DR Barometer
Shifting the needle

The Diabetic Retinopathy Barometer Report

Bangladesh

Contents

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

Introduction
Global Study

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

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

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 to enable people with diabetes to maintain their health and ensure that the contributions that they can make to family and community are not compromised.

Background

The DR Barometer Study used a mixed methods approach. Phase I was a qualitative study comprising 120 semi-structured interviews with a small sample of people with diabetes (n = 9 per country) and health care professionals (n = 6 per country) in each of 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 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.

Respondents from each country were grouped into regions as defined by the WHO and into the WBIGs.

Study Populations

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

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

The results from this survey provide new evidence reflecting concerns from the voices of thousands of adults with diabetes and health care professionals around the world. This study provides a rich resource for generating unique insights into 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 those with diabetes.

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

• Without DED: people with diabetes without any reported form of DED

• With DED: people with diabetes with reported DED but not DME

• With DME: people with diabetes with reported DED and DME

As reported by 4,340 adults with diabetes who responded to the survey, 20% 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 remaining respondents were optometrists, nurses, health educators or other professionals.

Introduction
Bangladesh Study

Demographic Characteristics[1]

Bangladesh is estimated to be the third most populous country in South Asia and the fifth in Asia with an estimated population of approximately 162.9 million inhabitants.

Currently it is estimated that 29% of the population is under the age of 15 years (47 million) while only 5% is over the age of 65 years (8.1 million).

By 2050, the population distribution in Bangladesh is expected to increase by 24%, with the country starting to age. Those 15 years and younger will make up 17% of the country's population while those aged 65 years and older will make up 15.5% of Bangladesh's population. This means that in just over 30 years the population aged 65 years or older will almost quadruple and reach an all-time high of approximately 31.4 million.

Diabetes Profile[2]

There are 415 million people with diabetes in the world and more than 78.3 million people are in the South-East Asia region. By 2040, this number is expected to rise to 140 million.

Seven countries comprise the South-East Asia region: India, Bangladesh, Nepal, Sri Lanka, Mauritius, Bhutan and the Maldives. In 2015, all countries in the region were classified by the World Bank as low- or middle- income, but also experienced an annual economic growth of 3.5%.

People with diabetes in India, Bangladesh, and Sri Lanka make up 99% of the region's total adult diabetes population. Bangladesh is the 10th country in the world for the number of adults living with diabetes with some 7.1 million (5.3-12.0‡). By 2040, this number is expected to increase to 13.6 million (10.7-24.6‡).

In 2015, diabetes national prevalence (20-79 years) was 7.9% (5.5 – 12.5‡) and diabetes age-adjusted comparative prevalence was 8.3% (6.3 – 13.8 ‡).

Deaths attributable to diabetes in Bangladesh in 2015 was 129,300, which is the second highest after India and accounts for about 11% of the diabetes-related deaths in this region, with 60% of these being citizens under the age of 60 years. The estimated number of undiagnosed cases was ~3.6 million (2.8-6.2‡).

Study Populations: Bangladesh

As reported by 64 adults with diabetes in Bangladesh, 41% were diagnosed with DED and a further 6.3% with DME.

Thirty-two health care professionals completed the survey in Bangladesh. Of these, 16 were diabetes specialists (50%), eight were ophthalmologists (25%), and three were primary care providers (9.4%). The remaining respondents were either nurses, health educators or other professionals.

The DR Barometer Study: Bangladesh Overview

The DR Barometer study was conducted in 41 countries. In Bangladesh, 64 adults with diabetes and 32 health care professionals provided new information about the experiences of living with, managing and treating diabetes, DR and DME.

44%

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

50%

of all providers **did not have written protocols/guidelines** for detection and management of diabetes-related vision loss available
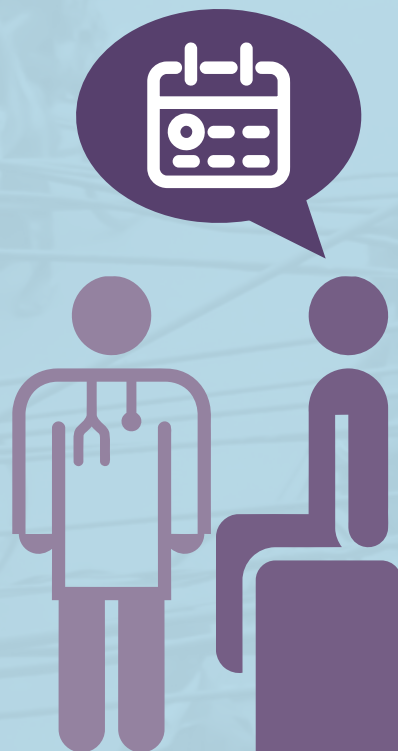
15%

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

DR: Diabetic Retinopathy
DME: Diabetic Macular Edema

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IFA

IAPB

International Diabetes Federation

BAYER

86%

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

100%

of those with DME experienced days of **poor physical and mental health**
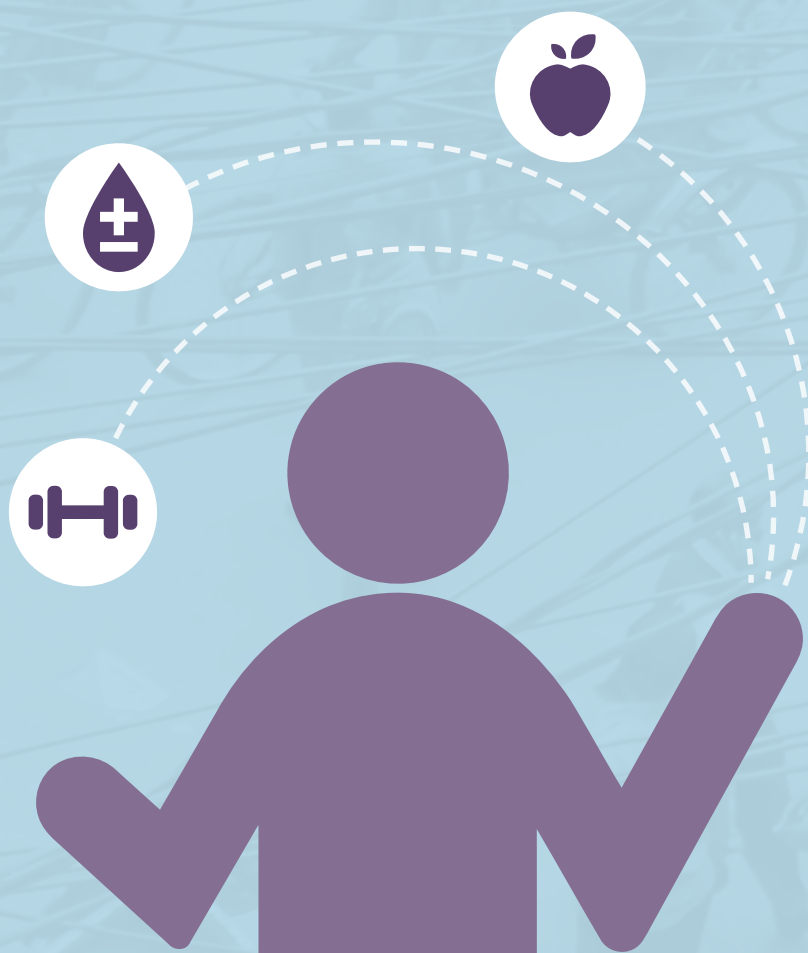
36%

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

Bangladesh
DR Barometer Findings:
Adults with Diabetes

Key Demographic Characteristics

Sixty-four adults with diabetes (patients) completed the patients' survey in Bangladesh: 47% were female and 53% were male. Eighty percent lived in an urban setting and 20% in a non-urban setting (see Appendix Table 4.2).

The education levels of all respondents were as follows: 13% did not complete primary school, 13% were educated to a primary school level, 30% to a secondary school level, 23% to a college or university level, and 21% to a graduate or post-graduate level (see Appendix Table 4.3).

Forty-eight percent of all respondents were in paid employment, 14% were retired, and 7.1% stated they were not working (see Appendix Table 4.4). Most respondents (48%) were aged between 40 and 59 years and 72% were of traditional working age (18- 59 years) (see Table 1).

Of the respondents in Bangladesh, 6.3% had been diagnosed with type 1 diabetes and 83% with type 2 diabetes. A further 11% of respondents were either unsure of or did not know their type of diabetes (see Appendix Table 2.1).

Forty-one percent of respondents reported that they had been diagnosed with DED and a further 6.3% (n=4) with DME.

Twenty-six percent of respondents were diagnosed with diabetes within the last year, 1 - 5 years ago (29%), 6 - 10 years ago (16%), 11 - 15 years ago (9.7%), 16 - 20 years ago (4.8%) and 21 years ago or more (13%) (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, 6.7% had type 1 and 67% had type 2 diabetes. In the 40-59 age group, 9.7% had type 1 and 84% had type 2 diabetes. No respondents in the 60-79-year-old group had type 1 diabetes and 94% had type 2.

In people aged 18-39 years, 20% had DED and with the same for DME. This increased to 39% for DED and decreased to 3.2% for DME in those aged 40-59 years. For people aged 60-79 years 65% had DED and no respondent had DME.

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

Of those diagnosed within the last year, 38% of respondents had DED and 13% had DME. The proportion of those with DED increased to 60% when diagnosed between 6-10 years and no respondent had DME. Fifty percent of those diagnosed with diabetes for more than 21 years had DED.

Forty-four percent of respondents said that their diabetes was not well controlled, and within this subgroup, 48% had DED and 3.3% had DME. For those 56% of people whose diabetes was controlled, 48% had DED and 3.7% 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		64 (100.0%)	4 (6.3%)	53 (82.8%)	26 (40.6%)	4 (6.3%)
Gender	Male	29 (52.7%)	3 (10.3%)	24 (82.8%)	13 (44.8%)	1 (3.4%)
	Female	26 (47.3%)	1 (3.8%)	20 (76.9%)	10 (38.5%)	2 (7.7%)
	Total Missing	9	0	9	3	1
Age	18-39 yrs.	15 (23.4%)	1 (6.7%)	10 (66.7%)	3 (20.0%)	3 (20.0%)
	40-59 yrs.	31 (48.4%)	3 (9.7%)	26 (83.9%)	12 (38.7%)	1 (3.2%)
	60-79 yrs.	17 (26.6%)	0 (0.0%)	16 (94.1%)	11 (64.7%)	0 (0.0%)
	80 yrs. plus	1 (1.6%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
Time since diagnosis	Within the last year	16 (25.8%)	2 (12.5%)	12 (75.0%)	6 (37.5%)	2 (12.5%)
	1 - 5 yrs.	18 (29.0%)	2 (11.1%)	13 (72.2%)	7 (38.9%)	2 (11.1%)
	6 - 10 yrs.	10 (16.1%)	0 (0.0%)	8 (80.0%)	6 (60.0%)	0 (0.0%)
	11 - 15 yrs.	6 (9.7%)	0 (0.0%)	6 (100.0%)	2 (33.3%)	0 (0.0%)
	16 - 20 yrs.	3 (4.8%)	0 (0.0%)	3 (100.0%)	1 (33.3%)	0 (0.0%)
	21 yrs. plus	8 (12.9%)	0 (0.0%)	8 (100.0%)	4 (50.0%)	0 (0.0%)
	Don't know/ Not sure	1 (1.6%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total Missing	2	0	2	0	0
Control of Diabetes	Controlled	34 (55.7%)	4 (11.8%)	26 (76.5%)	13 (38.2%)	3 (8.8%)
	Not controlled	27 (44.3%)	0 (0.0%)	24 (88.9%)	13 (48.1%)	1 (3.7%)
	Total Missing	3	0	3	0	0

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

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

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

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

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

Knowledge and Management of Diabetes

Ninety-eight percent of those surveyed saw a health care professional for their diabetes, with 98% seeing a diabetes specialist (average number of visits was 5.6 times per year) and 1.7% seeing a general or family doctor (average number of visits was 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. Ninety percent received information from a doctor or nurse, 17% from family, friends, or neighbours, and 13% from a diabetes organisation or other health organisation (see Table 2 and Appendix Table 2.4).

Table 2: Source of information regarding diabetes

Information Source	All Respondents (n=60)
Doctor or nurse	54 (90.0%)
Family/Friends/Neighbours	10 (16.7%)
Diabetes organisation or other health organisation	8 (13.3%)
TV/Radio/Newspaper/Magazines	8 (13.3%)
Health educator	7 (11.7%)
Nutritionist or dietician	6 (10.0%)
Internet	4 (6.7%)
Social media (e.g. Facebook, Twitter, blogs)	3 (5.0%)

A range of strategies was used by respondents to manage their diabetes. For those with type 1 diabetes, apart from insulin, all respondents managed their condition with diet, 75% with oral medicine, and 75% with exercise. Of the respondents with type 2 diabetes, 84% reported that they managed their diabetes with diet, 62% with oral medicine, 48% with exercise, and 28% with insulin.

Thirteen percent of respondents were enrolled in diabetes management programmes and they all said the programme included information on 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 those that had eye checks (75%), these occurred: less than 6 months (56%), 6 - 12 months (3.3%), and greater than 12 months (9.8%) (see Appendix Table 2.7).

The main challenges in controlling diabetes cited by respondents were: the high cost of care (56%), not having insurance (34%), it was too hard to eat the right things (33%), there were too many other things to do (28%), and travel to their regular doctor, or specialist, was difficult (25%) (see Appendix Table 2.9).

