

Supplemental Table S1. Text of each barrier item to referral after telescreening for diabetic retinopathy in the cross-sectional survey

Barriers to referral	Text of survey items
<i>Knowledge- and Attitude-related Factors</i>	
Distrust the recommended hospital	I trust the recommended superior hospital.
Fear of examination and treatment	I am afraid of ophthalmologic examination and treatment (e.g. fundus fluorescein angiography, retinal photocoagulation or surgery).
Difficulty in getting time to referral	My life is too busy for going to the hospital.
Too much trouble to see an ophthalmologist in a superior hospital	It is too much trouble to see an ophthalmologist in a superior hospital.
My eyes are okay	My eyes are very ill.
No serious illness need treatment at present	I don't think there is any serious illness for treatment at present.
Too old to need any more treatment	I'm old, and I don't want any more treatment.
Good eyesight in the other eye	If one eye can see, I don't think it's necessary to see a doctor immediately.
No effective treatment for diabetic retinopathy at present	I think there is no effective treatment for diabetic retinopathy at present.
<u>Depression</u>	Over the past 4 weeks I have felt blue, downhearted, or depressed.
Have been diagnosed or treated before telescreening	Before participated the screening, I had seen an eye doctor.
No response to previous treatment	I have been treated for diabetic retinopathy, but it didn't work.
<i>Logistics-related Factors</i>	
Financial difficulties	I can't afford the cost of ophthalmic examination or treatment.
Mobility or <u>transportation</u> difficulties	It is hard for me to travel to an eye doctor.
Lack of an escort	No one can accompany me to see an eye doctor.

Question:

We are interested in why some people do not referral to the superior hospitals.

Can you think of the main reason for the incomplete referral?

Supplemental Table S2. Associations between incomplete referral and the number of significant barriers experienced by the participants

Number of significant barriers to referral	Experiencing		Not experiencing		OR (95% CI)	P Value
	Total (%)	Incomplete referral (%)	Total (%)	Incomplete referral (%)		
≥ 1	2973 (89.3)	1140 (48.4)	358 (10.7)	99 (27.7)	2.46 (1.93-3.13)	<0.001
≥ 2	2021 (60.7)	1124 (55.6)	1310 (39.3)	415 (31.7)	2.70 (2.34-3.13)	<0.001
≥ 3	1036 (31.1)	680 (65.6)	2295 (68.9)	859 (37.4)	3.20 (2.74-3.72)	<0.001
≥ 4	389 (11.7)	265 (68.1)	2943 (88.3)	1274 (43.3)	2.80 (2.23-3.51)	<0.001
≥ 5	116 (3.5)	85 (73.3)	3215 (96.5)	1454 (45.2)	3.32 (2.19-5.04)	<0.001

≥ 6	17 (0.5)	13 (76.5)	3314 (99.5)	1526 (46.0)	3.81 (1.24-11.70)	0.012
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Figure legends

Supplemental Figure S1. The study process of the Shanghai Diabetic Eye Study

DR, diabetic retinopathy; NPDR, mild non-proliferative diabetic retinopathy; DME, diabetic macular edema

Supplemental Figure S2. Categorization of substantive responses to the main barrier to the referral in participants with incomplete referrals (N=1,368)