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Journal article

Prioritisation of diabetes-related footcare amongst primary care healthcare professionals

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TITLE: Prioritization of diabetes-related footcare amongst primary care healthcare professionals

RUNNING HEAD: Prioritization of diabetes-related footcare

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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Abstract

Aims and objectives: To assess primary healthcare professionals' priority for managing diabetic foot disease (DFD) over the progressive course of the condition compared to other aspects of diabetes care.

Background: DFD affects up to 60 million people globally. Evidence suggests that comprehensive preventative footcare may reduce serious complications of DFD, such as amputation.

Design: A cross-sectional quantitative study, reported according to STROBE statement.

Methods: General Practitioners (GPs) and Credentialed Diabetes Educators (CDEs) working within Australian primary care were invited to complete an online survey, to obtain information about preventative and early intervention footcare priorities and practices. Ten GPs and 84 CDEs completed the survey.

Results: On diagnosis of type 2 diabetes, haemoglobin A1c (HbA1c) review was identified to be one of the top three priorities of care by 57 (61%) of participants while at 20-year history of diabetes 73 (78%) participants indicated its priority. Foot assessments became a priority for 78% (n=73) of participants and podiatry referrals a priority for 53% (n=50) of participants only when a 'foot concern' was raised. Referrals to specialist high risk foot podiatrists or services was a first priority for 56% (n=53), when the person had significant amputation risk factors.

Conclusion: Diabetes-related preventative footcare assessments and management remain a low priority amongst primary healthcare professionals. Preventative care for asymptomatic complications, such as DFD, may be overlooked in favour of monitoring HbA1c or medication management. Limited prioritization of footcare in primary care is concerning given the risks for amputation associated with DFD.

Relevance to clinical practice: This study reveals the need for primary healthcare decision makers and clinicians to ensure preventative footcare is a focused priority earlier in the diabetes care continuum. Collaborative and widespread promotion of the importance of proactive rather than reactive footcare practices, is required to support prevention of foot ulcers and amputation.

Keywords

Australia, diabetes, foot, footcare, prevention, ulcer, diabetic foot disease, priority.

Introduction

With global diabetes prevalence anticipated to rise from 463 million adults to 700 million in 2045 (International Diabetes Federation, 2019), the burden of diabetes and its complications on individuals, healthcare services and the economy continues to grow (Australian Institute of Health and Welfare, 2019). Diabetic foot disease (DFD) is one complication of diabetes, affecting 40 to 60 million people globally (International Diabetes Federation, 2020). DFD is generally associated with peripheral neuropathy (microvascular complication) and peripheral vascular disease (macrovascular complication). The incidence of peripheral neuropathy ranges from 15-66% (Bus & van Netten, 2016; Tesfaye, 2010; Boulton, 2000). Neuropathy leads to loss of protective sensation and may cause abnormal mechanical stress on the foot with atypical loading or minor trauma increasing the risk of foot ulceration seven-fold (Schaper et al., 2020; Pradhan, Nabzdyk, Andersen, LoGerfo & Veves, 2009). Peripheral vascular disease has been reported to be present in up to 50% of people with a diabetes-related foot ulceration, impeding wound healing (Schaper et al., 2020). Between 19% and 34% of people with diabetes will develop a foot ulcer in their lifetime (Armstrong, Boulton & Bus, 2017) and up to 85% of all diabetes-related lower limb amputations are preceded by an ulcer (Boulton, 2014). A study of 6,436 people with diabetes attending Australian diabetes care services found 4.9% (n=319) had foot ulceration, 7.3% (n=469) peripheral vascular disease, 19% (n=1208) peripheral neuropathy and 2.7% (n=171) lower limb

amputation over the previous 12 months (Australian Government Department of Health, 2019). In developed countries, approximately 2% of people with diabetes experience foot ulceration annually, and about 1% have a lower-limb amputation (Bobirca, Mihalache, Georgescu & Patraacu, 2016; Lazzarini et al., 2015).

In England alone, DFD cost between £837 million and £962 million in 2014-2015 (Kerr, et al., 2019). It has been reported that the cost of an amputation in developed countries ranges between \$35,000 and \$45,000 (Petraakis, Kyriopoulos, Ginis & Athanasakis, 2017), which does not take into consideration social and psychological economics. With up to 90% of people with diabetes being unaware that they have neuropathy (Bongaerts, 2013) there is a need for primary healthcare professionals to be opportunistic and proactive in the assessment and management of DFD. Conducting routine foot assessments, risk stratification, and providing footcare education and appropriate footwear are central to DFD prevention in primary care (Bus et al., 2020).

Background

The International Diabetes Federation (IDF) promotes the need to shift focus from treating diabetes-related foot ulcers to preventing them (IDF, 2017). However, limited time during patient-General Practitioner (GP) consultations may result in foot assessments being overlooked, as macrovascular complications and HbA1c monitoring are the primary focus in busy practices (Clayton-Jones, 2015; Lavery, Wunderlick & Tredwell, 2005). In a United States national study of practicing podiatric physicians (n=843), 65% of participants agreed or strongly agreed that other pressing issues take priority ahead of behavioural counselling and foot self-care education due to time limitations and a lack of reimbursed time (Tinloy, Kaul, Ulbrecht, Schaefer & Gabby, 2014). A survey of 425 healthcare professionals attending a diabetic foot masterclass in the United Kingdom, found that 21% (n=89) considered time availability to be insufficient to provide people with diabetes with the footcare required (Pankhursts & Edmonds, 2018).

Varying rates of foot screening have been reported in primary care (Davies, 2014). A study of 94 primary care clinicians found that just 45% of participants remove the socks and shoes of their patients with diabetes at a consultation (Mullan, Wynter, Driscoll & Rasmussen, 2020). Another study involving 46 primary care nurses identified that 100% had not received education on diabetes-related foot assessments in

their nursing training and 80% were not confident in conducting such assessments (Lakha & Lee, 2018).

The grave impact of DFD on individuals, the healthcare system and the economy support the need to ensure preventative footcare actions are a priority amongst primary care clinicians (Houtum, 2012). However, the prioritization of footcare amongst primary care health professionals, in comparison to other facets of diabetes care, has not been ascertained.

This study therefore aimed to assess priorities for managing diabetes-related foot disease compared to other aspects of care required during a diabetes consultation, over the progressive course of the condition.

Methods

This cross-sectional study of GPs and Credentialed Diabetes Educators (CDEs) occurred between April and May 2019 and was approved by an endorsed human ethics advisory group. The study is reported in accordance with Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist (von Elm et al., 2008). Data collection occurred through a survey hosted on Qualtrics (Qualtrics.^{XM}, 2019, Utah), an online survey platform, and consent to participate was implied by survey completion and submission. Participants were advised that the survey was voluntary and anonymous.

Survey instrument

A 46-item investigator-initiated survey was developed based on a combination of validated and study-specific questions (Appendix 1). Demographic information was collected to enable the sample group to be described and ensure eligibility of participants.

The first author was an experienced primary care CDE, bringing experience and understanding to concepts reported. However, the importance of reflexivity was acknowledged. In order to mitigate potential sources of bias, hypothetical clinical scenarios were developed by a team which included two senior High-Risk Foot Service (HRFS) podiatrists, a HRFS endocrinologist and a GP with a special interest in diabetes. In addition, the completed survey tool was piloted by one CDE working in primary care and two GPs who provided feedback on feasibility, content and face validity of the survey tool. Minor amendments were made based on this review.

The clinical scenarios were presented to participants with the aim to assess and understand priorities and knowledge of footcare. In each clinical scenario, participants were asked to identify and rank their top three priorities of care, by placing the number 1 next to their highest priority, the number 2 next to their second highest priority and the number 3 next to their third highest priority. The scenarios included: (S1) consulting with a person at initial diagnosis of type 2 diabetes, (S2) consulting with a person with a 20-year history of diabetes, (S3) consulting with a person with diabetes who reported 'tingling' in their feet, (S4) consulting with a person with diabetes who reported a 'small cut' on their foot, (S5) on conducting a full foot assessment on a person with diabetes, evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter is found.

