledge and/or awareness (44%) and the cost of care (40%) (see Appendix PT 2.18). Ophthalmologists like health care professionals reported similar such barriers (see Table 13).

Table 13: Major barriers to optimizing eye health

Response	All Respondents (n=25)	Ophthalmologists (n=19)
Lack of knowledge and/or awareness	11 (44.0%)	10 (52.6%)
Long wait time for appointment	11 (44.0%)	9 (47.4%)
Cost of care	10 (40.0%)	7 (36.8%)
Proximity to care	7 (28.0%)	6 (31.6%)
Patients fear of treatment/results	6 (24.0%)	5 (26.3%)
Long wait time on the day of visit	6 (24.0%)	4 (21.1%)
Patients feel eye complications are unlikely	5 (20.0%)	4 (21.1%)
Patients feel eye exams are not important	6 (24.0%)	4 (21.1%)
Referral process	3 (12.0%)	2 (10.5%)
Patients have competing responsibilities and priorities	3 (12.0%)	2 (10.5%)
Recommended treatments are not available	1 (4.0%)	1 (5.3%)
Patients feel they are a burden on family/friends	1 (4.0%)	1 (5.3%)
Limited access to eye specialists	3 (12.0%)	1 (5.3%)
Clinic too small or lack necessary equipment/staff	1 (4.0%)	1 (5.3%)
Limited access to diabetes specialists	1 (4.0%)	0 (0.0%)
Other	2 (8.0%)	0 (0.0%)

Italy
DR Barometer Findings:
Ophthalmologists

Screening

There were thirty-three ophthalmologists who answered at least one of the supplementary questions (see Appendix PT 4.1 to PT 4.14). On average 25% of patients seen by the ophthalmologists had DR and 18% had DME (see Appendix PT 4.1 and PT 4.2).

The most common waiting time for a screening appointment for DED was more than one week but less than one month (63%) with 21% stating more than one month but less than two months (see Appendix PT 4.3).

Sixty-eight percent of ophthalmologists said that there was no wait from time of screening to diagnosis, and 16% (n=3) said that the wait time was more than one week but less than one month (see Appendix PT 4.4).

Treatment and Challenges

Eighty-six percent of ophthalmologists personally administer the treatment for DR (see Appendix PT 4.6). The most common factors influencing how ophthalmologists treat patients with DR or DME were: diabetes duration (78%), high glucose levels (67%) and the patient's age (61%) (see Appendix PT 4.7).

The most common outreach venues for screening for DED were vision centers (33%), health fairs for all (22%), health fairs for people with diabetes (22%), and mobile screening centers (22%) (see Appendix PT 4.13).

Eighty-four percent of ophthalmologists reported that they screen patients for DR based on fundoscopy through dilated pupils. Additionally 74% use optical coherence tomography, 47% use fluorescein angiography and 32% use retinal photo. Ninety-four percent reported that they treat DR and DME based on both visual and anatomical outcomes (see Appendix PT 4.8 and PT 4.9).

Sixty-three percent of ophthalmologists said that most patients present when visual problems have already occurred while 37% (n=7) reported that patients present in time for screening (see Appendix PT 4.10).

Most (86%) ophthalmologists had received specific training on the treatment and diagnosis of DR and or DME: 82% within the past year, 12% five or more years ago and 5.9% training greater than 1 year ago but less than 5 years (see Appendix PT 4.11). Sixty-seven percent would be interested in online education and certification on DME, angiogenesis and anti-VEGF therapies (see Appendix PT 4.12).

Late diagnosis (69%) and limited access to patient education on DR and DME (56%, n=9) were viewed by ophthalmologists as the greatest challenges for improving patient outcomes in DED (see Table 14).

Table 14: Challenges for improving outcomes in DED

Question	Response	Ophthalmologist
What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease?	Late diagnosis	11 (68.8%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	9 (56.3%)
	Referral pathways	7 (43.8%)
	No universal guidelines on how to treat	6 (37.5%)
	Government/insurance not able to cover patient costs	6 (37.5%)
	No universal guideline on when to treat	5 (31.3%)
	Multi-disciplinary team integration is poor	5 (31.3%)
	Ineffective screening services	5 (31.3%)
	Reimbursement/restrictions on approved therapy	2 (12.5%)
	No universal guidelines on referral/ screening	1 (6.3%)
	Current available therapies not effective	1 (6.3%)

Italy
DR Barometer Summary

In Italy, 71 adults with diabetes and 50 health care professionals provided insight in the experiences of living with, managing and treating diabetes, DR and DME.

The results of the DR Barometer Study, Italy were intended to improve the level of awareness around diabetes and eye complications, and access and barriers to diabetes management, including screening for DED and DME and timely treatment.

Italy is the sixth most populous country in Europe and fourth most populous country in the European Union with a total population of approximately 60.7 million. By 2050 it is projected that approximately 56% of the population will be at least 60 years old and only 13% of the population will be under the age of 15 years. This means that in just over 30 years the population of older people will almost double and reach an all-time high of approximately 19.9 million, with there being more adults 80 years older or older than children under 14 years of age.

Alongside the demographic changes the prevalence of people with diabetes is climbing rapidly. Today Italy has the fifth highest number of people with diabetes in the European Region at ~3.5 million (3,185.8-4,103.3‡) adults living with diabetes, which accounts to ~6% of this sub population in this region. Italy will continue to be in the top 10 countries for diabetes-related health expenditure at $12 billion USD.

The Barometer findings indicate that overall a younger population was more likely to be associated with type 1 diabetes which was the opposite for those with type 2 diabetes which tended to be an older population. Forty-one percent of those in the youngest age group (18-39 years) had type 1 diabetes (59% type 2) and in the 40 – 59 age group 221% had type 1 (78% type 2). This is an important but well known finding in the context of Italy's rapidly ageing population.

People were most often informed about their condition by health professionals such as the doctor, nurse, and nutritionist (41%). A trend globally which was reflected in the Italy study was the increasing use of the internet by over half (52%) of the respondents.

Only about one-third of patients (34%) were enrolled in diabetes management programmes but most (91%) said there was education on the importance of screening for eye complications.

Many of those surveyed struggled with the management of their diabetic condition with some issues that were within their personal control such as eating the right foods and balancing the responsibilities of family and work without compromising their only health. In addition long wait times for appointments to see their doctor and specialist were challenges, and a quarter just didn't want to think about having diabetes.

There was a relatively high awareness of the complications associated with diabetes. Vision loss (36%) was by far the most concerning followed by cardiovascular disease and amputations. While nearly half (49%) of those surveyed had no complications there was still many who reported having neuropathy, cardiovascular disease and neuropathy.

Knowing that diabetic-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 including long wait times for an appointment, a fear of treatment and / or results and the high costs of exams.

Evidence shows that the relationship between the patient and the health care professional is critical to ensure realistic and optimal patient outcomes. It was therefore surprising that 17% of patients surveyed had either never had a conversation about eye complications with their health professional or it only took place only when symptoms were present. Equally concerning is the myths and perceptions around vision changes with more than a quarter (29%) of patients reporting that vision problems were a normal part of ageing and some not making any special effort to prevent vision problems.

The longer the time since diabetes was diagnosed the greater the likelihood to be diagnosed with DED and DME. All respondents with DED and DME reported complications which were significantly greater in frequency to those patients without DED (e.g. 3.6% of those without DED reported cardiovascular disease compared with 29% of those with DED and the same for DME).

People with DED or DME said that their vision was affected and this impacted the lifestyle and the choices in life. Compared with 21% of those without DED, 86% of people with DED and 71% of people with DME experienced limitations to their daily activities as a result of poor health and reported both physical and mental unhealthy days

A proactive treatment approach to prevent further vision loss was preferred rather than reactive treatment once further vision loss had occurred. However for some (17%) respondents, access to healthcare was affected by their income. Health (57%) and family (8.7%) were the top 'worries' on the minds of the respondents surveyed

Patient education is very much at the heart of a proactive approach so it was somewhat unexpected to find that over a third of all providers had no written information about diabetes. Furthermore only 46% of health care professionals and 47% of ophthalmologists had written protocols for the management of diabetes-related vision which were used by staff. In many practices education material and protocols did not exist.

For patients with both type 1 and type 2 diabetes 73% and 85% of all providers respectively said that an initial eye exam should occur at time of the diagnosis of diabetes and there was agreement by most providers and ophthalmologists that follow-up eye examinations should be conducted every year.

The top four patient characteristics influencing the referral process for eye complications across providers and ophthalmologists were diabetes duration, the presence of comorbidities such as hypertension, high glucose levels, and the patient's age

Major barriers to optimizing eye health as reported by providers were long wait times for an appointment, a lack of knowledge and / or awareness and the high cost of care. Late diagnosis and the limited access to patient education on DR and DME were viewed by ophthalmologists as the greatest challenges for improving patient outcomes in DED.

