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Patient-centred dietetic care from the perspectives of older malnourished patients

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Publication Details

Hazzard, E., Barone, L., Mason, M., Lambert, K. & McMahon, A. (2017). Patient-centred dietetic care from the perspectives of older malnourished patients. *Journal of Human Nutrition and Dietetics*, 30 574-587.

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Patient-centred dietetic care from the perspectives of older malnourished patients

Abstract

Background: Governing organisations for health services currently recommend a patient-centred (PC) approach to practice for all health professions, including dietetics. For the vulnerable older malnourished patient, this approach needs to be prioritised to improve outcomes. The paucity of patient experience data likely limits evidence-based, patient-centred care (PCC) from being implemented effectively. The present study aimed to identify quality indicators of dietetic services from the perspectives of older malnourished patients to inform evidence-based PC dietetic care. **Methods:** Surveys were completed by a sample of 28 females and 28 males (mean age 81 years) who had been seen by a dietitian for malnutrition assessment. In-depth, face-to-face, semi-structured interviews were undertaken with a sub-sample of four females and six males (mean age 81 years). Interviews were transcribed verbatim. Thematic analysis of transcripts and open-ended survey responses was conducted to determine patient-identified quality indicators. **Results:** Three structure indicators (continuity of care through regular contact and post-discharge dietetic follow-up; interdisciplinary coordination and collaboration; and high-quality hospital food services), five process indicators (addressing a patient's primary medical concern; involving the patient's family; providing clear and simple dietetic information; providing expert dietary knowledge; utilising interpersonal communication skills) and three outcome indicators (improvement in health status; improvement or maintenance of independence; weight gain) were identified. The experiences of older malnourished patients with dietetic services, as described in the present study, reinforce the importance of ensuring high-quality and tailored dietetic care as a key element of PC dietetic services. **Conclusions:** The quality indicators of dietetic services identified in the present study may facilitate dietitians to provide evidence-based PCC for older malnourished patients.

Disciplines

Medicine and Health Sciences | Social and Behavioral Sciences

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Patient-centred dietetic care from the perspectives of older malnourished patients

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Keywords

Malnutrition, older-adult, dietetics, patient-centred, patient-perception, patient-experience

Authorship.

EH conceived the idea for this study, collected and analysed data, undertook a literature review, wrote the first draft and completed this manuscript. LB and MM conceived the idea for larger patient journey research project; supervised the project; assisted data collection; and contributed to the drafting of the manuscript. AM and KL contributed to the study design and data analyses; supervised the project; and contributed to the drafting of the manuscript. EH, LB, MM, AM and KL all critically reviewed the manuscript and approved the final version submitted for publication.

Abstract

Background

Governing organisations for health services currently recommend a patient-centred (PC) approach to practice for all health professions, including dietetics. For the vulnerable older malnourished patient this approach needs to be prioritised to improve outcomes. The paucity of patient experience data likely limits evidence-based patient-centred care (PCC) from being effectively implemented. The present study aimed to identify quality indicators of dietetic services from the perspectives of older malnourished patients to inform evidence-based PC dietetic care.

Methods

Surveys were completed by a sample of 28 females and 28 males (mean age 81 years) who had been seen by a dietitian for malnutrition assessment. In-depth, face-to-face, semi-structured interviews were undertaken with a sub-sample of four females and six males (mean age 81 years). Interviews were transcribed verbatim. Thematic analysis of transcripts and open-ended survey responses was conducted to elucidate patient identified quality indicators.

Results

Three structure indicators (continuity of care through regular contact and post-discharge dietetic follow-up; interdisciplinary coordination and collaboration; and high quality hospital food services), five process indicators (addressing the patients' primary medical concern; involving the patients' family; providing clear and simple dietetic information; providing expert dietary knowledge; utilising interpersonal communication skills) and three outcome indicators (improvement in health status; improvement or maintenance of independence; weight gain) were identified. The experiences of older malnourished patients with dietetic services described in this study, reinforce the importance of ensuring high quality and tailored dietetic care as a key element of PC dietetic services.