Setting and participants

A sample size of 30 to 40 participants was projected prior to recruitment, to enable the sample to be stratified by rural versus metropolitan participants in future phases of research. Given the exploratory nature of the study, no power calculations were conducted. Eligible participants for the survey were GPs and CDEs employed within Australian primary healthcare settings, at a minimum full time equivalent of >0.2 (one day per week), and who had been consulting with people with diabetes for more than 12 months. GPs and CDEs invited to participate in the study worked in community-based primary care health services.

In Australia, a GP is defined as a person with a medical degree and registered as a medical practitioner through the Medical Board of Australia. General practice is medical speciality, with entry to the specialty achieved by admission to the Royal Australian College of General Practitioners (RACGP) (RACGP, 2020). GPs are often the first point of contact for personal health matters (RACGP, 2020), with 81.8% of Australians seeing their GP in 2016-17 (AIHW, 2018).

A CDE is defined as a person who is registered by the Australian Diabetes Educator Association (ADEA) as a Credentialed Diabetes Educator (Australian Diabetes Educator Association, 2018¹). To become a CDE, an individual needs to be a registered medical practitioner, nurse, midwife, pharmacist, podiatrist, physiotherapist, accredited dietitian or exercise physiologist. Further, the healthcare professional must have completed a Graduate Certificate in diabetes education and management at university level and 1,000 hours clinical practice in diabetes education (Australian

Diabetes Educator Association, 2018²). Of the 1,500 CDEs in Australia, just over 80% are registered nurses.

Procedure

Convenience sampling was employed, with invitations to participate being dispersed to GPs and CDEs, through diabetes healthcare professional organisations' email subscriber lists. The invitation to participate was sent to approximately 6,897 email addresses. It is anticipated that across five healthcare professional organisation's email subscriber lists, some duplication may have occurred. It is not known how many eligible participants received the invitation e-mail. The survey remained open for a period of four weeks. Two weeks after the initial invitation, the subscriber lists from the same organisations were sent email reminders. The numbers of individuals at each stage of recruitment are outlined in Appendix 2.

Data analysis

Data were analysed using IBM SPSS Statistics 25 (IBM Corp, Armonk, NY, USA) IBM Corp, Armonk, NY, USA). Demographic variables were not controlled for these analyses, due to the small number of participants in some of the subgroups. Descriptive statistics including frequencies and percentages were used to summarise data, reporting numbers and percentages. To investigate whether participants' rankings of priorities change across the continuum of scenarios, Wilcoxon Signed Rank tests for related samples were used to assess changes in priorities across subsequent pairs. To reduce the risk of type 1 errors, we chose seven predetermined pairs, as follows: priority of foot assessments S1 versus S2 and S2 versus S3; priority of private podiatry referrals S1 versus S2 and S2 versus S3; priority of specialist tertiary diabetic foot clinic referrals S2 versus S3 and S4 versus S5; priority of referrals to HRFS podiatrists S4 versus S5. A minimum significance level of $p < 0.050$ was chosen to indicate statistical significance throughout the data analysis. As participants ranked aspects of diabetes care from first to third priority only (1, 2 or 3), blank and misnumbered (with a number other than 1, 2 or 3) variables were replaced with the number 4 using SPSS syntax commands.

Results

Demographic characteristics

Ninety-four participants were eligible for the study and completed the survey; including ten GPs and 84 CDEs. Over a third of the participants, including all of the GPs, had been working with people with diabetes for over 15 years. Over 51% of participants identified their primary care practice setting to be in a rural area, defined as centres with a population of <100,000 people. Table 1 displays the general demographic information for all eligible participants.

Priorities of care

Appendix 3 provides all results, identifying the number and percentage of participants who identified an aspect of diabetes care to be a first, second or third priority, in various clinical scenarios.

Lifestyle education was one of the top three priorities for the majority (86%, n=81) of participants in S1. This proportion decreased across the remaining four scenarios. Emotional and psychological health assessment was identified to be a priority of care for 23% (n=23) of participants in S1. The number of participants indicating this assessment to be a priority decreased in the remaining four scenarios (Table 2). At diagnosis, HbA1c review (blood glucose management) was considered to be one of the top three priorities of care by 61% (n=57) of participants. This increased to 78% (n=73) of participants indicating its priority in S2. When a foot concern was raised, as in S3, S4 and S5, HbA1c review decreased in priority, indicated by 57% (n=54), 38% (n=36) and 34% (n=32) of healthcare professionals respectively (Table 2).

When a healthcare professional consulted with a person with a 20-year history of diabetes, medication review and diabetes self-management assessment were both indicated to be priorities of care by over 50% of participants. More participants indicated medication review and self-management assessment to be a priority in S2, compared to S1 (Table 2). Self-management assessment was also indicated to be a priority of care amongst healthcare professionals in S3, S4 and S5, by 31% (n=29), 32% (n=30) and 27% (n=25) of participants respectively (Table 2).

The data indicate that prior to a potential diabetes-related foot complication being reported (S1 and S2), few participants (up to n=17) indicated foot assessments, referrals to private and HRFS podiatrists and referrals to specialist tertiary diabetic foot clinics to be one of the top three priorities of care (Figure. 1). With longer diabetes duration however, the priority of foot assessments and referrals to private podiatrists increased (Table 2). A Wilcoxon Signed Rank Test revealed a statistically significant

increase in the priority of both foot assessments and private podiatry referrals at a 20-year duration of diabetes, compared to initial diagnosis ($p = 0.032$ and $p = 0.024$ respectively).

Once a foot complication had been reported, as in S3 and S4, conducting a full foot assessment (neurological, pulses, risk rating) increased in priority for the majority (up to 78%, $n=73$) of participants (Table 2). Similarly, the priority of private podiatry referrals increased from 5.3% ($n=5$) of participants indicating its priority in S2 to over 50% ($n=50$) of participants in S3 and 37% ($n=35$) in S4 (Fig. 1). Referrals to podiatrists at specialist HRFS and to specialist tertiary diabetic foot clinics also increased in priority from S2 to S3 (Table 2 and Fig. 1). There was a statistically significant increase in the priority of foot assessments, private podiatry referrals and specialist tertiary diabetic foot clinic referrals on consultation with a person with reported 'tingling in feet', compared to consulting with a person with a 20-year history of diabetes ($p<0.001$, $p<0.001$ and $p=0.026$ respectively).

When consulting with a person with diabetes and a foot wound, wound care was identified to be a priority by 34% ($n=32$) of participants in S4 and 35% ($n=33$) in S5. Further when consulting with a person with significant diabetes-related foot risk factors (S5), including evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter, 49% ($n=46$) of participants indicated that referral to a podiatrist at a HRFS was one of their top three priorities of care, with 39% ($n=37$) indicating that this was their first priority (Table 3). An additional 17% ($n=16$) of participants indicated that their first priority would be to refer the patient to a tertiary diabetic foot clinic (Table 3). Wilcoxon Signed Rank Tests revealed a statistically significant increase in the priority of referrals to HRFS podiatrists and specialist tertiary diabetic foot clinics from S4 to S5 ($p<0.001$ for both). Eleven (12%) participants indicated referral to a podiatrist at a HRFS and four (4.3%) indicated referrals to a specialist tertiary diabetic foot clinic to be priorities in S4, compared to 46 and 28 in S5, respectively.