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

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

References and Acknowledgement

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Appendices

The Diabetic Retinopathy Barometer Survey: Appendices for Italy

APPENDIX 1 : National Results

Table 1.1

Survey Information	Number of Respondents (%)
All valid respondents [1]	78 (100.0%)
Respondents aged 18 or over	78 (100.0%)
Respondents with diabetes	71 (91.0%)

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

Table 1.2

Survey Information	Number of Respondents (%)
All valid respondents	78 (100.0%)
Included in Diabetic Analysis Set	71 (91.0%)
Excluded from Diabetic Analysis Set	7 (9.0%)
Reasons for exclusion from diabetic analysis set	.
Not diagnosed with diabetes	4
Missing information on diabetes diagnosis	3

Table 1.3

Survey Information	Number of Respondents (%)
Diabetic Analysis Set	71 (100.0%)
World Bank Income Group: High Income	71 (100.0%)
Persons with diabetic eye disease (DED)	7 (9.9%)
Persons with diabetic macular edema (DME)	7 (9.9%)
Persons with Type I diabetes	20 (28.2%)
Persons with Type II diabetes	51 (71.8%)
Persons seeing health care professional for diabetes	71 (100.0%)
Persons with eye disease & not received treatment	3 (4.2%)
Persons with eye disease & received treatment	9 (12.7%)

Table 2.1

Question	Response	Number of Respondents (%)
With which type of diabetes have you been diagnosed?	Type I	20 (28.2)
	Type II	51 (71.8)
	Total Valid Response	71 (100.0)

Table 2.2

Question	Response	Number of Respondents (%)
When was your diabetes diagnosed?	Within the last year	4 (5.6)
	1 - 5 years ago	27 (38.0)
	6 - 10 years ago	22 (31.0)
	11 - 15 years ago	8 (11.3)
	16 - 20 years ago	4 (5.6)
	21 years ago or longer	6 (8.5)
	Total Valid Response	71 (100.0)

Table 2.3.1

Question	Response	Number of Respondents (%)
Do you see a health care professional for your diabetes?	Yes	71 (100.0)
	Total Valid Response	71 (100.0)
What kind of health care professional?	General/Family Doctor	13 (18.3)
	Diabetes Specialist	58 (81.7)
	Total Valid Response	71 (100.0)

Table 2.3.2

Type of health care professional	Times per year seen for diabetes	Value
General/Family Doctor	Total valid numeric response (n)	10
	Mean	4.2
	SD	2.2
	Median	4.0
	Min	2

Type of health care professional	Times per year seen for diabetes	Value
	Max	9
	Don't know/Not sure	1
	Total missing	2
Diabetes Specialist	Total valid numeric response (n)	58
	Mean	4.0
	SD	3.5
	Median	3.5
	Min	1
	Max	24

Table 2.4

Question	Response	Number of Respondents (%)
How have you received information about diabetes?	Doctor or nurse	58 (81.7%)
	Health educator	10 (14.1%)
	Nutritionist or dietitian	29 (40.8%)
	Diabetes organization or other health organization	19 (26.8%)
	Family/Friends/Neighbors	24 (33.8%)
	TV/Radio/Newspaper/Magazines	11 (15.5%)
	Internet	37 (52.1%)
	Social media (e.g. Facebook, Twitter, blogs)	8 (11.3%)
	Pharmacist	10 (14.1%)
	Total Valid Response	71 (100.0%)

Table 2.5

Question	Response	Number of Respondents (%)
How do you manage your diabetes?	Diet	57 (81.4%)
	Oral medicine	43 (61.4%)
	Exercise	31 (44.3%)
	Insulin	45 (64.3%)
	Natural/Herbal medicine	7 (10.0%)

Question	Response	Number of Respondents (%)
	Total Valid Response	70 (100.0%)
	Total missing	1

Table 2.6

Question	Response	Number of Respondents (%)
Are you currently enrolled in a diabetes patient management support programme?	Yes	24 (33.8)
	No	47 (66.2)
	Total Valid Response	71 (100.0)
Who sponsors the programme?	Hospital support program	9 (37.5)
	Clinic support program	4 (16.7)
	Pharmaceutical support program	3 (12.5)
	Patient organization support program	6 (25.0)
	Don't know/Not sure	2 (8.3)
	Total Valid Response	24 (100.0)
	Total missing	47
Does the programme include education on the importance of screening for diabetic eye complications?	Yes	21 (91.3)
	No	2 (8.7)
	Total Valid Response	23 (100.0)
	Total missing	48

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	71 (100.0%)
	Less than 6 months	62 (87.3%)
	6 - 12 months	6 (8.5%)

Test	Response	Number of Respondents (%)
	Greater than 12 months	2 (2.8%)
	Total valid response	70 (98.6%)
	Total missing	1
	Total valid response	71 (100.0%)
Urine check	Yes	66 (94.3%)
	Less than 6 months	48 (68.6%)
	6 - 12 months	15 (21.4%)
	Greater than 12 months	2 (2.9%)
	Total valid response	65 (92.9%)
	Total missing	6
	No	4 (5.7%)
	Total valid response	70 (100.0%)
	Total missing	1
Weight check	Yes	67 (95.7%)
	Less than 6 months	55 (78.6%)
	6 - 12 months	7 (10.0%)
	Greater than 12 months	3 (4.3%)
	Total valid response	65 (92.9%)
	Total missing	6
	No	2 (2.9%)
	Don't know/Not sure	1 (1.4%)
	Total valid response	70 (100.0%)
	Total missing	1
Blood pressure check	Yes	64 (94.1%)
	Less than 6	57 (83.8%)

Test	Response	Number of Respondents (%)
	months	
	6 - 12 months	6 (8.8%)
	Total valid response	63 (92.6%)
	Total missing	8
	No	4 (5.9%)
	Total valid response	68 (100.0%)
	Total missing	3
Foot check	Yes	44 (63.8%)
	Less than 6 months	19 (27.5%)
	6 - 12 months	16 (23.2%)
	Greater than 12 months	9 (13.0%)
	Total valid response	44 (63.8%)
	Total missing	27
	No	23 (33.3%)
	Don't know/Not sure	2 (2.9%)
	Total valid response	69 (100.0%)
	Total missing	2
Eye check	Yes	67 (95.7%)
	Less than 6 months	37 (52.9%)
	6 - 12 months	22 (31.4%)
	Greater than 12 months	8 (11.4%)
	Total valid response	67 (95.7%)
	Total missing	4
	No	3 (4.3%)
	Total valid response	70 (100.0%)

Test	Response	Number of Respondents (%)
	Total missing	1

Table 2.8

Question	Response	Number of Respondents (%)
How well do you think your diabetes is controlled?	Very well	13 (18.6%)
	Well	46 (65.7%)
	Not very well	10 (14.3%)
	Don't know/Not sure	1 (1.4%)
	Total Valid Response	70 (100.0%)
	Total missing	1

Table 2.9

Question	Response	Number of Respondents (%)
What are the main challenges you face in controlling your diabetes?	High cost of care	14 (20.3%)
	No insurance	10 (14.5%)
	Travel to my regular doctor or specialist is difficult	8 (11.6%)
	Long wait time for an appointment to see my doctor or specialist	23 (33.3%)
	Health services needed are not available	10 (14.5%)
	Don't know enough about diabetes	2 (2.9%)
	Too hard to eat the right things	35 (50.7%)
	Too many other things to do	16 (23.2%)
	Stigma or discrimination because of diabetes	10 (14.5%)
	Don't want to think about having diabetes	18 (26.1%)
	Other	7 (10.1%)
	Total Valid Response	69 (100.0%)

Question	Response	Number of Respondents (%)
	Total missing	2

Table 2.10

Question	Response	Number of Respondents (%)
Which of the following services currently help you better manage your diabetes?	Free or low cost medicines or monitoring materials	49 (71.0%)
	Support groups	14 (20.3%)
	Support from family or friends	22 (31.9%)
	Health education and information	29 (42.0%)
	Mobile services (services that travel to or near your home)	2 (2.9%)
	Coordination of healthcare and services by a professional	17 (24.6%)
	Emergency helpline	12 (17.4%)
	Other	2 (2.9%)
	None	5 (7.2%)
	Total Valid Response	69 (100.0%)
	Total missing	2

Table 2.11

Question	Response	Number of Respondents (%)
What complications (or problems), to your knowledge, arise from diabetes?	Amputation	37 (52.9%)
	Foot ulcers	36 (51.4%)
	Increased risk of broken bones or fractures	9 (12.9%)
	Loss of feeling in hands or toes (neuropathy)	38 (54.3%)
	Vision loss	54 (77.1%)
	Irritable bowel disease	9 (12.9%)
	Kidney disease	28 (40.0%)
	Cardiovascular disease/Stroke	36 (51.4%)

Question	Response	Number of Respondents (%)
	Other	5 (7.1%)
	Don't know/Not sure	1 (1.4%)
	None	5 (7.1%)
	Total Valid Response	70 (100.0%)
	Total missing	1

Table 2.12

Question	Response	Number of Respondents (%)
Which complication of diabetes are you most concerned about?	Amputation	12 (17.4)
	Foot ulcers	1 (1.4)
	Increased risk of broken bones or fractures	2 (2.9)
	Loss of feeling in hands or toes (neuropathy)	1 (1.4)
	Vision loss	25 (36.2)
	Irritable bowel disease	1 (1.4)
	Kidney disease	7 (10.1)
	Cardiovascular disease/Stroke	13 (18.8)
	Don't know/Not sure	3 (4.3)
	None	4 (5.8)
	Total Valid Response	69 (100.0)
	Total missing	2

Table 2.13

Question	Response	Number of Respondents (%)
Which of the following complications of diabetes do you have?	Amputation	2 (2.9%)
	Foot ulcers	3 (4.3%)
	Broken bones or fractures	1 (1.4%)
	Loss of feeling in hands or toes (neuropathy)	8 (11.4%)
	Vision loss	15 (21.4%)

Question	Response	Number of Respondents (%)
	Irritable bowel disease	5 (7.1%)
	Kidney disease	4 (5.7%)
	Cardiovascular disease/Stroke	6 (8.6%)
	Other	1 (1.4%)
	Don't know/Not sure	5 (7.1%)
	None	34 (48.6%)
	Total Valid Response	70 (100.0%)
	Total missing	1

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	14 (20.0%)
	Multiple times per year	24 (34.3%)
	Once per year	20 (28.6%)
	Only when symptoms arise	7 (10.0%)
	Never	5 (7.1%)
	Total Valid Response	70 (100.0%)
	Total missing	1

Table 2.15

Question	Response	Number of Respondents (%)
Which of the following best describes your attitude to vision issues?	I think that vision problems are a normal part of ageing	20 (28.6%)
	I do what I can to prevent vision problems (e.g. get routine screenings, visit specialists)	54 (77.1%)
	I do not make any special effort to prevent vision problems	6 (8.6%)
	Total Valid Response	70 (100.0%)

Question	Response	Number of Respondents (%)
	Total missing	1

Table 2.16

Question	Response	Number of Respondents (%)
What type of health insurance do you have?	Public	44 (62.9)
	Public - Private	11 (15.7)
	Private	5 (7.1)
	None	10 (14.3)
	Total Valid Response	70 (100.0)
	Total missing	1