Conclusions

The quality indicators of dietetic services identified may facilitate dietitians to provide evidence-based PCC for older malnourished patients

58 Introduction

59 A growing number of older Australians are reliant on healthcare due to the increasing
60 population and rise in chronic conditions ^(1; 2; 3; 4; 5). Within this population malnutrition is a
61 serious medical concern, with approximately 40% of hospitalised and 10-30% of community
62 residing older adults are affected ^(6; 7; 8; 9; 10). As a result, older adults frequently interact with
63 both inpatient and community-based dietetic services. With advancing information
64 technology, today's population are more informed and less likely to be passive recipients of
65 healthcare and advice ⁽³⁾. Therefore, patient collaboration is necessary in order to tailor
66 dietetic services to the complex and holistic needs of today's older malnourished patient.
67 These ideals are recognised through patient-centred care (PCC) ⁽¹¹⁾.

68 PCC is identified as a key dimension of high quality healthcare ^(12; 13; 14). A range of
69 governing organisations and evidence-based practice guidelines recommend patient-centred
70 (PC) dietetic care for older malnourished patients ^(10; 14; 15). However, there appears to be a
71 lack of agreement or clarity on what variables define best-practice PCC in various settings.
72 Thereby, hindering wide-scale establishment of PCC, particularly in the hospital setting ^{(16; 17;}
73 ^{18; 19)}.

74 'Patient-centeredness' is a measure of healthcare quality ⁽¹²⁾. Therefore, clear quality
75 indicators need to be identified to inform PCC. Lawrence and Kinn ⁽²⁰⁾ define a quality
76 indicator as an agreed upon element of practice which can be measured to assess the quality
77 of care. For PCC for the older malnourished patient these indicators must be grounded on the
78 patients' perspectives of their experiences with healthcare ⁽²⁰⁾. However, this data is currently
79 lacking across all healthcare disciplines, including dietetics ⁽¹³⁾. Therefore, the aim of this
80 exploratory study was to identify PC quality indicators of dietetic services from the
81 perspectives of older malnourished patients.

82

83 Methods

84 *Study approach and context*

85 This study drew upon phenomenological methodology; as this approach is grounded on
86 determining people's first-hand emotions, attitudes and perceptions ^(21; 22). The study was
87 undertaken as part of wider local research investigating the patient journey of older adults,
88 which was approved by the Human Research Ethics Committee (HE15/007). 'Older adult'

was considered someone 70 years or older. This demographic is most reliant on health services⁽⁴⁾ and are a priority population for PCC⁽²³⁾.

Population sampling

A purposive sampling technique was employed for recruitment. The inclusion criteria were patients aged ≥ 70 years who were (i) screened as at risk of malnutrition and (ii) had subsequently been seen by a dietitian for malnutrition assessment using a validated malnutrition assessment tool Mini Nutrition Assessment (MNA) or Subjective Global Assessment (SGA). Patients from palliative care and oncology wards, dementia patients and those with a Mini-Mental State Examination score ≤ 18 or a Rowland Universal Dementia Assessments Scale score ≤ 22 , were excluded. Additionally, individuals were excluded if upon approach were deemed too unwell to participate. Furthermore, if patients' consented to the interview but two months or greater had lapsed since seeing a dietitian, they were excluded from the interview.

A sample of eligible patients were recruited from five hospitals within the Illawarra Shoalhaven Local Health District, between March and August 2015. The recruitment sites consisted of one general medical ward, three rehabilitation wards and two aged-care/non-acute wards, one dietetic outpatient service and one multidisciplinary transitional care service. Verbal consent to approach for participation in the study from each patient was obtained by the patients' treating dietitian, before researchers [EH and MT] obtained informed written consent and administered the survey. If eligible patients were discharged prior to having been approached for participation then study information, consent forms and the survey were mailed to them, including a stamped return envelope.

Data Collection

Data was collected and triangulated through three methods: medical record review, a patient satisfaction survey and semi-structured in depth interviews.