Support from family or friends (34%), health education and information (13%), and support groups (6.6%), were identified as important to improving the management of their condition. Fifty-seven percent of respondents stated that none of the services listed helped them better manage their diabetes (see Appendix Table 2.10).

Nature and Information about Complications

Eighty percent of respondents were aware of vision loss as a possible consequence of diabetes and other complications such as: kidney disease (61%), foot ulcers (48%), cardiovascular disease or stroke (48%) and amputation (34%) were also associated with diabetes (see Appendix Table 2.11).

Patients were most concerned about vision loss (44%), amputation (20%), kidney disease (15%), cardiovascular disease or stroke (8.2%), and foot ulcers (6.6%) (see Appendix Table 2.12).

Twenty-five percent reported that they had no complications of diabetes. However, of those who did, 46% had vision loss, kidney disease (25%), neuropathy (18%), cardiovascular disease or stroke (18%), and foot ulcers (8.2%) (see Figure 1 and Appendix Table 2.13).

Aside from vision loss, there was an increase in the frequency of people with DED and DME experiencing complications compared with people without DED. The frequency of neuropathy increased from 13% to 23% in those without DED and with DED respectively; 23% (without DED) and 31% (with DED) reported kidney disease (see Table 3 and EXP 1).

Figure 1: Presence of complications
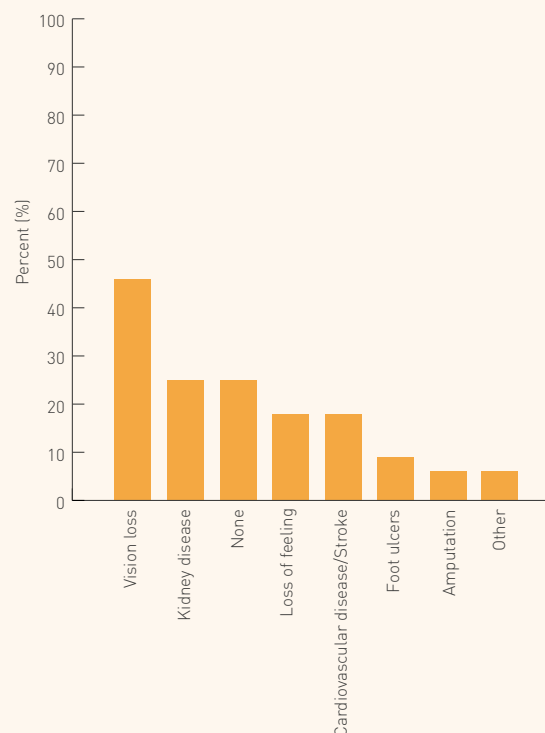
Table 3: Presence of complications without DED, with DED or DME

Complication	Without DED (n=31)	With DED (n=26)	With DME (n=4)
Any	17 (54.8%)	25 (96.2%)	4 (100.0%)
Vision loss	6 (19.4%)	19 (73.1%)	3 (75.0%)
Kidney disease	7 (22.6%)	8 (30.8%)	0 (0.0%)
Loss of feeling in hands or toes (neuropathy)	4 (12.9%)	6 (23.1%)	1 (25.0%)
Cardiovascular disease/Stroke	5 (16.1%)	6 (23.1%)	0 (0.0%)
Foot ulcers	3 (9.7%)	1 (3.8%)	1 (25.0%)
Amputation	2 (6.5%)	0 (0.0%)	1 (25.0%)
Other	2 (6.5%)	1 (3.8%)	0 (0.0%)
None	14 (45.2%)	1 (3.8%)	0 (0.0%)

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

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

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

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

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

Information about Diabetic Eye Disease and Diabetic Macular Edema

While 97% of respondents said that eye complications were discussed with their health care professionals, just over 15% either had never discussed them (3.3%) or only did so when symptoms arose (12%). The frequency of regular discussions varied from every visit (34%), multiple times a year (28%), and once a year (23%) (see Appendix Table 2.14).

Less than half of all patients (46%) did what they could to prevent vision problems (e.g. get routine screenings, visit specialists), yet an alarming 53% thought that vision problems were a normal part of ageing and 6.6% made no special effort to prevent vision problems (see Appendix Table 2.15).

Sixty-one percent of all respondents had received information about DR and DME with the doctor or nurse being the most common source (59%). It is alarming that over a third (39%) of all respondents did not receive such information from any of the listed sources (see Table 4 and Appendix Table 3.9).

Table 4: Source of information about DR and DME

Source	All respondents (n=56)
Doctor/Nurse	33 (58.9%)
Health educator	2 (3.6%)
Family/Friends/Neighbours	2 (3.6%)
TV/Radio/Newspaper/Magazines	2 (3.6%)
Internet	2 (3.6%)
Diabetes organisation or other health organisation	1 (1.8%)
None of the above	22 (39.3%)

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

About three quarters (76%) of the respondents reported having an eye exam for DED, with 73% having an exam in last year and a further 18% more than one year ago but less than two years ago (see Appendix Table 3.2). Eight percent of respondents were aware of government sponsored screening programmes for DED (see Appendix Table 3.1).

While a large proportion (75%) thought they should have their eyes examined for DED once a year, 10% said that testing should happen only when symptoms occur and two respondents stated only every two years (see Appendix Table 3.4).

The biggest barriers to eye exams were the high cost (44%), long wait times for an appointment (27%), and the eye exams were not available near the person's home (22%) (see Table 5 and Appendix Table 3.5).

Table 5: Barriers to eye examinations

Identified Barriers	All Respondents (n=59)
They are expensive	26 (44.1%)
Long wait time for appointment	16 (27.1%)
Eye exams are not available near my home	13 (22.0%)
Long wait time on the day of the visit	10 (16.9%)
Limited access to diabetes specialists	5 (8.5%)
Don't know much about my condition	3 (5.1%)
Too many other things to do or worry about	2 (3.4%)
Recommended treatments for eye problems are not available	1 (1.7%)
Clinics are too small or lack necessary equipment/staff	1 (1.7%)
Other	21 (35.6%)

Treatment of Diabetic Eye Disease and Diabetic Macular Edema

Treatment was assessed separately in people with DED and in those with DME. For those with DED, 77% had received treatment but the nature was not specified. Of those who received treatment, 75% (n=15) completed their treatments and 15% (n=3) were still receiving treatment. Eighty-nine percent felt that treatment had been successful and either their vision had improved (67%) or had stayed the same (22%). One respondent (5.6%) felt that the treatment did not work (see Table 6).

For the three respondents (12%) with DED who had not received treatment, the most common reason reported was that 'they were too busy' (67%).

All patients with DME (n=4) received treatment and the most common treatment was 'other' (75%). All respondents felt that the treatment had been successful and either their vision had improved (67%) or had stayed the same (33%).

There was a strong preference by all respondents with DME to have a proactive approach in the treatment pathway to prevent further vision loss rather than a reactive approach once further vision loss occurred (see Appendix Table 3.8).

Table 6: Treatment characteristics of patients with DED and DME

Question	Response	With DED (n=26)	With DME (n=4)
Have you had any treatment for diabetic eye disease?	Yes	20 (76.9%)	4 (100.0%)
	No	3 (11.5%)	0 (0.0%)
	Don't know/Not sure	3 (11.5%)	0 (0.0%)
What treatment did you receive?	Laser	7 (36.8%)	1 (25.0%)
	Anti-VEGF	1 (5.3%)	1 (25.0%)
	Other	12 (63.2%)	3 (75.0%)
	Other	9 (20.0%)	1 (3.1%)
Did you complete the treatment?	Yes	15 (75.0%)	3 (75.0%)
	No	2 (10.0%)	1 (25.0%)
	Still receiving treatment	3 (15.0%)	0 (0.0%)
	Don't know/Not sure	1 (2.2%)	0 (0.0%)
Do you feel that the treatment worked?	Yes, and vision improved	12 (66.7%)	2 (66.7%)
	Yes, but vision stayed the same	4 (22.2%)	1 (33.3%)
	No	1 (5.6%)	0 (0.0%)
	Don't know/Not sure	1 (5.6%)	0 (0.0%)
	Don't know/Not sure	0 (0.0%)	2 (6.7%)
What is/are the reason(s) that you did not complete the treatment?	Treatment was too expensive	0 (0.0%)	1 (100.0%)
	I was too busy	0 (0.0%)	1 (100.0%)
	Other	1 (100.0%)	0 (0.0%)
What are the reason(s) that you have not had treatment for diabetic eye disease?	Too expensive	1 (33.3%)	0 (0.0%)
	I'm too busy	2 (66.7%)	0 (0.0%)
	Other	1 (33.3%)	0 (0.0%)

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

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

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

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

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

Impact of Diabetic Eye Disease and Diabetic Macular Edema

Ninety-four percent of those diagnosed with DED, or DME, reported that their vision was affected (6.7% significantly, 87% slightly) (see Appendix Table 3.6).

Eighty-six percent of these respondents said that reported vision issues impacted their daily lives in various ways such as difficulty travelling (64%), managing their underlying diabetes (36%), household responsibilities, such as cooking or cleaning (29%), social interactions with family or friends (29%), working or keeping a job (29%), driving a vehicle (21%), and leisure activities orexercise (18%) (see Table 7).

Table 7: Activities affected through vision impairment and loss

	All Respondents (n=28)
Travelling	18 (64.3%)
Managing my diabetes	10 (35.7%)
Household responsibilities, such as cooking or cleaning	8 (28.6%)
Social interactions with family/ friends	8 (28.6%)
Work or keeping a job	8 (28.6%)
Driving (a car/vehicle)	6 (21.4%)
Leisure activities/exercise	5 (17.9%)
Other	2 (7.1%)
None	4 (14.3%)

Forty-two percent of respondents with DED, and 33% with DME were in paid employment compared with 55% of patients without DED (see Table 8 and Appendix EXP 5.1). Patients with vision complications reported difficulties with working or keeping a job (29%) and of those diagnosed with DED, 13% (n=3) were not working at all.

Forty-eight percent of all those surveyed did not receive assistance from the government while 39% (n=22) did receive assistance (see Appendix Table 4.5). The proportion of respondents without DED who received assistance from the government was 52%, compared with 54% with DED and 33% with DME.

Seventy-seven percent of respondents said they had no trouble paying for food at any time during the past year (see Appendix Table 4.6). Less than a third of respondents (27%) said that their access to healthcare was affected, and 24% of those said it was affected by their income (see Appendix Table 4.7).

Forty-four percent of those surveyed said they worried about their health, 18% about family and 7.3% were not worried about any of items listed in the survey (see Appendix Table 4.8).

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

Question	Response	Without DED (n=29)	With DED (n=24)	With DME (n=3)
Are you currently working?	Working for pay	16 (55.2%)	10 (41.7%)	1 (33.3%)
	Working without pay at home (e.g. housework, farming)	6 (20.7%)	8 (33.3%)	2 (66.7%)
	Volunteering	1 (3.4%)	0 (0.0%)	0 (0.0%)
	Retired	5 (17.2%)	3 (12.5%)	0 (0.0%)
	Not working	1 (3.4%)	3 (12.5%)	0 (0.0%)
	Not working	11 (7.4%)	7 (11.7%)	1 (2.5%)
Question	**Response**	**Without DED (n=29)**	**With DED (n=24)**	**With DME (n=3)**
Do you receive assistance from the government?	Income assistance	12 (41.4%)	9 (37.5%)	1 (33.3%)
	Pension assistance	3 (10.3%)	4 (16.7%)	0 (0.0%)
	None of the above	14 (48.3%)	11 (45.8%)	2 (66.7%)
Question	**Response**	**Without DED (n=29)**	**With DED (n=24)**	**With DME (n=3)**
Did you have trouble paying for food at any time during the past year?	Yes	5 (17.2%)	7 (29.2%)	1 (33.3%)
	No	24 (82.8%)	17 (70.8%)	2 (66.7%)

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).

Two-thirds of people without DED, with DED, and with DME reported their health as poor. Thirteen percent without DED had physically unhealthy days, as did 11% of those with DED, whilst 25% of those without DED and 14% of those with DED had mentally unhealthy days.

Compared with 21% of those without DED, 33% of people with DME and 38% of people with DED 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: vision problems, diabetes, mental or emotional health, and walking problems (see Appendix EXP 2).

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

Health Status	Without DED	With DED	With DME
Self-rated health: Good	9 (33.3%)	8 (33.3%)	1 (33.3%)
Self-rated health: Poor	18 (66.7%)	16 (66.7%)	2 (66.7%)
Physically unhealthy days	2 (13.3%)	1 (11.1%)	1 (100.0%)
Mentally unhealthy days	4 (25.0%)	1 (14.3%)	1 (100.0%)
Unhealthy days	4 (28.6%)	1 (14.3%)	1 (100.0%)
Activity limitation days	2 (28.6%)	0 (0.0%)	1 (100.0%)

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

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

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

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

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

Bangladesh
DR Barometer Findings:
Health Care Professionals

Key Demographic Characteristics

There were 32 health care professionals who answered at least one of the survey questions in Bangladesh. Of these, three were primary care providers (9.4%), 16 were diabetes specialist providers (50%) and eight were ophthalmologists (25%). The remaining respondents were nurses, health educators or other types of professionals (see Appendix PT 1.3).

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

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

Health care professionals were well educated (all had a graduate or advanced degree); 12% were female and 88% male; and varied in age categories with 35% being in the age group 50 - 59 years (see Appendix PT 3.1 and Table 10).