Table 2.17

Question	Response	Number of Respondents (%)
Most often, how do you pay for the following types of medical care and services?		
General doctor visits (e.g. primary care doctor)	Care is free	49 (70.0)
	Insurance pays total cost	7 (10.0)
	Insurance and out-of-pocket/cash (e.g. co-pays)	10 (14.3)
	Out-of-pocket only (pay cash for all care)	4 (5.7)
	Total Valid Response	70 (100.0)
	Total missing	1
Specialist medical visits (e.g. eye doctor, gynecologist, urologist)	Care is free	21 (30.0)
	Insurance pays total cost	8 (11.4)
	Insurance and out-of-pocket/cash (e.g. co-pays)	21 (30.0)
	Out-of-pocket only (pay cash for all care)	20 (28.6)
	Total Valid Response	70 (100.0)
	Total missing	1
Medicines	Care is free	27 (38.6)
	Insurance pays total cost	6 (8.6)

Question	Response	Number of Respondents (%)
	Insurance and out-of-pocket/cash (e.g. co-pays)	27 (38.6)
	Out-of-pocket only (pay cash for all care)	10 (14.3)
	Total Valid Response	70 (100.0)
	Total missing	1
Medical supplies (e.g. blood glucose meter/strips)	Care is free	27 (39.1)
	Insurance pays total cost	4 (5.8)
	Insurance and out-of-pocket/cash (e.g. co-pays)	17 (24.6)
	Out-of-pocket only (pay cash for all care)	13 (18.8)
	Do not use service	5 (7.2)
	Don't know/Not Sure	3 (4.3)
	Total Valid Response	69 (100.0)
	Total missing	2
Procedures	Care is free	23 (33.3)
	Insurance pays total cost	7 (10.1)
	Insurance and out-of-pocket/cash (e.g. co-pays)	19 (27.5)
	Out-of-pocket only (pay cash for all care)	10 (14.5)
	Do not use service	7 (10.1)
	Don't know/Not Sure	3 (4.3)
	Total Valid Response	69 (100.0)
	Total missing	2
Tests/screenings	Care is free	31 (45.6)
	Insurance pays total cost	7 (10.3)
	Insurance and out-of-pocket/cash (e.g. co-pays)	16 (23.5)
	Out-of-pocket only (pay cash for all care)	9 (13.2)
	Do not use service	3 (4.4)
	Don't know/Not Sure	2 (2.9)
	Total Valid Response	68 (100.0)

Question	Response	Number of Respondents (%)
	Total missing	3
Health education	Care is free	31 (44.9)
	Insurance pays total cost	7 (10.1)
	Insurance and out-of-pocket/cash (e.g. co-pays)	9 (13.0)
	Out-of-pocket only (pay cash for all care)	2 (2.9)
	Do not use service	16 (23.2)
	Don't know/Not Sure	4 (5.8)
	Total Valid Response	69 (100.0)
	Total missing	2
Counseling	Care is free	27 (39.1)
	Insurance pays total cost	9 (13.0)
	Insurance and out-of-pocket/cash (e.g. co-pays)	15 (21.7)
	Out-of-pocket only (pay cash for all care)	13 (18.8)
	Do not use service	4 (5.8)
	Don't know/Not Sure	1 (1.4)
	Total Valid Response	69 (100.0)
	Total missing	2

Table 3.1

Question	Response	Number of Respondents (%)
Are you aware of any government sponsored screening programs for diabetic eye disease (diabetic retinopathy)?	Yes	31 (44.3%)
	No	39 (55.7%)
	Total valid response	70 (100.0%)
	Total missing	1

Table 3.2

Question	Response	Number of Respondents (%)

Question	Response	Number of Respondents (%)
Have you ever had an eye exam for diabetic eye disease?	Yes	57 (81.4%)
	No	13 (18.6%)
	Total valid response	70 (100.0%)
	Total missing	1
How long ago was your last eye exam?	Within the last year	47 (82.5%)
	More than 1 year ago but less than 2 years	6 (10.5%)
	More than 2 years ago but less than 3 years	3 (5.3%)
	More than 3 years ago but less than 5 years	1 (1.8%)
	Total valid response	57 (100.0%)
	Total missing	14
Who did the last exam?	General/Family practitioner	2 (3.5%)
	Eye doctor/Eye clinic	54 (94.7%)
	Other	1 (1.8%)
	Total valid response	57 (100.0%)
	Total missing	14

Table 3.3

Question	Response	Number of Respondents (%)
Have you ever had a dilated eye exam, where your eyes are examined after eye drops?	Yes	62 (91.2%)
	No	4 (5.9%)
	Don't know/Not sure	2 (2.9%)
	Total valid response	68 (100.0%)
	Total missing	3

Table 3.4

Question	Response	Number of Respondents (%)
Based on what you know, how often should you get	Once a year	50 (71.4%)

Question	Response	Number of Respondents (%)
your eyes examined for diabetic eye disease?		
	Every two years	13 (18.6%)
	Less often than every two years	4 (5.7%)
	Only when symptoms occur	2 (2.9%)
	Don't know/Not sure	1 (1.4%)
	Total valid response	70 (100.0%)
	Total missing	1

Table 3.5

Question	Response	Number of Respondents (%)
For you, what are the biggest barriers to eye exams?	They are expensive	17 (25.0%)
	Eye exams are not available near my home	8 (11.8%)
	Long wait time for appointment	36 (52.9%)
	Long wait time on the day of the visit	17 (25.0%)
	Referral process is complicated or takes too long	2 (2.9%)
	Recommended treatments for eye problems are not available	3 (4.4%)
	Don't know much about my condition	6 (8.8%)
	Fear of treatment/results	18 (26.5%)
	Burden on my family/friends	8 (11.8%)
	Limited access to diabetes specialists	12 (17.6%)
	I'm not likely to have eye complications	3 (4.4%)
	Eye exams are not important	1 (1.5%)
	Too many other things to do or worry about	7 (10.3%)
	Clinics are too small or lack necessary equipment/staff	2 (2.9%)
	Other	6 (8.8%)
	Total valid response	68 (100.0%)
	Total missing	3

Table 3.6

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic eye disease?	Yes	12 (17.1%)
	No	58 (82.9%)
	Total valid response	70 (100.0%)
	Total missing	1
Has your diabetic eye disease affected your vision?	Yes, slightly	9 (75.0%)
	Yes, significantly	2 (16.7%)
	No	1 (8.3%)
	Total valid response	12 (100.0%)
	Total missing	59
Have vision issues caused you to have difficulty with any of the following?	Social interactions with family/friends	2 (18.2%)
	Leisure activities/exercise	3 (27.3%)
	Work or keeping a job	2 (18.2%)
	Managing my diabetes	5 (45.5%)
	Other	1 (9.1%)
	Driving (a car/vehicle)	8 (72.7%)
	Total valid response	11 (100.0%)
	Total missing	60

Table 3.7

Question	Response	Number of Respondents (%)
Have you had any treatment for diabetic eye disease?	Yes	9 (75.0%)
	No	3 (25.0%)
	Total valid response	12 (100.0%)
	Total missing	59
What treatment did you receive?	Laser	6 (66.7%)
	Injection in the eye (Anti-VEGF)	3 (33.3%)
	Surgery	2 (22.2%)

Question	Response	Number of Respondents (%)
	Total valid response	9 (100.0%)
	Total missing	62
Did you complete the treatment?	Yes	5 (55.6%)
	Still receiving treatment	4 (44.4%)
	Total valid response	9 (100.0%)
	Total missing	62
Do you feel that the treatment worked?	Yes, and vision improved	5 (55.6%)
	Yes, but vision stayed the same	1 (11.1%)
	Still waiting to know	1 (11.1%)
	Don't know/Not sure	2 (22.2%)
	Total valid response	9 (100.0%)
	Total missing	62
What is/are the reason(s) that you did not complete the treatment?	Total missing	71
What are the reason(s) that you have not had treatment for diabetic eye disease?	My doctor did not recommend any treatment	2 (66.7%)
	Still waiting for treatment	1 (33.3%)
	I'm fearful of treatment	1 (33.3%)
	Total valid response	3 (100.0%)
	Total missing	68

Table 3.8

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic macular edema?	Yes	7 (10.0%)
	No	60 (85.7%)
	Don't know/Not sure	3 (4.3%)
	Total valid response	70 (100.0%)
	Total missing	1
If Yes, which of the following would you prefer	Treatment to prevent further vision loss	5 (71.4%)
	Only treatment when vision loss has occurred	2 (28.6%)

Question	Response	Number of Respondents (%)
	Total valid response	7 (100.0%)
	Total missing	64

Table 3.9

Question	Response	Number of Respondents (%)
Have you received information about diabetic retinopathy or diabetic macular edema from any of the following sources?	Doctor/Nurse	36 (51.4%)
	Health educator	8 (11.4%)
	Diabetes organization or other health organization	12 (17.1%)
	Family/Friends/Neighbors	7 (10.0%)
	TV/Radio/Newspaper/Magazines	3 (4.3%)
	Internet	17 (24.3%)
	None of the above	16 (22.9%)
	Total valid response	70 (100.0%)
	Total missing	1

Table 4.1

Question	Response	Number of Respondents (%)
What is your gender?	Female	34 (49.3)
	Male	35 (50.7)
	Total Valid Response	69 (100.0)
	Total missing	2
Please indicate your age	18 - 29	11 (15.5)
	30 - 39	18 (25.4)
	40 - 49	19 (26.8)
	50 - 59	13 (18.3)
	60 - 69	7 (9.9)
	70 - 79	3 (4.2)
	Total Valid Response	71 (100.0)

Table 4.2

Question	Response	Number of Respondents (%)
Where do you live?	Urban setting	56 (81.2)
	Non-urban setting	13 (18.8)
	Total Valid Response	69 (100.0)
	Total missing	2

Table 4.3

Question	Response	Number of Respondents (%)
What is the highest level of education you completed?	Primary school	4 (5.7)
	Secondary school	33 (47.1)
	College/University	16 (22.9)
	Graduate or post-graduate	17 (24.3)
	Total valid response	70 (100.0)
	Total missing	1

Table 4.4

Question	Response	Number of Respondents (%)
Are you currently working?	Working for pay	47 (68.1)
	Working without pay at home (e.g. housework, farming)	4 (5.8)
	Volunteering	1 (1.4)
	Retired	11 (15.9)
	Student	1 (1.4)
	Not working	5 (7.2)
	Total Valid Response	69 (100.0)
	Total missing	2