Discussion

This study found that diabetes-related footcare amongst primary care healthcare professionals is of lower priority than other aspects of diabetes care which warrants concern that the risk of resultant acute diabetes-related foot complications may increase. This study explored the priorities for managing DFD amongst Australian primary care healthcare professionals. On initial diagnosis, lifestyle education, HbA1c review and

self-management assessment were the highest priorities of care. Similarly, at a 20-year history of diabetes, HbA1c review, medication review and self-management assessment were reported to be the top priorities of care. This research does not aim to undermine the value of lifestyle education, medication review, self-management assessment or HbA1c testing, nor argue against HbA1c as a necessary measure to assess the effectiveness of diabetes self-management strategies and pharmaceutical interventions. The focus on HbA1c review, as a priority of care within this study, does however, clearly support previous research, such as Guell & Unwin's findings (2015), which stated that prioritisation of glycaemic control eclipses preventative footcare actions and acts as a potential barrier to footcare provision.

Within Australia, the 2018 ANDA audit involving 4,856 people with diabetes found that 43% had not seen a podiatrist in the last year (Australian Government Department of Health, 2018). It is suggested that this may be related to the prioritisation of the other facets of diabetes care. An American study involving 843 doctors of podiatric medicine supported this proposition, with 65% of participants 'agreeing' or 'strongly agreeing' that other important issues are attended to before footcare (Tinloy et al., 2014).

In addition, this study found that, preventative footcare actions, such as foot assessments and referrals to podiatry were not reported to be priorities of care unless a foot complication had been reported (Tinloy et al., 2014). Harrison-Blount, Cullen, Nester and Williams (2014) identified that routine foot examinations were not conducted, due to time restraints and resource limitations, unless the patients themselves drew attention to a foot problem. Whilst it is encouraging that footcare actions such as wound care, foot assessments, referrals to podiatry and specialist tertiary diabetic foot clinics became higher priorities for healthcare professionals in the presence of acute diabetes-related foot complications, the International Working Group of the Diabetic Foot (IWGDF) promotes preventative strategies to support footcare and prevent ulcerations (Bus et al., 2020). The guideline on the prevention of foot ulcers recommends annual foot assessments for people at low risk of foot ulceration and more frequent assessments for those at higher risk (Bus et al., 2020). Further, the value of providing education to the person with diabetes about foot self-management and self-care has been identified as a fundamental element of foot ulcer prevention (Bus et al, 2016).

The IDF and IWGDF report that comprehensive foot assessments and care, founded on education, prevention and a multidisciplinary approach, have the potential to reduce foot complications and amputations by up to 85% (International Diabetes Federation, 2017; Bus et al, 2015). Fortunately, within Australia, a strong system of universal healthcare provides early access to medical treatment, subsidised medications and affordable referral to allied health professionals. However, even amongst healthcare professionals with extensive experience in diabetes care, delivery of best practice diabetes-related footcare in primary care is inconsistent (Mullan, Wynter, Driscoll & Rasmussen, 2020). Barriers to footcare have been identified to be multifaceted, including geographical, administrative and communication limitations, referral and care guideline unavailability and implementation challenges, and limited human, service, equipment and funding resources (Mullan, Driscoll, Wynter, Rasmussen, 2019). Therefore, there is a need to support preventative footcare delivery and provision, by raising awareness of its priority in diabetes care amongst primary care healthcare professionals and addressing the barriers to footcare provision.

Strengths and limitations

To the authors' knowledge this is the first study to examine the priorities of care throughout the diabetes care continuum, with a focus on exploring the prioritisation of footcare, amongst GPs and CDEs in primary care.

With seven pairs of rankings compared using Wilcoxon Signed Rank Tests, there is a risk of false positives. Applying the Bonferroni adjustment, the significance value would change to $p < 0.010$. In this instance differences in four of the seven pairs tested remain statistically significant, namely priority of foot assessments S2 versus S3; priority of private podiatry referrals S2 versus S3; priority of specialist tertiary diabetic foot clinic referrals S4 versus S5; priority of referrals to HRFS podiatrists S4 versus S5.

The sample size is a limitation of the study and as such findings cannot be generalised for the population. In addition, use of convenience sampling methods may mean participants are not representative of the population. Recruitment through diabetes healthcare professional organisations may provoke sampling bias, with those interested in diabetes and footcare more likely to participate in the study. Further, use of a non-validated survey tool decreases the validity and reliability of the findings. The questionnaire was however reviewed and informed by diabetes foot care experts to ensure content validity.

Conclusion

This study provides insight into the priorities of diabetes care amongst healthcare professionals in primary care in Australia. Findings indicate that diabetes-related footcare becomes a priority of care in the presence of a foot complication, as opposed to pre-complication. Focus on glycaemic control, lifestyle intervention and self-management assessment overshadow preventative footcare actions. Preventative diabetes-related footcare should be a focussed priority of care among primary care healthcare professionals early in the diabetes care continuum. Collaborative and widespread promotion of this message is required to support prevention of foot ulcers and amputation.

Relevance to clinical practice

The current study identified preventative footcare assessments and management to be of low priority amongst primary healthcare professionals consulting with people with diabetes, in comparison to other facets of diabetes care. People with diabetes, practice managers, healthcare policy decision makers, healthcare professionals and funding sources should partner to develop effective strategies to promote the proactive prioritization of diabetes-related footcare in primary care. With primary care being Australia's frontline healthcare system, involving the first tier of clinical services encountered (Department of Health, 2013), primary care clinicians, including GPs and CDEs (of whom are predominantly nurses), play a vital role in patient care and health education, as well as the prevention and early detection of diabetes and its complications (Aalaa, Malazy, Sanjari, Peimani & Mohajeri-Tehrani, 2012). It is crucial that preventative and early intervention footcare practices, such as foot assessments and education, are a priority of diabetes care, to aid in reducing the incidence of DFD and its potentially devastating consequences.

Impact Statement: What does this paper contribute to the wider global clinical community?

- Diabetic foot disease is recognized globally as the predominant cause of diabetes-related amputation and hospitalization. Preventative footcare actions in primary care can reduce the incidence of diabetes-related ulcers and lower limb amputation; yet these are a low priority for many primary healthcare professionals.
- Raising awareness of this should encourage clinicians to focus attention on diabetes-related footcare, as well as motivate healthcare policy decision makers, funders and practice managers to join forces to promote prioritization of footcare to people with diabetes within primary care.

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Table 1. Participants' demographic characteristics

		Total (n=94)	Total %
Professional role	General Practitioner	10	11
	Credentialed Diabetes Educator	84	89
Length of time consulting with people with diabetes in the primary care setting (years)	1–5	17	18
	6–10	26	28
	11–15	17	18
	>15	34	36
Workplace	General Practice	38	40
	Private Practice Clinic	15	16
	Community Health Centre	21	22
	Aboriginal Health Service	4	4.3
	Other (please specify)	16 [†]	17
Setting of primary care practice	Metropolitan area (Capital City)	28	30
	Urban (>100 000 population, not Capital City)	18	19
	Rural (centres with population <100 000 people)	48	51
State / Territory	Australian Capital Territory	1	1.1
	New South Wales	18	19
	Northern Territory	3	3.2
	Queensland	16	17
	South Australia	7	7.4
	Tasmania	5	5.3
	Victoria	37	39
	Western Australia	7	7.4

[†] participants indicated specialist centers, not for profit organizations, public hospitals and district nursing.

