

The Diabetic Retinopathy Barometer Report

South Korea



Contents

Introduction: Global Study	3
Goal	3
Background	3
Study Populations	4
Introduction: South Korea Study	5
Demographic Characteristics	5
Diabetes Profile	5
Study Populations: South Korea	5
South Korea DR Barometer Findings: Adults with Diabetes	8
Key Demographic Characteristics	8
Knowledge and Management of Diabetes	10
Nature and Information about Complications	11
Information about Diabetic Eye Disease and Diabetic Macular Edema	12
Screening for Diabetic Eye Disease	13
Treatment of Diabetic Eye Disease and Diabetic Macular Edema	14
Impact of Diabetic Eye Disease and Diabetic Macular Edema	15
Self-reported Quality of Life	17
South Korea DR Barometer Findings: Health Care Professionals	18
Key Demographic Characteristics	18
Clinical Practice Characteristics	19
Patient Education Information	20
Guidelines and Protocols	21
Screening Protocols and Barriers in the Care Pathway	22
Treatment and Challenges	24
South Korea DR Barometer Summary	26
References and Acknowledgement	29
Appendices	30



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 South Korea.

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, and access and barriers to diabetes management, including screening for DED and timely treatment.

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

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

Background

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

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

In the quantitative component of the study, both adults with diabetes (patients) and health care professionals (providers) were surveyed. The patient survey consisted of 46 questions divided into four sections covering awareness and knowledge, 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 participating in the patient survey were self-selected, predominantly from patient organisations. Therefore, this 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 caution should be applied when interpreting the results.

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

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

For the purpose of understanding the impact of the progression of DED, responses to the patient survey, beyond “all respondents”, are reported by 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 types of professionals.

Introduction

South Korea Study

Demographic Characteristics¹

The South Korea is estimated to be the third most populous country in East Asia and fourteenth most populous country in Asia with an estimated population of approximately 50.8 million.

Currently, it is estimated that 13.8% of the South Korea's population is under the age of 15 (~6.9 million) while 13.6% is over the age of 65 (~6.8 million).

Similarly, to other East Asian countries, South Korea is expected to see a consistent population decrease due to low fertility rates. However, the population distribution will be drastically different. By 2050, only ~11% of the population will be under the age of 15 while ~35% of South Korea's total populations will comprise of those 65 or older. This means that in just over 30 years, the population aged 65 years or older will almost triple and reach an all-time high of approximately 17.6 million.

Diabetes Profile²

There are 415 million people living with diabetes and more than 153.2 million people are in the Western Pacific Region. By 2040, this number is expected to rise to 214.8 million.

The IDF Western Pacific Region is the world's most populous region with 39 countries and territories. This region is home to 36.9% (153.2 million) of the total number of people with diabetes in the world and over half (52.1%) of the region's population who are living with diabetes are undiagnosed. It is important to note that of the 153.2 million people living with diabetes, 61.6% live in cities and 90.2% live in low- or middle-income countries.

South Korea has over 817,900 (783.8-906.9±) adults living with diabetes, which accounts to ~0.5% of people living with diabetes in this region. The diabetes national prevalence in South Korea (20 – 79 years) is 4.7% (4.5-5.2±) and the diabetes age-adjusted comparative prevalence is 4.4% (4.2-4.8±). It is important to note that South Korea is the tenth country in the world for the number of people with impaired glucose tolerance at ~5.2 million.

Deaths attributed to diabetes in South Korea in 2015 were 19,446, which accounts to ~1.6% of the diabetes-related deaths experienced in this region. The estimated number of undiagnosed cases was 514,200 (406.2-470.0±).

Study Populations: South Korea

As reported by 70 respondents with diabetes in South Korea, 10% were diagnosed with DED and a further 16% with DME.

Seventeen health care professionals completed the survey in South Korea. Of these, one was a diabetes specialist provider (5.9%), 13 were ophthalmologists (77%). The remaining respondents were either optometrists, nurses or other professionals.

The DR Barometer Study: South Korea Overview

The DR Barometer study was conducted in 41 countries. In South Korea, 70 adults with diabetes and 17 health care professionals provided new information about the experiences of living with, managing and treating diabetes, DR and DME.

39%

of patients said that **fear of the treatment and/or results** were a barrier to eye exams



24%

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



36%

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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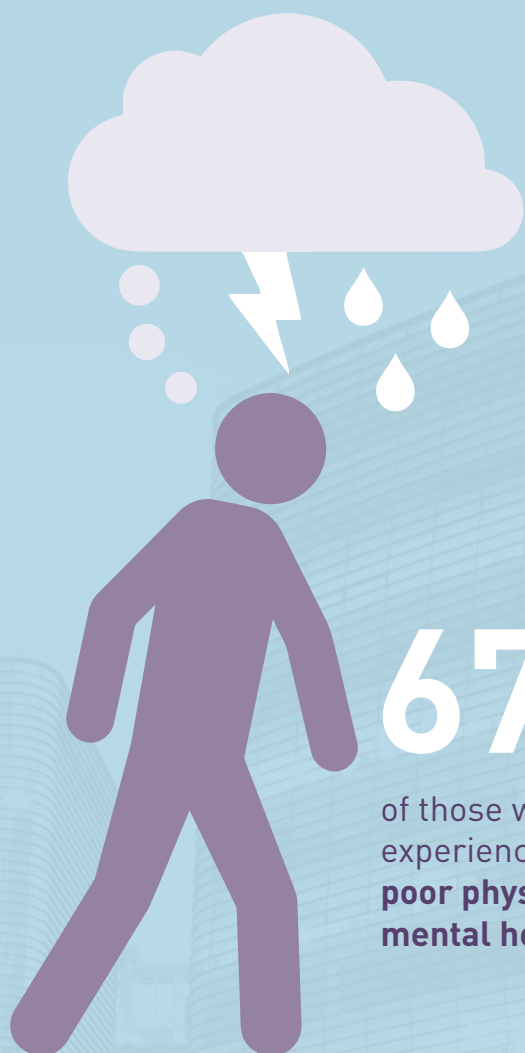
86%

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



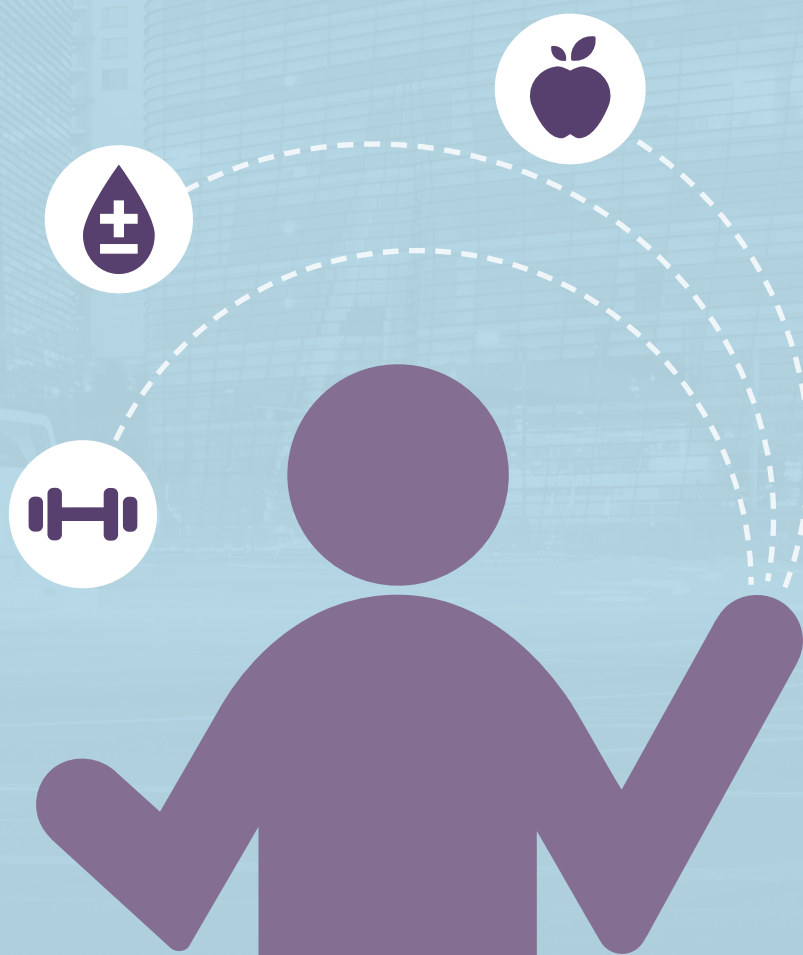
67%

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



43%

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



South Korea

DR Barometer Findings:

Adults with Diabetes

Key Demographic Characteristics

Seventy adults with diabetes completed the patients' survey in South Korea: 29% were female and 71% were male. Ninety percent lived in an urban setting and 10% in a non-urban setting (see Appendix Table 4.2).

The education level of all respondents were as follows: 1.4% of respondents were educated to a primary school level, 29% to a secondary school level, 61% to a college or university level, and 8.6% to a graduate or post-graduate level (see Appendix Table 4.3).

Seventy-three percent of all respondents were in paid employment, 10% were retired, and 8.6% were not working (see Appendix Table 4.4).

Most respondents (70%) were aged between 40 and 59 years (21% were 18-39 years and 8.6% were 60-79 years). Ninety-one percent were of traditional working age (18- 59 years) (see Table 1).

Of the respondents in South Korea, 30% had been diagnosed with type 1 diabetes and 60% with type 2 diabetes. A further 10% of respondents were either unsure of or did not know their type of diabetes (see Appendix Table 2.1).

Ten percent of respondents (n=7) had been diagnosed with DED and a further 16% (n=11) with DME.

Fourteen percent of those surveyed were diagnosed with diabetes within the last year, 1 - 5 years ago (37%), 6 - 10 years ago (30%), 11 - 15 years ago (8.6%), 16 - 20 years ago (4.3%), and 21 years ago or more (2.9%) (see Appendix Table 2.2).

Amongst 18 to 39 year-olds, 33% had type 1 and 53% had type 2 diabetes. In the 40-59 age group, 22% had type 1 and 67% had type 2 diabetes, 83% of 60-79 year-olds had type 1 diabetes and 17% had type 2.

In people aged 18-39 years, 13% had DED and 33% had DME. For those aged between 40-59 years 8.2% had DED and 12% had DME, and for people between 60-79 years of age, 17% had DED and no one reported to have DME.

In those diagnosed within the last year no respondent reported DED, this increased to 9.5% of those diagnosed 6-10 years ago. The proportion with DED increased again to 17% of those diagnosed 11-15 years ago. On the other hand, 20% of respondents were diagnosed with DME within the first year and this increased to 33% of those 11-15 years since diagnosis. Of note is the finding that half of the respondents that had been diagnosed 21 years ago or longer had DME.

While most (63%) respondents reported that their diabetes was well controlled, there were one in three (36%) who felt that this was not the case. For those who felt their diabetes was controlled, 9.1% had DED and 21% had DME, and for the group where their condition was not well-controlled 8% had DED and 8% 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		70 (100.0%)	21 (30.0%)	42 (60.0%)	7 (10.0%)	11 (15.7%)
Gender	Male	50 (71.4%)	16 (32.0%)	30 (60.0%)	4 (8.0%)	7 (14.0%)
	Female	20 (28.6%)	5 (25.0%)	12 (60.0%)	3 (15.0%)	4 (20.0%)
Age	18-39 yrs.	15 (21.4%)	5 (33.3%)	8 (53.3%)	2 (13.3%)	5 (33.3%)
	40-59 yrs.	49 (70.0%)	11 (22.4%)	33 (67.3%)	4 (8.2%)	6 (12.2%)
	60-79 yrs.	6 (8.6%)	5 (83.3%)	1 (16.7%)	1 (16.7%)	0 (0.0%)
Time since diagnosis	Within the last year	10 (14.3%)	1 (10.0%)	8 (80.0%)	0 (0.0%)	2 (20.0%)
	1 - 5 yrs.	26 (37.1%)	8 (30.8%)	13 (50.0%)	1 (3.8%)	4 (15.4%)
	6 - 10 yrs.	21 (30.0%)	6 (28.6%)	14 (66.7%)	2 (9.5%)	2 (9.5%)
	11 - 15 yrs.	6 (8.6%)	2 (33.3%)	4 (66.7%)	1 (16.7%)	2 (33.3%)
	16 - 20 yrs.	3 (4.3%)	2 (66.7%)	1 (33.3%)	2 (66.7%)	0 (0.0%)
	21 yrs. plus	2 (2.9%)	1 (50.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)
	Don't know/ Not sure	2 (2.9%)	1 (50.0%)	1 (50.0%)	1 (50.0%)	0 (0.0%)
Control of Diabetes	Controlled	44 (62.9%)	13 (29.5%)	28 (63.6%)	4 (9.1%)	9 (20.5%)
	Not controlled	25 (35.7%)	7 (28.0%)	14 (56.0%)	2 (8.0%)	2 (8.0%)
	Don't know/ Not sure	1 (1.4%)	1 (100.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)

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

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

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

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

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

Knowledge and Management of Diabetes

Eighty-nine percent of those surveyed saw a health care professional for their diabetes, with 31% seeing a diabetes specialist (average number of visits was 7.4 times per year) and 66% seeing a general or family doctor (average number of visits was 18.2 times per year) (see Appendix Table 2.3.1 and 2.3.2).

Adults with diabetes were informed about their condition through a variety of channels. Seventy-three percent received information from a doctor or nurse, 56% from the internet, and 53% from the TV, radio, newspaper, or magazines. For one in four respondents, family and friends along with diabetes, or other health, organisations were an important source of information (see Table 2 and Appendix Table 2.4).