Table 4.5

Question	Response	Number of Respondents (%)
Do you receive assistance from the government?	Income assistance	2 (3.0%)

Question	Response	Number of Respondents (%)
	Medical assistance	32 (48.5%)
	Food assistance	3 (4.5%)
	Housing assistance	1 (1.5%)
	Pension assistance	5 (7.6%)
	None of the above	29 (43.9%)
	Total valid response	66 (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	15 (22.1)
	No	53 (77.9)
	Total Valid Response	68 (100.0)
	Total missing	3

Table 4.7

Question	Response	Number of Respondents (%)
Do you feel that your access to health care is negatively affected by any of the following?	Age	6 (8.7)
	Education	2 (2.9)
	Ethnicity	1 (1.4)
	Gender	3 (4.3)
	Income	17 (24.6)
	Language you speak	1 (1.4)
	Place of birth	1 (1.4)
	Place where you live	10 (14.5)
	Race	1 (1.4)
	Sexual orientation	1 (1.4)

Question	Response	Number of Respondents (%)
	None of the above	44 (63.8)
	Total valid response	69 (100.0)
	Total missing	2

Table 4.8

Question	Response	Number of Respondents (%)
Which of the following do you worry about most?	Food	3 (4.3)
	Housing	2 (2.9)
	Money	15 (21.7)
	Health	39 (56.5)
	Family	6 (8.7)
	None of the above	4 (5.8)
	Total Valid Response	69 (100.0)
	Total missing	2

Table 5.1

Question	Response	Number of Respondents (%)
In general, would you say your health is:	Excellent	2 (3.0%)
	Very good	5 (7.5%)
	Good	16 (23.9%)
	Total good health	23 (34.3%)
	Fair	38 (56.7%)
	Poor	6 (9.0%)
	Fair or poor health	44 (65.7%)
	Total valid response	67 (100.0%)
	Total missing	4

Table 5.2

Question	Response	Number of Respondents (%)

Question	Response	Number of Respondents (%)
How many days during last 30 days was your physical health not good	Any unhealthy days	32 (54.2%)
	1-5 unhealthy days	15 (25.4%)
	6-10 unhealthy days	10 (16.9%)
	11-20 unhealthy days	2 (3.4%)
	21-30 unhealthy days	5 (8.5%)
	No unhealthy days	27 (45.8%)
	Total valid response	59 (100.0%)
	Total missing	12

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	27 (45.8%)
	1-5 unhealthy days	10 (16.9%)
	6-10 unhealthy days	8 (13.6%)
	11-20 unhealthy days	4 (6.8%)
	21-30 unhealthy days	5 (8.5%)
	No unhealthy days	32 (54.2%)
	Total valid response	59 (100.0%)
	Total missing	12

Table 5.3.2

Question	Response	Number of Respondents (%)

Question	Response	Number of Respondents (%)
Unhealthy days (physically or mentally unhealthy, max 30)	Any unhealthy days	38 (65.5%)
	1-5 unhealthy days	11 (19.0%)
	6-10 unhealthy days	7 (12.1%)
	11-20 unhealthy days	10 (17.2%)
	21-30 unhealthy days	10 (17.2%)
	No unhealthy days	20 (34.5%)
	Total valid response	58 (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	24 (60.0%)
	1-5 unhealthy days	13 (32.5%)
	6-10 unhealthy days	6 (15.0%)
	11-20 unhealthy days	4 (10.0%)
	21-30 unhealthy days	1 (2.5%)
	No unhealthy days	16 (40.0%)
	Total valid response	40 (100.0%)
	Total missing	31

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	23 (35.4%)

Question	Response	Number of Respondents (%)
	No	42 (64.6%)
	Total valid response	65 (100.0%)
	Total missing	6
Which impairment or health problem, if any, limits your activities?		
a) Arthritis/rheumatism	Yes	7 (26.9%)
	No	17 (65.4%)
	Don't know/Not sure	2 (7.7%)
	Total valid response	26 (100.0%)
	Total missing	45
b) Back or neck problem	Yes	18 (69.2%)
	No	8 (30.8%)
	Total valid response	26 (100.0%)
	Total missing	45
c) Fractures, bone/joint injury	Yes	3 (11.5%)
	No	23 (88.5%)
	Total valid response	26 (100.0%)
	Total missing	45
d) Walking problem	Yes	6 (23.1%)
	No	18 (69.2%)
	Don't know/Not sure	2 (7.7%)
	Total valid response	26 (100.0%)
	Total missing	45
e) Lung/breathing problem	Yes	3 (11.5%)
	No	22 (84.6%)
	Refused	1 (3.8%)
	Total valid response	26 (100.0%)
	Total missing	45

Question	Response	Number of Respondents (%)
f) Hearing problem	Yes	3 (11.5%)
	No	23 (88.5%)
	Total valid response	26 (100.0%)
	Total missing	45
g) Eye/vision problem	Yes	14 (51.9%)
	No	10 (37.0%)
	Don't know/Not sure	2 (7.4%)
	Refused	1 (3.7%)
	Total valid response	27 (100.0%)
	Total missing	44
h) Heart problem	Yes	10 (38.5%)
	No	15 (57.7%)
	Don't know/Not sure	1 (3.8%)
	Total valid response	26 (100.0%)
	Total missing	45
i) Stroke problem	Yes	3 (12.0%)
	No	22 (88.0%)
	Total valid response	25 (100.0%)
	Total missing	46
j) Hypertension/high blood pressure	Yes	15 (53.6%)
	No	13 (46.4%)
	Total valid response	28 (100.0%)
	Total missing	43
k) Diabetes	Yes	25 (89.3%)
	No	3 (10.7%)
	Total valid response	28 (100.0%)
	Total missing	43

Question	Response	Number of Respondents (%)
l) Cancer	Yes	3 (11.5%)
	No	23 (88.5%)
	Total valid response	26 (100.0%)
	Total missing	45
m) Mental or emotional health	Yes	6 (23.1%)
	No	16 (61.5%)
	Don't know/Not sure	3 (11.5%)
	Refused	1 (3.8%)
	Total valid response	26 (100.0%)
	Total missing	45

PT 1.2

Analysis Sets	Number of Respondents (%)
All valid respondents	50 (100.0%)
Included in Provider Analysis Set (PAS)	49 (98.0%)
Excluded in Provider Analysis Set (PAS)	1 (2.0%)
Reasons for exclusion from Provider Analysis Set:	
No other valid survey data	1
Provider Analysis Set	49
Included in the Eye Care Professional Set (Eye Specialist)	35 (71.4%)
Excluded in the Eye Care Professional Set (Eye Specialist)	14 (28.6%)
Reasons for exclusion from Eye Care Professional Set:	
Missing required speciality	14
No valid (non-missing) response for the supplemental eye questionnaire	0

PT 1.3

Subgroups	Number of Respondents (%)
Provider Analysis Set	49 (100.0%)
Primary Care Provider	2 (4.1%)

Subgroups	Number of Respondents (%)
Diabetes Specialist Provider	11 (22.4%)
Eye Care Professional	35 (71.4%)
Ophthalmologist	33 (67.3%)

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

PT 1.4

Item	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is your specialty?	General primary care/Family practitioner	2 (100.0%)	0 (0.0%)	0 (0.0%)	2 (4.1%)
	Diabetes specialist	0 (0.0%)	11 (100.0%)	0 (0.0%)	11 (22.4%)
	General ophthalmologist	0 (0.0%)	0 (0.0%)	8 (24.2%)	8 (16.3%)
	Optometrist	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (4.1%)
	Retinal specialist	0 (0.0%)	0 (0.0%)	28 (84.8%)	28 (57.1%)
	Nurse	0 (0.0%)	1 (9.1%)	1 (3.0%)	3 (6.1%)
	Health educator	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	None of the above	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.0%)
	Total valid response	2 (100.0%)	11 (100.0%)	33 (100.0%)	49 (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	11	33	49
	Mean	33.0	19.8	17.2	17.8
	SD	1.4	10.0	9.6	10.1
	Median	33.0	16.0	16.0	16.0

Item	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Min.	32	4	0	0
	Max.	34	35	35	35
	Total missing	0	0	0	0

PT 2.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is your main practice setting?	Diabetes clinic/practice	0 (0.0%)	1 (9.1%)	0 (0.0%)	1 (2.2%)
	Eye clinic/practice	0 (0.0%)	0 (0.0%)	4 (12.9%)	4 (8.7%)
	General medical clinic/practice	2 (100.0%)	1 (9.1%)	0 (0.0%)	3 (6.5%)
	Hospital	0 (0.0%)	7 (63.6%)	25 (80.6%)	33 (71.7%)
	Other	0 (0.0%)	2 (18.2%)	2 (6.5%)	5 (10.9%)
	Total Valid Response	2 (100.0%)	11 (100.0%)	31 (100.0%)	46 (100.0%)
	Total missing	0	0	2	3

PT 2.2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Where is your main practice located?	Urban setting	2 (100.0%)	9 (81.8%)	30 (96.8%)	43 (93.5%)
	Non-urban setting	0 (0.0%)	2 (18.2%)	1 (3.2%)	3 (6.5%)
	Total Valid Response	2 (100.0%)	11 (100.0%)	31 (100.0%)	46 (100.0%)
	Total missing	0	0	2	3

PT 2.3

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In which sector is your main practice?	Government	2 (100.0%)	8 (72.7%)	19 (61.3%)	31 (67.4%)
	Private	0 (0.0%)	1 (9.1%)	5 (16.1%)	6 (13.0%)
	Non profit	0 (0.0%)	1 (9.1%)	0 (0.0%)	1 (2.2%)
	Combined/mixed	0 (0.0%)	1 (9.1%)	7 (22.6%)	8 (17.4%)
	Total Valid Response	2 (100.0%)	11 (100.0%)	31 (100.0%)	46 (100.0%)
	Total missing	0	0	2	3

PT 2.4

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Is your main practice limited to certain populations?	No	1 (50.0%)	9 (81.8%)	30 (96.8%)	42 (91.3%)
	Yes, limited by age	1 (50.0%)	1 (9.1%)	1 (3.2%)	3 (6.5%)
	Yes, limited to low income or uninsured persons	0 (0.0%)	1 (9.1%)	0 (0.0%)	1 (2.2%)
	Yes, limited to persons who pay out-of-pocket	0 (0.0%)	2 (18.2%)	0 (0.0%)	2 (4.3%)
	Total valid response	2 (100.0%)	11 (100.0%)	31 (100.0%)	46 (100.0%)
	Total missing	0	0	2	3