Table 10: Summary of key characteristics of health care professionals

Group	Subgroup	All Respondents	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist
All respondents		32 (100.0%)	3 (9.4%)	16 (50.0%)	8 (25.0%)
Age group	30 - 39 yrs.	5 (29.4%)	0 (0.0%)	5 (55.6%)	0 (0.0%)
	40 - 49 yrs.	5 (29.4%)	1 (100.0%)	0 (0.0%)	2 (50.0%)
	50 - 59 yrs.	6 (35.3%)	0 (0.0%)	3 (33.3%)	2 (50.0%)
	60 - 69 yrs.	1 (5.9%)	0 (0.0%)	1 (11.1%)	0 (0.0%)
Gender	Female	2 (11.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Male	15 (88.2%)	1 (100.0%)	9 (100.0%)	4 (100.0%)
Education	Graduate or advanced degree (e.g. PhD, MD, etc.)	17 (100.0%)	1 (100.0%)	9 (100.0%)	4 (100.0%)

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

Clinical Practice Characteristics

Thirty-nine percent of all health care professionals have their main practice setting in a hospital (see Appendix PT 2.1) and 86% of ophthalmologists have their main practice setting in a hospital. Eighty-five percent of health care professionals worked in an urban setting (see Appendix PT 2.2).

Most health care professionals worked in the private sector (50%) as did 43% of ophthalmologists (see Appendix PT 2.3).

All health care professionals reported that a third of patients pay out-of-pocket (full fees) for services, 28% pay a reduced or subsidised rate for services, and 11% do not pay for services (see Appendix PT 2.7). The situation was slightly different for ophthalmologists only who reported that 40% of patients equally either do not pay or pay completely out-of-pocket (full fees).

All providers see on average 125 patients per week and some 62% of these patients have diabetes; and the findings for ophthalmologists are somewhat similar with see about 166 patients per week and 66% of these have diabetes (see Appendix PT 2.6).

For all health care professionals, the average waiting time for an appointment was most commonly less than one week (50%), however one in five providers (22%) did not take appointments (see Appendix PT 2.5).

For the ophthalmologist group, the most common response to average waiting time for an appointment was less than one week (80%) and 20% did not take appointments.

Table 11: Average wait times to schedule an appointment

Wait Time Intervals	All Respondents (n=18)
Less than 1 week	9 (50.0%)
More than 1 week but less than 1 month	1 (5.6%)
More than 3 months but less than 6 months	1 (5.6%)
Do not take appointments	4 (22.2%)
Other	2 (11.1%)
Don't know/Not sure	1 (5.6%)

Patient Education Information

A wide range of topics related to diabetes and its management are 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
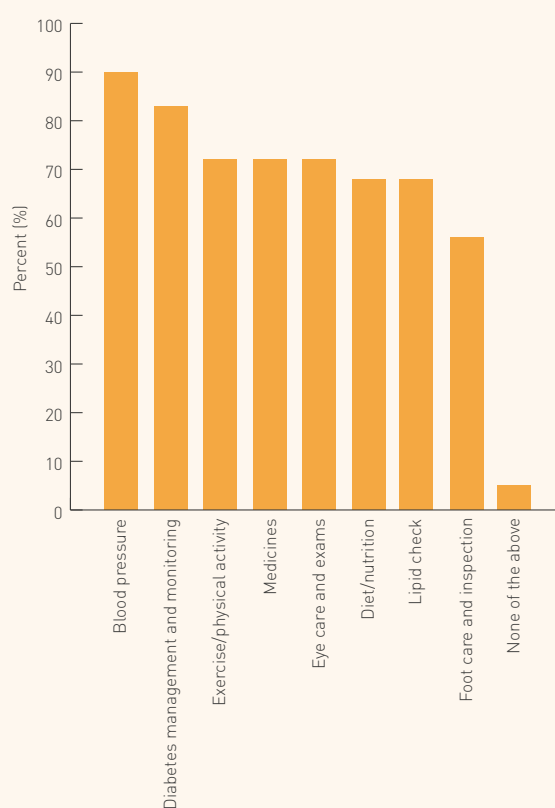
Health care professionals stated that written information about diabetes is available yet the adequacy of that related to eye complications varies.

Twenty-eight percent of all providers reported that they had sufficient information about eye complications, 39% had information on diabetes but information on eye complications was not sufficient, and 11% said that information on eye complications was not included. Overall, 22% of health care professionals had no written information at all (see Table 12 and Appendix PT 2.11).

Guidelines and Protocols

Fifty-six percent of the providers said that they had written protocols for the management of diabetes available, which were used by staff. However, 28% had no protocols (see Appendix PT 2.12).

With respect to the management of diabetes-related vision issues, only 28% of the providers had written protocols available that were used by staff and 17% had protocols but these were not used by staff. Every second (50%) health care professional reported that they did not have protocols on the management of diabetes-related vision issues (see Table 12 and Appendix PT 2.13).

Table 12: Availability and use of information and protocols

Question	Response	All Respondents (n=18)
Is there written information about diabetes available for patients in your main practice?	Yes, and information on eye complications is sufficient	5 (27.8%)
	Yes, but information on eye complications is not sufficient	7 (38.9%)
	Yes, but no information on eye complications is included	2 (11.1%)
	No written information is available for patients	4 (22.2%)
Question	**Response**	**All Respondents (n=18)**
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	5 (27.8%)
	Yes, available but not used by staff	3 (16.7%)
	Not available	9 (50.0%)
	Don't know/Not sure	1 (5.6%)

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

Screening Protocols and Barriers in the Care Pathway

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

With respect to patients with type 1 and type 2 diabetes, 77% and 94% of health care professionals thought that the initial eye exam should occur at the time of diagnosis of diabetes (see Appendix PT 2.14).

Overall, seventy-seven percent of health care professionals reported that follow-up eye examinations should be conducted every year (see Appendix PT 2.15). Seventy-five percent of ophthalmologists and 59% of all health care professionals said that they screen patients for DR (see Appendix PT 2.16).

Across all health care professionals, 59% send appointment reminders while 35% do not (see Appendix PT 2.19).

Seventy-one percent of the health care professionals, including 75% of ophthalmologists, reported that they shared information to optimise patient care management (see Appendix PT 2.20).

The most common patient characteristics influencing the referral process for eye complications were: diabetes duration (94%), the patient's age (82%), the presence of comorbidities such as hypertension (77%), high glucose levels (71%), and the educational level of the patient (29%) (see Appendix PT 2.17).

As reported by health care professionals, the major barriers to optimising eye health faced by patients with diabetes were: the high cost of care (65%), a lack of knowledge or awareness (53%), and limited access to eye specialists (41%) (see Table 13 and Appendix PT 2.18).

Table 13: Major barriers to optimising eye health

Response	All Respondents (n=17)
Cost of care	11 (64.7%)
Lack of knowledge and/or awareness	9 (52.9%)
Limited access to eye specialists	7 (41.2%)
Patients fear of treatment/results	6 (35.3%)
Limited access to diabetes specialists	6 (35.3%)
Patients feel eye complications are unlikely	6 (35.3%)
Patients feel eye exams are not important	6 (35.3%)
Referral process	5 (29.4%)
Proximity to care	4 (23.5%)
Long wait time for appointment	4 (23.5%)
Patients feel they are a burden on family/friends	3 (17.6%)
Patients have competing responsibilities and priorities	3 (17.6%)
Recommended treatments are not available	2 (11.8%)
Long wait time on the day of visit	1 (5.9%)
Clinic too small or lack necessary equipment/staff	1 (5.9%)
Other	2 (11.8%)

Bangladesh
DR Barometer Findings:
Ophthalmologists

Screening

There were three ophthalmologists who answered at least one of the supplementary questions (see Appendix PT 4.1 to PT 4.14). The ophthalmologists reported that an average of 30% of their patients had DR (see Appendix PT 4.1) and 16% had DME (see Appendix PT 4.1 and PT 4.2).

The most common waiting time for a patient for a screening appointment for DED was less than one week (100%) (see Appendix PT 4.3). Seventy-five percent of ophthalmologists reported that there was no wait from time of screening to diagnosis and 25% (n=1) reported a wait time of less than one one week (see Appendix PT 4.4).

Treatment and Challenges

All ophthalmologists personally administer treatment for DR (see Appendix PT 4.6). The most common factors influencing how ophthalmologists treat patients with DR or DME were: diabetes duration (100%), the patient's age (100%), high glucose levels (100%) and the presence of comorbidities such as hypertension (67%) (see Appendix PT 4.7).

The most common outreach venues for screening for DED were: mobile screening centres (33%), health fairs for all (33%), and health fairs for people with diabetes (33%). Significantly, 67% reported that outreach for screening is not done (see Appendix PT 4.13).

All ophthalmologists screen patients for DR based on fundoscopy through dilated pupils (100%). Additionally, 67% screened based on fundoscopy through undilated pupils, 67% use retinal photo, 67% fluorescein angiography, and 33% optical coherence tomography. Thirty-three percent of ophthalmologists reported that they treat DR and DME based on both visual and anatomical outcomes (see Appendix PT 4.8 and PT 4.9).

All ophthalmologists said that the majority of their patients present when visual problems have already occurred (see Appendix PT 4.10).

All ophthalmologists also reported to have received specific training on the treatment and diagnosis of DR and or DME. Fifty percent had training either between one and five years ago or more than five years ago (see Appendix PT 4.11). Notwithstanding this, all ophthalmologists were interested in online education and certification on DME, angiogenesis and anti-VEGF therapies (see Appendix PT 4.12).

The greatest challenges for improving patient outcomes in DED reported by all ophthalmologists were late diagnosis, complicated referral pathways and the limited access to patient education on DR and DME, 67% also reported the inability of government, or insurance, to cover a patient's cost as significant (see Table 14 and Appendix PT 4.14).

Table 14: Challenges for improving outcomes in DED

Question	Response	Ophthalmologist (n=3)
What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease?	Late diagnosis	3 (100.0%)
	Referral pathways	3 (100.0%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	3 (100.0%)
	Government/insurance not able to cover patient costs	2 (66.7%)
	Multi-disciplinary team integration is poor	2 (66.7%)
	No universal guidelines on referral/ screening	1 (33.3%)
	No universal guidelines on how to treat	1 (33.3%)
	Current available therapies not effective	1 (33.3%)
	Reimbursement/restrictions on approved therapy	1 (33.3%)

Bangladesh
DR Barometer Summary

In Bangladesh, 64 adults with diabetes and 32 health care professionals have provided insight about their experiences of living with, managing, and treating diabetes, DR and DME.

The results of the DR Barometer Study, Bangladesh 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.

By 2050, the population distribution in Bangladesh is expected to increase by 24%, with the country starting to age. Those aged 65 years and older will make up 15.5% of Bangladesh's population and in just over 30 years the population of older people will almost quadruple and reach an all-time high of approximately 31.4 million.

Alongside the demographic changes the prevalence of people with diabetes is climbing rapidly. Bangladesh is the 10th country in the world for the number of adults living with diabetes with some 7.1 million (5.3-12.0‡). By 2040, this number is expected to increase to 13.6 million (10.7-24.6‡).

The DR 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. In the 40-59 age group, 9.7% had type 1 and 84% had type 2 diabetes; no respondents in the 60-79 year-old group had type 1 diabetes and 94% had type 2. The relationships between age and type of diabetes will be an important trend in the context of the demographic upheavals Bangladesh is expected in the coming decades.

People were most often informed about their condition by health professionals such as a doctor or nurse. Family, friends, and neighbours also were important sources of information, followed, only by diabetes and other health organisations.

Only 13% of patients were enrolled in diabetes management programmes and all of those attending noted that there education on the importance of screening for eye complications was included in the programme.

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. The high cost of care and the fact that there was no insurance to pay for some of the services was also a dominant concern.

Travelling to and from appointments was a further challenge. In this scenario outreach clinics are of utmost importance however, the study found that 67% of ophthalmologist reported that outreach for screening is not done.

There was a relatively high awareness of the complications associated with diabetes. Vision loss (46%) was by far the most concerning followed by amputation, kidney disease, and cardiovascular disease. Almost all respondents with DED and DME reported complications with their condition and their frequency of additional complications was higher than those without DED.

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 the high costs of exams, long wait times on the day of the appointment, and eye exams not being available near the person's home.

Evidence shows that the relationship between the patient and the health care professional is critical to realistic and optimal patient outcomes. It was therefore surprising that some patients surveyed had either never had a conversation about eye complications with their health professional or it only took place once symptoms were present. Equally concerning is the myths and perceptions around vision changes with more that 53% of patients reporting that vision problems were a normal part of ageing and some not making any special effort to prevent vision problems

Being diagnosed with DED and DME was associated with increased limitations to daily activities as a result of poor health. Almost all respondents with DED or DME said that their vision was slightly or significant affected which in turn impacted their health, lifestyle, and life choices.

Most of those diagnosed with DED and DME struggled with normal activities of daily living, two-thirds of those in this subgroup had difficulty driving. Over one third had difficulties managing their underlying diabetes, as well as working and undertaking household responsibilities.

Those with DED and DME were also more likely to be receiving government assistance than those without DED. Overall a proactive treatment approach to prevent further vision loss was preferred rather than reactive treatment once further vision loss had occurred. However, for some (27%) their access to healthcare was affected by their limited income. Health (54%) and family (18%) were the top two 'worries' on the minds of the respondents surveyed.

Patient education is very much at the heart of a proactive treatment approach so it was concerning to find that only 28% of all providers had written protocols for the detection and management of diabetes-related vision issues. In some practices, education material and protocols did not exist.