Table 2: Source of information regarding diabetes

Information Source	All Respondents (n=70)
Doctor or nurse	51 (72.9%)
Internet	39 (55.7%)
TV/Radio/Newspaper/Magazines	37 (52.9%)
Family/Friends/Neighbours	19 (27.1%)
Diabetes organisation or other health organisation	17 (24.3%)
Health educator	14 (20.0%)
Pharmacist	14 (20.0%)
Social media (e.g. Facebook, Twitter, blogs)	10 (14.3%)
Nutritionist or dietician	5 (7.1%)
None of the above	2 (2.9%)

A range of strategies was used by respondents to manage their diabetes. For those with type 1 diabetes, apart from insulin, 62% managed their diabetes with diet, 57% with oral medicine and 48% with exercise. Of the respondents with type 2 diabetes, 71% reported that they managed their condition with diet, 67% with exercise, 62% with oral medicine, 21% with insulin, and 19% with natural or herbal medicine.

Twenty-three percent of respondents were enrolled in diabetes management programmes and of these 94% said the programme included education on the importance of screening for diabetic eye complications (see Appendix Table 2.6).

The nature and frequency of tests that people with diabetes experienced included blood glucose checks and eye checks. Those who had eye checks (68%) these occurred: less than 6 months (49%), 6 - 12 months (12%), and greater than 12 months (7.4%) (see Appendix Table 2.7).

The main challenges in controlling diabetes cited by respondents were: it was too hard to eat the right things (54%), the person did not want to think about having diabetes (30%), the person did not know enough about diabetes (23%), long wait times to schedule an appointment to see their doctor or specialist (21%), and travel to their regular doctor or specialist was difficult (20%) (see Appendix Table 2.9).

Coordination of healthcare and services by a professional (58%), health education and information (48%), free or low cost medicines or monitoring materials (44%), support from family or friends (28%), and support groups (13%) were identified as important to improving the management of their diabetes (see Appendix Table 2.10).

Nature and Information about Complications

Seventy-one percent of respondents were aware of vision loss and other complications, such as foot ulcers (60%), kidney disease (53%), neuropathy (50%), and cardiovascular disease or stroke (49%), were associated with diabetes (see Appendix Table 2.11).

Respondents were most concerned about vision loss (45%), kidney disease (16%), cardiovascular disease or stroke (13%), amputation (10%), and foot ulcers (4.3%) (see Appendix Table 2.12).

Thirty-six percent of respondents reported that they had no complications of diabetes. However, of those who did have complications 19% had vision loss, cardiovascular disease or stroke (17%), kidney disease (11%), foot ulcers (10%), and amputation (7.1%) (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 to people without DED. The frequency of kidney disease increased from 3.8% in those without DED to 29% with DED and 36% with DME. Likewise, cardiovascular disease increased from 14% in those without DED to 46% in those with DME (see Table 3 and Appendix EXP 1).

Figure 1: Presence of complications

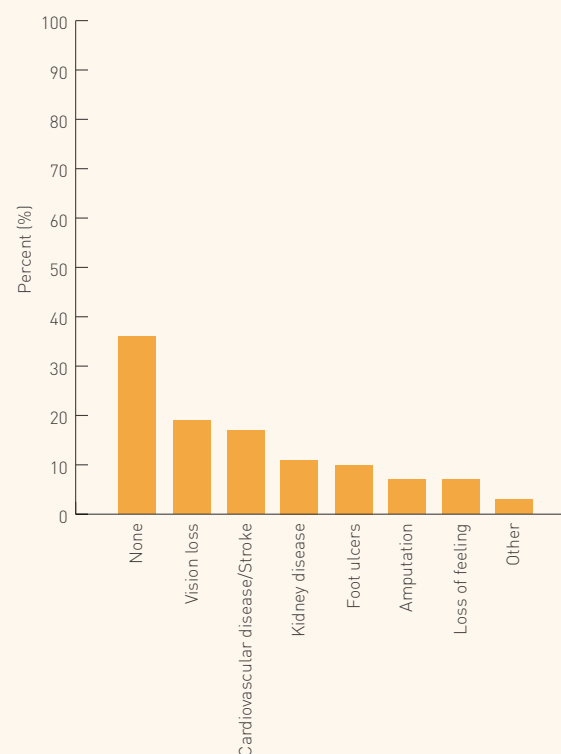


Table 3: Presence of complications without DED, with DED or DME

Complication	Without DED (n=52)	With DED (n=7)	With DME (n=11)
Any	29 (55.8%)	5 (71.4%)	11 (100.0%)
Vision loss	2 (3.8%)	4 (57.1%)	7 (63.6%)
Kidney disease	2 (3.8%)	2 (28.6%)	4 (36.4%)
Amputation	3 (5.8%)	0 (0.0%)	2 (18.2%)
Foot ulcers	2 (3.8%)	0 (0.0%)	5 (45.5%)
Loss of feeling in hands or toes (neuropathy)	1 (1.9%)	0 (0.0%)	4 (36.4%)
Cardiovascular disease/Stroke	7 (13.5%)	0 (0.0%)	5 (45.5%)
Other	1 (1.9%)	0 (0.0%)	1 (9.1%)
None	23 (44.2%)	2 (28.6%)	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

Seventy-seven percent of respondents stated that eye complications were discussed with their health care professionals. Notwithstanding this, one in three patients (36%) either never discussed eye complications with their health care professionals (19%) or discussion only took place once symptoms arose (17%). The frequency of regular discussions varied from every visit (23%), multiple times a year (21%), to once a year (16%) (see Appendix Table 2.14).

Shy of half (49%) of the respondents reported that they did what they could to prevent vision problems (e.g. get routine screenings,

visit specialists) while 39% thought that vision problems were a normal part of ageing and 33% made no special effort to have a preventative approach to their eye health (see Appendix Table 2.15).

Seventy-four percent of all respondents had received information about DR and DME, with a doctor or nurse being the most common source (47%) (see Table 4 and Appendix Table 3.9).

Table 4: Source of information about DR and DME

Source	All respondents (n=70)
Doctor/Nurse	33 (47.1%)
Internet	25 (35.7%)
TV/Radio/Newspaper/Magazines	24 (34.3%)
Family/Friends/Neighbours	14 (20.0%)
Diabetes organisation or other health organisation	13 (18.6%)
Health educator	10 (14.3%)
None of the above	18 (25.7%)

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

Fifty-three percent of respondents reported having an eye exam for DED, with 73% having the exam within the last year and a further 16% between one and two years ago. Twenty-three percent of respondents were aware of government sponsored screening programmes for DED (see Appendix Table 3.1 and Table 3.2).

While 69% of those surveyed thought they should have their eyes examined for DED once a year there were varied smaller numbers of respondents who thought that testing should either happen every two years, only when symptoms occur or not occur at all. An important finding to note, one in six (16%) respondents did not know how often they should have their eyes examined (see Appendix Table 3.4).

The biggest barriers to eye exams was a fear of treatment and/or the results (39%), followed by long wait times on the day of the visit (36%), long wait times to schedule an appointment or not knowing enough about one's condition (31%) (see Table 5 and Appendix Table 3.5).

Table 5: Barriers to eye examinations

Identified Barriers	All Respondents (n=70)
Fear of treatment/results	27 (38.6%)
Long wait time on the day of the visit	25 (35.7%)
Long wait time for appointment	22 (31.4%)
Don't know much about my condition	22 (31.4%)
They are expensive	20 (28.6%)
Too many other things to do or worry about	18 (25.7%)
Eye exams are not available near my home	16 (22.9%)
Limited access to diabetes specialists	13 (18.6%)
Burden on my family/friends	12 (17.1%)
Referral process is complicated or takes too long	6 (8.6%)
Clinics are too small or lack necessary equipment/staff	6 (8.6%)
Recommended treatments for eye problems are not available	4 (5.7%)
I'm not likely to have eye complications	1 (1.4%)
Eye exams are not important	1 (1.4%)
Other	5 (7.1%)

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 57% (n=4) had received treatment, the most common treatments being laser treatment (100%) and surgery (75%). Of those who received treatment, all completed their treatments and felt it had been successful and either their vision had improved (50%) or stayed the same (50%) (see Table 6).

For the two respondents (29%) with DED who had not received treatment, the reason reported was that the treatment was too expensive.

Eighty-eight percent of patients with DME (n=7) had received treatment, that being laser (71%) and anti-VEGF (71%), and most (86%) felt that treatment had been successful and either their vision had improved (43%) or stayed the same (43%).

For the one respondent with DME who had not received treatment, the reason reported was that the treatment was too expensive.

There was a strong preference by all those with DME to have a proactive approach (82%) in the treatment pathway to prevent further vision loss rather than a reactive approach (18%) 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=7)	With DME (n=8)
Have you had any treatment for diabetic eye disease?	Yes	4 (57.1%)	7 (87.5%)
	No	2 (28.6%)	1 (12.5%)
	Don't know/ Not sure	1 (14.3%)	0 (0.0%)
What treatment did you receive?	Laser	4 (100.0%)	5 (71.4%)
	Anti-VEGF	2 (50.0%)	5 (71.4%)
	Surgery	3 (75.0%)	3 (42.9%)
	Other	0 (0.0%)	2 (28.6%)
Did you complete the treatment?	Yes	4 (100.0%)	5 (71.4%)
	Still receiving treatment	0 (0.0%)	2 (28.6%)
Do you feel that the treatment worked?	Yes, and vision improved	2 (50.0%)	3 (42.9%)
	Yes, but vision stayed the same	2 (50.0%)	3 (42.9%)
	No	0 (0.0%)	1 (14.3%)
What are the reason(s) that you have not had treatment for diabetic eye disease?	Too expensive	2 (100.0%)	1 (100.0%)

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

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

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

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

Impact of Diabetic Eye Disease and Diabetic Macular Edema

Almost all (93%) of those diagnosed with DED or DME said that their vision was affected (53% significantly, 40% slightly) (see Appendix Table 3.6).

Eighty-six percent of these respondents reported vision issues impacted their daily lives in various ways such as managing their underlying diabetes (43%), difficulty experienced driving a vehicle (43%), travelling (36%), household responsibilities, such as cooking or cleaning (29%), social interactions with family or friends (29%), working or keeping a job (21%), and leisure activities or exercise (14%) (see Table 7).

Table 7: Activities affected through vision impairment and loss

	All Respondents (n=14)
Managing my diabetes	6 (42.9%)
Driving (a car/vehicle)	6 (42.9%)
Travelling	5 (35.7%)
Household responsibilities, such as cooking or cleaning	4 (28.6%)
Social interactions with family/friends	4 (28.6%)
Work or keeping a job	3 (21.4%)
Leisure activities/exercise	2 (14.3%)
Other	1 (7.1%)
None	2 (14.3%)

Fifty-seven percent those with DED and 73% with DME were in paid employment compared with 75% of respondents without DED (see Table 8 and Appendix EXP 5.1).

Although sixty-nine percent of those surveyed did not receive assistance from the government, 17% (n=6) received income assistance (see Appendix Table 4.5). There was a noted variance amongst the subgroups, 23% of those without DED received government assistance compared with 57% of those with DED and 55% of those with DME.

Seventy-one percent of all respondents said they had no trouble paying for food at any time during the past year (see Appendix Table 4.6). However, 71% with DED and 55% with DME reported difficulty with paying for food compared to 18% of those without DED.

The majority of respondents (79%) stated that they did not feel their access to health care was affected by certain factors, others felt it was affected by their age (13%) or income (11%) (see Appendix Table 4.7).

Forty-six percent of respondents said they worried about their health, 37% about money, and 4.3% about family, food, and housing (see Appendix Table 4.8).

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

Question	Response	Without DED (n=52)	With DED (n=7)	With DME (n=11)
Are you currently working?	Working for pay	39 (75.0%)	4 (57.1%)	8 (72.7%)
	Working without pay at home (e.g. housework, farming)	2 (3.8%)	1 (14.3%)	1 (9.1%)
	Volunteering	0 (0.0%)	0 (0.0%)	1 (9.1%)
	Retired	5 (9.6%)	2 (28.6%)	0 (0.0%)
	Student	1 (1.9%)	0 (0.0%)	0 (0.0%)
	Not working	5 (9.6%)	0 (0.0%)	1 (9.1%)
Question	Response	Without DED (n=52)	With DED (n=7)	With DME (n=11)
Do you receive assistance from the government?	Income assistance	4 (7.7%)	3 (42.9%)	5 (45.5%)
	Medical assistance	7 (13.5%)	2 (28.6%)	2 (18.2%)
	Food assistance	1 (1.9%)	0 (0.0%)	3 (27.3%)
	Housing assistance	3 (5.8%)	1 (14.3%)	2 (18.2%)
	Pension assistance	2 (3.8%)	0 (0.0%)	1 (9.1%)
	None of the above	40 (76.9%)	3 (42.9%)	5 (45.5%)
Question	Response	Without DED (n=51)	With DED (n=7)	With DME (n=11)
Did you have trouble paying for food at anytime during the past year?	Yes	9 (17.6%)	5 (71.4%)	6 (54.5%)
	No	42 (82.4%)	2 (28.6%)	5 (45.5%)

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

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

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

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

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

Self-reported Quality of Life

The CDC HRQOL-4 Core Modules of the “Healthy Days Measure” was used to capture information on self-reported quality of life, based on the number of unhealthy days within the last 30 days from when the survey was taken.

The reported health status varied depending on whether respondents had been diagnosed with DED or DME (see table 9).

Seventy-one percent of people with DED, and 55% of those with DME, reported self-rated health as poor compared with 70% of people without DED. Forty-three percent of those without DED reported activity limitation days compared to 75% of those with DED and 83% with DME.

Compared with 27% of those without DED, 43% of people with DED and 55% of people with DME experienced limitations to their daily activities due to poor health. People living with DED and DME had a higher proportion for some impairments (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	15 (30.0%)	2 (28.6%)	5 (45.5%)
Self-rated health: Poor	35 (70.0%)	5 (71.4%)	6 (54.5%)
Physically unhealthy days	25 (64.1%)	3 (60.0%)	6 (66.7%)
Mentally unhealthy days	18 (48.6%)	2 (40.0%)	4 (44.4%)
Unhealthy days	30 (78.9%)	3 (60.0%)	6 (66.7%)
Activity limitation days	13 (43.3%)	3 (75.0%)	5 (83.3%)

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

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

NB [3]: DME = respondents with DME = “Yes”.