PT 2.5

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the average wait time for an appointment in your main practice?	Less than 1 week	1 (100.0%)	2 (22.2%)	4 (14.3%)	8 (20.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	More than 1 week but less than 1 month	0 (0.0%)	3 (33.3%)	17 (60.7%)	20 (50.0%)
	More than 1 month but less than 2 months	0 (0.0%)	0 (0.0%)	6 (21.4%)	6 (15.0%)
	More than 2 months but less than 3 months	0 (0.0%)	2 (22.2%)	0 (0.0%)	2 (5.0%)
	More than 3 months but less than 6 months	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.5%)
	Do not take appointments	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (2.5%)
	Other	0 (0.0%)	1 (11.1%)	1 (3.6%)	2 (5.0%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	28 (100.0%)	40 (100.0%)
	Total missing	1	2	5	9

PT 2.6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
On average, how many patients do you see per week in your main practice [n patients]	Total valid response (n)	0	8	26	36
	Mean	.	96.1	67.3	74.4
	SD	.	145.7	57	82.1
	Median	.	45	50	50
	Min.	.	10	15	10
	Max.	.	450	250	450
	Total missing	2	3	7	13
What percentage of the patients in your main practice have diabetes [% patients]	Total valid response (n)	0	8	27	37

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Mean	.	75	26.3	38.2
	SD	.	32.1	17.7	31.1
	Median	.	90	20	30
	Min.	.	20	5	5
	Max.	.	100	85	100
	Total missing	2	3	6	12

PT 2.7

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, how do patients pay for the care and services that you provide?	Don't pay	1 (100.0%)	4 (50.0%)	9 (33.3%)	15 (39.5%)
	Pay a reduced/subsidized rate	0 (0.0%)	2 (25.0%)	7 (25.9%)	10 (26.3%)
	Pay out-of-pocket (full fees)	0 (0.0%)	2 (25.0%)	4 (14.8%)	6 (15.8%)
	Pay through insurance	0 (0.0%)	1 (12.5%)	3 (11.1%)	4 (10.5%)
	Patient pays some, insurance pays some	0 (0.0%)	1 (12.5%)	5 (18.5%)	6 (15.8%)
	Other	0 (0.0%)	2 (25.0%)	3 (11.1%)	6 (15.8%)
	Total valid response	1 (100.0%)	8 (100.0%)	27 (100.0%)	38 (100.0%)
	Total missing	1	3	6	11

PT 2.8

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In addition to your	Yes		2 (22.2%)	21 (72.4%)	23

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
main practice, do you work in another practice setting?					(54.8%)
	No	1 (100.0%)	7 (77.8%)	8 (27.6%)	19 (45.2%)
	Total valid response	1 (100.0%)	9 (100.0%)	29 (100.0%)	42 (100.0%)
	Total missing	1	2	4	7
In which other practice setting(s) do you work?	Hospital			5 (25.0%)	5 (23.8%)
	Eye clinic/practice			13 (65.0%)	13 (61.9%)
	Other		1 (100.0%)	3 (15.0%)	4 (19.0%)
	Total valid response		1 (100.0%)	20 (100.0%)	21 (100.0%)
	Total missing	2	10	13	28
In which sector(s) is(are) the practice(s)?	Government		1 (100.0%)	3 (15.0%)	4 (19.0%)
	Private			15 (75.0%)	15 (71.4%)
	Non profit			1 (5.0%)	1 (4.8%)
	Combined/mixed			1 (5.0%)	1 (4.8%)
	Total valid response		1 (100.0%)	20 (100.0%)	21 (100.0%)
	Total missing	2	10	13	28
Is there a major difference between your practices with respect to how diabetic eye disease is screened and managed?	Yes			5 (25.0%)	5 (23.8%)
	No		1 (100.0%)	15 (75.0%)	16 (76.2%)
	Total valid response		1 (100.0%)	20 (100.0%)	21 (100.0%)
	Total missing	2	10	13	28

PT 2.9

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Blood glucose	Yes			7 (87.5%)	16 (94.1%)	24 (88.9%)
		Total valid numeric response (n)	0	6 (75.0%)	13 (76.5%)	20 (74.1%)
		Mean		63.7	19.3	31.7
		SD		147.6	54.4	89.9
		Median		3.5	4.0	4.0
		Min		0	0	0
		Max		365	200	365
		Total missing	2	5	20	29
	No			1 (12.5%)	1 (5.9%)	3 (11.1%)
	Total valid response			8 (100.0%)	17 (100.0%)	27 (100.0%)
	Total missing		2	3	16	22
HbA1c	Yes			7 (87.5%)	16 (94.1%)	24 (88.9%)
		Total valid numeric response (n)	0	6 (75.0%)	13 (76.5%)	20 (74.1%)
		Mean		62.8	3.2	21.0
		SD		148.0	1.3	81.0
		Median		3.0	4.0	3.5
		Min		0	0	0
		Max		365	4	365
		Total missing	2	5	20	29
	No			1 (12.5%)	1 (5.9%)	3 (11.1%)
	Total valid			8 (100.0%)	17 (100.0%)	27 (100.0%)

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	response					
	Total missing		2	3	16	22
Urine check	Yes			7 (87.5%)	15 (93.8%)	23 (88.5%)
		Total valid numeric response (n)	0	6 (75.0%)	12 (75.0%)	19 (73.1%)
		Mean		62.7	3.5	22.1
		SD		148.1	1.2	83.1
		Median		2.5	4.0	3.0
		Min		0	1	0
		Max		365	6	365
		Total missing	2	5	21	30
	No			1 (12.5%)	1 (6.3%)	3 (11.5%)
	Total valid response			8 (100.0%)	16 (100.0%)	26 (100.0%)
	Total missing		2	3	17	23
Weight check	Yes			7 (87.5%)	12 (75.0%)	20 (76.9%)
		Total valid numeric response (n)	0	6 (75.0%)	10 (62.5%)	17 (65.4%)
		Mean		64.3	23.2	36.4
		SD		147.4	62.2	97.2
		Median		3.5	3.0	3.0
		Min		0	0	0
		Max		365	200	365
		Total missing	2	5	23	32
	No			1 (12.5%)	4 (25.0%)	6 (23.1%)
	Total			8 (100.0%)	16 (100.0%)	26

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	valid response					(100.0%)
	Total missing		2	3	17	23
Blood pressure check	Yes			7 (87.5%)	15 (93.8%)	22 (88.0%)
		Total valid numeric response (n)	0	6 (75.0%)	13 (81.3%)	19 (76.0%)
		Mean		64.3	20.1	34.1
		SD		147.4	54.2	91.8
		Median		3.5	4.0	4.0
		Min		0	0	0
		Max		365	200	365
		Total missing	2	5	20	30
	No			1 (12.5%)	1 (6.3%)	3 (12.0%)
	Total valid response			8 (100.0%)	16 (100.0%)	25 (100.0%)
	Total missing		2	3	17	24
Foot check	Yes			6 (75.0%)	10 (66.7%)	16 (66.7%)
		Total valid numeric response (n)	0	5 (62.5%)	9 (60.0%)	14 (58.3%)
		Mean		75.8	24.4	42.8
		SD		161.7	65.8	106.6
		Median		1.0	2.0	2.0
		Min		0	1	0
		Max		365	200	365
		Total missing	2	6	24	35
	No			2 (25.0%)	5 (33.3%)	8 (33.3%)

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total valid response			8 (100.0%)	15 (100.0%)	24 (100.0%)
	Total missing		2	3	18	25
Eye examination - Un-dilated	Yes			5 (62.5%)	16 (84.2%)	22 (75.9%)
		Total valid numeric response (n)	0	4 (50.0%)	15 (78.9%)	20 (69.0%)
		Mean		1.3	8.9	7.0
		SD		1.0	25.3	22.0
		Median		1.5	2.0	2.0
		Min		0	0	0
		Max		2	100	100
		Total missing	2	7	18	29
	No			3 (37.5%)	3 (15.8%)	7 (24.1%)
	Total valid response			8 (100.0%)	19 (100.0%)	29 (100.0%)
	Total missing		2	3	14	20
Eye examination - Optical Coherence Tomography	Yes			5 (62.5%)	23 (100.0%)	30 (90.9%)
		Total valid numeric response (n)	0	4 (50.0%)	20 (87.0%)	26 (78.8%)
		Mean		1.3	24.1	18.8
		SD		1.3	82.1	72.3
		Median		1.0	2.0	2.0
		Min		0	0	0
		Max		3	365	365

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		Total missing	2	7	13	23
	No			3 (37.5%)		3 (9.1%)
	Total valid response			8 (100.0%)	23 (100.0%)	33 (100.0%)
	Total missing		2	3	10	16
Eye examination - Fundoscopy	Yes			7 (87.5%)	23 (100.0%)	31 (96.9%)
		Total valid numeric response (n)	0	6 (75.0%)	20 (87.0%)	27 (84.4%)
		Mean		1.5	6.9	5.5
		SD		1.0	22.0	18.9
		Median		1.5	2.0	2.0
		Min		0	0	0
		Max		3	100	100
		Total missing	2	5	13	22
	No			1 (12.5%)		1 (3.1%)
	Total valid response			8 (100.0%)	23 (100.0%)	32 (100.0%)
	Total missing		2	3	10	17
Eye examination - Fluorescein Angiography	Yes			4 (50.0%)	22 (100.0%)	28 (87.5%)
		Total valid numeric response (n)	0	3 (37.5%)	18 (81.8%)	23 (71.9%)
		Mean		0.7	21.6	17.0
		SD		0.6	85.7	75.9
		Median		1.0	1.0	1.0
		Min		0	0	0