Demographic details for each participant (age, gender, length of hospital stay, malnutrition assessment scores and discharge destination) were obtained from written progress note and electronic medical record review.

The survey consisted of 27 questions (Appendix A) which was pilot tested with a small sample of eligible patients and dietetic health professionals to assess face validity. This study

reports on the responses to the open-ended survey questions relating to the patients' experience and satisfaction with dietetic care received. Additional data obtained from closed questions will be analysed in future research.

Semi-structured interviews were conducted by a non-treating member of the research team. These interviews lasted between 10-30 minutes and were undertaken at the patients' home post-discharge or in the hospital in a private room; at a time that was mutually convenient for patient and interviewer. The goal of the interview was to capture patients' experiences with dietetic service and their perceptions of this care. An interview guide covered five key topic areas (Appendix B) including narrating the nutrition care experience; recollections about referral and treatment delivered by the dietitian; rating the experience of dietetic care; perspectives on compliance to the dietary prescription; and assessment about the value of the care provided by the dietitian. Interviews were recorded using a digital recorder and transcribed verbatim by researchers, including the main author [EH and MT].

Data analysis

The qualitative data analysis frameworks by Green *et al.* ⁽²⁴⁾ and Fade and Swift ⁽²⁵⁾ were drawn upon to analyse the qualitative data obtained from the survey and interviews. Analysis involved immersion in the data, coding transcripts, creation of categories and identification of themes. Three of the ten interview transcripts were reviewed against the digital recording to enhance transcriptional accuracy. The transcripts were coded separately by EH and MT to develop main themes and ensure rigour ⁽²⁵⁾. Subcategories were then developed to account for variance within these themes. Differences were identified and debated through discussion, until consensus was reached, as recommended by Harris *et al.* ⁽²¹⁾. QSR NVivo 10 software (NVivo qualitative data analysis software. 10 ed. Melbourne, Australia: QSR International Pty Ltd; 2012) was utilised to manage this qualitative data. Demographic data was analysed using SPSS (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp) and reported as means and standard deviations. The Shapiro-Wilk test was used to determine normality.

Results

One hundred and seventeen participants were eligible and were approached for participation in the study. Fifty-six (response rate: 47.9%) completed the survey. Reasons for non-

156 participation in the interviews included death (n=2), drop out (n=2 related to relocation and
157 inconvenience), no longer meeting the eligibility criteria (n=1) and greater than two months
158 having lapsed since their last dietetic consult (n=12). The interview sample size (n=10) was
159 deemed appropriate for the depth of qualitative data collected, as data saturation was reached
160 by interview number eight with no new themes subsequently identified ⁽²¹⁾.

162 *Sample demographics*

163 Participant demographics are outlined in Table 1. There were 56 survey participants (28
164 males and 28 females) with a mean age of 80.73 years (0.962). The interview sub-sample
165 comprised of six males and four females, with a mean age of 80.2 years (2.476). Of the
166 survey sample for which an MNA or SGA score was recorded (n=52) 88.5% were assessed
167 as at risk of malnutrition or malnourished. This was the case for 100% of the interview sub-
168 sample.

170 *Patient –centred quality indicators of dietetic care*

171 Eleven quality indicators embedded within three domains: structure (relating to wider
172 healthcare systems and environment), process (relating directly to the dietitian-patient
173 interaction), and outcome (relating to desired measurable or immeasurable outcomes of
174 dietetic care) were identified (Table 2). A selection of these quality indicators are discussed
175 below with exemplar quotes provided to reinforce important findings.