For patients with either type 1 or type 2 diabetes 77% and 94% of all providers respectively said that an initial eye exam should occur at the time of diagnosis of diabetes and there was agreement by most that follow-up eye examinations should be conducted every year.

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

The high cost of care, a lack of knowledge and or awareness, and the limited access to eye specialists were viewed by ophthalmologists as some of the greatest challenges for improving patient outcomes in DED.

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

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

References and Acknowledgement

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

Appendices

The Diabetic Retinopathy Barometer Survey: Appendices for Bangladesh

APPENDIX 1 : National Results

Table 1.1

Survey Information	Number of Respondents (%)
All valid respondents [1]	71 (100.0%)
Respondents aged 18 or over	70 (98.6%)
Respondents with diabetes	64 (90.1%)

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

Table 1.2

Survey Information	Number of Respondents (%)
All valid respondents	71 (100.0%)
Included in Diabetic Analysis Set	64 (90.1%)
Excluded from Diabetic Analysis Set	7 (9.9%)
Reasons for exclusion from diabetic analysis set	.
Under 18 years of age	1
Not diagnosed with diabetes	3
Missing information on diabetes diagnosis	3

Table 1.3

Survey Information	Number of Respondents (%)
Diabetic Analysis Set	64 (100.0%)
Persons with diabetic eye disease (DED)	26 (40.6%)
Persons with diabetic macular edema (DME)	4 (6.3%)
Persons with Type I diabetes	4 (6.3%)
Persons with Type II diabetes	53 (82.8%)
Persons not seeing health care professional for diabetes	1 (1.6%)
Persons seeing health care professional for diabetes	62 (96.9%)
Persons with eye disease & not received treatment	3 (4.7%)
Persons with eye disease & received treatment	24 (37.5%)

Table 2.1

Question	Response	Number of Respondents (%)
With which type of diabetes have you been diagnosed?	Type I	4 (6.3)
	Type II	53 (82.8)
	Don't know/Not sure	7 (10.9)
	Total Valid Response	64 (100.0)

Table 2.2

Question	Response	Number of Respondents (%)
When was your diabetes diagnosed?	Within the last year	16 (25.8)
	1 - 5 years ago	18 (29.0)
	6 - 10 years ago	10 (16.1)
	11 - 15 years ago	6 (9.7)
	16 - 20 years ago	3 (4.8)
	21 years ago or longer	8 (12.9)
	Don't know/Not sure	1 (1.6)
	Total Valid Response	62 (100.0)
	Total missing	2

Table 2.3.1

Question	Response	Number of Respondents (%)
Do you see a health care professional for your diabetes?	Yes	62 (98.4)
	No	1 (1.6)
	Total Valid Response	63 (100.0)
	Total missing	1
What kind of health care professional?	General/Family Doctor	1 (1.7)
	Diabetes Specialist	59 (98.3)
	Total Valid Response	60 (100.0)
	Total missing	4

Table 2.3.2

Type of health care professional	Times per year seen for diabetes	Value
General/Family Doctor	Total valid numeric response (n)	1
	Mean	2.0
	SD	
	Median	2.0
	Min	2
	Max	2
Diabetes Specialist	Total valid numeric response (n)	59
	Mean	5.6
	SD	3.6
	Median	4.0
	Min	2
	Max	18

Table 2.4

Question	Response	Number of Respondents (%)
How have you received information about diabetes?	Doctor or nurse	54 (90.0%)
	Health educator	7 (11.7%)
	Nutritionist or dietitian	6 (10.0%)
	Diabetes organization or other health organization	8 (13.3%)
	Family/Friends/Neighbors	10 (16.7%)
	TV/Radio/Newspaper/Magazines	8 (13.3%)
	Internet	4 (6.7%)
	Social media (e.g. Facebook, Twitter, blogs)	3 (5.0%)
	Total Valid Response	60 (100.0%)
	Total missing	4

Table 2.5

Question	Response	Number of Respondents (%)
How do you manage your diabetes?	Diet	51 (83.6%)

Question	Response	Number of Respondents (%)
	Oral medicine	37 (60.7%)
	Exercise	30 (49.2%)
	Insulin	18 (29.5%)
	Natural/Herbal medicine	1 (1.6%)
	None of the above	1 (1.6%)
	Total Valid Response	61 (100.0%)
	Total missing	3

Table 2.6

Question	Response	Number of Respondents (%)
Are you currently enrolled in a diabetes patient management support programme?	Yes	8 (13.1)
	No	53 (86.9)
	Total Valid Response	61 (100.0)
	Total missing	3
Who sponsors the programme?	Hospital support program	6 (75.0)
	Clinic support program	1 (12.5)
	Patient organization support program	1 (12.5)
	Total Valid Response	8 (100.0)
	Total missing	56
Does the programme include education on the importance of screening for diabetic eye complications?	Yes	8 (100.0)
	Total Valid Response	8 (100.0)
	Total missing	56

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	58 (95.1%)
	Less than 6	49 (80.3%)

Test	Response	Number of Respondents (%)
	months	
	6 - 12 months	4 (6.6%)
	Greater than 12 months	5 (8.2%)
	Total valid response	58 (95.1%)
	Total missing	6
	No	3 (4.9%)
	Total valid response	61 (100.0%)
	Total missing	3
Urine check	Yes	55 (90.2%)
	Less than 6 months	48 (78.7%)
	6 - 12 months	4 (6.6%)
	Greater than 12 months	2 (3.3%)
	Total valid response	54 (88.5%)
	Total missing	10
	No	6 (9.8%)
	Total valid response	61 (100.0%)
	Total missing	3
Weight check	Yes	57 (93.4%)
	Less than 6 months	52 (85.2%)
	6 - 12 months	4 (6.6%)
	Greater than 12 months	1 (1.6%)
	Total valid response	57 (93.4%)
	Total missing	7
	No	4 (6.6%)
	Total valid response	61 (100.0%)

Test	Response	Number of Respondents (%)
	Total missing	3
Blood pressure check	Yes	51 (83.6%)
	Less than 6 months	45 (73.8%)
	6 - 12 months	3 (4.9%)
	Total valid response	48 (78.7%)
	Total missing	16
	No	10 (16.4%)
	Total valid response	61 (100.0%)
	Total missing	3
Foot check	Yes	28 (45.9%)
	Less than 6 months	20 (32.8%)
	6 - 12 months	2 (3.3%)
	Greater than 12 months	6 (9.8%)
	Total valid response	28 (45.9%)
	Total missing	36
	No	31 (50.8%)
	Don't know/Not sure	2 (3.3%)
	Total valid response	61 (100.0%)
	Total missing	3
Eye check	Yes	46 (75.4%)
	Less than 6 months	34 (55.7%)
	6 - 12 months	2 (3.3%)
	Greater than 12 months	6 (9.8%)
	Total valid response	42 (68.9%)
	Total missing	22

Test	Response	Number of Respondents (%)
	No	13 (21.3%)
	Don't know/Not sure	2 (3.3%)
	Total valid response	61 (100.0%)
	Total missing	3

Table 2.8

Question	Response	Number of Respondents (%)
How well do you think your diabetes is controlled?	Very well	12 (19.7%)
	Well	22 (36.1%)
	Not very well	25 (41.0%)
	Not well at all	2 (3.3%)
	Total Valid Response	61 (100.0%)
	Total missing	3

Table 2.9

Question	Response	Number of Respondents (%)
What are the main challenges you face in controlling your diabetes?	High cost of care	34 (55.7%)
	No insurance	21 (34.4%)
	Travel to my regular doctor or specialist is difficult	15 (24.6%)
	Long wait time for an appointment to see my doctor or specialist	15 (24.6%)
	Health services needed are not available	2 (3.3%)
	Don't know enough about diabetes	13 (21.3%)
	Too hard to eat the right things	20 (32.8%)
	Too many other things to do	17 (27.9%)
	Stigma or discrimination because of diabetes	2 (3.3%)

Question	Response	Number of Respondents (%)
	Don't want to think about having diabetes	7 (11.5%)
	Other	2 (3.3%)
	Total Valid Response	61 (100.0%)
	Total missing	3

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	3 (4.9%)
	Support groups	4 (6.6%)
	Support from family or friends	21 (34.4%)
	Health education and information	8 (13.1%)
	Coordination of healthcare and services by a professional	2 (3.3%)
	None	35 (57.4%)
	Total Valid Response	61 (100.0%)
	Total missing	3

Table 2.11

Question	Response	Number of Respondents (%)
What complications (or problems), to your knowledge, arise from diabetes?	Amputation	21 (34.4%)
	Foot ulcers	29 (47.5%)
	Increased risk of broken bones or fractures	7 (11.5%)
	Loss of feeling in hands or toes (neuropathy)	19 (31.1%)
	Vision loss	49 (80.3%)
	Irritable bowel disease	1 (1.6%)
	Kidney disease	37 (60.7%)
	Cardiovascular disease/Stroke	29 (47.5%)

Question	Response	Number of Respondents (%)
	Other	1 (1.6%)
	Don't know/Not sure	5 (8.2%)
	None	2 (3.3%)
	Total Valid Response	61 (100.0%)
	Total missing	3

Table 2.12

Question	Response	Number of Respondents (%)
Which complication of diabetes are you most concerned about?	Amputation	12 (19.7)
	Foot ulcers	4 (6.6)
	Increased risk of broken bones or fractures	1 (1.6)
	Loss of feeling in hands or toes (neuropathy)	2 (3.3)
	Vision loss	27 (44.3)
	Kidney disease	9 (14.8)
	Cardiovascular disease/Stroke	5 (8.2)
	None	1 (1.6)
	Total Valid Response	61 (100.0)
	Total missing	3

Table 2.13

Question	Response	Number of Respondents (%)
Which of the following complications of diabetes do you have?	Amputation	3 (4.9%)
	Foot ulcers	5 (8.2%)
	Broken bones or fractures	1 (1.6%)
	Loss of feeling in hands or toes (neuropathy)	11 (18.0%)
	Vision loss	28 (45.9%)
	Kidney disease	15 (24.6%)
	Cardiovascular disease/Stroke	11 (18.0%)

Question	Response	Number of Respondents (%)
	Other	3 (4.9%)
	Don't know/Not sure	2 (3.3%)
	None	15 (24.6%)
	Total Valid Response	61 (100.0%)
	Total missing	3

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	21 (34.4%)
	Multiple times per year	17 (27.9%)
	Once per year	14 (23.0%)
	Only when symptoms arise	7 (11.5%)
	Never	2 (3.3%)
	Total Valid Response	61 (100.0%)
	Total missing	3

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	32 (52.5%)
	I do what I can to prevent vision problems (e.g. get routine screenings, visit specialists)	28 (45.9%)
	I do not make any special effort to prevent vision problems	4 (6.6%)
	Total Valid Response	61 (100.0%)
	Total missing	3

Table 2.16

Question	Response	Number of Respondents (%)
What type of health insurance do you have?	Public	2 (3.3)
	Public - Private	1 (1.7)
	Private	2 (3.3)
	None	55 (91.7)
	Total Valid Response	60 (100.0)
	Total missing	4

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	3 (5.1)
	Insurance and out-of-pocket/cash (e.g. co-pays)	1 (1.7)
	Out-of-pocket only (pay cash for all care)	54 (91.5)
	Do not use service	1 (1.7)
	Total Valid Response	59 (100.0)
	Total missing	5
Specialist medical visits (e.g. eye doctor, gynecologist, urologist)	Care is free	4 (6.8)
	Out-of-pocket only (pay cash for all care)	55 (93.2)
	Total Valid Response	59 (100.0)
	Total missing	5
Medicines	Care is free	3 (5.1)
	Insurance and out-of-pocket/cash (e.g. co-pays)	1 (1.7)
	Out-of-pocket only (pay cash for all care)	54 (91.5)
	Do not use service	1 (1.7)
	Total Valid Response	59 (100.0)
	Total missing	5
Medical supplies (e.g. blood glucose meter/strips)	Care is free	3 (5.1)

Question	Response	Number of Respondents (%)
	Out-of-pocket only (pay cash for all care)	54 (91.5)
	Do not use service	2 (3.4)
	Total Valid Response	59 (100.0)
	Total missing	5
Procedures	Care is free	2 (3.4)
	Insurance and out-of-pocket/cash (e.g. co-pays)	1 (1.7)
	Out-of-pocket only (pay cash for all care)	53 (91.4)
	Do not use service	1 (1.7)
	Don't know/Not Sure	1 (1.7)
	Total Valid Response	58 (100.0)
	Total missing	6
Tests/screenings	Care is free	3 (5.1)
	Insurance and out-of-pocket/cash (e.g. co-pays)	1 (1.7)
	Out-of-pocket only (pay cash for all care)	54 (91.5)
	Do not use service	1 (1.7)
	Total Valid Response	59 (100.0)
	Total missing	5
Health education	Care is free	6 (10.3)
	Out-of-pocket only (pay cash for all care)	51 (87.9)
	Do not use service	1 (1.7)
	Total Valid Response	58 (100.0)
	Total missing	6
Counseling	Care is free	4 (6.9)
	Out-of-pocket only (pay cash for all care)	52 (89.7)
	Do not use service	2 (3.4)
	Total Valid Response	58 (100.0)
	Total missing	6

Table 3.1

Question	Response	Number of Respondents (%)
Are you aware of any government sponsored screening programs for diabetic eye disease (diabetic retinopathy)?	Yes	5 (8.5%)
	No	54 (91.5%)
	Total valid response	59 (100.0%)
	Total missing	5