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		Max		1	365	365
		Total missing	2	8	15	26
	No			4 (50.0%)		4 (12.5%)
	Total valid response			8 (100.0%)	22 (100.0%)	32 (100.0%)
	Total missing		2	3	11	17
Eye examination - Lipid check	Yes			3 (37.5%)	13 (76.5%)	16 (61.5%)
		Total valid numeric response (n)	0	3 (37.5%)	12 (70.6%)	15 (57.7%)
		Mean		1.3	2.3	2.1
		SD		1.2	1.8	1.7
		Median		2.0	2.0	2.0
		Min		0	0	0
		Max		2	6	6
		Total missing	2	8	21	34
	No			5 (62.5%)	4 (23.5%)	10 (38.5%)
	Total valid response			8 (100.0%)	17 (100.0%)	26 (100.0%)
	Total missing		2	3	16	23

PT 2.10

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, what topics do you cover during a routine	Diabetes management and monitoring	0 (0.0%)	7 (100.0%)	12 (63.2%)	21 (75.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
visit with a patient who has diabetes?					
	Diet/nutrition	0 (0.0%)	6 (85.7%)	6 (31.6%)	14 (50.0%)
	Exercise/physical activity	0 (0.0%)	5 (71.4%)	4 (21.1%)	11 (39.3%)
	Medicines	0 (0.0%)	6 (85.7%)	6 (31.6%)	14 (50.0%)
	Foot care and inspection	0 (0.0%)	4 (57.1%)	1 (5.3%)	6 (21.4%)
	Blood pressure	0 (0.0%)	6 (85.7%)	3 (15.8%)	10 (35.7%)
	Eye care and exams	0 (0.0%)	4 (57.1%)	18 (94.7%)	23 (82.1%)
	Lipid check	0 (0.0%)	5 (71.4%)	2 (10.5%)	7 (25.0%)
	Total valid response	0	7 (100.0%)	19 (100.0%)	28 (100.0%)
	Total missing	2	4	14	21

PT 2.11

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Is there written information about diabetes available for patients in your main practice?	Yes, and information on eye complications is sufficient	0 (0.0%)	2 (33.3%)	6 (30.0%)	9 (32.1%)
	Yes, but information on eye complications is not sufficient	0 (0.0%)	2 (33.3%)	2 (10.0%)	4 (14.3%)
	Yes, but no information on eye complications is included	0 (0.0%)	1 (16.7%)	0 (0.0%)	1 (3.6%)
	No written information is available for	0 (0.0%)	1 (16.7%)	8 (40.0%)	10 (35.7%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	patients				
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	4 (20.0%)	4 (14.3%)
	Total Valid Response	0	6 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	5	13	21

PT 2.12

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you have written protocols/guidelines available in your main practice for the management of diabetes?	Yes, available and used by staff	0 (0.0%)	3 (42.9%)	8 (42.1%)	12 (42.9%)
	Yes, available but not used by staff	0 (0.0%)	2 (28.6%)	1 (5.3%)	3 (10.7%)
	Not available	0 (0.0%)	2 (28.6%)	5 (26.3%)	8 (28.6%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	5 (26.3%)	5 (17.9%)
	Total Valid Response	0	7 (100.0%)	19 (100.0%)	28 (100.0%)
	Total missing	2	4	14	21

PT 2.13

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you have written protocols/guidelines for detection and management of diabetes-related vision issue available in your main	Yes, available and used by staff	0 (0.0%)	3 (42.9%)	9 (47.4%)	13 (46.4%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
practice?					
	Yes, available but not used by staff	0 (0.0%)	1 (14.3%)	1 (5.3%)	2 (7.1%)
	Not available	0 (0.0%)	3 (42.9%)	8 (42.1%)	12 (42.9%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	1 (5.3%)	1 (3.6%)
	Total Valid Response	0	7 (100.0%)	19 (100.0%)	28 (100.0%)
	Total missing	2	4	14	21

PT 2.14

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of initial eye exams for persons with diabetes - Type I?	After a predetermined number of years (numeric response) (n)	0	2 (33.3%)	1 (5.3%)	3 (11.5%)
	Mean		5.0	5.0	5.0
	SD		0.0		0.0
	Median		5.0	5.0	5.0
	Min		5	5	5
	Max		5	5	5
	After a predetermined age (numeric response) (n)	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		3 (50.0%)	15 (78.9%)	19 (73.1%)
	No standard practice, timing varies case by case			3 (15.8%)	3 (11.5%)
	Other		1 (16.7%)		1 (3.8%)
	Total valid response		6 (100.0%)	19 (100.0%)	26 (100.0%)
	Total missing	2	5	14	23
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	1 (14.3%)	1 (5.3%)	2 (7.4%)
	Mean		5.0	5.0	5.0
	SD				0.0
	Median		5.0	5.0	5.0
	Min		5	5	5
	Max		5	5	5
	After a predetermined age (numeric response) (n)	0	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed		6 (85.7%)	16 (84.2%)	23 (85.2%)
	No standard practice, timing varies case by case			2 (10.5%)	2 (7.4%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total valid response		7 (100.0%)	19 (100.0%)	27 (100.0%)
	Total missing	2	4	14	22

PT 2.15

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of follow-up eye examinations for persons with diabetes?	Once a year	0 (0.0%)	5 (71.4%)	14 (70.0%)	20 (71.4%)
	Every two years	0 (0.0%)	2 (28.6%)	1 (5.0%)	3 (10.7%)
	Other	0 (0.0%)	0 (0.0%)	5 (25.0%)	5 (17.9%)
	Total Valid Response	0	7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21

PT 2.16

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you screen patients for DR?	Yes	1 (100.0%)	7 (100.0%)	18 (81.8%)	27 (84.4%)
	No			4 (18.2%)	5 (15.6%)
	Total valid response	1 (100.0%)	7 (100.0%)	22 (100.0%)	32 (100.0%)
	Total missing	1	4	11	17
Where do you screen patients?	In clinic		5 (71.4%)	17 (94.4%)	23 (88.5%)
	Outreach		1 (14.3%)	2 (11.1%)	4 (15.4%)
	Other		2 (28.6%)		2 (7.7%)
	Total valid response		7 (100.0%)	18 (100.0%)	26 (100.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total missing	2	4	15	23

PT 2.17

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What patient characteristics influence your vision care and/or vision referrals?	Diabetes duration	0 (0.0%)	5 (71.4%)	18 (100.0%)	24 (92.3%)
	Patient's age	0 (0.0%)	3 (42.9%)	13 (72.2%)	17 (65.4%)
	Presence of comorbidities such as hypertension, etc.	0 (0.0%)	5 (71.4%)	16 (88.9%)	21 (80.8%)
	High glucose levels	0 (0.0%)	4 (57.1%)	15 (83.3%)	19 (73.1%)
	Ability or inability to pay	0 (0.0%)	0 (0.0%)	1 (5.6%)	1 (3.8%)
	Insurance restrictions	0 (0.0%)	0 (0.0%)	1 (5.6%)	1 (3.8%)
	Patient educational level	0 (0.0%)	1 (14.3%)	3 (16.7%)	4 (15.4%)
	Patient adherence to recommendations	0 (0.0%)	2 (28.6%)	7 (38.9%)	9 (34.6%)
	None of the above	0 (0.0%)	1 (14.3%)	0 (0.0%)	1 (3.8%)
	Not applicable	0 (0.0%)	1 (14.3%)	0 (0.0%)	1 (3.8%)
	Total valid response	0	7 (100.0%)	18 (100.0%)	26 (100.0%)
	Total missing	2	4	15	23

PT 2.18

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What are the major barriers to optimizing eye	Cost of care	0 (0.0%)	2 (40.0%)	7 (36.8%)	10 (40.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
health faced by patients with diabetes in your main practice?					
	Proximity to care	0 (0.0%)	1 (20.0%)	6 (31.6%)	7 (28.0%)
	Long wait time for appointment	0 (0.0%)	2 (40.0%)	9 (47.4%)	11 (44.0%)
	Long wait time on the day of visit	0 (0.0%)	2 (40.0%)	4 (21.1%)	6 (24.0%)
	Referral process	0 (0.0%)	1 (20.0%)	2 (10.5%)	3 (12.0%)
	Recommended treatments are not available	0 (0.0%)	0 (0.0%)	1 (5.3%)	1 (4.0%)
	Lack of knowledge and/or awareness	0 (0.0%)	1 (20.0%)	10 (52.6%)	11 (44.0%)
	Patients fear of treatment/results	0 (0.0%)	1 (20.0%)	5 (26.3%)	6 (24.0%)
	Patients they are a burden on family/friends	0 (0.0%)	0 (0.0%)	1 (5.3%)	1 (4.0%)
	Limited access to diabetes specialists	0 (0.0%)	1 (20.0%)	0 (0.0%)	1 (4.0%)
	Limited access to eye specialists	0 (0.0%)	2 (40.0%)	1 (5.3%)	3 (12.0%)
	Patients feel eye complications are unlikely	0 (0.0%)	1 (20.0%)	4 (21.1%)	5 (20.0%)
	Patients feel eye exams are not important	0 (0.0%)	2 (40.0%)	4 (21.1%)	6 (24.0%)
	Patients have competing responsibilities and priorities	0 (0.0%)	1 (20.0%)	2 (10.5%)	3 (12.0%)
	Clinic too small or lack necessary equipment/staff	0 (0.0%)	0 (0.0%)	1 (5.3%)	1 (4.0%)
	Other	0 (0.0%)	2 (40.0%)	0 (0.0%)	2 (8.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total valid response	0	5 (100.0%)	19 (100.0%)	25 (100.0%)
	Total missing	2	6	14	24

PT 2.19

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, are patients contacted with reminders for general follow-up appointments?	Yes	0 (0.0%)	5 (71.4%)	20 (100.0%)	26 (92.9%)
	No	0 (0.0%)	2 (28.6%)	0 (0.0%)	2 (7.1%)
	Total Valid Response	0	7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21

PT 2.20

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you share relevant patient information with other health care professionals involved in the patients care e.g. his or her general practitioner, ophthalmologist, podiastrist?	Yes	0 (0.0%)	6 (85.7%)	18 (90.0%)	25 (89.3%)
	No	0 (0.0%)	1 (14.3%)	2 (10.0%)	3 (10.7%)
	Total Valid Response	0	7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21

