Appendix 2. Exploring GP opinion on the potential protective effect of a GP contact Semi-structured survey

A semi-structured survey was used to explore the opinions of GPs on the existence and duration of the temporal protective effect of a GP consultation. The protective effect was defined as the duration of time following a GP consultation that people with diabetes would be expected to have a lower risk of hospitalisations and complications. The results were used to inform the empirical analysis.

Participants and procedures

This study used a cross-sectional survey design conducted among a convenience sample of GPs currently practising in Australia between September 2017 and April 2018. Participants were primarily recruited through key contacts from the project steering panel and Western Australian Primary Health Alliance. Additional recruitment was carried out at GP panel meeting events. To be eligible for the study the participants had to be currently practising GPs with experience of diabetes management. The participants were offered the choice of answering the survey either online using the Curtin Qualtrics platform or via a paper version. Information about the study and a consent form were included with the survey. All surveys were coded and were free of identifying personal information to maintain confidentiality for participants.

Measures

This survey consisted of four main parts including:

1)   Participants' practice experience with patients with diabetes which collected information regarding years in practice, frequency of encounters with patients with diabetes, and experience with diabetes management.

2)   Self-ratings on belief in the time protective effect following a GP consultation for people with diabetes.

4) Estimations of the duration of the protective effects of a GP consultation for people with diabetes exhibiting several different characteristics; *i.e.* types of complications (macrovascular complications and microvascular complications), and complication status (no complication, one or two complications or multiple complications).

All the questions were designed on a six-point Likert scale with open-ended possibilities for participants to add comments. Prior to conducting the survey, the questionnaire was reviewed by a separate cohort of GPs and researchers in the field and revised according to their feedback.

Data management and analysis

Responses to the online survey were saved via the Qualtrics program and then downloaded and saved as an Excel file. The responses to the paper-based version were also entered into Excel. All data were stored and handled according to Curtin University guidelines.

A simple descriptive analysis was conducted to provide a summary of frequency of GPs' responses to the options for each section. Any responses entered in the open-ended sections were entered in separate columns and presented in quote marks. These results were then used to inform the empirical analyses.

Semi-structured survey results

A total of 16 out of 42 potential participants (38%) responded to the survey. Each respondent had been practising as a GP for an average of 17 years, with 14 practising in Australia for at least five years and only two practising for two or three years. Most participants reported providing services frequently for people with diabetes. Eight out of 16 GPs reported every day; 4 out of 16 reported once a week; 3 out of 16 reported once a month and none reported rarely or never. GPs reported that they sometimes (2/16); often (6/16) or always (8/16) discussed care plans with diabetes patients. The majority of GPs (13/16) rated that proactively planning follow-up

care for patients with diabetes would be extremely important or very important, while others

rated it moderately important or slightly important (3/16) and none responded with low or not

important ratings (Table 2A.1).

Most (15/16) respondents believed that a GP consultation would have a temporary protective

effect against the risk of hospitalisations or development of complications for people living with

diabetes

(Table 2A.2). However, this was rated from very true (3/16) to true (6/16) and somewhat true

(6/16). One participant who replied 'somewhat true' expanded in a comment: '*Depending if it*

was a routine surveillance consult which would give a longer temporal potential effect or an

emergency consult for cellulitis which might mean that I refer them [to] hospital immediately'.

Table 1A.1. GP practising experience with diabetes patients

Characteristics	Frequency (N=16)	Percentage (%)
How many years have you been practising as a GP?		
Under 5 years	2	12.5
5 years or more	14	87.5
How often do you see patients with diabetes in the last two years?		
Every day	8	50.0
Every week	4	25.0
Every month	3	17.7
Rarely	1	6.3
Do you discuss a care plan with patients with diabetes?		
Always	7	43.7
Very often	6	37.5
Sometimes	3	18.7
How do you rate the importance of proactively planning follow-up care for patients with diabetes in maintaining their health and well-being?		
Extremely important	11	68.7
Very important	2	12.5
Moderately important	2	12.5
Slightly important	1	6.3

Table 1A.2. GP's beliefs regarding the temporal protective effect of a GP consultation

GPs' believe	Do you believe that GP consultation would have 'time limited/temporal protective effect' following GP consultation on reducing potentially preventable hospitalisation for people with diabetes					
	Very true	True	Somewhat true	Somewhat untrue	Untrue	Not what I believe
N (%)	3 (18.7)	6 (37.5)	6 (37.5)	1 (6.2)	0 (0.0)	0 (0.0)

Fifty percent of GPs (8/16) believed that the temporal protective effect following a GP consultation would be about 10 to 12 months for diabetes without complication, while the other 50% of participants believed it would be shorter (varying between 1 to 7 months). For diabetes with one or two complications, GPs' responses were less consistent. Among 16 participants, three estimated about 8 to 9 months, 5 estimated 6 to 7 months, 5 estimated 2 to 3 months, while 3 respondents believed that the protective effect would be less than a month. For diabetes with three or more complications, the majority (8/16) believed that the temporal protective effect would be one month or less, others believed it would be 2 to 7 months (6/16) and 8 to 9 months (1/16) (Table 2A.3).

Table 1A.3. GPs' estimation of the temporal protective effect by clinical conditions

GP's estimation	Length of the temporal protective effect of a GP consultation					
	1 month or less	2 - 3 months	4-5 months	6-7 months	8-9 months	10-12 months
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Diabetes with NO complication	4 (25.0)	1 (6.2)	2 (12.5)	1 (6.2)	0 (0.0)	8 (50.0)
Diabetes with 1 or 2 complications	3 (18.8)	5 (31.2)	0 (0.0)	5 (31.2)	3 (18.8)	0 (0)
Diabetes with 3 or more complications	8 (50.0)	2 (12.5)	2 (12.5)	2 (12.5)	1 (6.2)	1 (6.2)