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

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

South Korea

DR Barometer Findings:

Health Care Professionals

Key Demographic Characteristics

There were 17 health care professionals who answered at least one of the survey questions in South Korea. Of these, one was a diabetes specialist provider (5.9%) and 13 were ophthalmologists (77%). The remaining respondents were optometrists, nurses or other professionals (see Appendix PT 1.3).

As the majority of respondents were ophthalmologists, results will focus primarily on this subgroup.

Health care professionals as a group had been practicing for an average of 11 years, with the ophthalmologist group practicing for an average of 12 years (see Appendix PT 1.5).

Health care professionals were well educated (92% with graduate or advanced degree); 67% were female and 33% male and, the largest proportion (58%) were aged 30 - 39 years with a further 25% in the 40-49 age groups, and 17% in the 50-59 age group (see Table 10 and Appendix PT 3.1).

Table 10: Summary of key characteristics of health care professionals

Group	Subgroup	All Respondents	Ophthalmologist
All respondents		17 (100.0%)	13 (76.5%)
Age group	30 - 39 yrs.	7 (58.3%)	5 (50.0%)
	40 - 49 yrs.	3 (25.0%)	3 (30.0%)
	50 - 59 yrs.	2 (16.7%)	2 (20.0%)
Gender	Female	8 (66.7%)	6 (60.0%)
	Male	4 (33.3%)	4 (40.0%)
Education	College/University	1 (8.3%)	0 (0.0%)
	Graduate or advanced degree (e.g. PhD, MD, etc.)	11 (91.7%)	10 (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

Ninety-two percent of ophthalmologists had their main practice setting in a hospital and all were located in an urban setting (see Appendix PT 2.1 and PT 2.2).

Most ophthalmologists worked mainly in the government (33%), private (25%), and combined or mixed (25%) sectors (see Appendix PT 2.3).

Ophthalmologists reported that 82% of patients were responsible for part of fees while insurance pays the remaining, 36% of patients pay a reduced or subsidised rate for services, and 18% pay out-of-pocket (full fees) for services (see Appendix PT 2.7).

On average, ophthalmologists saw 186 patients per week and 33% had diabetes, of which an estimated 35% had DR, and 14% had DME (see Appendix PT 2.6).

For an appointment with an ophthalmologist, the average wait time for an appointment was between one week and a month in 64% of practices but for a further 27% of practices, the wait time was less than one week (see Appendix PT 2.5).

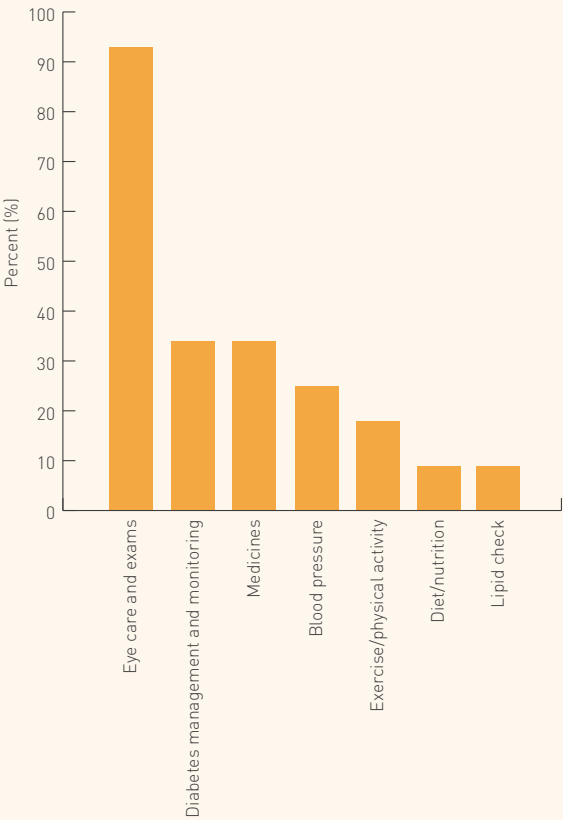
Table 11: Average wait times to schedule an appointment

Wait Time Intervals	All Respondents (n=13)	Ophthalmologist (n=11)
Less than 1 week	4 (30.8%)	3 (27.3%)
More than 1 week but less than 1 month	8 (61.5%)	7 (63.6%)
Six or more months	1 (7.7%)	1 (9.1%)

Patient Education Information

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

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



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

Sixty percent of ophthalmologists had written information about diabetes with sufficient information about potential eye complications, 20% had information on diabetes, but that which included eye complications was insufficient (see Table 12 and Appendix PT 2.11).

Guidelines and Protocols

Sixty percent of ophthalmologists had written protocols for the management of diabetes, which were used by staff. However, 17% had no such protocols (see Appendix PT 2.12).

With respect to the management of diabetes-related vision issues, 30% of ophthalmologists did not have protocols available for use (see Table 12 and Appendix PT 2.13).

Table 12: Availability and use of information and protocols

Question	Response	All Respondents (n=12)	Ophthalmologist (n=10)
Is there written information about diabetes available for patients in your main practice?	Yes, and information on eye complications is sufficient	8 (66.7%)	6 (60.0%)
	Yes, but information on eye complications is not sufficient	2 (16.7%)	2 (20.0%)
	Don't know/Not sure	2 (16.7%)	2 (20.0%)
Question	Response	All Respondents (n=12)	Ophthalmologist (n=10)
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	7 (58.3%)	6 (60.0%)
	Yes, available but not used by staff	1 (8.3%)	1 (10.0%)
	Not available	4 (33.3%)	3 (30.0%)

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

Screening Protocols and Barriers in the Care Pathway

Most ophthalmologists (80%) screen patients for DR and the timing for the initial eye exam for persons with diabetes varied depending upon the type of diabetes as reported by ophthalmologists (see Appendix PT 2.16).

For those with type 1 diabetes 50% of ophthalmologists reported that the initial eye exam should occur at time of the diagnosis of diabetes while the remaining 50% specify after a pre-determined number of years from diagnosis. For patients with type 2 diabetes all ophthalmologists recommended an eye exam at time of diagnosis (see Appendix PT 2.14).

Eighty percent ophthalmologists reported that follow-up eye examinations should be conducted every year and all reported to send their patients reminders to schedule general follow-up appointments (see Appendix PT 2.15 and PT 2.19).

The most common outreach venues for screening for DED were health fairs for people with diabetes (63%), health fairs for all (25%), and mobile screening centres (25%) (see Appendix PT 4.13).

The majority of ophthalmologists (90%) shared patient information with other providers to optimise care management (see Appendix PT 2.20).

The most common waiting time for a screening appointment for DED was between one week and a month (67%), with 22% stating less than one week. Seventy-eight percent of ophthalmologists reported that there was no wait from time of screening to diagnosis, 22% (n=2) reported a wait time of less than one week (see Appendix PT 4.3 and PT 4.4).

The most common patient characteristics influencing the referral process for eye complications were the duration of diabetes (80%), presence of comorbidities such as hypertension (80%), high glucose levels (70%), a patient's age (50%), and a patient's gender (10%) (see Appendix PT 2.17).

All ophthalmologists reported that they screen patients for DR based on fundoscopy through dilated pupils. Additionally half (50%) use a retinal photo, a quarter (25%) use optical coherence tomography and a quarter (25%) use fluorescein angiography (see Appendix PT 4.9).

As reported by ophthalmologists, the major barriers to optimising eye health faced by patients with diabetes were the cost of care (70%), a lack of knowledge and/or awareness (60%), and patients feel that eye exams are not important (50%) (see Table 13 and Appendix PT 2.18).

Table 13: Major barriers to optimising eye health

Response	All Respondents (n=12)	Ophthalmologists (n=10)
Cost of care	8 (66.7%)	7 (70.0%)
Lack of knowledge and/or awareness	6 (50.0%)	6 (60.0%)
Patients feel eye exams are not important	6 (50.0%)	5 (50.0%)
Long wait time for appointment	5 (41.7%)	4 (40.0%)
Patients feel eye complications are unlikely	3 (25.0%)	3 (30.0%)
Proximity to care	2 (16.7%)	2 (20.0%)
Long wait time on the day of visit	3 (25.0%)	2 (20.0%)
Referral process	2 (16.7%)	2 (20.0%)
Patients feel they are a burden on family/friends	2 (16.7%)	2 (20.0%)
Patients fear of treatment/results	1 (8.3%)	1 (10.0%)
Clinic too small or lack necessary equipment/staff	1 (8.3%)	0 (0.0%)

Treatment and Challenges

Eighty-nine percent of ophthalmologists personally administer treatment for DR. The most common factors influencing how ophthalmologists treat patients were a patient's ability to adhere to recommendations (75%), a patient's age (63%), and the presence of comorbidities such as hypertension etc. (63%) (see Appendix PT 4.6 and PT 4.7).

Fifty percent (n=4) of ophthalmologists said that most patients present when visual problems have already occurred while 38% (n=3) reported that patients present "in time" for screening and one respondent said that patients present too late for effective treatment although the sample is notably very small (see Appendix PT 4.10).

All ophthalmologists had received specific training on the treatment and diagnosis of DR and or DME. Thirty-eight percent had received training within the past year, 25% between one and five years while for 38% of respondents training occurred five years ago or more (see Appendix PT 4.11).

Fifty percent would be interested in online education and certification on DME, angiogenesis and anti-VEGF therapies (see Appendix PT 4.12).

Ophthalmologists reported the greatest challenge for improving patient outcomes in DED were the reimbursement restrictions on approved therapies (75%). Other reported challenges included the limited access to patient education on DR and DME (63%) and the frequency of late diagnosis (50%) (see Table 14 and Appendix PT 4.14).

Table 14: Challenges for improving outcomes in DED

Question	Response	Ophthalmologist (n=8)
What do you perceive to be the greatest challenges for improving patient outcomes in diabetic eye disease?	Reimbursement/restrictions on approved therapy	6 (75.0%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	5 (62.5%)
	Late diagnosis	4 (50.0%)
	Government/insurance not able to cover patient costs	3 (37.5%)
	No universal guidelines on referral/screening	2 (25.0%)
	Current available therapies not effective	2 (25.0%)
	Referral pathways	1 (12.5%)

South Korea

DR Barometer Summary

In South Korea, 70 adults with diabetes and 13 ophthalmologists have provided insight about their experiences of living with, managing and treating diabetes, DR and DME. The results help to understand awareness, management, and services available in South Korea.

The South Korea is estimated to be the third most populous country in East Asia and fourteenth most populous country in Asia with an estimated population of approximately 50.8 million with an estimated 817,900 (783.8-906.9±) adults living with diabetes.

Similarly, to other East Asian countries, South Korea is expected to see a consistent population decrease due to low fertility rates. However, the population distribution will be drastically different. By 2050, only ~11% of the population will be under the age of 15 while ~35% of South Korea's total populations will comprise of those 65 or older. This means that in just over 30 years, the population aged 65 years or older will almost triple and reach an all-time high of approximately 17.6 million.

The diabetes national prevalence in South Korea (20 – 79 years) is 4.7% (4.5-5.2±) and the diabetes age-adjusted comparative prevalence is 4.4% (4.2-4.8±). It is important to note that South Korea is the tenth country in the world for the number of people with impaired glucose tolerance at ~5.2 million. The estimated number of undiagnosed cases was 514,200 (406.2-470.0±).

Of the respondents in South Korea, 30% had been diagnosed with type 1 diabetes and 60% with type 2 diabetes and a further 10% were unsure of their type of diabetes.

The global DR Barometer findings indicated a trend that a younger population was more likely to be associated with type 1 diabetes, and an older population tended to be predominately associated with type 2 diabetes, which was the opposite of the findings in South Korea.

In South Korea amongst 18 to 39 year-olds, 33% had type 1 diabetes and 55% had type 2 diabetes. In the 40-59 age group, 67% had type 1 and 33% had type 2 diabetes. Forty-three percent of those between 60-79 years of age had type 1 diabetes and 57% had type 2.

Ten percent of respondents (n=7) had been diagnosed with DED and a further 16% (n=11) with DME. In people aged 18-39 years, 13% had DED and 33% had DME, those aged 40-59 years 8.2% had DED and 12% had DME, and for people between 60-79 years of age 17% had DED and no respondent in this age category had DME.

People were most often informed about their condition from their health care professionals, such as doctor or nurse. There was a notable high reliance on traditional media, such as TV, radio, newspapers or magazines, along with family or friends. A trend globally, which was reflected in the South Korean study, was the increasing usage of the internet by more than half of respondents.

Many of those surveyed struggled with the management of their diabetic condition citing issues that were within their personal control to address, such as difficulty know what type of diet to maintain, not wanting to acknowledge their diabetes or not being informed enough about their condition. There was also health care system challenges reported such as the long wait times to schedule an appointment to see their doctor or specialist and difficulty travelling to their regular doctor or specialist.

A compilation of not wanting to acknowledge or being well informed coupled with health care system challenges may be a factor in the finding that only twenty-three percent of respondents were currently enrolled in a diabetes management programme.

One in three respondents were not aware that vision loss was a complication associated with diabetes yet of all known diabetes-related complications, vision loss was feared the most, almost three times more than any other complication such as kidney disease, cardiovascular disease or loss of limb.

There was also an increase in the frequency of people with DED and DME experiencing certain complications compared with those without DED. The frequency of kidney disease increased from 3.8% in those without DED to 29% with DED and 36% with DME. Likewise, cardiovascular disease increased from 14% in those without DED to 46% in those with DME.

The relationship between the patient and their health care provider is critical to realistic and optimal patient outcomes. Indeed, health education and information was reported by almost half of patients as an important tool to improve the management of one's diabetes yet 53% of respondents did not receive any information on eye complications from their doctor or nurse.

Likewise, sixty percent of ophthalmologist reported one of the major barriers to optimising eye health was a lack of knowledge or awareness on behalf of the patient yet one in five of these ophthalmologists did not have sufficient information on diabetes and potential eye complications available for their patients.