Table 2: Total participants indicating aspect of care to be their first, second or third priority in different clinical scenarios (n=94)

Priority	New diabetes diagnosis (S1)	20-year diabetes history (S2)	Person with diabetes and reported 'tingling in feet' (S3)	Person with diabetes and reported 'cut on foot' (S4)	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter (S5)
	Frequency n (%)				
Lifestyle education (diet / exercise / weight)	81 (86)	29 (31)	8 (8.5)	6 (6.3)	1 (1.1)
HbA1c review (assessing blood glucose management)	57 (61)	73 (78)	54 (57)	36 (38)	32 (34)
Self-management assessment	37 (39)	47 (50)	29 (31)	30 (32)	25 (27)
Medication review	32 (34)	49 (52)	11 (12)	6 (6.3)	10 (11)
Emotional / psychological health assessment	23 (23)	17 (18)	4 (4.3)	2 (2.1)	2 (2.1)
Conduct full foot assessment (neurological, pulses, risk rating)	9 (9.6)	17 (18)	73 (78)	63 (67)	-‡
Blood pressure review and management	8 (8.5)	8 (8.5)	1 (1.1)	0	2 (2.1)
Referral to diabetes educator	7 (7.4)	5 (5.3)	1 (1.1)	1 (1.1)	0
Referral to general practitioner	1 (1.1)	3 (3.2)	6 (6.4)	14 (15)	23 (25)
Lipid assessment	4 (4.3)	2 (2.1)	2 (2.1)	0	0
Renal function assessment	3 (3.2)	10 (11)	1 (1.1)	0	1 (1.1)
Smoking assessment	3 (3.2)	2 (2.1)	4 (4.3)	3 (3.2)	3 (3.2)
Driving safety education	2 (2.1)	1 (1.1)	0	0	0
Referral to tertiary multidisciplinary diabetes service	2 (2.1)	3 (3.2)	3 (3.2)	1 (1.1)	11 (12)
Eye examination	1 (1.1)	3 (3.2)	0	0	1 (1.1)
Referral to specialist tertiary diabetic foot clinic	1 (1.1)	0	6 (6.4)	4 (4.3)	28 (30)
Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan	0	5 (5.3)	50 (53)	35 (37)	16 (17)
Referral to podiatrist at a specialist HRFS	0	0	7 (7.4)	11 (12)	46 (49)
Wounds assessment and dressing	0	0	0	32 (34)	33 (35)
Referral to endocrinologist	0	3 (3.2)	3 (3.2)	0	3 (3.2)
Referral to vascular surgeon	0	0	1 (1.1)	0	7 (7.4)
Visually inspect feet only	-‡	-‡	11 (12)	22 (23)	-‡
Ongoing wound assessment in primary care	0	0	0	9 (9.6)	19 (20)

‡ option not available for participants to select

*option not available for participants to select

Table 3: Total Participants indicating aspect of care to be their first priority in different clinical scenarios (n=94)

Priority	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter				
	New diabetes diagnosis	20-year diabetes history	Person with diabetes and reported 'tingling in feet'	Person with diabetes and reported 'cut on foot'	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter
	Frequency n (%)				
Lifestyle education (diet / exercise / weight)	37 (39)	8 (8.5)	4 (4.3)	1 (1.1)	1 (1.1)
HbA1c review (assessing blood glucose management)	28 (30)	43 (46)	22 (23)	5 (5.3)	4 (4.3)
Self-management assessment	15 (16)	22 (23)	7 (7.4)	3 (3.2)	1 (1.1)
Medication review	1 (1.1)	2 (2.1)	0	1 (1.1)	0
Emotional / psychological health assessment	4 (4.3)	4 (4.3)	1 (1.1)	1 (1.1)	0
Conduct full foot assessment (neurological, pulses, risk rating)	0	1 (1.1)	37 (39)	49 (52)	₣
Blood pressure review and management	1 (1.1)	2 (2.1)	1 (1.1)	0	0
Referral to diabetes educator	3 (3.2)	2 (2.1)	0	0	0
Referral to general practitioner	0	2 (2.1)	0	1 (1.1)	7 (7.4)
Lipid assessment	0	0	0	0	0
Renal function assessment	0	2 (2.1)	0	0	0
Smoking assessment	0	0	0	0	0
Driving safety education	0	0	0	0	0
Referral to tertiary multidisciplinary diabetes service	0	1 (1.1)	0	0	1 (1.1)
Eye examination	0	0	0	0	0
Referral to specialist tertiary diabetic foot clinic	0	0	1 (1.1)	0	16 (17)
Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan	0	0	8 (8.5)	3 (3.2)	8 (8.5)
Referral to podiatrist at a specialist HRFS	0	0	3 (3.2)	1 (1.1)	37 (39)
Wounds assessment and dressing	0	0	0	9 (9.6)	11 (12)

₣ option not available for participants to select

Referral to endocrinologist	0	0	1 (1.1)	0	0
Referral to vascular surgeon	0	0	0	0	2 (2.1)
Visually inspect feet only	-§	-§	7 (7.4)	19 (20)	-§
Ongoing wound assessment in primary care	0	0	0	0	0
Swab wound and send swab to pathology	-§	-§	-§	-§	3 (3.2)

Figure Legend

Figure 1: Priority of footcare in various clinical scenarios

Appendices Legend

Appendix 1: Survey tool

Appendix 2: Participant selection

Appendix 3: Healthcare professionals' top three priorities of care in various clinical scenarios

Appendix 1: Survey Tool

Demographic Information

Q1. Do you work in the Australian primary healthcare sector?

- Yes No

Q2. What is your current professional role?

- General Practitioner Credentialed Diabetes Educator
 Nurse Practitioner (CDE) Other (please specify)

Q3. Do you consult with people with diabetes?

- Yes No

Q4. How long have you been consulting with people with diabetes in the primary care setting?

- less than 12 months 1-5 years 6-10 years 11-15 years
 >15 years

Q5. Where do you work?

- General Practice Private Practice Clinic
 Community Health Centre Aboriginal Health Service
 Other (please specify)

Q6. What Full Time Equivalent (FTE) per fortnight do you work in primary care?

- less than 0.2 FTE 0.2 – 1.0 FTE

Q7. What best describes the setting of your main place of primary care practice?

- Metropolitan area (Capital City)
 Urban (>100,000 population, not Capital City)
 Rural (centres with population < 100,000 people)

Q8. What state/territory do you work in?

- ACT NSW NT QLD SA
 TAS VIC WA

Clinical Scenarios

Please consider the following situations and how you would respond to these in your day-to-day work.

Q9. Do you generally (more than 50% of the time) remove the shoes and socks of your patients with diabetes at a consultation?

Yes

No

Q10. A person newly diagnosed with type 2 diabetes presents to your clinic. Please indicate your top three priorities in this situation by placing the number 1 next to your highest priority, the number 2 next to your second highest priority and the number 3 next to your third highest priority.

- | | |
|--|--|
| <input type="checkbox"/> HbA1c review (assessing blood glucose management) | <input type="checkbox"/> Self-management assessment |
| <input type="checkbox"/> Medication review | <input type="checkbox"/> Emotional / psychological health assessment |
| <input type="checkbox"/> Blood pressure review and management | <input type="checkbox"/> Driving safety education |
| <input type="checkbox"/> Renal function assessment | <input type="checkbox"/> Wounds assessment and dressing |
| <input type="checkbox"/> Lipid assessment | <input type="checkbox"/> Ongoing wound dressing in primary care |
| <input type="checkbox"/> Lifestyle education (diet / exercise / weight) | <input type="checkbox"/> Referral to diabetes educator |
| <input type="checkbox"/> Conduct full foot assessment (neurological, pulses, risk rating) | <input type="checkbox"/> Referral to general practitioner |
| <input type="checkbox"/> Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan | <input type="checkbox"/> Referral to tertiary multidisciplinary diabetes service |
| <input type="checkbox"/> Referral to podiatrist at a specialist high risk foot service | <input type="checkbox"/> Referral to endocrinologist |
| <input type="checkbox"/> Eye examination | <input type="checkbox"/> Referral to specialist tertiary diabetic foot clinic (multidisciplinary high risk foot service) |
| <input type="checkbox"/> Smoking assessment | <input type="checkbox"/> Referral to vascular surgeon |
| | <input type="checkbox"/> Other (please specify) |

Q11. A person with a twenty year history of diabetes presents to your clinic for the first time. Please indicate your top three priorities in this situation by placing the number 1 next to your highest priority, the number 2 next to your second highest priority and the number 3 next to your third highest priority.