Table 3.2

Question	Response	Number of Respondents (%)
Have you ever had an eye exam for diabetic eye disease?	Yes	45 (76.3%)
	No	14 (23.7%)
	Total valid response	59 (100.0%)
	Total missing	5
How long ago was your last eye exam?	Within the last year	32 (72.7%)
	More than 1 year ago but less than 2 years	8 (18.2%)
	More than 2 years ago but less than 3 years	2 (4.5%)
	More than 3 years ago but less than 5 years	1 (2.3%)
	Five or more years ago	1 (2.3%)
	Total valid response	44 (100.0%)
	Total missing	20
Who did the last exam?	General/Family practitioner	2 (4.4%)
	Eye doctor/Eye clinic	42 (93.3%)
	Other	1 (2.2%)
	Total valid response	45 (100.0%)
	Total missing	19

Table 3.3

Question	Response	Number of Respondents (%)

Question	Response	Number of Respondents (%)
Have you ever had a dilated eye exam, where your eyes are examined after eye drops?	Yes	31 (52.5%)
	No	24 (40.7%)
	Don't know/Not sure	4 (6.8%)
	Total valid response	59 (100.0%)
	Total missing	5

Table 3.4

Question	Response	Number of Respondents (%)
Based on what you know, how often should you get your eyes examined for diabetic eye disease?	Once a year	44 (74.6%)
	Every two years	2 (3.4%)
	Only when symptoms occur	6 (10.2%)
	Don't know/Not sure	7 (11.9%)
	Total valid response	59 (100.0%)
	Total missing	5

Table 3.5

Question	Response	Number of Respondents (%)
For you, what are the biggest barriers to eye exams?	They are expensive	26 (44.1%)
	Eye exams are not available near my home	13 (22.0%)
	Long wait time for appointment	16 (27.1%)
	Long wait time on the day of the visit	10 (16.9%)
	Recommended treatments for eye problems are not available	1 (1.7%)
	Don't know much about my condition	3 (5.1%)
	Limited access to diabetes specialists	5 (8.5%)
	Too many other things to do or worry	2 (3.4%)

Question	Response	Number of Respondents (%)
	about	
	Clinics are too small or lack necessary equipment/staff	1 (1.7%)
	Other	21 (35.6%)
	Total valid response	59 (100.0%)
	Total missing	5

Table 3.6

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic eye disease?	Yes	30 (50.8%)
	No	29 (49.2%)
	Total valid response	59 (100.0%)
	Total missing	5
Has your diabetic eye disease affected your vision?	Yes, slightly	26 (86.7%)
	Yes, significantly	2 (6.7%)
	No	2 (6.7%)
	Total valid response	30 (100.0%)
	Total missing	34
Have vision issues caused you to have difficulty with any of the following?	Traveling	18 (64.3%)
	Household responsibilities, such as cooking or cleaning	8 (28.6%)
	Social interactions with family/friends	8 (28.6%)
	Leisure activities/exercise	5 (17.9%)
	Work or keeping a job	8 (28.6%)
	Managing my diabetes	10 (35.7%)
	Other	2 (7.1%)
	None	4 (14.3%)
	Driving (a car/vehicle)	6 (21.4%)
	Total valid response	28 (100.0%)
	Total missing	36

Table 3.7

Question	Response	Number of Respondents (%)
Have you had any treatment for diabetic eye disease?	Yes	24 (80.0%)
	No	3 (10.0%)
	Don't know/Not sure	3 (10.0%)
	Total valid response	30 (100.0%)
	Total missing	34
What treatment did you receive?	Laser	8 (34.8%)
	Injection in the eye (Anti-VEGF)	2 (8.7%)
	Other	15 (65.2%)
	Total valid response	23 (100.0%)
	Total missing	41
Did you complete the treatment?	Yes	18 (75.0%)
	No	3 (12.5%)
	Still receiving treatment	3 (12.5%)
	Total valid response	24 (100.0%)
	Total missing	40
Do you feel that the treatment worked?	Yes, and vision improved	14 (66.7%)
	Yes, but vision stayed the same	5 (23.8%)
	No	1 (4.8%)
	Don't know/Not sure	1 (4.8%)
	Total valid response	21 (100.0%)
	Total missing	43
What is/are the reason(s) that you did not complete the treatment?	Treatment was too expensive	1 (50.0%)
	I was too busy	1 (50.0%)
	Other	1 (50.0%)
	Total valid response	2 (100.0%)
	Total missing	62
What are the reason(s) that you have not had	Too expensive	1 (33.3%)

Question	Response	Number of Respondents (%)
treatment for diabetic eye disease?		
	I'm too busy	2 (66.7%)
	Other	1 (33.3%)
	Total valid response	3 (100.0%)
	Total missing	61

Table 3.8

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic macular edema?	Yes	4 (7.0%)
	No	38 (66.7%)
	Don't know/Not sure	15 (26.3%)
	Total valid response	57 (100.0%)
	Total missing	7
If Yes, which of the following would you prefer	Treatment to prevent further vision loss	4 (100.0%)
	Total valid response	4 (100.0%)
	Total missing	60

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	33 (58.9%)
	Health educator	2 (3.6%)
	Diabetes organization or other health organization	1 (1.8%)
	Family/Friends/Neighbors	2 (3.6%)
	TV/Radio/Newspaper/Magazines	2 (3.6%)
	Internet	2 (3.6%)
	None of the above	22 (39.3%)
	Total valid response	56 (100.0%)

Question	Response	Number of Respondents (%)
	Total missing	8

Table 4.1

Question	Response	Number of Respondents (%)
What is your gender?	Female	26 (47.3)
	Male	29 (52.7)
	Total Valid Response	55 (100.0)
	Total missing	9
Please indicate your age	18 - 29	3 (4.7)
	30 - 39	12 (18.8)
	40 - 49	11 (17.2)
	50 - 59	20 (31.3)
	60 - 69	12 (18.8)
	70 - 79	5 (7.8)
	80 - 89	1 (1.6)
	Total Valid Response	64 (100.0)

Table 4.2

Question	Response	Number of Respondents (%)
Where do you live?	Urban setting	45 (80.4)
	Non-urban setting	11 (19.6)
	Total Valid Response	56 (100.0)
	Total missing	8

Table 4.3

Question	Response	Number of Respondents (%)
What is the highest level of education you completed?	Did not complete primary school	7 (12.5)
	Primary school	7 (12.5)
	Secondary school	17 (30.4)
	College/University	13 (23.2)
	Graduate or post-graduate	12 (21.4)

Question	Response	Number of Respondents (%)
	Total valid response	56 (100.0)
	Total missing	8

Table 4.4

Question	Response	Number of Respondents (%)
Are you currently working?	Working for pay	27 (48.2)
	Working without pay at home (e.g. housework, farming)	16 (28.6)
	Volunteering	1 (1.8)
	Retired	8 (14.3)
	Not working	4 (7.1)
	Total Valid Response	56 (100.0)
	Total missing	8

Table 4.5

Question	Response	Number of Respondents (%)
Do you receive assistance from the government?	Income assistance	22 (39.3%)
	Pension assistance	7 (12.5%)
	None of the above	27 (48.2%)
	Total valid response	56 (100.0%)
	Total missing	8

Table 4.6

Question	Response	Number of Respondents (%)
Did you have trouble paying for food at anytime during the past year?	Yes	13 (23.2)
	No	43 (76.8)
	Total Valid Response	56 (100.0)
	Total missing	8

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	1 (1.8)
	Education	2 (3.6)
	Gender	2 (3.6)
	Income	13 (23.6)
	Place of birth	1 (1.8)
	Place where you live	1 (1.8)
	None of the above	40 (72.7)
	Total valid response	55 (100.0)
	Total missing	9

Table 4.8

Question	Response	Number of Respondents (%)
Which of the following do you worry about most?	Money	17 (30.9)
	Health	24 (43.6)
	Family	10 (18.2)
	None of the above	4 (7.3)
	Total Valid Response	55 (100.0)
	Total missing	9

Table 5.1

Question	Response	Number of Respondents (%)
In general, would you say your health is:	Excellent	1 (1.9%)
	Very good	3 (5.6%)
	Good	14 (25.9%)
	Total good health	18 (33.3%)
	Fair	31 (57.4%)

Question	Response	Number of Respondents (%)
	Poor	5 (9.3%)
	Fair or poor health	36 (66.7%)
	Total valid response	54 (100.0%)
	Total missing	10

Table 5.2

Question	Response	Number of Respondents (%)
How many days during last 30 days was your physical health not good	Any unhealthy days	4 (16.0%)
	1-5 unhealthy days	1 (4.0%)
	6-10 unhealthy days	1 (4.0%)
	11-20 unhealthy days	2 (8.0%)
	No unhealthy days	21 (84.0%)
	Total valid response	25 (100.0%)
	Total missing	39

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	6 (25.0%)
	1-5 unhealthy days	1 (4.2%)
	6-10 unhealthy days	3 (12.5%)
	11-20 unhealthy days	1 (4.2%)
	21-30 unhealthy days	1 (4.2%)
	No unhealthy days	18 (75.0%)
	Total valid	24 (100.0%)

Question	Response	Number of Respondents (%)
	response	
	Total missing	40

Table 5.3.2

Question	Response	Number of Respondents (%)
Unhealthy days (physically or mentally unhealthy, max 30)	Any unhealthy days	6 (27.3%)
	1-5 unhealthy days	1 (4.5%)
	11-20 unhealthy days	2 (9.1%)
	21-30 unhealthy days	3 (13.6%)
	No unhealthy days	16 (72.7%)
	Total valid response	22 (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	3 (33.3%)
	6-10 unhealthy days	1 (11.1%)
	11-20 unhealthy days	1 (11.1%)
	21-30 unhealthy days	1 (11.1%)
	No unhealthy days	6 (66.7%)
	Total valid response	9 (100.0%)
	Total missing	55

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	16 (30.8%)
	No	36 (69.2%)
	Total valid response	52 (100.0%)
	Total missing	12
Which impairment or health problem, if any, limits your activities?		
a) Arthritis/rheumatism	Yes	1 (25.0%)
	No	3 (75.0%)
	Total valid response	4 (100.0%)
	Total missing	60
b) Back or neck problem	Yes	2 (50.0%)
	No	2 (50.0%)
	Total valid response	4 (100.0%)
	Total missing	60
c) Fractures, bone/joint injury	Yes	4 (66.7%)
	No	2 (33.3%)
	Total valid response	6 (100.0%)
	Total missing	58
d) Walking problem	Yes	5 (71.4%)
	No	2 (28.6%)
	Total valid response	7 (100.0%)
	Total missing	57
e) Lung/breathing problem	Yes	3 (60.0%)
	No	2 (40.0%)
	Total valid response	5 (100.0%)
	Total missing	59
f) Hearing problem	Yes	1 (25.0%)
	No	3 (75.0%)

Question	Response	Number of Respondents (%)
	Total valid response	4 (100.0%)
	Total missing	60
g) Eye/vision problem	Yes	15 (100.0%)
	Total valid response	15 (100.0%)
	Total missing	49
h) Heart problem	Yes	3 (50.0%)
	No	3 (50.0%)
	Total valid response	6 (100.0%)
	Total missing	58
i) Stroke problem	Yes	1 (25.0%)
	No	3 (75.0%)
	Total valid response	4 (100.0%)
	Total missing	60
j) Hypertension/high blood pressure	Yes	3 (60.0%)
	No	2 (40.0%)
	Total valid response	5 (100.0%)
	Total missing	59
k) Diabetes	Yes	5 (83.3%)
	No	1 (16.7%)
	Total valid response	6 (100.0%)
	Total missing	58
l) Cancer	No	4 (100.0%)
	Total valid response	4 (100.0%)
	Total missing	60
m) Mental or emotional health	Yes	5 (83.3%)
	No	1 (16.7%)
	Total valid response	6 (100.0%)

Question	Response	Number of Respondents (%)
	Total missing	58

PT 1.2

Analysis Sets	Number of Respondents (%)
All valid respondents	32 (100.0%)
Included in Provider Analysis Set (PAS)	32 (100.0%)
Excluded in Provider Analysis Set (PAS)	0 (0.0%)
Reasons for exclusion from Provider Analysis Set:	
No other valid survey data	0
Provider Analysis Set	32
Included in the Eye Care Professional Set (Eye Specialist)	8 (25.0%)
Excluded in the Eye Care Professional Set (Eye Specialist)	24 (75.0%)
Reasons for exclusion from Eye Care Professional Set:	
Missing required speciality	24
No valid (non-missing) response for the supplemental eye questionnaire	0

PT 1.3

Subgroups	Number of Respondents (%)
Provider Analysis Set	32 (100.0%)
Primary Care Provider	3 (9.4%)
Diabetes Specialist Provider	16 (50.0%)
Eye Care Professional	8 (25.0%)
Ophthalmologist	8 (25.0%)

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	3 (100.0%)	6 (37.5%)	0 (0.0%)	9 (28.1%)