177 *Structure indicators*

178 *Continuity of care through regular contact and post-discharge dietetic follow-up.* Both open-
179 ended survey and interview responses revealed that continuity of care through regular contact
180 and post-discharge dietetic follow-up was considered to be PC dietetic care. Unfortunately,
181 participants often felt this was limited, particularly in the hospital setting. For example, P82
182 described the interaction with the inpatient dietitian as “*fleeting*”. Furthermore, P71’s
183 emotive response to being asked if they had contact with a dietitian following a hospital
184 admission supports the value in providing continuity of care through post-discharge dietetic
185 follow-up: “*No – you’re the only one who cares about me*”. In comparison, P74 reflected
186 positively on regular post-discharge follow-up with the dietitian available through a
187 community-based transitional aged care program: “*ITACS very good. They came here all the*
188 *time (sic)*”.

Interdisciplinary coordination and collaboration. Participants valued dietitians coordinating and working collaboratively with other healthcare professionals to provide holistic care as a component of PCC, as encapsulated in the following quote: “*Dietitians have their role and that is to see if you were eating healthy... as long as you’re not ignoring other issues... if you’re going to ignore that and just concentrate on one well it’s going to fail*” (P45). However, several participants recounted experiences whereby poor coordination and collaboration within the team failed this impacted their nutrition: “*When they take me to X Hospital for a test, they wipe me off the list, so when I get back there’s no tea, or no lunch*” (P4).

High quality hospital food services. Patient perceptions regarding the quality of dietetic services were intimately linked with perceptions regarding the quality of hospital food and interactions with food service staff. Overwhelmingly experiences with the hospital food services were negative and this reflected negatively on perceptions of the dietitian. For example, P74 explains: “*(Dietitians) do nothing... No, we all complain... they brought the meals and they go out again. They saw that and they do nothing*” (P74).

Process indicators

Addressing the patients’ primary medical concern. The importance of the dietitian tailoring nutritional advice and care to the patients’ primary medical concern is illustrated by P50: “*There should be a guide to guide you, what, you know, really need... I have a break in my femur so you need calcium and protein... and other (nutrients) for your bones (sic)*”. Several of the respondents believed that nutrition care could not be provided until their underlying medical issue was diagnosed: “*First thing I’d ask the doctors what happened to me and then I would maybe ask for the dietitian*” (P1); “*A dietitian couldn’t tell me about what to eat because she didn’t have the knowledge from the doctors*” (P15). These quotes further highlight the importance of interdisciplinary coordination and collaboration.

Providing clear and simple information. Information that was understandable and actionable was considered a key element of a high quality PC dietetic care; and aligns with the theme of providing continuity of care. They valued clear and simple information provided by dietitians: “*I got home and understood everything right away*” (P15) and disliked the use of jargon: “*When the doctors were talking to me... they were saying F, uh, F, FD, F, C, FJ and all like this I don’t even know what they were flipping talking about*” (P15). Further

emphasising the importance of providing clear and simple information, several participants had difficulty recalling the information provided in the hospital setting, as evidenced by P50: “What did the dietitian do for me hmmm... I can’t remember anything in particular”. Conversely, both survey and interview participants were more likely to recall written dietetic information and this was viewed positively: P74: “I got a note... She’s very good”.

Utilising interpersonal communication skills. High quality PC dietetic care was recognised when dietitians utilised interpersonal skills such as active listening and empathy: “They listen to you. Whatever you know, you want, they try to help you... they are very kind” (P36), “she was lovely” (P72). When participants felt the dietitian or other members of the health care team did not utilise interpersonal skills, the perception of that health professional was negatively affected. This was repeatedly communicated in response to being asked what inpatient dietitians could do to improve the service: “They could listen... they don’t listen to you” (P72); and “It just seems hard to get through sometimes” (P4). Further supporting the importance of utilising interpersonal communication skills with older malnourished patients, P72 recounted an impersonal interaction with a doctor: “A doctor – who didn’t give me his surname, I much prefer when a doctor says “I’m Dr Smith”, because you can’t identify them otherwise. The nurses come in and say “Hi, I’m Julie, I’m looking after you”.