- | | |
|--|--|
| <input type="checkbox"/> HbA1c review (assessing blood glucose management) | <input type="checkbox"/> Self-management assessment |
| <input type="checkbox"/> Medication review | <input type="checkbox"/> Emotional / psychological health assessment |
| <input type="checkbox"/> Blood pressure review and management | <input type="checkbox"/> Driving safety education |
| <input type="checkbox"/> Renal function assessment | <input type="checkbox"/> Wounds assessment and dressing |
| <input type="checkbox"/> Lipid assessment | <input type="checkbox"/> Ongoing wound dressing in primary care |
| <input type="checkbox"/> Lifestyle education (diet / exercise / weight) | <input type="checkbox"/> Referral to diabetes educator |
| <input type="checkbox"/> Conduct full foot assessment (neurological, pulses, risk rating) | <input type="checkbox"/> Referral to general practitioner |
| <input type="checkbox"/> Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan | <input type="checkbox"/> Referral to tertiary multidisciplinary diabetes service |
| <input type="checkbox"/> Referral to podiatrist at a specialist high risk foot service | <input type="checkbox"/> Referral to endocrinologist |
| <input type="checkbox"/> Eye examination | <input type="checkbox"/> Referral to specialist tertiary diabetic foot clinic (multidisciplinary high risk foot service) |
| <input type="checkbox"/> Smoking assessment | <input type="checkbox"/> Referral to vascular surgeon |
| | <input type="checkbox"/> Other (please specify) |

Q12. A person with diabetes presents to your clinic for the first time and reports tingling in their feet. Please indicate your top three priorities in this situation by placing the number 1 next to your highest priority, the number 2 next to your second highest priority and the number 3 next to your third highest priority.

- | | |
|--|--|
| <input type="checkbox"/> HbA1c review (assessing blood glucose management) | <input type="checkbox"/> Smoking assessment |
| <input type="checkbox"/> Medication review | <input type="checkbox"/> Self-management assessment |
| <input type="checkbox"/> Blood pressure review and management | <input type="checkbox"/> Emotional / psychological health assessment |
| <input type="checkbox"/> Renal function assessment | <input type="checkbox"/> Driving safety education |
| <input type="checkbox"/> Lipid assessment | <input type="checkbox"/> Wounds assessment and dressing |
| <input type="checkbox"/> Lifestyle education (diet / exercise / weight) | <input type="checkbox"/> Ongoing wound dressing in primary care |
| <input type="checkbox"/> Visually inspect feet only | <input type="checkbox"/> Referral to diabetes educator |
| <input type="checkbox"/> Conduct full foot assessment (neurological, pulses, risk rating) | <input type="checkbox"/> Referral to general practitioner |
| <input type="checkbox"/> Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan | <input type="checkbox"/> Referral to tertiary multidisciplinary diabetes service |
| <input type="checkbox"/> Referral to podiatrist at a specialist high risk foot service | <input type="checkbox"/> Referral to endocrinologist |
| <input type="checkbox"/> Eye examination | <input type="checkbox"/> Referral to specialist tertiary diabetic foot clinic (multidisciplinary high risk foot service) |
| | <input type="checkbox"/> Referral to vascular surgeon |
| | <input type="checkbox"/> Other (please specify) |

Q13. A person with diabetes presents to your clinic for the first time and reports that they have a small cut on their foot. Please indicate your top three priorities in this situation by placing the number 1 next to your highest priority, the number 2 next to your second highest priority and the number 3 next to your third highest priority.

- | | |
|--|--|
| <input type="checkbox"/> HbA1c review (assessing blood glucose management) | <input type="checkbox"/> Smoking assessment |
| <input type="checkbox"/> Medication review | <input type="checkbox"/> Self-management assessment |
| <input type="checkbox"/> Blood pressure review and management | <input type="checkbox"/> Emotional / psychological health assessment |
| <input type="checkbox"/> Renal function assessment | <input type="checkbox"/> Driving safety education |
| <input type="checkbox"/> Lipid assessment | <input type="checkbox"/> Wounds assessment and dressing |
| <input type="checkbox"/> Lifestyle education (diet / exercise / weight) | <input type="checkbox"/> Ongoing wound dressing in primary care |
| <input type="checkbox"/> Visually inspect feet only | <input type="checkbox"/> Referral to diabetes educator |
| <input type="checkbox"/> Conduct full foot assessment (neurological, pulses, risk rating) | <input type="checkbox"/> Referral to general practitioner |
| <input type="checkbox"/> Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan | <input type="checkbox"/> Referral to tertiary multidisciplinary diabetes service |
| <input type="checkbox"/> Referral to podiatrist at a specialist high risk foot service | <input type="checkbox"/> Referral to endocrinologist |
| <input type="checkbox"/> Eye examination | <input type="checkbox"/> Referral to specialist tertiary diabetic foot clinic (multidisciplinary high risk foot service) |
| | <input type="checkbox"/> Referral to vascular surgeon |
| | <input type="checkbox"/> Other (please specify) |

Q14. You conduct a full foot assessment on a person with diabetes and find that they have evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter. Please indicate your top three priorities in this situation by placing the number 1 next to your highest priority, the number 2 next to your second highest priority and the number 3 next to your third highest priority.

- | | |
|--|--|
| <input type="checkbox"/> HbA1c review (assessing blood glucose management) | <input type="checkbox"/> Self-management assessment |
| <input type="checkbox"/> Medication review | <input type="checkbox"/> Emotional / psychological health assessment |
| <input type="checkbox"/> Blood pressure review and management | <input type="checkbox"/> Driving safety education |
| <input type="checkbox"/> Renal function assessment | <input type="checkbox"/> Wounds assessment and dressing |
| <input type="checkbox"/> Lipid assessment | <input type="checkbox"/> Smoking assessment |
| <input type="checkbox"/> Lifestyle education (diet / exercise / weight) | <input type="checkbox"/> Swab the wound and send swab to pathology |
| <input type="checkbox"/> Conduct full foot assessment (neurological, pulses, risk rating) | <input type="checkbox"/> Ongoing wound dressing in primary care |
| <input type="checkbox"/> Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan | <input type="checkbox"/> Referral to diabetes educator |
| <input type="checkbox"/> Referral to podiatrist at a specialist high risk foot service | <input type="checkbox"/> Referral to general practitioner |
| <input type="checkbox"/> Eye examination | <input type="checkbox"/> Referral to tertiary multidisciplinary diabetes service |
| <input type="checkbox"/> Smoking assessment | <input type="checkbox"/> Referral to endocrinologist |
| | <input type="checkbox"/> Referral to specialist tertiary diabetic foot clinic (multidisciplinary high risk foot service) |
| | <input type="checkbox"/> Referral to vascular surgeon |
| | <input type="checkbox"/> Other (please specify) |

Q15. A highly functioning, independent 61 year old working woman with poorly controlled type 2 diabetes but no previous complications presents to your clinic. She has a 1 x 2cm ulcer, which appears to be deep, on the left plantar surface at the interphalangeal joint of the hallux. You note 1.5cm of surrounding cellulitis. Your clinic notes reveal that she saw a podiatrist 5 months ago with no abnormalities reported by the consulting podiatrist at this visit. The woman reports that the ulcer has been there for a couple of weeks, it is not giving her any discomfort and she has been washing it in salty water and putting bandaids on it regularly. She is afebrile, with normal blood pressure and heart rate and her most recent HbA1c was 8.1% (65mmol/mol).

Please indicate which of the following statements best describes your course of action in this situation (you may select more than one response).