Item	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	practitioner				
	Diabetes specialist	0 (0.0%)	16 (100.0%)	0 (0.0%)	16 (50.0%)
	General ophthalmologist	0 (0.0%)	0 (0.0%)	6 (75.0%)	6 (18.8%)
	Optometrist	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Retinal specialist	0 (0.0%)	0 (0.0%)	4 (50.0%)	4 (12.5%)
	Nurse	0 (0.0%)	1 (6.3%)	0 (0.0%)	1 (3.1%)
	Health educator	0 (0.0%)	3 (18.8%)	0 (0.0%)	5 (15.6%)
	None of the above	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (9.4%)
	Total valid response	3 (100.0%)	16 (100.0%)	8 (100.0%)	32 (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)	3	15	8	31
	Mean	14.7	17.1	11.5	15.3
	SD	1.2	12.8	6.8	9.9
	Median	14.0	12.0	9.5	14.0
	Min.	14	2	4	2
	Max.	16	38	20	38
	Total missing	0	1	0	1

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%)	7 (46.7%)	0 (0.0%)	7 (25.0%)
	Eye clinic/practice	0 (0.0%)	0 (0.0%)	1 (14.3%)	2 (7.1%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	General medical clinic/practice	1 (50.0%)	2 (13.3%)	0 (0.0%)	3 (10.7%)
	Hospital	0 (0.0%)	5 (33.3%)	6 (85.7%)	11 (39.3%)
	Other	1 (50.0%)	1 (6.7%)	0 (0.0%)	5 (17.9%)
	Total Valid Response	2 (100.0%)	15 (100.0%)	7 (100.0%)	28 (100.0%)
	Total missing	1	1	1	4

PT 2.2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Where is your main practice located?	Urban setting	2 (100.0%)	11 (78.6%)	7 (100.0%)	23 (85.2%)
	Non-urban setting	0 (0.0%)	3 (21.4%)	0 (0.0%)	4 (14.8%)
	Total Valid Response	2 (100.0%)	14 (100.0%)	7 (100.0%)	27 (100.0%)
	Total missing	1	2	1	5

PT 2.3

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In which sector is your main practice?	Government	0 (0.0%)	1 (6.7%)	2 (28.6%)	3 (10.7%)
	Private	0 (0.0%)	11 (73.3%)	3 (42.9%)	14 (50.0%)
	Non profit	2 (100.0%)	1 (6.7%)	2 (28.6%)	8 (28.6%)
	Combined/mixed	0 (0.0%)	2 (13.3%)	0 (0.0%)	3 (10.7%)
	Total Valid Response	2 (100.0%)	15 (100.0%)	7 (100.0%)	28 (100.0%)
	Total missing	1	1	1	4

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%)	12 (80.0%)	7 (100.0%)	23 (82.1%)
	Yes, limited by age	1 (50.0%)	1 (6.7%)	0 (0.0%)	2 (7.1%)
	Yes, limited to persons who pay out-of-pocket	0 (0.0%)	2 (13.3%)	0 (0.0%)	2 (7.1%)
	Yes, other	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.6%)
	Total valid response	2 (100.0%)	15 (100.0%)	7 (100.0%)	28 (100.0%)
	Total missing	1	1	1	4

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%)	4 (44.4%)	4 (80.0%)	9 (50.0%)
	More than 1 week but less than 1 month	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.6%)
	More than 3 months but less than 6 months	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.6%)
	Do not take appointments	0 (0.0%)	2 (22.2%)	1 (20.0%)	4 (22.2%)
	Other	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (11.1%)
	Don't know/Not sure	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.6%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

PT 2.6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
On average, how many patients do you see per week in your main practice [n patients]	Total valid response (n)	1	9	5	16
	Mean	75	120	166	124.7
	SD	.	85.6	152.1	108.2
	Median	75	150	70	72.5
	Min.	75	10	30	10
	Max.	75	250	360	360
	Total missing	2	7	3	16
What percentage of the patients in your main practice have diabetes [% patients]	Total valid response (n)	1	9	5	16
	Mean	20	62.6	66.2	63.4
	SD	.	26.1	23.2	27
	Median	20	75	75	75
	Min.	20	8	36	8
	Max.	20	90	95	100
	Total missing	2	7	3	16

PT 2.7

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, how do patients pay for the care and services that you provide?	Don't pay	0 (0.0%)	0 (0.0%)	2 (40.0%)	2 (11.1%)
	Pay a reduced/subsidized rate	0 (0.0%)	3 (33.3%)	1 (20.0%)	5 (27.8%)
	Pay out-of-pocket	1	3 (33.3%)	2 (40.0%)	6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	(full fees)	(100.0%)			(33.3%)
	Other	0 (0.0%)	3 (33.3%)	0 (0.0%)	5 (27.8%)
	Total valid response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

PT 2.8

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In addition to your main practice, do you work in another practice setting?	Yes	1 (100.0%)	9 (100.0%)	2 (33.3%)	12 (63.2%)
	No			4 (66.7%)	7 (36.8%)
	Total valid response	1 (100.0%)	9 (100.0%)	6 (100.0%)	19 (100.0%)
	Total missing	2	7	2	13
In which other practice setting(s) do you work?	Hospital		5 (55.6%)	1 (50.0%)	6 (50.0%)
	General medical clinic/practice		4 (44.4%)	1 (50.0%)	5 (41.7%)
	Diabetes clinic/practice		1 (11.1%)	1 (50.0%)	2 (16.7%)
	Eye clinic/practice		1 (11.1%)	2 (100.0%)	3 (25.0%)
	Other	1 (100.0%)	1 (11.1%)		2 (16.7%)
	Total valid response	1 (100.0%)	9 (100.0%)	2 (100.0%)	12 (100.0%)
	Total missing	2	7	6	20
In which sector(s) is(are) the practice(s)?	Government		1 (11.1%)		1 (8.3%)
	Private		7 (77.8%)	2 (100.0%)	9

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
					(75.0%)
	Non profit	1 (100.0%)			1 (8.3%)
	Combined/mixed		1 (11.1%)		1 (8.3%)
	Total valid response	1 (100.0%)	9 (100.0%)	2 (100.0%)	12 (100.0%)
	Total missing	2	7	6	20
Is there a major difference between your practices with respect to how diabetic eye disease is screened and managed?	Yes	1 (100.0%)	5 (55.6%)		6 (50.0%)
	No		4 (44.4%)	2 (100.0%)	6 (50.0%)
	Total valid response	1 (100.0%)	9 (100.0%)	2 (100.0%)	12 (100.0%)
	Total missing	2	7	6	20

PT 2.9

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Blood glucose	Yes		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
		Total valid numeric response (n)	1 (100.0%)	9 (100.0%)	3 (60.0%)	16 (88.9%)
		Mean	12.0	11.4	5.7	8.7
		SD		9.2	5.7	8.1
		Median	12.0	12.0	4.0	6.5
		Min	12	0	1	0
		Max	12	26	12	26
		Total missing	2	7	5	16
	Total valid		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	response					
	Total missing		2	7	3	14
HbA1c	Yes		1 (100.0%)	8 (88.9%)	5 (100.0%)	16 (88.9%)
		Total valid numeric response (n)	1 (100.0%)	8 (88.9%)	5 (100.0%)	16 (88.9%)
		Mean	2.0	3.8	2.2	2.9
		SD		2.9	1.1	2.3
		Median	2.0	3.5	2.0	2.5
		Min	2	0	1	0
		Max	2	10	4	10
		Total missing	2	8	3	16
	No			1 (11.1%)		2 (11.1%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Urine check	Yes		1 (100.0%)	8 (88.9%)	3 (60.0%)	14 (77.8%)
		Total valid numeric response (n)	1 (100.0%)	8 (88.9%)	3 (60.0%)	14 (77.8%)
		Mean	4.0	8.8	8.0	7.3
		SD		9.0	3.5	7.2
		Median	4.0	4.5	10.0	4.0
		Min	4	0	4	0
		Max	4	24	10	24
		Total missing	2	8	5	18
	No			1 (11.1%)	2 (40.0%)	4 (22.2%)
	Total		1	9 (100.0%)	5 (100.0%)	18

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	valid response		(100.0%)			(100.0%)
	Total missing		2	7	3	14
Weight check	Yes		1 (100.0%)	9 (100.0%)	3 (60.0%)	16 (88.9%)
		Total valid numeric response (n)	1 (100.0%)	9 (100.0%)	3 (60.0%)	16 (88.9%)
		Mean	12.0	10.2	1.7	7.1
		SD		7.8	0.6	7.2
		Median	12.0	10.0	2.0	5.0
		Min	12	0	1	0
		Max	12	24	2	24
		Total missing	2	7	5	16
	No				2 (40.0%)	2 (11.1%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Blood pressure check	Yes		1 (100.0%)	9 (100.0%)	4 (80.0%)	17 (94.4%)
		Total valid numeric response (n)	1 (100.0%)	9 (100.0%)	4 (80.0%)	17 (94.4%)
		Mean	12.0	10.8	4.0	7.6
		SD		7.8	5.4	7.3
		Median	12.0	10.0	2.0	8.0
		Min	12	0	0	0
		Max	12	24	12	24
		Total missing	2	7	4	15
	No				1 (20.0%)	1 (5.6%)
	Total		1	9 (100.0%)	5 (100.0%)	18

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	valid response		(100.0%)			(100.0%)
	Total missing		2	7	3	14
Foot check	Yes		1 (100.0%)	8 (88.9%)	2 (40.0%)	14 (77.8%)
		Total valid numeric response (n)	1 (100.0%)	8 (88.9%)	2 (40.0%)	14 (77.8%)
		Mean	1.0	7.9	1.5	5.1
		SD		8.0	0.7	6.8
		Median	1.0	7.0	1.5	2.0
		Min	1	0	1	0
		Max	1	24	2	24
		Total missing	2	8	6	18
	No			1 (11.1%)	3 (60.0%)	4 (22.2%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Eye examination - Un-dilated	Yes		1 (100.0%)	7 (77.8%)	4 (80.0%)	14 (77.8%)
		Total valid numeric response (n)	1 (100.0%)	7 (77.8%)	4 (80.0%)	14 (77.8%)
		Mean	1.0	3.3	1.5	2.1
		SD		4.0	0.6	3.0
		Median	1.0	2.0	1.5	1.5
		Min	1	0	1	0
		Max	1	12	2	12
		Total missing	2	9	4	18
	No			2 (22.2%)	1 (20.0%)	4

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
						(22.2%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Eye examination - Optical Coherence Tomography	Yes			2 (22.2%)	4 (80.0%)	8 (44.4%)
		Total valid numeric response (n)	0 (0.0%)	2 (22.2%)	4 (80.0%)	8 (44.4%)
		Mean		1.0	2.3	1.4
		SD		1.4	0.5	1.2
		Median		1.0	2.0	2.0
		Min		0	2	0
		Max		2	3	3
		Total missing	3	14	4	24
	No		1 (100.0%)	7 (77.8%)	1 (20.0%)	10 (55.6%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Eye examination - Fundoscopy	Yes			5 (62.5%)	5 (100.0%)	12 (70.6%)
		Total valid numeric response (n)	0 (0.0%)	5 (62.5%)	5 (100.0%)	12 (70.6%)
		Mean		1.0	3.8	2.3
		SD		0.7	4.6	3.2
		Median		1.0	2.0	1.5
		Min		0	1	0

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		Max		2	12	12
		Total missing	3	11	3	20
	No		1 (100.0%)	3 (37.5%)		5 (29.4%)
	Total valid response		1 (100.0%)	8 (100.0%)	5 (100.0%)	17 (100.0%)
	Total missing		2	8	3	15
Eye examination - Fluorescein Angiography	Yes			2 (22.2%)	5 (100.0%)	8 (44.4%)
		Total valid numeric response (n)	0 (0.0%)	2 (22.2%)	5 (100.0%)	8 (44.4%)
		Mean		1.0	1.4	1.1
		SD		1.4	0.9	1.0
		Median		1.0	2.0	1.5
		Min		0	0	0
		Max		2	2	2
		Total missing	3	14	3	24
	No		1 (100.0%)	7 (77.8%)		10 (55.6%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14
Eye examination - Lipid check	Yes		1 (100.0%)	8 (88.9%)	5 (100.0%)	16 (88.9%)
		Total valid numeric response (n)	1 (100.0%)	8 (88.9%)	5 (100.0%)	16 (88.9%)
		Mean	2.0	4.5	1.8	3.2

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		SD		6.5	1.3	4.8
		Median	2.0	2.0	1.0	2.0
		Min	2	0	1	0
		Max	2	20	4	20
		Total missing	2	8	3	16
	No			1 (11.1%)		2 (11.1%)
	Total valid response		1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing		2	7	3	14

PT 2.10

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In your main practice, what topics do you cover during a routine visit with a patient who has diabetes?	Diabetes management and monitoring	1 (100.0%)	8 (88.9%)	4 (80.0%)	15 (83.3%)
	Diet/nutrition	0 (0.0%)	7 (77.8%)	3 (60.0%)	12 (66.7%)
	Exercise/physical activity	0 (0.0%)	8 (88.9%)	3 (60.0%)	13 (72.2%)
	Medicines	1 (100.0%)	9 (100.0%)	3 (60.0%)	13 (72.2%)
	Foot care and inspection	0 (0.0%)	8 (88.9%)	0 (0.0%)	10 (55.6%)
	Blood pressure	1 (100.0%)	9 (100.0%)	4 (80.0%)	16 (88.9%)
	Eye care and exams	0 (0.0%)	7 (77.8%)	5 (100.0%)	13 (72.2%)
	Lipid check	0 (0.0%)	8 (88.9%)	3 (60.0%)	12 (66.7%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	None of the above	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.6%)
	Total valid response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