It is also important to note, one in three patients either never discussed eye complications with their health care providers or discussions only took place once symptoms arose. Equally concerning were the myths and perceptions around vision changes and prevention strategies, with 39% believing that vision problems were a normal part of ageing and a third of respondents not making any effort to prevent vision problems.

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

Almost all (93%) of those diagnosed with DED or DME said that their vision was affected either slightly or significantly, and eighty-six percent of these respondents reported ways in which vision impairment impacted their health, lifestyle, and life choices. For almost half, this manifested in their inability to manage their underlying diabetes.

Additionally driving a vehicle, travelling, undertaking household responsibilities, social interactions with family or friends, working or keeping a job, and even one's leisure activities were all affected by vision impairment or loss due to DED or DME.

Sixty-nine percent of those surveyed did not receive assistance from the government while 17% received income assistance. There was a reported variance amongst the subgroups; 23% of those without DED received government assistance compared with 57% of those with DED and 55% of those with DME.

Seventy-one percent of all respondents said they had no trouble paying for food at any time during the past year. However, 71% with DED and 55% with DME reported difficulty with paying for food compared to 18% of those without DED.

The majority of respondents with DME preferred a proactive treatment approach to prevent further vision loss rather than a reactive treatment once further vision loss has occurred. Over a third of respondents felt that their access to health care was affected by certain factors such as their level of income. For the respondents with either DED or DME who had not received treatment (n=3), the reason reported was the cost of treatment was too expensive.

Knowing that diabetes-related vision loss is preventable, addressing barriers to eye screening is an important policy issue. While just over half of respondents had received an eye exam, which is understandable considering the purposeful sample, there remained many barriers, such as a fear of treatment and/or the results, long wait time to schedule an appointment, and lack of knowledge about one's condition.

Supporting this, ophthalmologist reported patient's lack of knowledge and/or awareness or not feeling that eye exams were important were barriers to optimising eye health. However, they reported the cost of care as the greatest barrier facing patients.

Ophthalmologists reported the greatest challenge for improving patient outcomes in DED were the reimbursement restrictions on approved therapies.

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 South Korea.

References and Acknowledgement

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

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

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

Appendices



The Diabetic Retinopathy Barometer Survey: Appendices for South Korea

APPENDIX 1 : National Results

Table 1.1

Survey Information	Number of Respondents (%)
All valid respondents [1]	77 (100.0%)
Respondents aged 18 or over	76 (98.7%)
Respondents with diabetes	70 (90.9%)

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

Table 1.2

Survey Information	Number of Respondents (%)
All valid respondents	77 (100.0%)
Included in Diabetic Analysis Set	70 (90.9%)
Excluded from Diabetic Analysis Set	7 (9.1%)
Reasons for exclusion from diabetic analysis set	.
Under 18 years of age	1
Not diagnosed with diabetes	5
Missing information on diabetes diagnosis	1

Table 1.3

Survey Information	Number of Respondents (%)
Diabetic Analysis Set	70 (100.0%)
World Bank Income Group: High Income	70 (100.0%)
Persons with diabetic eye disease (DED)	7 (10.0%)
Persons with diabetic macular edema (DME)	11 (15.7%)
Persons with Type I diabetes	21 (30.0%)
Persons with Type II diabetes	42 (60.0%)
Persons not seeing health care professional for diabetes	8 (11.4%)
Persons seeing health care professional for diabetes	62 (88.6%)
Persons with eye disease & not received treatment	3 (4.3%)
Persons with eye disease & received treatment	11 (15.7%)

Table 2.1

Question	Response	Number of Respondents (%)
With which type of diabetes have you been diagnosed?	Type I	21 (30.0)
	Type II	42 (60.0)
	Don't know/Not sure	7 (10.0)
	Total Valid Response	70 (100.0)

Table 2.2

Question	Response	Number of Respondents (%)
When was your diabetes diagnosed?	Within the last year	10 (14.3)
	1 - 5 years ago	26 (37.1)
	6 - 10 years ago	21 (30.0)
	11 - 15 years ago	6 (8.6)
	16 - 20 years ago	3 (4.3)
	21 years ago or longer	2 (2.9)
	Don't know/Not sure	2 (2.9)
	Total Valid Response	70 (100.0)

Table 2.3.1

Question	Response	Number of Respondents (%)
Do you see a health care professional for your diabetes?	Yes	62 (88.6)
	No	8 (11.4)
	Total Valid Response	70 (100.0)
What kind of health care professional?	General/Family Doctor	41 (66.1)
	Diabetes Specialist	19 (30.6)
	Don't know/Not sure of kind	2 (3.2)
	Total Valid Response	62 (100.0)
	Total missing	8

Table 2.3.2

Type of health care professional	Times per year seen for diabetes	Value
General/Family Doctor	Total valid numeric response (n)	37
	Mean	18.2
	SD	58.7
	Median	12.0
	Min	1
	Max	365
	Don't know/Not sure	4
Diabetes Specialist	Total valid numeric response (n)	19
	Mean	7.4
	SD	4.4
	Median	6.0
	Min	3
	Max	15
Don't know/Not sure of kind	Total valid numeric response (n)	2
	Mean	1.0
	SD	0.0
	Median	1.0
	Min	1
	Max	1

Table 2.4

Question	Response	Number of Respondents (%)
How have you received information about diabetes?	Doctor or nurse	51 (72.9%)
	Health educator	14 (20.0%)
	Nutritionist or dietitian	5 (7.1%)
	Diabetes organization or other health organization	17 (24.3%)
	Family/Friends/Neighbors	19 (27.1%)
	TV/Radio/Newspaper/Magazines	37 (52.9%)
	Internet	39 (55.7%)
	Social media (e.g. Facebook, Twitter,	10 (14.3%)

Question	Response	Number of Respondents (%)
	blogs)	
	Pharmacist	14 (20.0%)
	None of the above	2 (2.9%)
	Total Valid Response	70 (100.0%)

Table 2.5

Question	Response	Number of Respondents (%)
How do you manage your diabetes?	Diet	48 (68.6%)
	Oral medicine	40 (57.1%)
	Exercise	41 (58.6%)
	Insulin	15 (21.4%)
	Natural/Herbal medicine	11 (15.7%)
	None of the above	3 (4.3%)
	Total Valid Response	70 (100.0%)

Table 2.6

Question	Response	Number of Respondents (%)
Are you currently enrolled in a diabetes patient management support programme?	Yes	16 (22.9)
	No	54 (77.1)
	Total Valid Response	70 (100.0)
Who sponsors the programme?	Hospital support program	10 (62.5)
	Clinic support program	3 (18.8)
	Pharmaceutical support program	2 (12.5)
	Don't know/Not sure	1 (6.3)
	Total Valid Response	16 (100.0)
	Total missing	54
Does the programme include education on the importance of screening for diabetic eye complications?	Yes	15 (93.8)
	No	1 (6.3)
	Total Valid Response	16 (100.0)

Question	Response	Number of Respondents (%)
	Total missing	54

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	68 (98.6%)
	Less than 6 months	60 (87.0%)
	6 - 12 months	4 (5.8%)
	Greater than 12 months	4 (5.8%)
	Total valid response	68 (98.6%)
	Total missing	2
	Don't know/Not sure	1 (1.4%)
	Total valid response	69 (100.0%)
	Total missing	1
Urine check	Yes	66 (95.7%)
	Less than 6 months	44 (63.8%)
	6 - 12 months	14 (20.3%)
	Greater than 12 months	8 (11.6%)
	Total valid response	66 (95.7%)
	Total missing	4
	No	2 (2.9%)
	Don't know/Not sure	1 (1.4%)
	Total valid response	69 (100.0%)
	Total missing	1
Weight check	Yes	59 (86.8%)

Test	Response	Number of Respondents (%)
Have you ever had the following tests in a doctors office of clinic? And if yes, how long ago		
	Less than 6 months	43 (63.2%)
	6 - 12 months	10 (14.7%)
	Greater than 12 months	6 (8.8%)
	Total valid response	59 (86.8%)
	Total missing	11
	No	6 (8.8%)
	Don't know/Not sure	3 (4.4%)
	Total valid response	68 (100.0%)
	Total missing	2
Blood pressure check	Yes	67 (97.1%)
	Less than 6 months	60 (87.0%)
	6 - 12 months	5 (7.2%)
	Greater than 12 months	2 (2.9%)
	Total valid response	67 (97.1%)
	Total missing	3
	No	1 (1.4%)
	Don't know/Not sure	1 (1.4%)
	Total valid response	69 (100.0%)
	Total missing	1
Foot check	Yes	25 (37.9%)
	Less than 6 months	18 (27.3%)
	6 - 12 months	7 (10.6%)
	Total valid response	25 (37.9%)

Test	Response	Number of Respondents (%)
Have you ever had the following tests in a doctors office of clinic? And if yes, how long ago		
	Total missing	45
	No	40 (60.6%)
	Don't know/Not sure	1 (1.5%)
	Total valid response	66 (100.0%)
	Total missing	4
Eye check	Yes	46 (67.6%)
	Less than 6 months	33 (48.5%)
	6 - 12 months	8 (11.8%)
	Greater than 12 months	5 (7.4%)
	Total valid response	46 (67.6%)
	Total missing	24
	No	21 (30.9%)
	Don't know/Not sure	1 (1.5%)
	Total valid response	68 (100.0%)
	Total missing	2

Table 2.8

Question	Response	Number of Respondents (%)
How well do you think your diabetes is controlled?	Very well	7 (10.0%)
	Well	37 (52.9%)
	Not very well	20 (28.6%)
	Not well at all	5 (7.1%)
	Don't know/Not sure	1 (1.4%)
	Total Valid Response	70 (100.0%)

Table 2.9

Question	Response	Number of Respondents (%)
What are the main challenges you face in controlling your diabetes?	High cost of care	12 (17.1%)
	No insurance	4 (5.7%)
	Travel to my regular doctor or specialist is difficult	14 (20.0%)
	Long wait time for an appointment to see my doctor or specialist	15 (21.4%)
	Health services needed are not available	6 (8.6%)
	Don't know enough about diabetes	16 (22.9%)
	Too hard to eat the right things	38 (54.3%)
	Too many other things to do	14 (20.0%)
	Stigma or discrimination because of diabetes	10 (14.3%)
	Don't want to think about having diabetes	21 (30.0%)
	Other	6 (8.6%)
	Total Valid Response	70 (100.0%)

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	30 (43.5%)
	Support groups	9 (13.0%)
	Support from family or friends	19 (27.5%)
	Health education and information	33 (47.8%)
	Mobile services (services that travel to or near your home)	5 (7.2%)
	Coordination of healthcare and services by a professional	40 (58.0%)
	Emergency helpline	5 (7.2%)
	Other	4 (5.8%)

Question	Response	Number of Respondents (%)
	None	5 (7.2%)
	Total Valid Response	69 (100.0%)
	Total missing	1

Table 2.11

Question	Response	Number of Respondents (%)
What complications (or problems), to your knowledge, arise from diabetes?	Amputation	31 (44.3%)
	Foot ulcers	42 (60.0%)
	Increased risk of broken bones or fractures	14 (20.0%)
	Loss of feeling in hands or toes (neuropathy)	35 (50.0%)
	Vision loss	50 (71.4%)
	Irritable bowel disease	16 (22.9%)
	Kidney disease	37 (52.9%)
	Cardiovascular disease/Stroke	34 (48.6%)
	Other	6 (8.6%)
	Don't know/Not sure	4 (5.7%)
	None	6 (8.6%)
	Total Valid Response	70 (100.0%)

Table 2.12

Question	Response	Number of Respondents (%)
Which complication of diabetes are you most concerned about?	Amputation	7 (10.1)
	Foot ulcers	3 (4.3)
	Increased risk of broken bones or fractures	1 (1.4)
	Loss of feeling in hands or toes (neuropathy)	1 (1.4)
	Vision loss	31 (44.9)
	Irritable bowel disease	1 (1.4)

Question	Response	Number of Respondents (%)
	Kidney disease	11 (15.9)
	Cardiovascular disease/Stroke	9 (13.0)
	None	5 (7.2)
	Total Valid Response	69 (100.0)
	Total missing	1

Table 2.13

Question	Response	Number of Respondents (%)
Which of the following complications of diabetes do you have?	Amputation	5 (7.1%)
	Foot ulcers	7 (10.0%)
	Broken bones or fractures	3 (4.3%)
	Loss of feeling in hands or toes (neuropathy)	5 (7.1%)
	Vision loss	13 (18.6%)
	Irritable bowel disease	8 (11.4%)
	Kidney disease	8 (11.4%)
	Cardiovascular disease/Stroke	12 (17.1%)
	Other	2 (2.9%)
	Don't know/Not sure	12 (17.1%)
	None	25 (35.7%)
	Total Valid Response	70 (100.0%)

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	16 (22.9%)
	Multiple times per year	15 (21.4%)
	Once per year	11 (15.7%)
	Only when symptoms arise	12 (17.1%)
	Never	13 (18.6%)

Question	Response	Number of Respondents (%)
	Don't know/Not sure	3 (4.3%)
	Total Valid Response	70 (100.0%)

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	27 (38.6%)
	I do what I can to prevent vision problems (e.g. get routine screenings, visit specialists)	34 (48.6%)
	I do not make any special effort to prevent vision problems	23 (32.9%)
	Total Valid Response	70 (100.0%)

Table 2.16

Question	Response	Number of Respondents (%)
What type of health insurance do you have?	Public	51 (72.9)
	Public - Private	17 (24.3)
	None	2 (2.9)
	Total Valid Response	70 (100.0)

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	7 (10.0)
	Insurance pays total cost	9 (12.9)
	Insurance and out-of-pocket/cash (e.g. co-pays)	48 (68.6)
	Out-of-pocket only (pay cash for all care)	2 (2.9)
	Don't know/Not Sure	4 (5.7)