- | | |
|---|--|
| <input type="checkbox"/> No action | <input type="checkbox"/> Commence antibiotics |
| <input type="checkbox"/> Refer to general practitioner for assessment and management | <input type="checkbox"/> Continue regular review and wound care within primary care |
| <input type="checkbox"/> Assess and dress wound | <input type="checkbox"/> Refer to specialist diabetic foot clinic (multidisciplinary high risk foot service) |
| <input type="checkbox"/> Assess wound and refer to other healthcare professional to dress wound (e.g. general practitioner / primary care nurse / podiatrist) | <input type="checkbox"/> Refer to hospital emergency department |
| <input type="checkbox"/> Conduct full foot assessment | <input type="checkbox"/> Refer to endocrinologist |
| | <input type="checkbox"/> Refer to other specialist (e.g. vascular surgeon, orthopaedic surgeon, infectious) |

- Refer to other healthcare professional to conduct full foot assessment (e.g. general practitioner, credentialed diabetes educator, primary care nurse, private community podiatrist)
- Swab the wound and send swab to pathology

diseases physician)

- Assess diabetes self management - e.g. blood glucose levels
- Other (please specify)

Diabetes-related foot assessment and management

Q16. When treating patients with diabetes, how often in the last 12 months did you do the following? (Used with permission from Quinton et al. Diabetic Foot Management Survey)

	Never (0%)	Very Rarely (1-20%)	Rarely (21- 60%)	Some times (41-60%)	Often (61- 80%)	Very Often (81-99%)	Always (100%)
Assess for risk of developing foot complications							
Inquire about previous foot ulcers and amputations							
Visually inspect feet for structural abnormalities							
Visually inspect feet for wounds							
Assess for neuropathy							
Assess for neuropathy using a 10g monofilament							
Palpate their foot pulses							
Perform an Ankle Brachial Index or Toe Pressure assessment							
Classify their risk of developing foot complications (e.g. low, intermediate, high)							
Provide footcare education to prevent foot complications?							
Provide or recommend footwear to prevent foot complications?							
Recommend a review assessment annually for patients stratified as low risk?							
Recommend a review assessment within 6 months for patient stratified as intermediate or high risk?							

Diabetes-related foot ulcer referral

Q17. Do you have access to and know how to refer patients with diabetes-related foot ulcers to a specialist tertiary multi-disciplinary foot care team (High Risk Foot Service)?

(Modified from Quinton et al. Diabetic Foot Management Survey to include not only having access, but knowing how to refer)

- Yes No

Q18. (If answered 'yes' to Q17) How often in the last 12 months did you refer patients with the following conditions to a specialist tertiary multi-disciplinary foot care team (High Risk Foot Service)? (Used with permission from Quinton et al. Diabetic Foot Management Survey)

	Never (0%)	Very Rarely (1-20%)	Rarely (21- 60%)	Some times (41-60%)	Often (61- 80%)	Very Often (81-99%)	Always (100%)
Diabetic foot ulceration							
Deep foot ulceration (probing to tendon, joint or bone)							
Ulcer not reducing in size after 4 weeks							
Ulcers in patients with absent foot pulses							
Ulcers with ascending cellulitis							
Suspected Charcot's neuroarthropathy							

Q19. Do you have access to expert foot care consultation via telehealth digital imaging or videoconference? (Used with permission from Quinton et al. Diabetic Foot Management Survey)

- Yes No

Q20. (If answered 'yes' to Q18) How often in the last 12 months did you refer patients with the following conditions to an expert foot care consultation via telehealth or videoconference? (Used with permission from Quinton et al. Diabetic Foot Management Survey)

	Never (0%)	Very Rarely (1-20%)	Rarely (21- 60%)	Some times (41-60%)	Often (61- 80%)	Very Often (81-99%)	Always (100%)
Diabetic foot ulceration							
Deep foot ulceration (probing to tendon, joint or bone)							
Ulcer not reducing in size after 4 weeks							
Ulcers in patients with absent foot pulses							
Ulcers with ascending cellulitis							
Suspected Charcot's neuroarthropathy							

Q21. If you do not have access to and know how to refer patients with diabetes-related foot ulcers to a specialist tertiary multi-disciplinary foot care team (High Risk Foot Service), how do you manage these patients?

- Refer to private community podiatrist Refer to private vascular surgeon
 Manage at your practice Refer to general practice for management
 Other (please specify)

Q22. If you have any additional comments, please provide these here.

Q23.

Thank you for completing this survey. Please note all responses will be confidential and deidentified.

In Phase two of this study we will be conducting semi-structured interviews on the perceptions to the barriers and enablers of preventative and early intervention diabetes-related foot care.

Would you like to participate in Phase 2 of this research?

Yes

No

Q24.

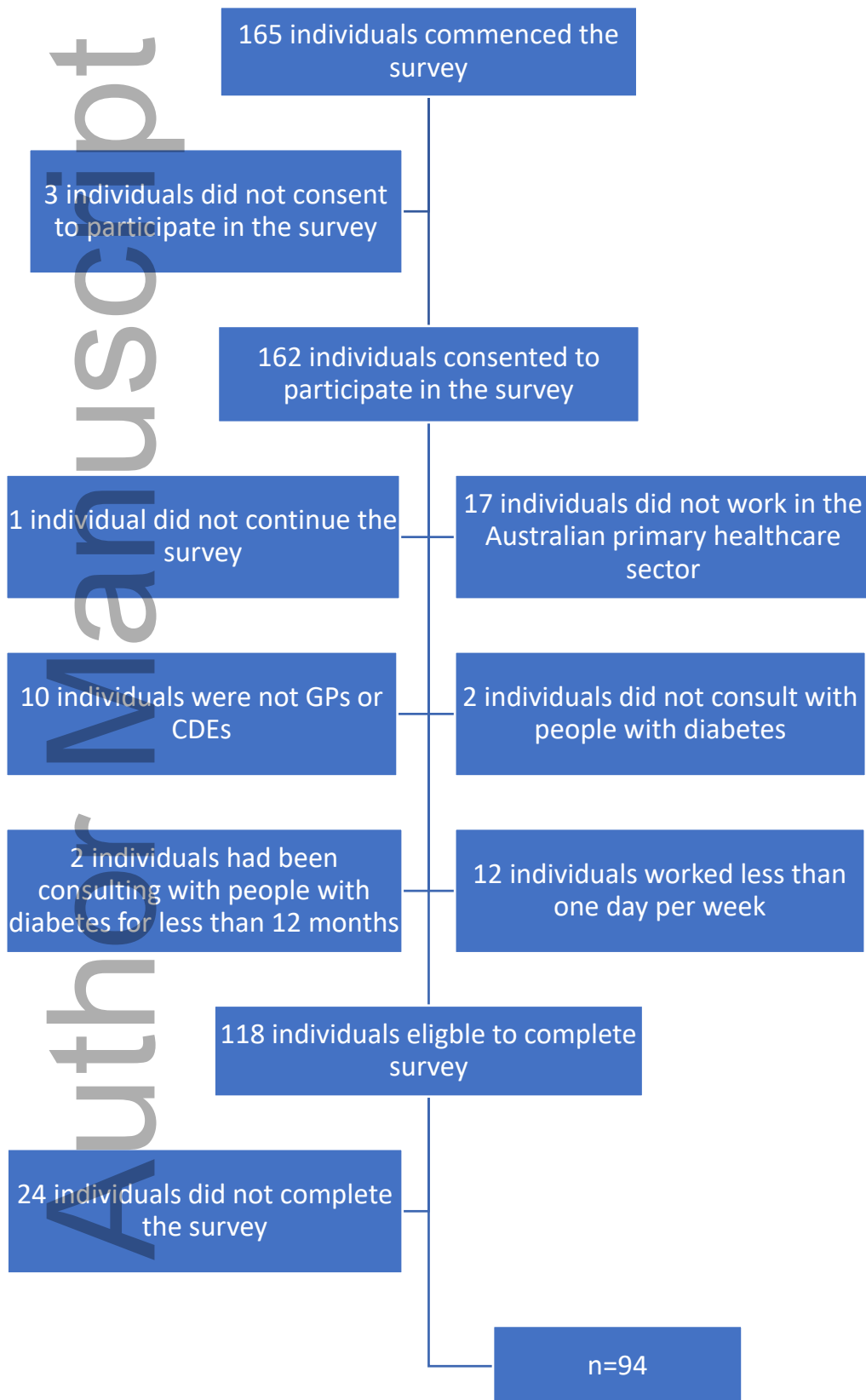
In order to be contacted for participation in Phase 2 please provide your contact details below:

Name: _____

Email address: _____

Phone number: _____

Appendix 2: Participant selection



Appendix 2: Healthcare professionals' top three priorities of care in various clinical scenarios

Priority	Scenario	Frequency n (%)			total % participants	n total (n=94)
		1 st priority	2 nd priority	3 rd priority		
Lifestyle education (diet / exercise / weight)	New diabetes diagnosis	37 (39.4)	27 (28.7)	17 (18.1)	86.2	81
	Twenty-year diabetes history	8 (8.5)	5 (5.3)	16 (17)	30.9	29
	Person with diabetes and reported 'tingling in feet'	4 (4.3)	0	4 (4.3)	8.5	8
	Person with diabetes and reported 'cut on foot'	1 (1.1)	2 (2.1)	3 (3.2)	6.3	6
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	1 (1.1)	0	0	1.1	1
HbA1c review (assessing blood glucose management)	New diabetes diagnosis	28 (29.8)	13 (13.8)	16 (17)	60.6	57
	Twenty-year diabetes history	43 (45.7)	22 (23.4)	8 (8.5)	77.7	73
	Person with diabetes and reported 'tingling in feet'	22 (23.4)	20 (21.3)	12 (12.8)	57.4	54
	Person with diabetes and reported 'cut on foot'	5 (5.3)	15 (16)	16 (17)	38.3	36
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	4 (4.3)	13 (13.8)	15 (16)	34	32
Self-management assessment	New diabetes diagnosis	15 (16)	12 (12.8)	10 (10.6)	39.4	37
	Twenty-year diabetes history	22 (23.4)	16 (17)	9 (9.6)	50	47
	Person with diabetes and reported 'tingling in feet'	7 (7.4)	9 (9.6)	13 (13.8)	30.8	29
	Person with diabetes and reported 'cut on foot'	3 (3.2)	10 (10.6)	17 (18.1)	31.9	30
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	1 (1.1)	12 (12.8)	12 (12.8)	26.6	25
Medication review	New diabetes diagnosis	1 (1.1)	15 (16)	16 (17)	34.1	32
	Twenty-year diabetes history	2 (2.1)	24 (25.5)	23 (24.5)	52.1	49
	Person with diabetes and reported 'tingling in feet'	0	7 (7.4)	4 (4.3)	11.7	11
	Person with diabetes and reported 'cut on foot'	1 (1.1)	3 (3.2)	2 (2.1)	6.3	6
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	2 (2.1)	8 (8.5)	10.6	10
Emotional / psychological health assessment	New diabetes diagnosis	4 (4.3)	10 (10.6)	8 (8.5)	23.4	23
	Twenty-year diabetes history	4 (4.3)	7 (7.4)	6 (6.4)	18	17
	Person with diabetes and reported 'tingling in feet'	1 (1.1)	3 (3.2)	0	4.3	4
	Person with diabetes and reported 'cut on foot'	1 (1.1)	1 (1.1)	0	2.1	2

	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	2 (2.1)	2.1	2
Other (please specify)	New diabetes diagnosis	5 (5.3)	2 (2.1)	5 (5.3)	12.8	12
	Twenty-year diabetes history	5 (5.3)	2 (2.1)	5 (5.3)	12.8	12
	Person with diabetes and reported 'tingling in feet'	2 (2.1)	1 (1.1)	2 (2.1)	5.3	5
	Person with diabetes and reported 'cut on foot'	1 (1.1)	4 (4.3)	1 (1.1)	6.4	6
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	2 (2.1)	0	2 (2.1)	4.3	4
Conduct full foot assessment (neurological, pulses, risk rating)	New diabetes diagnosis	0	2 (2.1)	7 (7.4)	9.6	9
	Twenty-year diabetes history	1 (1.1)	6 (6.4)	10 (10.6)	18.1	17
	Person with diabetes and reported 'tingling in feet'	37 (39.4)	26 (27.7)	10 (10.6)	77.7	73
	Person with diabetes and reported 'cut on foot'	49 (52.1)	11 (11.7)	3 (3.2)	67	63
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	- [†]	- [†]	- [†]	- [†]	- [†]
Blood pressure review and management	New diabetes diagnosis	1 (1.1)	2 (2.1)	5 (5.3)	8.5	8
	Twenty-year diabetes history	2 (2.1)	4 (4.3)	2 (2.1)	8.5	8
	Person with diabetes and reported 'tingling in feet'	1 (1.1)	0	0	1.1	1
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	2 (2.1)	0	2.1	2
Referral to diabetes educator	New diabetes diagnosis	3 (3.2)	4 (4.3)	0	7.4	7
	Twenty-year diabetes history	2 (2.1)	3 (3.2)	0	5.3	5
	Person with diabetes and reported 'tingling in feet'	0	0	1 (1.1)	1.1	1
	Person with diabetes and reported 'cut on foot'	0	0	1 (1.1)	1.1	1
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	0	0	0
Lipid assessment	New diabetes diagnosis	0	2 (2.1)	2 (2.1)	4.3	4
	Twenty-year diabetes history	0	0	2 (2.1)	2.1	2
	Person with diabetes and reported 'tingling in feet'	0	0	2 (2.1)	2.1	2
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	0	0	0
Renal function assessment	New diabetes diagnosis	0	1 (1.1)	2 (2.1)	3.2	3