Outcome indicators

Improvement of and maintenance of independence. Patients valued dietetic care that was tailored to helping them achieve or maintain a level of independence that particularly allowed them to remain in their own home: “You are professionals in here... when I come in this hospital I couldn’t lift myself from the chair... now I can walk... I am independent... believe me I am very happy” (P36); “I need the strength in my legs... I need the strength in me upper body and that and diet... is part of it, along with the physical part yeah, so I’ll do whatever I need to quicken this process up so I can get out (sic)” (P46). As also evident from these quotes, participants recognised the importance of dietitians collaborating with other members of the healthcare team to expedite their transition home; further supporting that theme as a component of PC dietetic care.

Discussion

In this study we identified eleven key themes that can be used to describe high quality PC dietetic care for older malnourished patients. Previous research has largely utilised Likert-scale-style and closed questions to capture patient preferences in dietetic services. These studies have elucidated similar key indicators such as: interdisciplinary collaboration⁽²⁶⁾; interpersonal communication skills^(27; 28; 29), empathy⁽³⁰⁾ and patient involvement⁽³¹⁾. A strength of the present study is the use of more open-ended questions and triangulation through in-depth qualitative interviews. This allowed for more detailed patient experiences to be elucidated, which is key to informing PCC^(22; 32; 33; 34; 35). In line with this thinking, Hancock *et al.*⁽³⁶⁾ utilised semi-structured interviews to capture patient experiences. Participants identified: communication, rapport, individualised information and non-judgemental regular support as quality indicators of dietetic care⁽³⁷⁾. Cant and Aroni⁽²⁷⁾ confirmed the value of good communication through patient interviews. Moreover Endevelt and Gesser-Edelsburg⁽³⁸⁾ supported the importance of providing individualised dietetic care through focus groups with patients. However, as these studies have not explored the perceptions of older malnourished patients regarding hospital-based dietetic services, this study helps to address a critical gap in the literature. Therefore, the present findings offer information necessary to help inform evidence-based PC dietetic care for the vulnerable older malnourished patient population.

Participants in this study acknowledged that quality inpatient dietetic care is often hampered by structures unique to the hospital environment. Specifically, they explained that the present hospital setting did not support regular dietetic follow-up and restricted obvious and optimal interdisciplinary coordination and collaboration. Additionally, with the apparent poor delineation between food service staff and dietitians, dissatisfaction with the quality of hospital food services translated to negative perceptions of the dietitian. These findings highlight that dietetic care environments must be conducive to PCC in order to facilitate this practice. This notion is recognised in several key health policy reports and research studies which identify that healthcare services must have systems in place that are conducive to PCC; to allow health professionals to practice in this way^(39; 40; 41; 42). Therefore, changes at a hospital system level in relation to: ensuring adequate dietetic staffing; facilitating interdisciplinary collaboration and coordination; and improving the quality of food services, appear to be central to facilitating PC dietetic care in this setting.

288

289 As outlined above, working within the hospital environment may present obstacles to the
290 provision of PC dietetic care. This was recognised by the older malnourished patients in this
291 study. Hence, they placed high value on continuity of care through post-discharge dietetic
292 follow-up. A framework describing PCC for older adults by the Victorian Department of
293 Health ⁽²³⁾ supports this, by recommending interdisciplinary discharge planning and follow-
294 up for this vulnerable population ⁽²³⁾. These ideals can be recognised in the relatively novel
295 healthcare model: the PC medical home. This is a community-based model whereby one
296 practitioner coordinates an interdisciplinary care plan that is tailored the patients' personal
297 needs and values ⁽⁴³⁾. The benefits of the PC medical home (and similar transition home
298 programs for older adults) include lower rates of hospital readmission and improvements in
299 patient satisfaction with care, as described in a systematic review by Allen *et al.* ⁽⁴⁴⁾.
300 Therefore, the development of more interdisciplinary community-based dietetic services and
301 dietetic positions in transition home services, may promote PC dietetic care for older
302 malnourished patients.