Question	Response	Number of Respondents (%)
Most often, how do you pay for the following types of medical care and services?		
	Total Valid Response	70 (100.0)
Specialist medical visits (e.g. eye doctor, gynecologist, urologist)	Care is free	3 (4.3)
	Insurance pays total cost	10 (14.5)
	Insurance and out-of-pocket/cash (e.g. co-pays)	50 (72.5)
	Out-of-pocket only (pay cash for all care)	2 (2.9)
	Do not use service	1 (1.4)
	Don't know/Not Sure	3 (4.3)
	Total Valid Response	69 (100.0)
	Total missing	1
Medicines	Care is free	4 (5.8)
	Insurance pays total cost	11 (15.9)
	Insurance and out-of-pocket/cash (e.g. co-pays)	39 (56.5)
	Out-of-pocket only (pay cash for all care)	11 (15.9)
	Do not use service	1 (1.4)
	Don't know/Not Sure	3 (4.3)
	Total Valid Response	69 (100.0)
	Total missing	1
Medical supplies (e.g. blood glucose meter/strips)	Care is free	3 (4.4)
	Insurance pays total cost	4 (5.9)
	Insurance and out-of-pocket/cash (e.g. co-pays)	16 (23.5)
	Out-of-pocket only (pay cash for all care)	36 (52.9)
	Do not use service	5 (7.4)
	Don't know/Not Sure	4 (5.9)
	Total Valid Response	68 (100.0)
	Total missing	2
Procedures	Care is free	3 (4.4)

Question	Response	Number of Respondents (%)
Most often, how do you pay for the following types of medical care and services?		
	Insurance pays total cost	7 (10.3)
	Insurance and out-of-pocket/cash (e.g. co-pays)	35 (51.5)
	Out-of-pocket only (pay cash for all care)	7 (10.3)
	Do not use service	11 (16.2)
	Don't know/Not Sure	5 (7.4)
	Total Valid Response	68 (100.0)
	Total missing	2
Tests/screenings	Care is free	7 (10.4)
	Insurance pays total cost	10 (14.9)
	Insurance and out-of-pocket/cash (e.g. co-pays)	43 (64.2)
	Out-of-pocket only (pay cash for all care)	4 (6.0)
	Don't know/Not Sure	3 (4.5)
	Total Valid Response	67 (100.0)
	Total missing	3
Health education	Care is free	20 (29.4)
	Insurance pays total cost	7 (10.3)
	Insurance and out-of-pocket/cash (e.g. co-pays)	8 (11.8)
	Out-of-pocket only (pay cash for all care)	11 (16.2)
	Do not use service	12 (17.6)
	Don't know/Not Sure	10 (14.7)
	Total Valid Response	68 (100.0)
	Total missing	2
Counseling	Care is free	15 (21.7)
	Insurance pays total cost	9 (13.0)
	Insurance and out-of-pocket/cash (e.g. co-pays)	16 (23.2)
	Out-of-pocket only (pay cash for all care)	8 (11.6)

Question	Response	Number of Respondents (%)
Most often, how do you pay for the following types of medical care and services?		
	Do not use service	12 (17.4)
	Don't know/Not Sure	9 (13.0)
	Total Valid Response	69 (100.0)
	Total missing	1

Table 3.1

Question	Response	Number of Respondents (%)
Are you aware of any government sponsored screening programs for diabetic eye disease (diabetic retinopathy)?	Yes	16 (22.9%)
	No	54 (77.1%)
	Total valid response	70 (100.0%)

Table 3.2

Question	Response	Number of Respondents (%)
Have you ever had an eye exam for diabetic eye disease?	Yes	37 (52.9%)
	No	33 (47.1%)
	Total valid response	70 (100.0%)
How long ago was your last eye exam?	Within the last year	27 (73.0%)
	More than 1 year ago but less than 2 years	6 (16.2%)
	More than 2 years ago but less than 3 years	3 (8.1%)
	Five or more years ago	1 (2.7%)
	Total valid response	37 (100.0%)
	Total missing	33
Who did the last exam?	General/Family practitioner	9 (24.3%)
	Eye doctor/Eye clinic	27 (73.0%)
	Don't know/Not sure	1 (2.7%)
	Total valid response	37 (100.0%)

Question	Response	Number of Respondents (%)
	Total missing	33

Table 3.3

Question	Response	Number of Respondents (%)
Have you ever had a dilated eye exam, where your eyes are examined after eye drops?	Yes	31 (44.9%)
	No	34 (49.3%)
	Don't know/Not sure	4 (5.8%)
	Total valid response	69 (100.0%)
	Total missing	1

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	48 (68.6%)
	Every two years	5 (7.1%)
	Only when symptoms occur	4 (5.7%)
	Never	2 (2.9%)
	Don't know/Not sure	11 (15.7%)
	Total valid response	70 (100.0%)

Table 3.5

Question	Response	Number of Respondents (%)
For you, what are the biggest barriers to eye exams?	They are expensive	20 (28.6%)
	Eye exams are not available near my home	16 (22.9%)
	Long wait time for appointment	22 (31.4%)
	Long wait time on the day of the visit	25 (35.7%)

Question	Response	Number of Respondents (%)
	Referral process is complicated or takes too long	6 (8.6%)
	Recommended treatments for eye problems are not available	4 (5.7%)
	Don't know much about my condition	22 (31.4%)
	Fear of treatment/results	27 (38.6%)
	Burden on my family/friends	12 (17.1%)
	Limited access to diabetes specialists	13 (18.6%)
	I'm not likely to have eye complications	1 (1.4%)
	Eye exams are not important	1 (1.4%)
	Too many other things to do or worry about	18 (25.7%)
	Clinics are too small or lack necessary equipment/staff	6 (8.6%)
	Other	5 (7.1%)
	Total valid response	70 (100.0%)

Table 3.6

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic eye disease?	Yes	15 (21.4%)
	No	55 (78.6%)
	Total valid response	70 (100.0%)
Has your diabetic eye disease affected your vision?	Yes, slightly	6 (40.0%)
	Yes, significantly	8 (53.3%)
	No	1 (6.7%)
	Total valid response	15 (100.0%)
	Total missing	55
Have vision issues caused you to have difficulty with any of the following?	Traveling	5 (35.7%)
	Household responsibilities, such as cooking or cleaning	4 (28.6%)
	Social interactions with family/friends	4 (28.6%)

Question	Response	Number of Respondents (%)
	Leisure activities/exercise	2 (14.3%)
	Work or keeping a job	3 (21.4%)
	Managing my diabetes	6 (42.9%)
	Other	1 (7.1%)
	None	2 (14.3%)
	Driving (a car/vehicle)	6 (42.9%)
	Total valid response	14 (100.0%)
	Total missing	56

Table 3.7

Question	Response	Number of Respondents (%)
Have you had any treatment for diabetic eye disease?	Yes	11 (73.3%)
	No	3 (20.0%)
	Don't know/Not sure	1 (6.7%)
	Total valid response	15 (100.0%)
	Total missing	55
What treatment did you receive?	Laser	9 (81.8%)
	Injection in the eye (Anti-VEGF)	7 (63.6%)
	Surgery	6 (54.5%)
	Other	2 (18.2%)
	Total valid response	11 (100.0%)
	Total missing	59
Did you complete the treatment?	Yes	9 (81.8%)
	Still receiving treatment	2 (18.2%)
	Total valid response	11 (100.0%)
	Total missing	59
Do you feel that the treatment worked?	Yes, and vision improved	5 (45.5%)
	Yes, but vision stayed the same	5 (45.5%)
	No	1 (9.1%)

Question	Response	Number of Respondents (%)
	Total valid response	11 (100.0%)
	Total missing	59
What is/are the reason(s) that you did not complete the treatment?	Total missing	70
What are the reason(s) that you have not had treatment for diabetic eye disease?	Too expensive	3 (100.0%)
	Total valid response	3 (100.0%)
	Total missing	67

Table 3.8

Question	Response	Number of Respondents (%)
Have you been diagnosed with diabetic macular edema?	Yes	11 (15.7%)
	No	57 (81.4%)
	Don't know/Not sure	2 (2.9%)
	Total valid response	70 (100.0%)
If Yes, which of the following would you prefer	Treatment to prevent further vision loss	9 (81.8%)
	Only treatment when vision loss has occurred	2 (18.2%)
	Total valid response	11 (100.0%)
	Total missing	59

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 (47.1%)
	Health educator	10 (14.3%)
	Diabetes organization or other health organization	13 (18.6%)
	Family/Friends/Neighbors	14 (20.0%)
	TV/Radio/Newspaper/Magazines	24 (34.3%)

Question	Response	Number of Respondents (%)
	Internet	25 (35.7%)
	None of the above	18 (25.7%)
	Total valid response	70 (100.0%)

Table 4.1

Question	Response	Number of Respondents (%)
What is your gender?	Female	20 (28.6)
	Male	50 (71.4)
	Total Valid Response	70 (100.0)
Please indicate your age	18 - 29	3 (4.3)
	30 - 39	12 (17.1)
	40 - 49	30 (42.9)
	50 - 59	19 (27.1)
	60 - 69	5 (7.1)
	70 - 79	1 (1.4)
	Total Valid Response	70 (100.0)

Table 4.2

Question	Response	Number of Respondents (%)
Where do you live?	Urban setting	62 (89.9)
	Non-urban setting	7 (10.1)
	Total Valid Response	69 (100.0)
	Total missing	1

Table 4.3

Question	Response	Number of Respondents (%)
What is the highest level of education you completed?	Primary school	1 (1.4)
	Secondary school	20 (28.6)
	College/University	43 (61.4)
	Graduate or post-graduate	6 (8.6)
	Total valid response	70 (100.0)

Table 4.4

Question	Response	Number of Respondents (%)
Are you currently working?	Working for pay	51 (72.9)
	Working without pay at home (e.g. housework, farming)	4 (5.7)
	Volunteering	1 (1.4)
	Retired	7 (10.0)
	Student	1 (1.4)
	Not working	6 (8.6)
	Total Valid Response	70 (100.0)

Table 4.5

Question	Response	Number of Respondents (%)
Do you receive assistance from the government?	Income assistance	12 (17.1%)
	Medical assistance	11 (15.7%)
	Food assistance	4 (5.7%)
	Housing assistance	6 (8.6%)
	Pension assistance	3 (4.3%)
	None of the above	48 (68.6%)
	Total valid response	70 (100.0%)

Table 4.6

Question	Response	Number of Respondents (%)
Did you have trouble paying for food at anytime during the past year?	Yes	20 (29.0)
	No	49 (71.0)
	Total Valid Response	69 (100.0)
	Total missing	1

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	9 (12.9)
	Education	3 (4.3)
	Ethnicity	1 (1.4)
	Gender	6 (8.6)
	Income	8 (11.4)
	Language you speak	3 (4.3)
	Place of birth	3 (4.3)
	Place where you live	4 (5.7)
	Race	2 (2.9)
	Religion	3 (4.3)
	Sexual orientation	3 (4.3)
	Tribal affiliation	1 (1.4)
	None of the above	55 (78.6)
	Total valid response	70 (100.0)

Table 4.8

Question	Response	Number of Respondents (%)
Which of the following do you worry about most?	Food	3 (4.3)
	Housing	3 (4.3)
	Money	26 (37.1)
	Health	32 (45.7)
	Family	3 (4.3)
	None of the above	3 (4.3)
	Total Valid Response	70 (100.0)

Table 5.1

Question	Response	Number of Respondents (%)
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Question	Response	Number of Respondents (%)
In general, would you say your health is:	Excellent	2 (2.9%)
	Very good	5 (7.4%)
	Good	15 (22.1%)
	Total good health	22 (32.4%)
	Fair	26 (38.2%)
	Poor	20 (29.4%)
	Fair or poor health	46 (67.6%)
	Total valid response	68 (100.0%)
	Total missing	2

Table 5.2

Question	Response	Number of Respondents (%)
How many days during last 30 days was your physical health not good	Any unhealthy days	34 (64.2%)
	1-5 unhealthy days	10 (18.9%)
	6-10 unhealthy days	8 (15.1%)
	11-20 unhealthy days	10 (18.9%)
	21-30 unhealthy days	6 (11.3%)
	No unhealthy days	19 (35.8%)
	Total valid response	53 (100.0%)
	Total missing	17

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	24 (47.1%)
	1-5 unhealthy days	7 (13.7%)
	6-10 unhealthy	8 (15.7%)

Question	Response	Number of Respondents (%)
	days	
	11-20 unhealthy days	5 (9.8%)
	21-30 unhealthy days	4 (7.8%)
	No unhealthy days	27 (52.9%)
	Total valid response	51 (100.0%)
	Total missing	19

Table 5.3.2

Question	Response	Number of Respondents (%)
Unhealthy days (physically or mentally unhealthy, max 30)	Any unhealthy days	39 (75.0%)
	1-5 unhealthy days	6 (11.5%)
	6-10 unhealthy days	9 (17.3%)
	11-20 unhealthy days	8 (15.4%)
	21-30 unhealthy days	16 (30.8%)
	No unhealthy days	13 (25.0%)
	Total valid response	52 (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	21 (52.5%)
	1-5 unhealthy days	6 (15.0%)
	6-10 unhealthy days	8 (20.0%)

Question	Response	Number of Respondents (%)
	11-20 unhealthy days	4 (10.0%)
	21-30 unhealthy days	3 (7.5%)
	No unhealthy days	19 (47.5%)
	Total valid response	40 (100.0%)
	Total missing	30

Table 5.5

Question	Response	Number of Respondents (%)
Are you limited in any way in any activities because of any impairment or health problem?	Yes	23 (35.4%)
	No	42 (64.6%)
	Total valid response	65 (100.0%)
	Total missing	5
Which impairment or health problem, if any, limits your activities?		
a) Arthritis/rheumatism	Yes	8 (30.8%)
	No	17 (65.4%)
	Don't know/Not sure	1 (3.8%)
	Total valid response	26 (100.0%)
	Total missing	44
b) Back or neck problem	Yes	16 (61.5%)
	No	10 (38.5%)
	Total valid response	26 (100.0%)
	Total missing	44
c) Fractures, bone/joint injury	Yes	8 (30.8%)
	No	17 (65.4%)
	Don't know/Not sure	1 (3.8%)