PT 3.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Please indicate your age:	30 - 39		2 (28.6%)	6 (30.0%)	9 (32.1%)
	40 - 49		2 (28.6%)	4 (20.0%)	6 (21.4%)
	50 - 59		2 (28.6%)	10 (50.0%)	12 (42.9%)
	60 - 69		1 (14.3%)		1 (3.6%)
	Total valid response		7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21
What is your gender?	Female		4 (57.1%)	7 (35.0%)	12 (42.9%)
	Male		3 (42.9%)	13 (65.0%)	16 (57.1%)
	Total valid response		7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21
What is your highest level of education completed?	College/University		2 (28.6%)	1 (5.0%)	3 (10.7%)
	Graduate or advanced degree (e.g. PhD, MD, etc)		5 (71.4%)	19 (95.0%)	25 (89.3%)
	Total valid response		7 (100.0%)	20 (100.0%)	28 (100.0%)
	Total missing	2	4	13	21

PT 4.1

Question	Response	Ophthalmologist
What percentage of your patients have diabetic retinopathy	Total valid numeric response (n)	22
	Mean	25.1
	SD	18.2
	Median	25.0
	Min	0
	Max	70

Question	Response	Ophthalmologist
	Total missing	11

PT 4.2

Question	Response	Ophthalmologist
What percentage of your patients have diabetic macular edema?	Total valid numeric response (n)	22
	Mean	22.1
	SD	23.7
	Median	12.5
	Min	0
	Max	80
	Total missing	11

PT 4.3

Question	Response	Ophthalmologist
What is the average amount of time your patients wait for an appointment to be screened for diabetic eye disease in your practice?	Less than 1 week	1 (5.3%)
	More than 1 week but less than 1 month	12 (63.2%)
	More than 1 month but less than 2 months	4 (21.1%)
	More than 2 months but less than 3 months	1 (5.3%)
	More than 3 months but less than 6 months	1 (5.3%)
	Total Valid Response	19 (100.0%)
	Total missing	14

PT 4.4

Question	Response	Ophthalmologist
From the time a patient is screened, what is the average length of time he/she waits for diagnosis?	Less than 1 week	2 (10.5%)
	More than 1 week but less	3 (15.8%)

Question	Response	Ophthalmologist
	than 1 month	
	More than 1 month but less than 2 months	1 (5.3%)
	There is not wait, diagnosis is given when screened	13 (68.4%)
	Total Valid Response	19 (100.0%)
	Total missing	14

PT 4.5

Type of Treatment	Question	Response/time	Ophthalmologist
Laser photocoagulation	Is the treatment available?	Available within country	4 (20.0%)
		Available locally	5 (25.0%)
		Available in practice	17 (85.0%)
		Total valid response	20 (100.0%)
		Total missing	13
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	17 (94.4%)
		Mean	1.9
		SD	1.0
		Median	2.0
		Min	1
		Max	4
		Don't know/not sure	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	17 (94.4%)
		Mean	1.9
		SD	1.0
		Median	2.0

Type of Treatment	Question	Response/time	Ophthalmologist
		Min	1
		Max	4
		Don't know/not sure	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	14 (100.0%)
		Mean	2.2
		SD	1.2
		Median	2.0
		Min	1
		Max	4
		Total valid response	14 (100.0%)
		Total missing	19
Anti-VEGF therapies	Is the treatment available?	Available within country	4 (21.1%)
		Available locally	5 (26.3%)
		Available in practice	16 (84.2%)
		Total valid response	19 (100.0%)
		Total missing	14
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	15 (93.8%)
		Mean	2.1
		SD	1.1
		Median	2.0
		Min	1
		Max	4
		Don't know/not sure	1 (6.3%)
		Total valid	16 (100.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		response	
		Total missing	17
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	17 (100.0%)
		Mean	2.1
		SD	0.9
		Median	2.0
		Min	1
		Max	4
		Total valid response	17 (100.0%)
		Total missing	16
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	13 (100.0%)
		Mean	7.0
		SD	13.6
		Median	4.0
		Min	1
		Max	52
		Total valid response	13 (100.0%)
		Total missing	20
Intravitreal steroid	Is the treatment available?	Available within country	4 (20.0%)
		Available locally	5 (25.0%)
		Available in practice	16 (80.0%)
		Total valid response	20 (100.0%)
		Total missing	13
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	16 (88.9%)
		Mean	2.1
		SD	1.0

Type of Treatment	Question	Response/time	Ophthalmologist
		Median	2.0
		Min	1
		Max	4
		Don't know/not sure	1 (5.6%)
		Not applicable	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	17 (94.4%)
		Mean	2.2
		SD	0.9
		Median	2.0
		Min	1
		Max	4
		Not applicable	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	12 (92.3%)
		Mean	5.3
		SD	6.6
		Median	3.0
		Min	1
		Max	24
		Not applicable	1 (7.7%)
		Total valid response	13 (100.0%)
		Total missing	20
Uncomplicated vitrectomy	Is the treatment available?	Available within country	4 (20.0%)
		Available locally	6 (30.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Available in practice	16 (80.0%)
		Total valid response	20 (100.0%)
		Total missing	13
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	16 (88.9%)
		Mean	3.4
		SD	2.3
		Median	3.5
		Min	1
		Max	8
		Don't know/not sure	1 (5.6%)
		Not applicable	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	17 (94.4%)
		Mean	3.8
		SD	2.0
		Median	4.0
		Min	1
		Max	8
		Not applicable	1 (5.6%)
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	10 (76.9%)
		Mean	5.6
		SD	4.9
		Median	4.0

Type of Treatment	Question	Response/time	Ophthalmologist
		Min	1
		Max	18
		Not applicable	3 (23.1%)
		Total valid response	13 (100.0%)
		Total missing	20
Complex vitreo-retinal surgery	Is the treatment available?	Available within country	4 (20.0%)
		Available locally	6 (30.0%)
		Available in practice	16 (80.0%)
		Total valid response	20 (100.0%)
		Total missing	13
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	15 (88.2%)
		Mean	3.3
		SD	3.1
		Median	2.0
		Min	1
		Max	10
		Don't know/not sure	1 (5.9%)
		Not applicable	1 (5.9%)
		Total valid response	17 (100.0%)
		Total missing	16
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	17 (94.4%)
		Mean	3.8
		SD	3.0
		Median	3.0
		Min	1
		Max	10
		Not applicable	1 (5.6%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Total valid response	18 (100.0%)
		Total missing	15
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	11 (78.6%)
		Mean	5.5
		SD	5.0
		Median	4.0
		Min	1
		Max	18
		Not applicable	3 (21.4%)
		Total valid response	14 (100.0%)
		Total missing	19

PT 4.6

Question	Response	Ophthalmologist
Do you personally administer treatment for diabetic retinopathy?	Yes	18 (85.7%)
	No	3 (14.3%)
	Total valid response	21 (100.0%)
	Total missing	12
Who administer it?	Another provider in your practice	1 (100.0%)
	Total valid response	1 (100.0%)
	Total missing	32

PT 4.7

Question	Response	Ophthalmologist
Do any of the following influence how you treat diabetic retinopathy or diabetic macular edema?	Diabetes duration	14 (77.8%)
	Patient's age	11 (61.1%)
	Presence of comorbidities such as hypertension, etc.	11 (61.1%)

Question	Response	Ophthalmologist
	High glucose levels	12 (66.7%)
	Ability or inability to pay	2 (11.1%)
	Insurance restrictions	1 (5.6%)
	Patient educational level	1 (5.6%)
	Patient adherence to recommendations	7 (38.9%)
	None of the above	3 (16.7%)
	Total valid response	18 (100.0%)
	Total missing	15

PT 4.8

Question	Response	Ophthalmologist
Do you treat diabetic retinopathy and diabetic macular edema based on:	Visual outcome	1 (5.6%)
	Both	17 (94.4%)
	Total Valid Response	18 (100.0%)
	Total missing	15

PT 4.9

Question	Response	Ophthalmologist
How are your patients with diabetes screened for diabetic eye disease?	Fundoscopy dilated	16 (84.2%)
	Retinal photo	6 (31.6%)
	Optical Coherence Tomography	14 (73.7%)
	Fluorescein Angiography	9 (47.4%)
	Total valid response	19 (100.0%)
	Total missing	14

PT 4.10

Question	Response	Ophthalmologist
In your opinion, do the majority of your patients present:	In time for screening	7 (36.8%)
	When visual problems have already occurred	12 (63.2%)

Question	Response	Ophthalmologist
	Total Valid Response	19 (100.0%)
	Total missing	14

PT 4.11

Question	Response	Ophthalmologist
Have you received training specifically on treatment and diagnosis of diabetic retinopathy and/or clinically significant diabetic macular edema?	Yes	18 (85.7%)
	No	3 (14.3%)
	Total valid response	21 (100.0%)
	Total missing	12
If yes, When was your last training?	Five or more years ago	2 (11.8%)
	Greater than 1 year ago but less than 5 years	1 (5.9%)
	Within the past year	14 (82.4%)
	Total valid response	17 (100.0%)
	Total missing	16

PT 4.12

Question	Response	Ophthalmologist
Would you be interested in online education and certification on DME, Angiogenesis and Anti-VEGF therapies?	Yes	14 (66.7%)
	No	7 (33.3%)
	Total Valid Response	21 (100.0%)
	Total missing	12

PT 4.13

Question	Response	Ophthalmologist
How is outreach for screening for diabetic eye disease done in your main practice?	Health fairs for all	4 (22.2%)
	Health fairs for people with diabetes	4 (22.2%)
	Mobile screening centers	4 (22.2%)

Question	Response	Ophthalmologist
	At vision centers	6 (33.3%)
	Not done	3 (16.7%)
	Don't know/Not sure	3 (16.7%)
	Total valid response	18 (100.0%)
	Total missing	15

PT 4.14

Question	Response	Ophthalmologist
What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease?	Reimbursement/restrictions on approved therapy	2 (12.5%)
	Late diagnosis	11 (68.8%)
	Referral pathways	7 (43.8%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	9 (56.3%)
	No universal guidelines on referral/screening	1 (6.3%)
	No universal guidelines on how to treat	6 (37.5%)
	No universal guideline on when to treat	5 (31.3%)
	Current available therapies not effective	1 (6.3%)
	Government/insurance not able to cover patient costs	6 (37.5%)
	Multi-disciplinary team integration is poor	5 (31.3%)
	Ineffective screening services	5 (31.3%)
	Total valid response	16 (100.0%)
	Total missing	17