303

304 Being listened to was a salient indicator of interpersonal communication and PC dietetic care
305 according to the participants. Due to the time restrained and busy nature of the hospital
306 setting, participants in the present study felt they were not always effectively heard by
307 dietitians. This issue may be further compounded as older patients are more likely to suffer
308 from hearing, vision and cognitive impairments ⁽⁴⁵⁾. Whitehead *et al.* ⁽⁴⁶⁾ also recognise that
309 good communication, which encompasses attentive listening, is fundamental to PCC, and key
310 to facilitating dietary behaviour change. Unfortunately, they also found that while
311 recognising the importance of good communication with patients, dietitians noted that it was
312 time consuming ⁽⁴⁶⁾. However, a report by the Victorian Department of Health ⁽²³⁾ emphasises
313 that time taken to communicate with older patients is not wasted. They explain that it is safer
314 and more efficient to know what patients need than to assume and this is necessary to provide
315 optimal and tailored PCC ⁽²³⁾. While dietitians are encouraged to take the time to utilise
316 interpersonal communication skills with older malnourished patients to provide PCC, it is
317 appreciated that until hospital-based systems are transformed to facilitate this practice, this
318 may continue to be a challenge. This further highlights the value of community-based dietetic
319 follow-up to help to overcome hospital setting related barriers to interpersonal
320 communication.

321

To our knowledge this small exploratory study is the first to capture older malnourished patients' experiences with hospital dietetic services in both the inpatient and community setting. It provides the initial data to inform an ongoing wider study on the older malnourished patients' dietetic journey. However, limitations should be acknowledged. Firstly, only 16 weeks were available for data collection. This subsequently limited the sample size as the capacity for researchers to recruit inpatients before they were discharged was restricted; and response rate was lowest when participants were recruited via mail (14.3% and 0% for the survey and interview respectively). Due to the small sample and purposive nature of sampling the views of participants included in this study may not represent the views of all older malnourished patients. Moreover, throughout the survey responses and interviews an overwhelming sense of agreeableness evolved. This may be explained by Coulter and Jenkinson⁽⁴⁷⁾ who found that older patients have fewer expectations of the care provided in comparison to their younger peers. Similarly, the results may have been exposed to positive bias as older patient responses can be influenced by a desire to please the researcher⁽⁴⁸⁾ and a hesitation to critique healthcare⁽⁴⁹⁾. While these limitations do make the representativeness of the findings unclear, qualitative research in nutrition sciences aims to enrich our knowledge of certain processes, rather than present definitive relationships and conclusions⁽²¹⁾. Hence, the present findings help to address the lack of patient experience research conducted with the older malnourished patient population. This is central to informing evidence-based PC dietetic care.

It would be worth exploring older malnourished patient perceptions of quality dietetic care in larger samples and in other health districts across Australia, as well as in other countries. This will allow the translatability of these findings to be explored. Additionally, such research may further enhance our understanding of PC dietetic care for older malnourished patients across the care continuum. Through expanding this evidence base and also exploring the perceptions of health professionals, the present findings could aid the development of a tool to assess the patient-centeredness of dietetic services for older malnourished patients.

In conclusion the results of this study have identified eleven quality indicators of dietetic services from the perspectives of older malnourished patients. This set of indicators help to describe what older malnourished patients believe constitutes PC dietetic care. This may assist dietitians to provide evidence-based PCC.

Acknowledgements

The authors would like to thank (i) the patients who participated in the study, (ii) Martin Tracjevski who assisted with data collection and analysis and (iii) Amanda Cullen who assisted with data collection. Work was undertaken in the Illawarra Shoalhaven Local Health District and in the School of Medicine, University of Wollongong.

Conflicts of interest, sourcing of funding and authorship:

The authors declare that they have no conflicts of interest and received no financial support for this study. EH conceived the idea for this study, collected and analysed data, undertook a literature review, wrote the first draft and completed this manuscript. LB and MM conceived the idea for larger patient journey research project; supervised the project; assisted data collection; and contributed to the drafting of the manuscript. AM and KL contributed to the study design and data analyses; supervised the project; and contributed to the drafting of the manuscript. EH, LB, MM, AM and KL all critically reviewed the manuscript and approved the final version submitted for publication.