Question	Response	Number of Respondents (%)
	Total valid response	26 (100.0%)
	Total missing	44
d) Walking problem	Yes	8 (29.6%)
	No	17 (63.0%)
	Don't know/Not sure	1 (3.7%)
	Refused	1 (3.7%)
	Total valid response	27 (100.0%)
	Total missing	43
e) Lung/breathing problem	Yes	3 (11.5%)
	No	22 (84.6%)
	Don't know/Not sure	1 (3.8%)
	Total valid response	26 (100.0%)
	Total missing	44
f) Hearing problem	Yes	7 (25.9%)
	No	19 (70.4%)
	Don't know/Not sure	1 (3.7%)
	Total valid response	27 (100.0%)
	Total missing	43
g) Eye/vision problem	Yes	14 (53.8%)
	No	10 (38.5%)
	Don't know/Not sure	2 (7.7%)
	Total valid response	26 (100.0%)
	Total missing	44
h) Heart problem	Yes	4 (15.4%)
	No	19 (73.1%)
	Don't know/Not sure	3 (11.5%)

Question	Response	Number of Respondents (%)
	Total valid response	26 (100.0%)
	Total missing	44
i) Stroke problem	Yes	4 (15.4%)
	No	19 (73.1%)
	Don't know/Not sure	3 (11.5%)
	Total valid response	26 (100.0%)
	Total missing	44
j) Hypertension/high blood pressure	Yes	14 (51.9%)
	No	11 (40.7%)
	Don't know/Not sure	2 (7.4%)
	Total valid response	27 (100.0%)
	Total missing	43
k) Diabetes	Yes	22 (81.5%)
	No	4 (14.8%)
	Don't know/Not sure	1 (3.7%)
	Total valid response	27 (100.0%)
	Total missing	43
l) Cancer	Yes	2 (7.7%)
	No	22 (84.6%)
	Don't know/Not sure	2 (7.7%)
	Total valid response	26 (100.0%)
	Total missing	44
m) Mental or emotional health	Yes	13 (52.0%)
	No	11 (44.0%)
	Don't know/Not sure	1 (4.0%)
	Total valid	25 (100.0%)

Question	Response	Number of Respondents (%)
	response	
	Total missing	45

PT 1.2

Analysis Sets	Number of Respondents (%)
All valid respondents	17 (100.0%)
Included in Provider Analysis Set (PAS)	17 (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	17
Included in the Eye Care Professional Set (Eye Specialist)	14 (82.4%)
Excluded in the Eye Care Professional Set (Eye Specialist)	3 (17.6%)
Reasons for exclusion from Eye Care Professional Set:	
Missing required speciality	3
No valid (non-missing) response for the supplemental eye questionnaire	0

PT 1.3

Subgroups	Number of Respondents (%)
Provider Analysis Set	17 (100.0%)
Primary Care Provider	0 (0.0%)
Diabetes Specialist Provider	1 (5.9%)
Eye Care Professional	14 (82.4%)
Ophthalmologist	13 (76.5%)

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

Item	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is your specialty?	General primary care/Family practitioner	N/A	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Diabetes specialist	N/A	1 (100.0%)	0 (0.0%)	1 (5.9%)
	General ophthalmologist	N/A	0 (0.0%)	2 (15.4%)	2 (11.8%)
	Optometrist	N/A	0 (0.0%)	0 (0.0%)	1 (5.9%)
	Retinal specialist	N/A	0 (0.0%)	11 (84.6%)	11 (64.7%)
	Nurse	N/A	0 (0.0%)	0 (0.0%)	1 (5.9%)
	Health educator	N/A	0 (0.0%)	0 (0.0%)	0 (0.0%)
	None of the above	N/A	0 (0.0%)	0 (0.0%)	1 (5.9%)
	Total valid response	0 (100.0%)	1 (100.0%)	13 (100.0%)	17 (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)	.	1	12	16
	Mean	.	10.0	11.5	10.8
	SD	.	.	7.3	6.5
	Median	.	10.0	11.0	10.0
	Min.	.	10	4	4
	Max.	.	10	25	25
	Total missing	0	0	1	1

PT 2.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is your main practice	Diabetes clinic/practice	0 (0.0%)	0 (0.0%)	1 (8.3%)	2 (13.3%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
setting?					
	Eye clinic/practice	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	General medical clinic/practice	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Hospital	0 (0.0%)	1 (100.0%)	11 (91.7%)	12 (80.0%)
	Other	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	12 (100.0%)	15 (100.0%)
	Total missing	0	0	1	2

PT 2.2

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Where is your main practice located?	Urban setting	0 (0.0%)	1 (100.0%)	12 (100.0%)	15 (100.0%)
	Non-urban setting	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	12 (100.0%)	15 (100.0%)
	Total missing	0	0	1	2

PT 2.3

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
In which sector is your main practice?	Government	0 (0.0%)	0 (0.0%)	4 (33.3%)	5 (33.3%)
	Private	0 (0.0%)	1 (100.0%)	3 (25.0%)	4 (26.7%)
	Non profit	0 (0.0%)	0 (0.0%)	2 (16.7%)	3 (20.0%)
	Combined/mixed	0 (0.0%)	0 (0.0%)	3 (25.0%)	3 (20.0%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	12 (100.0%)	15 (100.0%)

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

PT 2.4

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Is your main practice limited to certain populations?	No	0 (0.0%)	1 (100.0%)	12 (100.0%)	13 (86.7%)
	Yes, limited by age	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)
	Yes, limited to low income or uninsured persons	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)
	Yes, limited to persons who pay out-of-pocket	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)
	Total valid response	0	1 (100.0%)	12 (100.0%)	15 (100.0%)
	Total missing	0	0	1	2

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	0 (0.0%)	0 (0.0%)	3 (27.3%)	4 (30.8%)
	More than 1 week but less than 1 month	0 (0.0%)	1 (100.0%)	7 (63.6%)	8 (61.5%)
	Six or more months	0 (0.0%)	0 (0.0%)	1 (9.1%)	1 (7.7%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing	0	0	2	4

PT 2.6

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
On average, how many patients do you see per week in your main practice [n patients]	Total valid response (n)	0	1	11	13
	Mean	N/A	200	186.4	175.4
	SD	N/A	.	76.3	82.3
	Median	N/A	200	200	200
	Min.	N/A	200	20	20
	Max.	N/A	200	300	300
	Total missing	0	0	2	4
What percentage of the patients in your main practice have diabetes [% patients]	Total valid response (n)	0	1	11	13
	Mean	N/A	80	33.2	39.6
	SD	N/A	.	17.1	22.2
	Median	N/A	80	30	40
	Min.	N/A	80	5	5
	Max.	N/A	80	60	80
	Total missing	0	0	2	4

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%)	1 (9.1%)	1 (7.7%)
	Pay a reduced/subsidized rate	0 (0.0%)	1 (100.0%)	4 (36.4%)	5 (38.5%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Pay out-of-pocket (full fees)	0 (0.0%)	0 (0.0%)	2 (18.2%)	3 (23.1%)
	Pay through insurance	0 (0.0%)	0 (0.0%)	2 (18.2%)	2 (15.4%)
	Patient pays some, insurance pays some	0 (0.0%)	0 (0.0%)	9 (81.8%)	9 (69.2%)
	Total valid response	0	1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing	0	0	2	4

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 (9.1%)	1 (7.7%)
	No		1 (100.0%)	10 (90.9%)	12 (92.3%)
	Total valid response		1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing			2	4
In which other practice setting(s) do you work?	Hospital			1 (100.0%)	1 (100.0%)
	Eye clinic/practice			1 (100.0%)	1 (100.0%)
	Total valid response			1 (100.0%)	1 (100.0%)
	Total missing		1	12	16
In which sector(s) is(are) the practice(s)?	Combined/mixed			1 (100.0%)	1 (100.0%)
	Total valid response			1 (100.0%)	1 (100.0%)
	Total missing		1	12	16
Is there a major difference between your practices with	No			1 (100.0%)	1 (100.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
respect to how diabetic eye disease is screened and managed?					
	Total valid response			1 (100.0%)	1 (100.0%)
	Total missing		1	12	16

PT 2.9

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Blood glucose	Yes			1 (100.0%)	7 (77.8%)	9 (81.8%)
		Total valid numeric response (n)		1 (100.0%)	6 (66.7%)	8 (72.7%)
		Mean		4.0	4.7	5.5
		SD			3.8	4.1
		Median		4.0	4.0	4.0
		Min		4	1	1
		Max		4	12	12
		Total missing		0	7	9
	No				2 (22.2%)	2 (18.2%)
	Total valid response			1 (100.0%)	9 (100.0%)	11 (100.0%)
	Total missing				4	6
HbA1c	Yes			1 (100.0%)	7 (77.8%)	9 (81.8%)
		Total valid numeric response (n)		1 (100.0%)	6 (66.7%)	8 (72.7%)
		Mean		4.0	2.8	4.1
		SD			1.3	3.4

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS		
		Median		4.0	3.0	4.0		
		Min		4	1	1		
		Max		4	4	12		
		Total missing		0	7	9		
	No				2 (22.2%)	2 (18.2%)		
	Total valid response			1 (100.0%)	9 (100.0%)	11 (100.0%)		
	Total missing				4	6		
	Urine check	Yes			1 (100.0%)	5 (55.6%)	7 (63.6%)	
				Total valid numeric response (n)		1 (100.0%)	4 (44.4%)	6 (54.5%)
				Mean		1.0	2.8	2.7
SD					1.5	1.5		
Median				1.0	3.0	3.0		
Min				1	1	1		
Max				1	4	4		
Total missing				0	9	11		
No					4 (44.4%)	4 (36.4%)		
Total valid response			1 (100.0%)	9 (100.0%)	11 (100.0%)			
Total missing					4	6		
Weight check	Yes			1 (100.0%)	6 (66.7%)	8 (72.7%)		
		Total valid numeric response (n)		1 (100.0%)	5 (55.6%)	7 (63.6%)		
		Mean		4.0	3.2	3.4		

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS	
		SD			1.1	1.0	
		Median		4.0	4.0	4.0	
		Min		4	2	2	
		Max		4	4	4	
		Total missing		0	8	10	
	No				3 (33.3%)	3 (27.3%)	
	Total valid response	1 (100.0%)		9 (100.0%)	11 (100.0%)		
	Total missing			4	6		
	Blood pressure check	Yes		1 (100.0%)	8 (88.9%)	10 (90.9%)	
				Total valid numeric response (n)	1 (100.0%)	7 (77.8%)	9 (81.8%)
				Mean	4.0	4.6	5.3
				SD		3.4	3.9
Median			4.0	4.0	4.0		
Min			4	2	2		
Max			4	12	12		
Total missing			0	6	8		
No				1 (11.1%)	1 (9.1%)		
Total valid response		1 (100.0%)	9 (100.0%)	11 (100.0%)			
Total missing			4	6			
Foot check		Yes	1 (100.0%)	5 (55.6%)	7 (63.6%)		
			Total valid numeric response (n)	1 (100.0%)	4 (44.4%)	6 (54.5%)	
	Mean		1.0	2.5	2.2		

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS	
		SD			1.7	1.5	
		Median		1.0	2.5	1.5	
		Min		1	1	1	
		Max		1	4	4	
		Total missing		0	9	11	
	No				4 (44.4%)	4 (36.4%)	
	Total valid response	1 (100.0%)		9 (100.0%)	11 (100.0%)		
	Total missing			4	6		
	Eye examination - Un-dilated	Yes			1 (100.0%)	6 (66.7%)	8 (72.7%)
				Total valid numeric response (n)	1 (100.0%)	6 (66.7%)	8 (72.7%)
				Mean	1.0	4.5	3.8
				SD		3.9	3.6
Median			1.0	4.0	3.0		
Min			1	1	1		
Max			1	12	12		
Total missing			0	7	9		
No				3 (33.3%)	3 (27.3%)		
Total valid response		1 (100.0%)	9 (100.0%)	11 (100.0%)			
Total missing			4	6			
Eye examination - Optical Coherence Tomography	Yes		1 (100.0%)	11 (100.0%)	12 (92.3%)		

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
		Total valid numeric response (n)		1 (100.0%)	10 (90.9%)	11 (84.6%)
		Mean		0.0	39.2	35.6
		SD			114.5	109.3
		Median		0.0	3.5	3.0
		Min		0	1	0
		Max		0	365	365
		Total missing		0	3	6
	No					1 (7.7%)
	Total valid response			1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing				2	4
Eye examination - Fundoscopy	Yes			1 (100.0%)	10 (90.9%)	12 (92.3%)
		Total valid numeric response (n)		1 (100.0%)	10 (90.9%)	12 (92.3%)
		Mean		1.0	39.6	33.3
		SD			114.3	104.5
		Median		1.0	4.0	4.0
		Min		1	1	1
		Max		1	365	365
		Total missing		0	3	5
	No				1 (9.1%)	1 (7.7%)
	Total valid response			1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing				2	4
Eye examination - Fluorescein	Yes			1 (100.0%)	11 (100.0%)	12 (92.3%)

Type of Test	Yes/No	How often/year	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Angiography						
		Total valid numeric response (n)		1 (100.0%)	10 (90.9%)	11 (84.6%)
		Mean		0.0	30.9	28.1
		SD			94.6	90.2
		Median		0.0	1.0	1.0
		Min		0	0	0
		Max		0	300	300
		Total missing		0	3	6
	No					1 (7.7%)
	Total valid response			1 (100.0%)	11 (100.0%)	13 (100.0%)
	Total missing				2	4
Eye examination - Lipid check	Yes			1 (100.0%)	5 (55.6%)	7 (63.6%)
		Total valid numeric response (n)		1 (100.0%)	5 (55.6%)	7 (63.6%)
		Mean		2.0	2.6	2.4
		SD			1.9	1.6
		Median		2.0	4.0	2.0
		Min		2	0	0
		Max		2	4	4
		Total missing		0	8	10
	No				4 (44.4%)	4 (36.4%)
	Total valid response			1 (100.0%)	9 (100.0%)	11 (100.0%)
	Total missing				4	6