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%)	3 (33.3%)	2 (40.0%)	5 (27.8%)
	Yes, but information on eye complications is not sufficient	0 (0.0%)	4 (44.4%)	3 (60.0%)	7 (38.9%)
	Yes, but no information on eye complications is included	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (11.1%)
	No written information is available for patients	1 (100.0%)	2 (22.2%)	0 (0.0%)	4 (22.2%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

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%)	6 (66.7%)	2 (40.0%)	10 (55.6%)
	Yes,	1	1 (11.1%)	0 (0.0%)	2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	available but not used by staff	(100.0%)			(11.1%)
	Not available	0 (0.0%)	1 (11.1%)	3 (60.0%)	5 (27.8%)
	Don't know/Not sure	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.6%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

PT 2.13

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you have written protocols/guidelines for detection and management of diabetes-related vision issue available in your main practice?	Yes, available and used by staff	0 (0.0%)	2 (22.2%)	2 (40.0%)	5 (27.8%)
	Yes, available but not used by staff	1 (100.0%)	1 (11.1%)	1 (20.0%)	3 (16.7%)
	Not available	0 (0.0%)	5 (55.6%)	2 (40.0%)	9 (50.0%)
	Don't know/Not sure	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.6%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	5 (100.0%)	18 (100.0%)
	Total missing	2	7	3	14

PT 2.14

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of initial eye exams for persons with diabetes - Type I?	After a predetermined number of years (numeric response) (n)	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.9%)
	Mean		5.0		5.0
	SD				
	Median		5.0		5.0
	Min		5		5
	Max		5		5
	After a predetermined age (numeric response) (n)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed	1 (100.0%)	6 (66.7%)	3 (75.0%)	13 (76.5%)
	When a patient reports eye/vision problems		1 (11.1%)		1 (5.9%)
	No standard practice, timing varies case by case			1 (25.0%)	1 (5.9%)
	Other		1 (11.1%)		1 (5.9%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15
What is the protocol in your main practice for timing of initial eye exams for persons with diabetes -	After a predetermined number of years (numeric response) (n)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Type II?					
	Mean				
	SD				
	Median				
	Min				
	Max				
	After a predetermined age (numeric response) (n)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed	1 (100.0%)	8 (88.9%)	4 (100.0%)	16 (94.1%)
	Other		1 (11.1%)		1 (5.9%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 2.15

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of follow-up eye examinations for persons with diabetes?	Once a year	1 (100.0%)	7 (77.8%)	3 (75.0%)	13 (76.5%)
	Every two years	0 (0.0%)	2 (22.2%)	0 (0.0%)	2 (11.8%)
	Only when symptoms are present	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (5.9%)
	Other	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total Valid Response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 2.16

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you screen patients for DR?	Yes		7 (77.8%)	3 (75.0%)	10 (58.8%)
	No	1 (100.0%)	2 (22.2%)	1 (25.0%)	7 (41.2%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15
Where do you screen patients?	In clinic		5 (71.4%)	3 (100.0%)	8 (80.0%)
	Other		3 (42.9%)		3 (30.0%)
	Total valid response		7 (100.0%)	3 (100.0%)	10 (100.0%)
	Total missing	3	9	5	22

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	1 (100.0%)	9 (100.0%)	4 (100.0%)	16 (94.1%)
	Patient's age	1 (100.0%)	8 (88.9%)	3 (75.0%)	14 (82.4%)
	Patient's gender	0 (0.0%)	1 (11.1%)	2 (50.0%)	4 (23.5%)
	Presence of comorbidities such as hypertension, etc.	1 (100.0%)	6 (66.7%)	4 (100.0%)	13 (76.5%)
	High glucose levels	0 (0.0%)	6 (66.7%)	4 (100.0%)	12

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
					(70.6%)
	Ability or inability to pay	1 (100.0%)	0 (0.0%)	2 (50.0%)	3 (17.6%)
	Insurance restrictions	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (11.8%)
	Patient educational level	1 (100.0%)	1 (11.1%)	2 (50.0%)	5 (29.4%)
	Patient adherence to recommendations	0 (0.0%)	2 (22.2%)	2 (50.0%)	4 (23.5%)
	Not applicable	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 2.18

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What are the major barriers to optimizing eye health faced by patients with diabetes in your main practice?	Cost of care	1 (100.0%)	4 (44.4%)	4 (100.0%)	11 (64.7%)
	Proximity to care	1 (100.0%)	2 (22.2%)	1 (25.0%)	4 (23.5%)
	Long wait time for appointment	0 (0.0%)	2 (22.2%)	1 (25.0%)	4 (23.5%)
	Long wait time on the day of visit	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (5.9%)
	Referral process	1 (100.0%)	2 (22.2%)	1 (25.0%)	5 (29.4%)
	Recommended treatments are not available	0 (0.0%)	0 (0.0%)	1 (25.0%)	2 (11.8%)
	Lack of knowledge and/or awareness	1 (100.0%)	3 (33.3%)	3 (75.0%)	9 (52.9%)
	Patients fear of	0 (0.0%)	3 (33.3%)	2 (50.0%)	6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	treatment/results				(35.3%)
	Patients they are a burden on family/friends	1 (100.0%)	0 (0.0%)	1 (25.0%)	3 (17.6%)
	Limited access to diabetes specialists	1 (100.0%)	1 (11.1%)	2 (50.0%)	6 (35.3%)
	Limited access to eye specialists	1 (100.0%)	3 (33.3%)	2 (50.0%)	7 (41.2%)
	Patients feel eye complications are unlikely	0 (0.0%)	4 (44.4%)	2 (50.0%)	6 (35.3%)
	Patients feel eye exams are not important	1 (100.0%)	5 (55.6%)	0 (0.0%)	6 (35.3%)
	Patients have competing responsibilities and priorities	0 (0.0%)	0 (0.0%)	2 (50.0%)	3 (17.6%)
	Clinic too small or lack necessary equipment/staff	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (5.9%)
	Other	0 (0.0%)	1 (11.1%)	0 (0.0%)	2 (11.8%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

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%)	7 (77.8%)	3 (75.0%)	10 (58.8%)
	No	1 (100.0%)	2 (22.2%)	1 (25.0%)	6 (35.3%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total Valid Response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 2.20

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you share relevant patient information with other health care professionals involved in the patients care e.g. his or her general practitioner, ophthalmologist, podiastrist?	Yes	1 (100.0%)	7 (77.8%)	3 (75.0%)	12 (70.6%)
	No	0 (0.0%)	2 (22.2%)	1 (25.0%)	4 (23.5%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)
	Total Valid Response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 3.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Please indicate your age:	30 - 39		5 (55.6%)		5 (29.4%)
	40 - 49	1 (100.0%)		2 (50.0%)	5 (29.4%)
	50 - 59		3 (33.3%)	2 (50.0%)	6 (35.3%)
	60 - 69		1 (11.1%)		1 (5.9%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15
What is your	Female				2 (11.8%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
gender?					
	Male	1 (100.0%)	9 (100.0%)	4 (100.0%)	15 (88.2%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15
What is your highest level of education completed?	Graduate or advanced degree (e.g. PhD, MD, etc)	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total valid response	1 (100.0%)	9 (100.0%)	4 (100.0%)	17 (100.0%)
	Total missing	2	7	4	15

PT 4.1

Question	Response	Ophthalmologist
What percentage of your patients have diabetic retinopathy	Total valid numeric response (n)	4
	Mean	30.0
	SD	23.1
	Median	30.0
	Min	10
	Max	50
	Total missing	4

PT 4.2

Question	Response	Ophthalmologist
What percentage of your patients have diabetic macular edema?	Total valid numeric response (n)	4
	Mean	15.8
	SD	16.5
	Median	16.5
	Min	0
	Max	30
	Total missing	4

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	4 (100.0%)
	Total Valid Response	4 (100.0%)
	Total missing	4

PT 4.4

Question	Response	Ophthalmologist
From the time a patient is screened, what is the average length of time he/she waits for diagnosis?	Less than 1 week	1 (25.0%)
	There is not wait, diagnosis is given when screened	3 (75.0%)
	Total Valid Response	4 (100.0%)
	Total missing	4

PT 4.5

Type of Treatment	Question	Response/time	Ophthalmologist
Laser photocoagulation	Is the treatment available?	Available within country	2 (50.0%)
		Available locally	2 (50.0%)
		Available in practice	4 (100.0%)
		Total valid response	4 (100.0%)
		Total missing	4
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	1.5
		SD	0.7
		Median	1.5
		Min	1
		Max	2
		Total valid	2 (100.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		response	
		Total missing	6
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	1.5
		SD	0.7
		Median	1.5
		Min	1
		Max	2
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	3 (100.0%)
		Mean	2.7
		SD	1.5
		Median	3.0
		Min	1
		Max	4
		Total valid response	3 (100.0%)
		Total missing	5
Anti-VEGF therapies	Is the treatment available?	Available within country	2 (50.0%)
		Available locally	2 (50.0%)
		Available in practice	4 (100.0%)
		Total valid response	4 (100.0%)
		Total missing	4
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	1 (50.0%)
		Mean	4.0
		SD	

Type of Treatment	Question	Response/time	Ophthalmologist
		Median	4.0
		Min	4
		Max	4
		Don't know/not sure	1 (50.0%)
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	3.0
		SD	1.4
		Median	3.0
		Min	2
		Max	4
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	3 (100.0%)
		Mean	3.0
		SD	1.7
		Median	4.0
		Min	1
		Max	4
		Total valid response	3 (100.0%)
		Total missing	5
Intravitreal steroid	Is the treatment available?	Available within country	2 (50.0%)
		Available locally	2 (50.0%)
		Available in practice	4 (100.0%)
		Total valid response	4 (100.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Total missing	4
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	1.5
		SD	0.7
		Median	1.5
		Min	1
		Max	2
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	1.5
		SD	0.7
		Median	1.5
		Min	1
		Max	2
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	3 (100.0%)
		Mean	5.7
		SD	5.7
		Median	4.0
		Min	1
		Max	12
		Total valid response	3 (100.0%)
		Total missing	5
Uncomplicated vitrectomy	Is the treatment available?	Available within country	2 (50.0%)
		Available locally	1 (25.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Available in practice	3 (75.0%)
		Total valid response	4 (100.0%)
		Total missing	4
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	2 (66.7%)
		Mean	3.0
		SD	1.4
		Median	3.0
		Min	2
		Max	4
		Not applicable	1 (33.3%)
		Total valid response	3 (100.0%)
		Total missing	5
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	2 (66.7%)
		Mean	2.5
		SD	2.1
		Median	2.5
		Min	1
		Max	4
		Not applicable	1 (33.3%)
		Total valid response	3 (100.0%)
		Total missing	5
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	2 (66.7%)
		Mean	3.5
		SD	0.7
		Median	3.5
		Min	3
		Max	4

Type of Treatment	Question	Response/time	Ophthalmologist
		Not applicable	1 (33.3%)
		Total valid response	3 (100.0%)
		Total missing	5
Complex vitreo-retinal surgery	Is the treatment available?	Available within country	3 (100.0%)
		Available locally	1 (33.3%)
		Available in practice	1 (33.3%)
		Total valid response	3 (100.0%)
		Total missing	5
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	3.0
		SD	1.4
		Median	3.0
		Min	2
		Max	4
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid numeric response (n)	2 (100.0%)
		Mean	3.5
		SD	0.7
		Median	3.5
		Min	3
		Max	4
		Total valid response	2 (100.0%)
		Total missing	6
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	2 (100.0%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Mean	4.0
		SD	0.0
		Median	4.0
		Min	4
		Max	4
		Total valid response	2 (100.0%)
		Total missing	6

PT 4.6

Question	Response	Ophthalmologist
Do you personally administer treatment for diabetic retinopathy?	Yes	3 (100.0%)
	Total valid response	3 (100.0%)
	Total missing	5
Who administer it?	Total missing	8

PT 4.7

Question	Response	Ophthalmologist
Do any of the following influence how you treat diabetic retinopathy or diabetic macular edema?	Diabetes duration	3 (100.0%)
	Patient's age	3 (100.0%)
	Patient's gender	1 (33.3%)
	Presence of comorbidities such as hypertension, etc.	2 (66.7%)
	High glucose levels	3 (100.0%)
	Ability or inability to pay	1 (33.3%)
	Patient educational level	1 (33.3%)
	Patient adherence to recommendations	1 (33.3%)
	Total valid response	3 (100.0%)
	Total missing	5

PT 4.8

Question	Response	Ophthalmologist
Do you treat diabetic retinopathy and diabetic macular edema based on:	Visual outcome	2 (66.7%)
	Both	1 (33.3%)
	Total Valid Response	3 (100.0%)
	Total missing	5

PT 4.9

Question	Response	Ophthalmologist
How are your patients with diabetes screened for diabetic eye disease?	Fundoscopy undilated	2 (66.7%)
	Fundoscopy dilated	3 (100.0%)
	Retinal photo	2 (66.7%)
	Optical Coherence Tomography	1 (33.3%)
	Fluorescein Angiography	2 (66.7%)
	Total valid response	3 (100.0%)
	Total missing	5

PT 4.10

Question	Response	Ophthalmologist
In your opinion, do the majority of your patients present:	When visual problems have already occurred	3 (100.0%)
	Total Valid Response	3 (100.0%)
	Total missing	5

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	3 (100.0%)
	Total valid response	3 (100.0%)
	Total missing	5
If yes, When was your last training?	Five or more years ago	1 (50.0%)
	Greater than 1 year ago but less than 5	1 (50.0%)

Question	Response	Ophthalmologist
	years	
	Total valid response	2 (100.0%)
	Total missing	6