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Appendix A. Survey

Patient satisfaction survey

In the Nutrition Department of Illawarra Shoalhaven Local Health District we aim to provide the best quality dietetic service to our patients and clients.

By completing this survey, you will be providing us with feedback to improve the quality of our care and services. Your responses will remain confidential.

We'd like to thank you in advance for your time.

Please provide some basic information about yourself: (Please circle)

Gender: Female Male

Age: 70-74yrs 75-84yrs 85+yrs

Living situation: Live alone in own home Live with spouse/partner/family

Live in low level care Live in Nursing Home

Tell us about your experience in hospital

1- How long have you been in hospital for? Please tick:

☐ $\leq$ 1 week

☐ 1-2 weeks

☐ 2-4 weeks

☐ 1-3 months

☐ $\geq$ 3 months

2- If you have been transferred to different hospitals during your stay please let us know how many, please circle.

Coledale Bulli Wollongong Port Kembla

29

30 Shellharbour Kiama Other _____

31

32 **3- During your stay in hospital, did you ask to see a Dietitian?**

33 [] No

34 [] Yes, tell us why:

35 _____

36

37 **4- During your stay in hospital, did a Dietitian come to see you without you**
38 **asking? Please tick:**

39 [] Yes, please tell us the number of dietitian visits: _____

40 [] No, if no, go to question 10

41 [] Unsure/don't know

42 **5- Can you recall the information the dietitian discussed with you, please tick:**

43 [] Yes, please tell us what the information was mainly about:

44 _____

45 _____

46 [] No

47 [] Unsure

48

49 **6- Did your dietitian give you advice on ways to improve your nutritional**
50 **intake?**

51 [] Yes, please tell us what key advice was given:

52 _____

53 _____

54 [] No

55 [] Unsure

56

57 **7- Did you find this information useful?**

58 [] Yes, please tell us what advice was most useful:

59 _____

60 _____

[] No, please tell us what might have been useful:

8- Did the Dietitian explain things in a way you could understand?

[] Yes

[] No, please tell us how it could have been explained better:

9- If you have seen a dietitian during THIS stay, how would you rate the dietetic service that you have received?

Excellent Good No comment Fair
Poor

Please comment on what the dietitian(s) could have done better or what they did well?

10- During your stay, have you received any special/different foods or supplement drinks?

[] Yes, please let us know what those foods/drinks were:

[] No

[] Unsure

11- Have you been weighed while you have been in hospital?

[] Yes

[] No

93 ☐ Unsure

94

95 **12- Do you have any concerns about your weight?**

96 ☐ Yes, what are they? -

97 _____

98 ☐ No

99 ☐ Unsure

100

101 **13- Do you have any concerns or worries about how well you have been eating in**
102 **hospital?**

103 ☐ Yes, what are they?

104 _____

105 ☐ No

106 ☐ Unsure

107

108 **14- Do you think it would be helpful to see a dietitian after you go home from**
109 **hospital?**

110 ☐ Yes, please let us know why?

111 _____

112 ☐ No, please let us know why not?

113 _____

114 ☐ Unsure

115

116 **15- What language do you mainly speak at home?**

117 ☐ English, go to question 17

118 ☐ A language other than English, specify language

119 _____

120

121 **16- If you saw a dietitian, was an interpreter provided?**

122 ☐ Yes

123 ☐ No, did not need one

124 ☐ No, but would have liked to have had one.

125 **17- Did you complete this survey on your own?**

126 ☐ Yes

127 ☐ No, with help from someone (please specify)

128 _____

129

130 **18- Have you seen a dietitian as an outpatient**

131 ☐ Yes, **please go on to question 19**

132 ☐ No, this concludes the survey for inpatient dietetic services; thank you for your
133 time, your feedback is greatly appreciated.