EXP 1

Question	Response	Without DED (%)	With DED (%)	With DME (%)
Which of the following complications of diabetes do you have?	Cardiovascular disease/Stroke	2 (3.6%)	2 (28.6%)	2 (28.6%)
	Kidney disease	1 (1.8%)	2 (28.6%)	1 (14.3%)
	Loss of feeling in hands	3 (5.4%)	2 (28.6%)	3 (42.9%)

Question	Response	Without DED (%)	With DED (%)	With DME (%)
	or toes (neuropathy)			
	Vision loss	6 (10.7%)	4 (57.1%)	5 (71.4%)
	Amputation	2 (3.6%)	0 (0.0%)	0 (0.0%)
	Irritable bowel disease	3 (5.4%)	2 (28.6%)	0 (0.0%)
	Broken bones or fractures	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Foot ulcers	3 (5.4%)	0 (0.0%)	0 (0.0%)
	Other	0 (0.0%)	1 (14.3%)	0 (0.0%)
	None	34 (60.7%)	0 (0.0%)	0 (0.0%)
	Don't know/Not sure	5 (8.9%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	56 (100.0%)	7 (100.0%)	7 (100.0%)
	Total missing	1	0	0

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

EXP 2

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Limited in any way in any activities because of impairment or health problem	12 (21.4%)	6 (85.7%)	5 (71.4%)
Impairment or health problem			
Diabetes	15 (93.8%)	6 (100.0%)	4 (66.7%)
Back or neck problem	11 (73.3%)	3 (60.0%)	4 (66.7%)
Eye/vision problem	7 (46.7%)	3 (50.0%)	4 (66.7%)
Hypertension/high blood pressure	7 (43.8%)	4 (66.7%)	4 (66.7%)
Heart problem	6 (40.0%)	1 (20.0%)	3 (50.0%)
Mental or emotional health	3 (20.0%)	2 (40.0%)	1 (16.7%)
Cancer	3 (20.0%)	0 (0.0%)	0 (0.0%)
Arthritis/rheumatism	2 (13.3%)	2 (40.0%)	3 (50.0%)
Walking problem	2 (13.3%)	1 (20.0%)	3 (50.0%)
Lung/breathing problem	2 (13.3%)	0 (0.0%)	1 (16.7%)
Fractures, bone/joint injury	1 (6.7%)	1 (20.0%)	1 (16.7%)
Stroke problem	1 (7.1%)	2 (40.0%)	0 (0.0%)

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Hearing problem	1 (6.7%)	2 (40.0%)	0 (0.0%)

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

EXP 3

Health Status	Without DED (%)	With DED (%)	With DME (%)
Self-rated health: Good	20 (37.0%)	1 (16.7%)	2 (28.6%)
Self-rated health: Poor	34 (63.0%)	5 (83.3%)	5 (71.4%)
Physically unhealthy days	21 (46.7%)	6 (85.7%)	5 (71.4%)
Mentally unhealthy days	17 (37.8%)	6 (85.7%)	4 (57.1%)
Unhealthy days	27 (61.4%)	6 (85.7%)	5 (71.4%)
Activity limitation days	15 (50.0%)	4 (80.0%)	5 (100.0%)

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

EXP 4

Item	Response	All respondents	Respondents with Type I diabetes	Respondents with Type II diabetes
How do you manage your diabetes?	Diet	57 (81.4%)	15 (75.0%)	42 (84.0%)
	Oral medicine	43 (61.4%)	8 (40.0%)	35 (70.0%)
	Exercise	31 (44.3%)	11 (55.0%)	20 (40.0%)
	Insulin	45 (64.3%)	18 (90.0%)	27 (54.0%)
	Natural/Herbal medicine	7 (10.0%)	1 (5.0%)	6 (12.0%)

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	36 (65.5%)	6 (85.7%)	5 (71.4%)
	Working without pay at home (e.g. housework, farming)	4 (7.3%)	0 (0.0%)	0 (0.0%)
	Volunteering	1 (1.8%)	0 (0.0%)	0 (0.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Retired	9 (16.4%)	1 (14.3%)	1 (14.3%)
	Student	1 (1.8%)	0 (0.0%)	0 (0.0%)
	Not working	4 (7.3%)	0 (0.0%)	1 (14.3%)
	Total Valid Response	55 (100.0%)	7 (100.0%)	7 (100.0%)
	Total missing	2	0	0
Do you receive assistance from the government?	Income assistance	1 (1.9%)	0 (0.0%)	1 (14.3%)
	Medical assistance	23 (44.2%)	5 (71.4%)	4 (57.1%)
	Food assistance	1 (1.9%)	0 (0.0%)	2 (28.6%)
	Housing assistance	0 (0.0%)	1 (14.3%)	0 (0.0%)
	Pension assistance	4 (7.7%)	0 (0.0%)	1 (14.3%)
	None of the above	26 (50.0%)	2 (28.6%)	1 (14.3%)
	Total valid response	52 (100.0%)	7 (100.0%)	7 (100.0%)
	Total missing	5	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	10 (18.5%)	3 (42.9%)	2 (28.6%)
	No	44 (81.5%)	4 (57.1%)	5 (71.4%)
	Total Valid Response	54 (100.0%)	7 (100.0%)	7 (100.0%)
	Total missing	3	0	0

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

EXP 5.2: Age group 18-39 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	18 (81.8%)	3 (100.0%)	3 (75.0%)
	Working without pay at home (e.g. housework, farming)	1 (4.5%)	0 (0.0%)	0 (0.0%)
	Volunteering	1 (4.5%)	0 (0.0%)	0 (0.0%)
	Student	1 (4.5%)	0 (0.0%)	0 (0.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Not working	1 (4.5%)	0 (0.0%)	1 (25.0%)
	Total Valid Response	22 (100.0%)	3 (100.0%)	4 (100.0%)
Do you receive assistance from the government?	Income assistance	1 (5.0%)	0 (0.0%)	0 (0.0%)
	Medical assistance	9 (45.0%)	2 (66.7%)	2 (50.0%)
	Food assistance	1 (5.0%)	0 (0.0%)	2 (50.0%)
	None of the above	10 (50.0%)	1 (33.3%)	1 (25.0%)
	Total valid response	20 (100.0%)	3 (100.0%)	4 (100.0%)
	Total missing	2	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	4 (18.2%)	1 (33.3%)	1 (25.0%)
	No	18 (81.8%)	2 (66.7%)	3 (75.0%)
	Total Valid Response	22 (100.0%)	3 (100.0%)	4 (100.0%)

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

EXP 5.3: Age group 40-59 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	18 (72.0%)	3 (100.0%)	2 (100.0%)
	Working without pay at home (e.g. housework, farming)	2 (8.0%)	0 (0.0%)	0 (0.0%)
	Retired	2 (8.0%)	0 (0.0%)	0 (0.0%)
	Not working	3 (12.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	25 (100.0%)	3 (100.0%)	2 (100.0%)
	Total missing	2	0	0
Do you receive assistance from the government?	Income assistance	0 (0.0%)	0 (0.0%)	1 (50.0%)
	Medical assistance	11 (45.8%)	2 (66.7%)	2 (100.0%)
	Pension assistance	2 (8.3%)	0 (0.0%)	0 (0.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	None of the above	12 (50.0%)	1 (33.3%)	0 (0.0%)
	Total valid response	24 (100.0%)	3 (100.0%)	2 (100.0%)
	Total missing	3	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	6 (24.0%)	1 (33.3%)	1 (50.0%)
	No	19 (76.0%)	2 (66.7%)	1 (50.0%)
	Total Valid Response	25 (100.0%)	3 (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".

EXP 5.4: Age group 60-79 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working without pay at home (e.g. housework, farming)	1 (12.5%)	0 (0.0%)	0 (0.0%)
	Retired	7 (87.5%)	1 (100.0%)	1 (100.0%)
	Total Valid Response	8 (100.0%)	1 (100.0%)	1 (100.0%)
Do you receive assistance from the government?	Medical assistance	3 (37.5%)	1 (100.0%)	0 (0.0%)
	Housing assistance	0 (0.0%)	1 (100.0%)	0 (0.0%)
	Pension assistance	2 (25.0%)	0 (0.0%)	1 (100.0%)
	None of the above	4 (50.0%)	0 (0.0%)	0 (0.0%)
	Total valid response	8 (100.0%)	1 (100.0%)	1 (100.0%)
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	0 (0.0%)	1 (100.0%)	0 (0.0%)
	No	7 (100.0%)	0 (0.0%)	1 (100.0%)
	Total Valid Response	7 (100.0%)	1	1 (100.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
			(100.0%)	
	Total missing	1	0	0

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

EXP 5.5: Age group 80+ years

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

EXP 6

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
All respondents		71 (100%)	20 (28.2%)	51 (71.8%)	7 (9.9%)	7 (9.9%)
Gender	Male	35 (50.7%)	13 (37.1%)	22 (62.9%)	4 (11.4%)	3 (8.6%)
	Female	34 (49.3%)	6 (17.6%)	28 (82.4%)	3 (8.8%)	4 (11.8%)
	Total Missing	2	1	1	0	0
Age	18-39 yrs	29 (40.8%)	12 (41.4%)	17 (58.6%)	3 (10.3%)	4 (13.8%)
	40-59 yrs	32 (45.1%)	7 (21.9%)	25 (78.1%)	3 (9.4%)	2 (6.3%)
	60-79 yrs	10 (14.1%)	1 (10.0%)	9 (90.0%)	1 (10.0%)	1 (10.0%)
Time since diagnosis	Within the last year	4 (5.6%)	1 (25.0%)	3 (75.0%)	0 (0.0%)	0 (0.0%)
	1 - 5 years ago	27 (38.0%)	9 (33.3%)	18 (66.7%)	2 (7.4%)	4 (14.8%)
	6 - 10 years ago	22 (31.0%)	3 (13.6%)	19 (86.4%)	2 (9.1%)	1 (4.5%)
	11 - 15 years ago	8 (11.3%)	2 (25.0%)	6 (75.0%)	0 (0.0%)	1 (12.5%)
	16 - 20 years ago	4 (5.6%)	1 (25.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)

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