PT 4.12

Question	Response	Ophthalmologist
Would you be interested in online education and certification on DME, Angiogenesis and Anti-VEGF therapies?	Yes	3 (100.0%)
	Total Valid Response	3 (100.0%)
	Total missing	5

PT 4.13

Question	Response	Ophthalmologist
How is outreach for screening for diabetic eye disease done in your main practice?	Health fairs for all	1 (33.3%)
	Health fairs for people with diabetes	1 (33.3%)
	Mobile screening centers	1 (33.3%)
	Not done	2 (66.7%)
	Total valid response	3 (100.0%)
	Total missing	5

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	1 (33.3%)
	Late diagnosis	3 (100.0%)
	Referral pathways	3 (100.0%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	3 (100.0%)
	No universal guidelines on referral/screening	1 (33.3%)
	No universal guidelines on how to treat	1 (33.3%)

Question	Response	Ophthalmologist
	Current available therapies not effective	1 (33.3%)
	Government/insurance not able to cover patient costs	2 (66.7%)
	Multi-disciplinary team integration is poor	2 (66.7%)
	Total valid response	3 (100.0%)
	Total missing	5

EXP 1

Question	Response	Without DED (%)	With DED (%)	With DME (%)
Which of the following complications of diabetes do you have?	Foot ulcers	3 (9.7%)	1 (3.8%)	1 (25.0%)
	Loss of feeling in hands or toes (neuropathy)	4 (12.9%)	6 (23.1%)	1 (25.0%)
	Vision loss	6 (19.4%)	19 (73.1%)	3 (75.0%)
	Amputation	2 (6.5%)	0 (0.0%)	1 (25.0%)
	Cardiovascular disease/Stroke	5 (16.1%)	6 (23.1%)	0 (0.0%)
	Kidney disease	7 (22.6%)	8 (30.8%)	0 (0.0%)
	Broken bones or fractures	1 (3.2%)	0 (0.0%)	0 (0.0%)
	Other	2 (6.5%)	1 (3.8%)	0 (0.0%)
	None	14 (45.2%)	1 (3.8%)	0 (0.0%)
	Don't know/Not sure	1 (3.2%)	1 (3.8%)	0 (0.0%)
	Total Valid Response	31 (100.0%)	26 (100.0%)	4 (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 2

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Limited in any way in any activities because of impairment or health problem	6 (21.4%)	9 (37.5%)	1 (33.3%)

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Impairment or health problem			
Eye/vision problem	5 (100.0%)	9 (100.0%)	1 (100.0%)
Diabetes	4 (100.0%)	1 (50.0%)	0 (0.0%)
Mental or emotional health	3 (75.0%)	2 (100.0%)	0 (0.0%)
Fractures, bone/joint injury	3 (75.0%)	1 (50.0%)	0 (0.0%)
Walking problem	3 (75.0%)	2 (66.7%)	0 (0.0%)
Lung/breathing problem	2 (66.7%)	1 (50.0%)	0 (0.0%)
Back or neck problem	2 (66.7%)	0 (0.0%)	0 (0.0%)
Heart problem	2 (50.0%)	1 (50.0%)	0 (0.0%)
Hypertension/high blood pressure	1 (33.3%)	2 (100.0%)	0 (0.0%)
Stroke problem	0 (0.0%)	1 (50.0%)	0 (0.0%)
Arthritis/rheumatism	0 (0.0%)	1 (50.0%)	0 (0.0%)
Hearing problem	0 (0.0%)	1 (50.0%)	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	9 (33.3%)	8 (33.3%)	1 (33.3%)
Self-rated health: Poor	18 (66.7%)	16 (66.7%)	2 (66.7%)
Physically unhealthy days	2 (13.3%)	1 (11.1%)	1 (100.0%)
Mentally unhealthy days	4 (25.0%)	1 (14.3%)	1 (100.0%)
Unhealthy days	4 (28.6%)	1 (14.3%)	1 (100.0%)
Activity limitation days	2 (28.6%)	0 (0.0%)	1 (100.0%)

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

EXP 4

Item	Response	All respondents	Respondents with Type I diabetes	Respondents with Type II diabetes
How do you manage your diabetes?	Diet	51 (83.6%)	4 (100.0%)	42 (84.0%)
	Oral medicine	37 (60.7%)	3 (75.0%)	31 (62.0%)

Item	Response	All respondents	Respondents with Type I diabetes	Respondents with Type II diabetes
	Exercise	30 (49.2%)	3 (75.0%)	24 (48.0%)
	Insulin	18 (29.5%)	1 (25.0%)	14 (28.0%)
	Natural/Herbal medicine	1 (1.6%)		1 (2.0%)
	None of the above	1 (1.6%)		1 (2.0%)

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	16 (55.2%)	10 (41.7%)	1 (33.3%)
	Working without pay at home (e.g. housework, farming)	6 (20.7%)	8 (33.3%)	2 (66.7%)
	Volunteering	1 (3.4%)	0 (0.0%)	0 (0.0%)
	Retired	5 (17.2%)	3 (12.5%)	0 (0.0%)
	Not working	1 (3.4%)	3 (12.5%)	0 (0.0%)
	Total Valid Response	29 (100.0%)	24 (100.0%)	3 (100.0%)
	Total missing	5	2	1
Do you receive assistance from the government?	Income assistance	12 (41.4%)	9 (37.5%)	1 (33.3%)
	Pension assistance	3 (10.3%)	4 (16.7%)	0 (0.0%)
	None of the above	14 (48.3%)	11 (45.8%)	2 (66.7%)
	Total valid response	29 (100.0%)	24 (100.0%)	3 (100.0%)
	Total missing	5	2	1
Did you have trouble paying for food at anytime during the past year?	Yes	5 (17.2%)	7 (29.2%)	1 (33.3%)
	No	24 (82.8%)	17 (70.8%)	2 (66.7%)
	Total Valid Response	29 (100.0%)	24 (100.0%)	3 (100.0%)
	Total missing	5	2	1

EXP 5.2: Age group 18-39 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	4 (80.0%)	2 (66.7%)	0 (0.0%)
	Working without pay at home (e.g. housework, farming)	1 (20.0%)	1 (33.3%)	2 (100.0%)
	Total Valid Response	5 (100.0%)	3 (100.0%)	2 (100.0%)
	Total missing	4	0	1
Do you receive assistance from the government?	Income assistance	2 (40.0%)	2 (66.7%)	0 (0.0%)
	None of the above	3 (60.0%)	1 (33.3%)	2 (100.0%)
	Total valid response	5 (100.0%)	3 (100.0%)	2 (100.0%)
	Total missing	4	0	1
Did you have trouble paying for food at anytime during the past year?	Yes	1 (20.0%)	0 (0.0%)	1 (50.0%)
	No	4 (80.0%)	3 (100.0%)	1 (50.0%)
	Total Valid Response	5 (100.0%)	3 (100.0%)	2 (100.0%)
	Total missing	4	0	1

EXP 5.3: Age group 40-59 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	11 (64.7%)	6 (50.0%)	1 (100.0%)
	Working without pay at home (e.g. housework, farming)	5 (29.4%)	5 (41.7%)	0 (0.0%)
	Volunteering	1 (5.9%)	0 (0.0%)	0 (0.0%)
	Not working	0 (0.0%)	1 (8.3%)	0 (0.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Total Valid Response	17 (100.0%)	12 (100.0%)	1 (100.0%)
	Total missing	1	0	0
Do you receive assistance from the government?	Income assistance	7 (41.2%)	5 (41.7%)	1 (100.0%)
	Pension assistance	1 (5.9%)	0 (0.0%)	0 (0.0%)
	None of the above	9 (52.9%)	7 (58.3%)	0 (0.0%)
	Total valid response	17 (100.0%)	12 (100.0%)	1 (100.0%)
	Total missing	1	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	3 (17.6%)	5 (41.7%)	0 (0.0%)
	No	14 (82.4%)	7 (58.3%)	1 (100.0%)
	Total Valid Response	17 (100.0%)	12 (100.0%)	1 (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 5.4: Age group 60-79 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	1 (16.7%)	2 (22.2%)	0 (0.0%)
	Working without pay at home (e.g. housework, farming)	0 (0.0%)	2 (22.2%)	0 (0.0%)
	Retired	4 (66.7%)	3 (33.3%)	0 (0.0%)
	Not working	1 (16.7%)	2 (22.2%)	0 (0.0%)
	Total Valid Response	6 (100.0%)	9 (100.0%)	0 (0.0%)
	Total missing	0	2	0
Do you receive assistance from the government?	Income assistance	3 (50.0%)	2 (22.2%)	0 (0.0%)
	Pension assistance	1 (16.7%)	4 (44.4%)	0 (0.0%)
	None of the above	2 (33.3%)	3 (33.3%)	0 (0.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	Total valid response	6 (100.0%)	9 (100.0%)	0
	Total missing	0	2	0
Did you have trouble paying for food at anytime during the past year?	Yes	1 (16.7%)	2 (22.2%)	0 (0.0%)
	No	5 (83.3%)	7 (77.8%)	0 (0.0%)
	Total Valid Response	6 (100.0%)	9 (100.0%)	0 (0.0%)
	Total missing	0	2	0

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

EXP 5.5: Age group 80+ years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Retired	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	1 (100.0%)	0 (0.0%)	0 (0.0%)
Do you receive assistance from the government?	Pension assistance	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total valid response	1 (100.0%)	0	0
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	No	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	1 (100.0%)	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		64 (100%)	4 (6.3%)	53 (82.8%)	26 (40.6%)	4 (6.3%)
Gender	Male	29 (52.7%)	3 (10.3%)	24 (82.8%)	13 (44.8%)	1 (3.4%)

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
	Female	26 (47.3%)	1 (3.8%)	20 (76.9%)	10 (38.5%)	2 (7.7%)
	Total Missing	9	0	9	3	1
Age	18-39 yrs	15 (23.4%)	1 (6.7%)	10 (66.7%)	3 (20.0%)	3 (20.0%)
	40-59 yrs	31 (48.4%)	3 (9.7%)	26 (83.9%)	12 (38.7%)	1 (3.2%)
	60-79 yrs	17 (26.6%)	0 (0.0%)	16 (94.1%)	11 (64.7%)	0 (0.0%)
	80 yrs and over	1 (1.6%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
Time since diagnosis	Within the last year	16 (25.8%)	2 (12.5%)	12 (75.0%)	6 (37.5%)	2 (12.5%)
	1 - 5 years ago	18 (29.0%)	2 (11.1%)	13 (72.2%)	7 (38.9%)	2 (11.1%)
	6 - 10 years ago	10 (16.1%)	0 (0.0%)	8 (80.0%)	6 (60.0%)	0 (0.0%)
	11 - 15 years ago	6 (9.7%)	0 (0.0%)	6 (100.0%)	2 (33.3%)	0 (0.0%)
	16 - 20 years ago	3 (4.8%)	0 (0.0%)	3 (100.0%)	1 (33.3%)	0 (0.0%)
	21 years ago or longer	8 (12.9%)	0 (0.0%)	8 (100.0%)	4 (50.0%)	0 (0.0%)
	Don't know/Not sure	1 (1.6%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
	Total Missing	2	0	2	0	0
Control of Diabetes	Controlled	34 (55.7%)	4 (11.8%)	26 (76.5%)	13 (38.2%)	3 (8.8%)
	Not controlled	27 (44.3%)	0 (0.0%)	24 (88.9%)	13 (48.1%)	1 (3.7%)
	Total Missing	3	0	3	0	0

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

EXP 7

Question	Response	With DED n (%)	With DME n (%)
Have you had any treatment for diabetic eye disease?	Yes	20 (76.9%)	4 (100.0%)

Question	Response	With DED n (%)	With DME n (%)
	No	3 (11.5%)	0 (0.0%)
	Don't know/Not sure	3 (11.5%)	0 (0.0%)
	Total valid response	26 (100.0%)	4 (100.0%)
What treatment did you receive?	Laser	7 (36.8%)	1 (25.0%)
	Anti-VEGF	1 (5.3%)	1 (25.0%)
	Other	12 (63.2%)	3 (75.0%)
	Total valid response	19 (100.0%)	4 (100.0%)
	Total missing	7	0
Did you complete the treatment?	Yes	15 (75.0%)	3 (75.0%)
	No	2 (10.0%)	1 (25.0%)
	Still receiving treatment	3 (15.0%)	0 (0.0%)
	Total valid response	20 (100.0%)	4 (100.0%)
	Total missing	6	0
Do you feel that the treatment worked?	Yes, and vision improved	12 (66.7%)	2 (66.7%)
	Yes, but vision stayed the same	4 (22.2%)	1 (33.3%)
	No	1 (5.6%)	0 (0.0%)
	Don't know/Not sure	1 (5.6%)	0 (0.0%)
	Total valid response	18 (100.0%)	3 (100.0%)
	Total missing	8	1
What is/are the reason(s) that you did not complete the treatment?	Treatment was too expensive	0 (0.0%)	1 (100.0%)
	I was too busy	0 (0.0%)	1 (100.0%)
	Other	1 (100.0%)	0 (0.0%)
	Total valid response	1 (100.0%)	1 (100.0%)
	Total missing	25	3
What are the reason(s) that you have not had treatment for diabetic eye disease?	Too expensive	1 (33.3%)	0 (0.0%)
	I'm too busy	2 (66.7%)	0 (0.0%)
	Other	1 (33.3%)	0 (0.0%)
	Total valid response	3 (100.0%)	0 (0.0%)
	Total missing	23	4

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