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	0 (0.0%)	1 (100.0%)	2 (20.0%)	4 (33.3%)
	Diet/nutrition	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (8.3%)
	Exercise/physical activity	0 (0.0%)	1 (100.0%)	1 (10.0%)	2 (16.7%)
	Medicines	0 (0.0%)	1 (100.0%)	3 (30.0%)	4 (33.3%)
	Blood pressure	0 (0.0%)	1 (100.0%)	2 (20.0%)	3 (25.0%)
	Eye care and exams	0 (0.0%)	0 (0.0%)	10 (100.0%)	11 (91.7%)
	Lipid check	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (8.3%)
	Total valid response	0	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

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%)	1 (100.0%)	6 (60.0%)	8 (66.7%)
	Yes, but information on eye complications is not sufficient	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total missing	0	0	3	5

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%)	0 (0.0%)	6 (60.0%)	7 (58.3%)
	Yes, available but not used by staff	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)
	Not available	0 (0.0%)	1 (100.0%)	1 (10.0%)	2 (16.7%)
	Don't know/Not sure	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

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%)	0 (0.0%)	6 (60.0%)	7 (58.3%)
	Yes, available but not used by staff	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Not available	0 (0.0%)	1 (100.0%)	3 (30.0%)	4 (33.3%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

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%)	5 (50.0%)	5 (41.7%)
	Mean			4.2	4.2
	SD			1.1	1.1
	Median			5.0	5.0
	Min			3	3
	Max			5	5
	After a predetermined age (numeric response) (n)		0 (0.0%)	0 (0.0%)	0 (0.0%)
	Mean				
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed		1 (100.0%)	5 (50.0%)	7 (58.3%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of initial eye exams for persons with diabetes - Type II?	After a predetermined number of years (numeric response) (n)		1 (100.0%)	0 (0.0%)	1 (8.3%)
	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%)
	Mean				
	SD				
	Median				
	Min				
	Max				
	As soon as they are diagnosed			10 (100.0%)	11 (91.7%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5

PT 2.15

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What is the protocol in your main practice for timing of follow-up eye examinations for persons with diabetes?	Once a year	0 (0.0%)	1 (100.0%)	8 (80.0%)	10 (83.3%)
	Other	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

PT 2.16

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Do you screen patients for DR?	Yes			8 (80.0%)	9 (75.0%)
	No		1 (100.0%)	2 (20.0%)	3 (25.0%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5
Where do you screen patients?	In clinic			8 (100.0%)	9 (100.0%)
	Total valid response			8 (100.0%)	9 (100.0%)
	Total missing		1	5	8

PT 2.17

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What patient characteristics influence your vision care and/or vision referrals?	Diabetes duration	0 (0.0%)	1 (100.0%)	8 (80.0%)	10 (83.3%)
	Patient's age	0 (0.0%)	1 (100.0%)	5 (50.0%)	6 (50.0%)
	Patient's gender	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)
	Presence of comorbidities such as hypertension, etc.	0 (0.0%)	0 (0.0%)	8 (80.0%)	9 (75.0%)
	High glucose levels	0 (0.0%)	1 (100.0%)	7 (70.0%)	9 (75.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Ability or inability to pay	0 (0.0%)	1 (100.0%)	0 (0.0%)	1 (8.3%)
	Patient adherence to recommendations	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)
	Not applicable	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Total valid response	0	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

PT 2.18

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
What are the major barriers to optimizing eye health faced by patients with diabetes in your main practice?	Cost of care	0 (0.0%)	1 (100.0%)	7 (70.0%)	8 (66.7%)
	Proximity to care	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Long wait time for appointment	0 (0.0%)	1 (100.0%)	4 (40.0%)	5 (41.7%)
	Long wait time on the day of visit	0 (0.0%)	1 (100.0%)	2 (20.0%)	3 (25.0%)
	Referral process	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Lack of knowledge and/or awareness	0 (0.0%)	0 (0.0%)	6 (60.0%)	6 (50.0%)
	Patients fear of treatment/results	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)
	Patients they are a burden on family/friends	0 (0.0%)	0 (0.0%)	2 (20.0%)	2 (16.7%)
	Patients feel eye complications are unlikely	0 (0.0%)	0 (0.0%)	3 (30.0%)	3 (25.0%)

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
	Patients feel eye exams are not important	0 (0.0%)	1 (100.0%)	5 (50.0%)	6 (50.0%)
	Clinic too small or lack necessary equipment/staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (8.3%)
	Total valid response	0	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

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%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

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, podiatrist?	Yes	0 (0.0%)	1 (100.0%)	9 (90.0%)	11 (91.7%)
	No	0 (0.0%)	0 (0.0%)	1 (10.0%)	1 (8.3%)
	Total Valid Response	0 (0.0%)	1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing	0	0	3	5

PT 3.1

Question	Response	Primary Care Provider	Diabetes Specialist Provider	Ophthalmologist	PAS
Please indicate your age:	30 - 39		1 (100.0%)	5 (50.0%)	7 (58.3%)
	40 - 49			3 (30.0%)	3 (25.0%)
	50 - 59			2 (20.0%)	2 (16.7%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5
What is your gender?	Female		1 (100.0%)	6 (60.0%)	8 (66.7%)
	Male			4 (40.0%)	4 (33.3%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5
What is your highest level of education completed?	College/University				1 (8.3%)
	Graduate or advanced degree (e.g. PhD, MD, etc)		1 (100.0%)	10 (100.0%)	11 (91.7%)
	Total valid response		1 (100.0%)	10 (100.0%)	12 (100.0%)
	Total missing			3	5

PT 4.1

Question	Response	Ophthalmologist
What percentage of your patients have diabetic retinopathy	Total valid numeric response (n)	9
	Mean	35.0
	SD	15.4
	Median	40.0
	Min	10
	Max	60

Question	Response	Ophthalmologist
	Total missing	4

PT 4.2

Question	Response	Ophthalmologist
What percentage of your patients have diabetic macular edema?	Total valid numeric response (n)	9
	Mean	14.1
	SD	10.0
	Median	10.0
	Min	5
	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	2 (22.2%)
	More than 1 week but less than 1 month	6 (66.7%)
	Six or more months	1 (11.1%)
	Total Valid Response	9 (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	2 (22.2%)
	There is not wait, diagnosis is given when screened	7 (77.8%)
	Total Valid Response	9 (100.0%)
	Total missing	4

PT 4.5

Type of Treatment	Question	Response/time	Ophthalmologist
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Type of Treatment	Question	Response/time	Ophthalmologist
Laser photocoagulation	Is the treatment available?	Available within country	5 (55.6%)
		Available locally	5 (55.6%)
		Available in practice	9 (100.0%)
		Total valid response	9 (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)	7 (87.5%)
		Mean	1.1
		SD	1.1
		Median	1.0
		Min	0
		Max	3
		Don't know/not sure	1 (12.5%)
		Total valid response	8 (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)	5 (83.3%)
		Mean	1.2
		SD	1.1
		Median	2.0
		Min	0
		Max	2
		Don't know/not sure	1 (16.7%)
		Total valid response	6 (100.0%)
		Total missing	7
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	5 (83.3%)
		Mean	3.6

Type of Treatment	Question	Response/time	Ophthalmologist
		SD	5.0
		Median	2.0
		Min	0
		Max	12
		Don't know/not sure	1 (16.7%)
		Total valid response	6 (100.0%)
		Total missing	7
Anti-VEGF therapies	Is the treatment available?	Available within country	5 (55.6%)
		Available locally	5 (55.6%)
		Available in practice	9 (100.0%)
		Total valid response	9 (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)	7 (87.5%)
		Mean	0.9
		SD	0.4
		Median	1.0
		Min	0
		Max	1
		Don't know/not sure	1 (12.5%)
		Total valid response	8 (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)	5 (83.3%)
		Mean	0.8
		SD	0.4
		Median	1.0
		Min	0

Type of Treatment	Question	Response/time	Ophthalmologist
	What is the average amount of time your patients wait for a second treatment?(weeks)	Max	1
		Don't know/not sure	1 (16.7%)
		Total valid response	6 (100.0%)
		Total missing	7
		Total valid numeric response (n)	5 (83.3%)
		Mean	2.8
		SD	2.9
		Median	1.0
		Min	0
		Max	6
		Don't know/not sure	1 (16.7%)
		Total valid response	6 (100.0%)
		Total missing	7
Intravitreal steroid	Is the treatment available?	Available within country	5 (55.6%)
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Available locally	5 (55.6%)
		Available in practice	9 (100.0%)
		Total valid response	9 (100.0%)
		Total missing	4
		Total valid numeric response (n)	7 (87.5%)
		Mean	0.9
		SD	0.4
		Median	1.0
		Min	0
		Max	1
		Don't know/not sure	1 (12.5%)

Type of Treatment	Question	Response/time	Ophthalmologist
	What is the average amount of time your patients wait for a first treatment?(weeks)	Total valid response	8 (100.0%)
		Total missing	5
		Total valid numeric response (n)	5 (83.3%)
		Mean	1.0
		SD	0.7
		Median	1.0
		Min	0
		Max	2
		Don't know/not sure	1 (16.7%)
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid response	6 (100.0%)
		Total missing	7
		Total valid numeric response (n)	5 (83.3%)
		Mean	6.0
		SD	8.5
		Median	1.0
		Min	0
		Max	20
		Don't know/not sure	1 (16.7%)
		Total valid response	6 (100.0%)
		Total missing	7
Uncomplicated vitrectomy	Is the treatment available?	Available within country	5 (55.6%)
		Available locally	5 (55.6%)
		Available in practice	9 (100.0%)
		Total valid response	9 (100.0%)
		Total missing	4

Type of Treatment	Question	Response/time	Ophthalmologist
	What is the average amount of time your patients wait for a consultation appointment? (weeks)	Total valid numeric response (n)	7 (100.0%)
		Mean	1.4
		SD	1.0
		Median	1.0
		Min	0
		Max	3
		Don't know/not sure	
		Total valid response	7 (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)	6 (85.7%)
		Mean	1.7
		SD	0.8
		Median	1.5
		Min	1
		Max	3
		Don't know/not sure	1 (14.3%)
		Total valid response	7 (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)	5 (71.4%)
		Mean	2.4
		SD	3.2
		Median	1.0
		Min	0
		Max	8
		Don't know/not sure	1 (14.3%)
		Not applicable	1 (14.3%)

Type of Treatment	Question	Response/time	Ophthalmologist
		Total valid response	7 (100.0%)
		Total missing	6
Complex vitreo-retinal surgery	Is the treatment available?	Available within country	5 (55.6%)
		Available locally	5 (55.6%)
		Available in practice	9 (100.0%)
		Total valid response	9 (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)
			7 (87.5%)
		Mean	1.6
		SD	1.0
		Median	2.0
		Min	0
		Max	3
		Don't know/not sure	1 (12.5%)
		Total valid response	8 (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)
			6 (85.7%)
		Mean	1.7
		SD	0.8
		Median	1.5
		Min	1
		Max	3
		Don't know/not sure	1 (14.3%)
		Total valid response	7 (100.0%)
		Total missing	6

Type of Treatment	Question	Response/time	Ophthalmologist
	What is the average amount of time your patients wait for a second treatment?(weeks)	Total valid numeric response (n)	5 (71.4%)
		Mean	2.4
		SD	3.2
		Median	1.0
		Min	0
		Max	8
		Don't know/not sure	1 (14.3%)
		Not applicable	1 (14.3%)
		Total valid response	7 (100.0%)
		Total missing	6

PT 4.6

Question	Response	Ophthalmologist
Do you personally administer treatment for diabetic retinopathy?	Yes	8 (88.9%)
	No	1 (11.1%)
	Total valid response	9 (100.0%)
	Total missing	4
Who administer it?	Another provider in your practice	1 (100.0%)
	Total valid response	1 (100.0%)
	Total missing	12

PT 4.7

Question	Response	Ophthalmologist
Do any of the following influence how you treat diabetic retinopathy or diabetic macular edema?	Diabetes duration	4 (50.0%)
	Patient's age	5 (62.5%)
	Presence of comorbidities such as hypertension, etc.	5 (62.5%)
	High glucose levels	4 (50.0%)

Question	Response	Ophthalmologist
	Ability or inability to pay	5 (62.5%)
	Insurance restrictions	3 (37.5%)
	Patient educational level	2 (25.0%)
	Patient adherence to recommendations	6 (75.0%)
	None of the above	1 (12.5%)
	Total valid response	8 (100.0%)
	Total missing	5

PT 4.8

Question	Response	Ophthalmologist
Do you treat diabetic retinopathy and diabetic macular edema based on:	Both	8 (100.0%)
	Other	0 (0.0%)
	Total Valid Response	8 (100.0%)
	Total missing	5

PT 4.9

Question	Response	Ophthalmologist
How are your patients with diabetes screened for diabetic eye disease?	Fundoscopy dilated	8 (100.0%)
	Retinal photo	4 (50.0%)
	Optical Coherence Tomography	2 (25.0%)
	Fluorescein Angiography	2 (25.0%)
	Total valid response	8 (100.0%)
	Total missing	5

PT 4.10

Question	Response	Ophthalmologist
In your opinion, do the majority of your patients present:	In time for screening	3 (37.5%)
	When visual problems have already occurred	4 (50.0%)
	Too late for effective treatment	1 (12.5%)

Question	Response	Ophthalmologist
	Total Valid Response	8 (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	8 (100.0%)
	No	
	Total valid response	8 (100.0%)
	Total missing	5
If yes, When was your last training?	Five or more years ago	3 (37.5%)
	Greater than 1 year ago but less than 5 years	2 (25.0%)
	Within the past year	3 (37.5%)
	Total valid response	8 (100.0%)
	Total missing	5