[†] option not available for participants to select

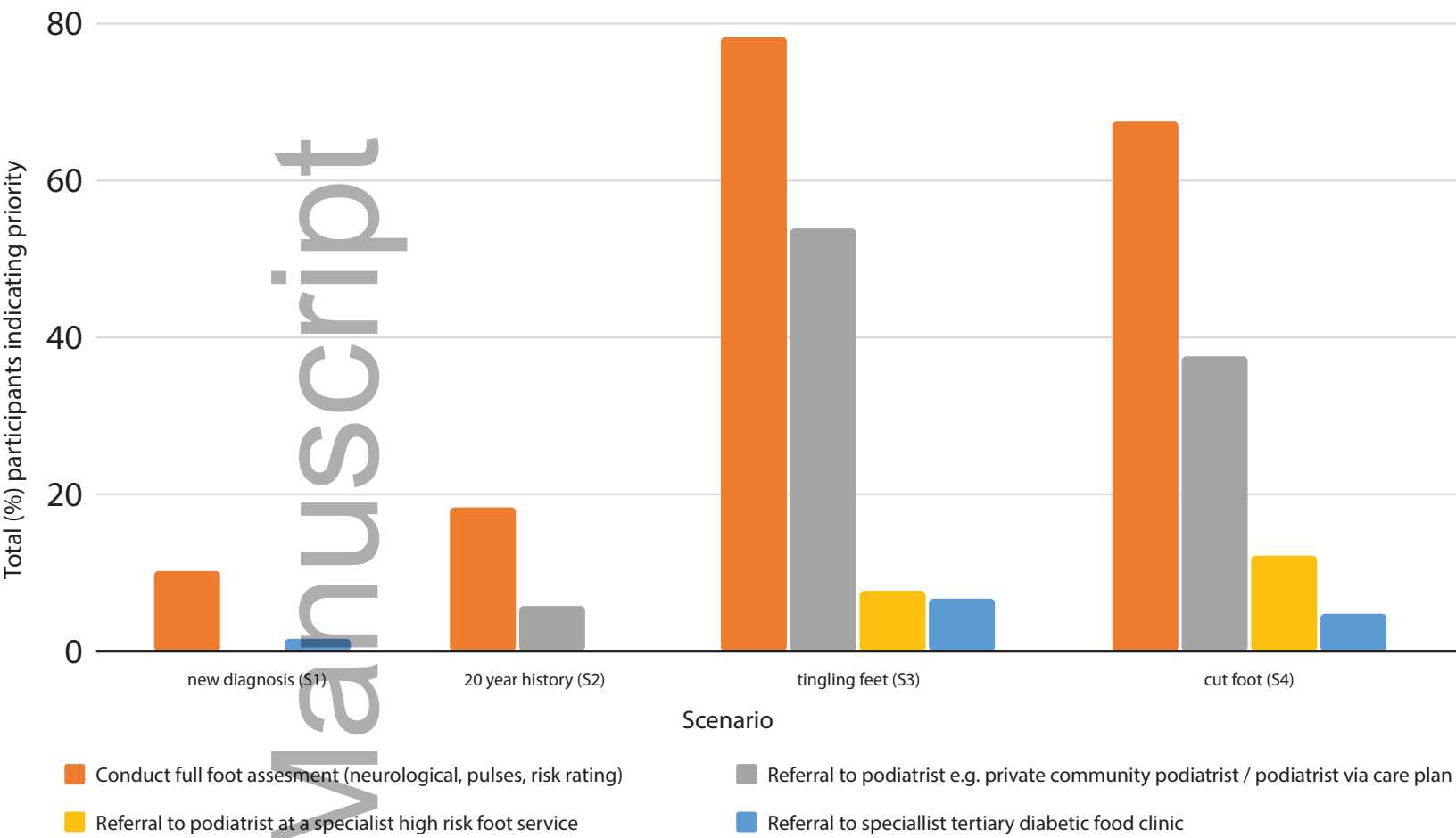
	Twenty-year diabetes history	2 (2.1)	5 (5.3)	3 (3.2)	10.6	10
	Person with diabetes and reported 'tingling in feet'	0	0	1 (1.1)	1.1	1
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	1 (1.1)	1.1	1
Smoking assessment	New diabetes diagnosis	0	1 (1.1)	2 (2.1)	3.2	4
	Twenty-year diabetes history	0	0	2 (2.1)	2.1	2
	Person with diabetes and reported 'tingling in feet'	0	1 (1.1)	3 (3.2)	4.3	4
	Person with diabetes and reported 'cut on foot'	0	1 (1.1)	2 (2.1)	3.2	3
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	1 (1.1)	2 (2.1)	3.2	3
Driving safety education	New diabetes diagnosis	0	1 (1.1)	1 (1.1)	2.1	2
	Twenty-year diabetes history	0	0	1 (1.1)	1.1	1
	Person with diabetes and reported 'tingling in feet'	0	0	0	0	0
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	0	0	0
Referral to tertiary multidisciplinary diabetes service	New diabetes diagnosis	0	0	2 (2.1)	2.1	2
	Twenty-year diabetes history	1 (1.1)	1 (1.1)	1 (1.1)	3.2	3
	Person with diabetes and reported 'tingling in feet'	0	2 (2.1)	1 (1.1)	3.2	3
	Person with diabetes and reported 'cut on foot'	0	0	1 (1.1)	1.1	1
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	1 (1.1)	6 (6.4)	4 (4.3)	11.7	11
Eye examination	New diabetes diagnosis	0	0	1 (1.1)	1.1	1
	Twenty-year diabetes history	0	1 (1.1)	2 (2.1)	3.2	3
	Person with diabetes and reported 'tingling in feet'	0	0	0	0	0
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	0	1 (1.1)	1.1	1
Referral to general practitioner	New diabetes diagnosis	0	1 (1.1)	0	1.1	1
	Twenty-year diabetes history	2 (2.1)	0	1 (1.1)	3.2	3
	Person with diabetes and reported 'tingling in feet'	0	3 (3.2)	3 (3.2)	6.4	6
	Person with diabetes and reported 'cut on foot'	1 (1.1)	5 (5.3)	8 (8.5)	14.9	14
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	7 (7.4)	7 (7.4)	9 (9.6)	24.5	23

Referral to specialist tertiary diabetic foot clinic	New diabetes diagnosis	0	1 (1.1)	0	1.1	1
	Twenty-year diabetes history	0	0	0	0	0
	Person with diabetes and reported 'tingling in feet'	1 (1.1)	2 (2.1)	3 (3.2)	6.4	6
	Person with diabetes and reported 'cut on foot'	0	0	4 (4.3)	4.3	4
Referral to podiatrist e.g. private community podiatrist / podiatrist via care plan	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	16 (17.0)	8 (8.5)	4 (4.3)	29.8	28
	New diabetes diagnosis	0	0	0	0	0
	Twenty-year diabetes history	0	2 (2.1)	3 (3.2)	5.3	5
	Person with diabetes and reported 'tingling in feet'	8 (8.5)	20 (21.3)	22 (23.4)	53.2	50
Referral to podiatrist at a specialist HRFS	Person with diabetes and reported 'cut on foot'	3 (3.2)	13 (13.8)	19 (20.2)	37.2	35
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	8 (8.5)	4 (4.3)	4 (4.3)	17	16
	New diabetes diagnosis	0	0	0	0	0
	Twenty-year diabetes history	0	0	0	0	0
Wounds assessment and dressing	Person with diabetes and reported 'tingling in feet'	3 (3.2)	0	4 (4.3)	7.4	7
	Person with diabetes and reported 'cut on foot'	1 (1.1)	4 (4.3)	6 (6.4)	11.7	11
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	37 (39.4)	7 (7.4)	2 (2.1)	48.9	46
	New diabetes diagnosis	0	0	0	0	0
Referral to endocrinologist	Twenty-year diabetes history	0	0	0	0	0
	Person with diabetes and reported 'tingling in feet'	0	0	0	0	0
	Person with diabetes and reported 'cut on foot'	9 (9.6)	19 (20.2)	4 (4.3)	34	32
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	11 (11.7)	14 (14.9)	8 (8.5)	35.1	33
Referral to vascular surgeon	New diabetes diagnosis	0	0	0	0	0
	Twenty-year diabetes history	0	1 (1.1)	2 (2.1)	3.2	3
	Person with diabetes and reported 'tingling in feet'	1 (1.1)	1 (1.1)	1 (1.1)	3.2	3
	Person with diabetes and reported 'cut on foot'	0	0	0	0	0
Referral to vascular surgeon	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	1 (1.1)	2 (2.1)	3.2	3
	New diabetes diagnosis	0	0	0	0	0
	Twenty-year diabetes history	0	0	0	0	0
	Person with diabetes and reported 'tingling in feet'	0	0	1 (1.1)	1.1	1
Referral to vascular surgeon	Person with diabetes and reported 'cut on foot'	0	0	0	0	0

	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	2 (2.1)	1 (1.1)	4 (4.3)	7.4	7
Visually inspect feet only	New diabetes diagnosis	-†	-†	-†	-†	-†
	Twenty-year diabetes history	-†	-†	-†	-†	-†
	Person with diabetes and reported 'tingling in feet'	7 (7.4)	2 (2.1)	2 (2.1)	11.7	11
	Person with diabetes and reported 'cut on foot'	19 (20.2)	1 (1.1)	2 (2.1)	23.4	22
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	-†	-†	-†	-†	-†
Ongoing wound assessment in primary care	New diabetes diagnosis	0	0	0	0	0
	Twenty-year diabetes history	0	0	0	0	0
	Person with diabetes and reported 'tingling in feet'	0	0	0	0	0
	Person with diabetes and reported 'cut on foot'	0	5 (5.3)	4 (4.3)	9.6	9
	Person with diabetes and evidence of peripheral neuropathy, absent pedal pulses and an ulcer 1cm in diameter	0	8 (8.5)	11 (11.7)	20.2	19
Swab wound and send swab to pathology	New diabetes diagnosis	-†	-†	-†	-†	-†
	Twenty-year diabetes history	-†	-†	-†	-†	-†
	Person with diabetes and reported 'tingling in feet'	-†	-†	-†	-†	-†
	Person with diabetes and reported 'cut on foot'	-†	-†	-†	-†	-†

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Figure 1: Priority of footcare in various clinical scenarios



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