PT 4.12

Question	Response	Ophthalmologist
Would you be interested in online education and certification on DME, Angiogenesis and Anti-VEGF therapies?	Yes	4 (50.0%)
	No	4 (50.0%)
	Total Valid Response	8 (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	2 (25.0%)
	Health fairs for people with diabetes	5 (62.5%)
	Mobile screening centers	2 (25.0%)

Question	Response	Ophthalmologist
	Not done	2 (25.0%)
	Total valid response	8 (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	6 (75.0%)
	Late diagnosis	4 (50.0%)
	Referral pathways	1 (12.5%)
	Limited access to patient education on diabetic retinopathy and diabetic macular edema	5 (62.5%)
	No universal guidelines on referral/screening	2 (25.0%)
	Current available therapies not effective	2 (25.0%)
	Government/insurance not able to cover patient costs	3 (37.5%)
	Total valid response	8 (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?	Irritable bowel disease	3 (5.8%)	1 (14.3%)	4 (36.4%)
	Kidney disease	2 (3.8%)	2 (28.6%)	4 (36.4%)
	Vision loss	2 (3.8%)	4 (57.1%)	7 (63.6%)
	Foot ulcers	2 (3.8%)	0 (0.0%)	5 (45.5%)
	Amputation	3 (5.8%)	0 (0.0%)	2 (18.2%)
	Cardiovascular disease/Stroke	7 (13.5%)	0 (0.0%)	5 (45.5%)
	Broken bones or fractures	0 (0.0%)	0 (0.0%)	3 (27.3%)

Question	Response	Without DED (%)	With DED (%)	With DME (%)
	Loss of feeling in hands or toes (neuropathy)	1 (1.9%)	0 (0.0%)	4 (36.4%)
	Other	1 (1.9%)	0 (0.0%)	1 (9.1%)
	None	23 (44.2%)	2 (28.6%)	0 (0.0%)
	Don't know/Not sure	11 (21.2%)	0 (0.0%)	1 (9.1%)
	Total Valid Response	52 (100.0%)	7 (100.0%)	11 (100.0%)
	Total missing	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 2

Limitations	Without DED n (%)	With DED n (%)	With DME n (%)
Limited in any way in any activities because of impairment or health problem	14 (26.9%)	3 (42.9%)	6 (54.5%)
Impairment or health problem			
Diabetes	15 (83.3%)	2 (66.7%)	5 (83.3%)
Back or neck problem	11 (64.7%)	0 (0.0%)	5 (83.3%)
Mental or emotional health	9 (56.3%)	1 (33.3%)	3 (50.0%)
Eye/vision problem	9 (52.9%)	1 (33.3%)	4 (66.7%)
Hypertension/high blood pressure	8 (44.4%)	1 (33.3%)	5 (83.3%)
Fractures, bone/joint injury	5 (29.4%)	1 (33.3%)	2 (33.3%)
Walking problem	5 (27.8%)	1 (33.3%)	2 (33.3%)
Hearing problem	4 (22.2%)	1 (33.3%)	2 (33.3%)
Arthritis/rheumatism	3 (17.6%)	2 (66.7%)	3 (50.0%)
Heart problem	2 (11.8%)	0 (0.0%)	2 (33.3%)
Lung/breathing problem	2 (11.8%)	0 (0.0%)	1 (16.7%)
Stroke problem	1 (5.9%)	1 (33.3%)	2 (33.3%)
Cancer	0 (0.0%)	1 (33.3%)	1 (16.7%)

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]: 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	15 (30.0%)	2 (28.6%)	5 (45.5%)
Self-rated health: Poor	35 (70.0%)	5 (71.4%)	6 (54.5%)
Physically unhealthy days	25 (64.1%)	3 (60.0%)	6 (66.7%)
Mentally unhealthy days	18 (48.6%)	2 (40.0%)	4 (44.4%)
Unhealthy days	30 (78.9%)	3 (60.0%)	6 (66.7%)
Activity limitation days	13 (43.3%)	3 (75.0%)	5 (83.3%)

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

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

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

EXP 4

Item	Response	All respondents	Respondents with Type I diabetes	Respondents with Type II diabetes
How do you manage your diabetes?	Diet	48 (68.6%)	13 (61.9%)	30 (71.4%)
	Oral medicine	40 (57.1%)	12 (57.1%)	26 (61.9%)
	Exercise	41 (58.6%)	10 (47.6%)	28 (66.7%)
	Insulin	15 (21.4%)	6 (28.6%)	9 (21.4%)
	Natural/Herbal medicine	11 (15.7%)	2 (9.5%)	8 (19.0%)
	None of the above	3 (4.3%)	1 (4.8%)	2 (4.8%)

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	39 (75.0%)	4 (57.1%)	8 (72.7%)
	Working without pay at home (e.g. housework, farming)	2 (3.8%)	1 (14.3%)	1 (9.1%)
	Volunteering	0 (0.0%)	0 (0.0%)	1 (9.1%)
	Retired	5 (9.6%)	2 (28.6%)	0 (0.0%)
	Student	1 (1.9%)	0 (0.0%)	0 (0.0%)
	Not working	5 (9.6%)	0 (0.0%)	1 (9.1%)
	Total Valid Response	52 (100.0%)	7 (100.0%)	11 (100.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Do you receive assistance from the government?	Income assistance	4 (7.7%)	3 (42.9%)	5 (45.5%)
	Medical assistance	7 (13.5%)	2 (28.6%)	2 (18.2%)
	Food assistance	1 (1.9%)	0 (0.0%)	3 (27.3%)
	Housing assistance	3 (5.8%)	1 (14.3%)	2 (18.2%)
	Pension assistance	2 (3.8%)	0 (0.0%)	1 (9.1%)
	None of the above	40 (76.9%)	3 (42.9%)	5 (45.5%)
	Total valid response	52 (100.0%)	7 (100.0%)	11 (100.0%)
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	9 (17.6%)	5 (71.4%)	6 (54.5%)
	No	42 (82.4%)	2 (28.6%)	5 (45.5%)
	Total Valid Response	51 (100.0%)	7 (100.0%)	11 (100.0%)
	Total missing	1	0	0

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

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

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

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

EXP 5.2: Age group 18-39 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	7 (87.5%)	1 (50.0%)	3 (60.0%)
	Volunteering	0 (0.0%)	0 (0.0%)	1 (20.0%)
	Retired	0 (0.0%)	1 (50.0%)	0 (0.0%)
	Student	1 (12.5%)	0 (0.0%)	0 (0.0%)
	Not working	0 (0.0%)	0 (0.0%)	1 (20.0%)
	Total Valid Response	8 (100.0%)	2 (100.0%)	5 (100.0%)
Do you receive assistance from the government?	Income assistance	0 (0.0%)	1 (50.0%)	4 (80.0%)
	Medical assistance	1 (12.5%)	0 (0.0%)	2 (40.0%)
	Food assistance	1 (12.5%)	0 (0.0%)	1 (20.0%)
	Housing	0 (0.0%)	1 (50.0%)	2 (40.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
	assistance			
	Pension assistance	0 (0.0%)	0 (0.0%)	1 (20.0%)
	None of the above	6 (75.0%)	1 (50.0%)	1 (20.0%)
	Total valid response	8 (100.0%)	2 (100.0%)	5 (100.0%)
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	0 (0.0%)	2 (100.0%)	3 (60.0%)
	No	8 (100.0%)	0 (0.0%)	2 (40.0%)
	Total Valid Response	8 (100.0%)	2 (100.0%)	5 (100.0%)

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

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

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

EXP 5.3: Age group 40-59 years

Item	Response	Without DED (%)	With DED (%)	With DME (%)
Are you currently working?	Working for pay	30 (76.9%)	3 (75.0%)	5 (83.3%)
	Working without pay at home (e.g. housework, farming)	2 (5.1%)	1 (25.0%)	1 (16.7%)
	Retired	3 (7.7%)	0 (0.0%)	0 (0.0%)
	Not working	4 (10.3%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	39 (100.0%)	4 (100.0%)	6 (100.0%)
Do you receive assistance from the government?	Income assistance	4 (10.3%)	1 (25.0%)	1 (16.7%)
	Medical assistance	6 (15.4%)	1 (25.0%)	0 (0.0%)
	Food assistance	0 (0.0%)	0 (0.0%)	2 (33.3%)
	Housing assistance	3 (7.7%)	0 (0.0%)	0 (0.0%)
	None of the above	31 (79.5%)	2 (50.0%)	4 (66.7%)
	Total valid response	39 (100.0%)	4 (100.0%)	6 (100.0%)
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past	Yes	8 (21.1%)	2 (50.0%)	3 (50.0%)

Item	Response	Without DED (%)	With DED (%)	With DME (%)
year?				
	No	30 (78.9%)	2 (50.0%)	3 (50.0%)
	Total Valid Response	38 (100.0%)	4 (100.0%)	6 (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	2 (40.0%)	0 (0.0%)	0 (0.0%)
	Retired	2 (40.0%)	1 (100.0%)	0 (0.0%)
	Not working	1 (20.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	5 (100.0%)	1 (100.0%)	0 (0.0%)
Do you receive assistance from the government?	Income assistance	0 (0.0%)	1 (100.0%)	0 (0.0%)
	Medical assistance	0 (0.0%)	1 (100.0%)	0 (0.0%)
	Pension assistance	2 (40.0%)	0 (0.0%)	0 (0.0%)
	None of the above	3 (60.0%)	0 (0.0%)	0 (0.0%)
	Total valid response	5 (100.0%)	1 (100.0%)	0
	Total missing	0	0	0
Did you have trouble paying for food at anytime during the past year?	Yes	1 (20.0%)	1 (100.0%)	0 (0.0%)
	No	4 (80.0%)	0 (0.0%)	0 (0.0%)
	Total Valid Response	5 (100.0%)	1 (100.0%)	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 5.5: Age group 80+ years

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

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

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

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

EXP 6

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
All respondents		70 (100%)	21 (30.0%)	42 (60.0%)	7 (10.0%)	11 (15.7%)
Gender	Male	50 (71.4%)	16 (32.0%)	30 (60.0%)	4 (8.0%)	7 (14.0%)
	Female	20 (28.6%)	5 (25.0%)	12 (60.0%)	3 (15.0%)	4 (20.0%)
Age	18-39 yrs	15 (21.4%)	5 (33.3%)	8 (53.3%)	2 (13.3%)	5 (33.3%)
	40-59 yrs	49 (70.0%)	11 (22.4%)	33 (67.3%)	4 (8.2%)	6 (12.2%)
	60-79 yrs	6 (8.6%)	5 (83.3%)	1 (16.7%)	1 (16.7%)	0 (0.0%)
Time since diagnosis	Within the last year	10 (14.3%)	1 (10.0%)	8 (80.0%)	0 (0.0%)	2 (20.0%)
	1 - 5 years ago	26 (37.1%)	8 (30.8%)	13 (50.0%)	1 (3.8%)	4 (15.4%)
	6 - 10 years ago	21 (30.0%)	6 (28.6%)	14 (66.7%)	2 (9.5%)	2 (9.5%)
	11 - 15 years ago	6 (8.6%)	2 (33.3%)	4 (66.7%)	1 (16.7%)	2 (33.3%)
	16 - 20 years ago	3 (4.3%)	2 (66.7%)	1 (33.3%)	2 (66.7%)	0 (0.0%)
	21 years ago or longer	2 (2.9%)	1 (50.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)
	Don't know/Not sure	2 (2.9%)	1 (50.0%)	1 (50.0%)	1 (50.0%)	0 (0.0%)
Control of Diabetes	Controlled	44 (62.9%)	13 (29.5%)	28 (63.6%)	4 (9.1%)	9 (20.5%)
	Not controlled	25 (35.7%)	7 (28.0%)	14 (56.0%)	2 (8.0%)	2 (8.0%)
	Don't	1 (1.4%)	1 (100.0%)	0 (0.0%)	1	0 (0.0%)

Group	Subgroup	All respondents	Type 1 diabetes	Type 2 diabetes	With DED (%)	With DME (%)
	know/Not sure				(100.0%)	

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

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

NB [3]: Percentages within groups are calculated from non-missing data for that question.

EXP 7

Question	Response	With DED n (%)	With DME n (%)
Have you had any treatment for diabetic eye disease?	Yes	4 (57.1%)	7 (87.5%)
	No	2 (28.6%)	1 (12.5%)
	Don't know/Not sure	1 (14.3%)	0 (0.0%)
	Total valid response	7 (100.0%)	8 (100.0%)
	Total missing	0	3
What treatment did you receive?	Laser	4 (100.0%)	5 (71.4%)
	Anti-VEGF	2 (50.0%)	5 (71.4%)
	Surgery	3 (75.0%)	3 (42.9%)
	Other	0 (0.0%)	2 (28.6%)
	Total valid response	4 (100.0%)	7 (100.0%)
	Total missing	3	4
Did you complete the treatment?	Yes	4 (100.0%)	5 (71.4%)
	Still receiving treatment	0 (0.0%)	2 (28.6%)
	Total valid response	4 (100.0%)	7 (100.0%)
	Total missing	3	4
Do you feel that the treatment worked?	Yes, and vision improved	2 (50.0%)	3 (42.9%)
	Yes, but vision stayed the same	2 (50.0%)	3 (42.9%)
	No	0 (0.0%)	1 (14.3%)
	Total valid response	4 (100.0%)	7 (100.0%)
	Total missing	3	4
What is/are the reason(s) that you did not complete the treatment?	Total valid response	0 (0.0%)	0 (0.0%)
	Total missing	7	11

Question	Response	With DED n (%)	With DME n (%)
What are the reason(s) that you have not had treatment for diabetic eye disease?	Too expensive	2 (100.0%)	1 (100.0%)
	Total valid response	2 (100.0%)	1 (100.0%)
	Total missing	5	10

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

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

NB [3]: Percentages within groups are calculated from non-missing data for that question.

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