134 **Please feel free to write any other comments about inpatient dietetics services you**
135 **wish to share with us below:**

136 _____

137 _____

138 _____

139 _____

140 _____

141 _____

142 **Tell us about your experience as an outpatient**

143 **Only answer these next questions if you have seen a dietitian as an outpatient.**

144

145 **19- If you have seen a dietitian as an outpatient please indicate with which**
146 **service:**

147 ☐ ITACS (Illawarra Transitional Aged Care Service)

148 ☐ CONECT (Community Outpatient and Extended Care Team)

149 ☐ Other (Please specify)

150 _____

151

152 **20- Do you know why you have seen the dietitian?**

153 ☐ Yes, tell us why:

154 _____

155 ☐ No

156

157 **21- Has your Dietitian given you advice on ways to improve your nutritional**
158 **intake?**

159 [] Yes, please tell us what key advice was given:

160 _____

161 _____

162 [] No

163 [] Unsure

164

165 **22- Have you found this information useful?**

166 [] Yes, please tell us what advice was most useful:

167 _____

168 _____

169 [] No, please tell us what might have been useful:

170 _____

171 _____

172

173 **23- Did the dietitian explain things in a way you could understand?**

174 [] Yes

175 [] No, please tell us what you would have preferred/how it could have been better:

176

177 _____

178 _____

179

180 **24- How would you rate the outpatient dietetic service that you have received?**

181

182 Excellent Good No comment Fair

183 Poor

184

185 Please comment on what the dietitian(s) could have done better or what they did
186 well?

187 _____
188 _____
189 _____

190

191 **25- What language do you mainly speak at home?**

192 [] English, go to question 27.

193 [] A language other than English, specify language

194 _____

195

196

197 **26- Was an interpreter provided for you?**

198 [] Yes

199 [] No, did not need one

200 [] No, but would have liked to have had one.

201 **27- Did you complete this survey on your own?**

202 [] Yes

203 [] No, with help from someone (please specify)

204 _____

205 **Please feel free to write any other comments about outpatient dietetic services that**
206 **you wish to share with us below:**

207 _____

208 _____

209 _____

210 **Thank you for your time. Your feedback is greatly appreciated**

1. During your hospital admission, a Dietitian was involved in your care. Please describe your nutrition care experience from beginning to end (including your experience with the outpatient service (ITACS/CONNECT)).

Prompts: What triggered the need for nutrition care? What did the Dietitian do for you? Were you given a special diet/supplement drinks/ information/reassurance etc.? Were you given any specific advice? How have you been using the advice that you were given?

2. What was positive about seeing the dietitian?

Prompts: Identify type of information provided, how it was delivered and in what setting, what changes if any was enacted with the eating plan, how as the advice used during and proposed for after the hospital stay.

**3. Was there anything negative about your interaction with the Dietitian?
What constructive criticism can you offer us so we can improve things?**

Prompts: Identify if the Dietitian understood what the patients concerns were; if their preferences and requests were taken into account, and if not why the patient might think they were not; identify if the food requirements were the main concern, or the advice about how to manage the dietary requirements was of main concern; identify what the patient thinks might be done better from their experience.

4. If you were able to talk with someone who might have similar health issues and who had to go to hospital what might you advise them to talk with the Dietitian about?

Prompts: identify any specific areas of concern or areas that were well done that might not be clear to other patients around food and nutrition offerings or advice;

242 identify if patient are concerned about how they will manage their food and nutrition
243 needs at home.

244

245

246 4. **Any other comments that you would like to make about the Dietitian or the**
247 **service that we have not yet covered**

248

Table 1. Survey and interview participant demographics.

	Survey	Interview
	(n=56)	(n=10)
Gender		
Male	28 (50.0%)	6 (60.0%)
Female	28 (50.0%)	4 (40.0%)
Recruitment setting		
Inpatient	46 (82.1%)	10 (100.0%)
Outpatient	10 (17.9%)	0 (0.0%)
Malnourished or at risk of malnutrition		
Yes	46 (88.5%)	10 (100.0%)
No	6 (11.5%) ^a	0 (0.0%)
Discharge destination		
Home		
Total	29 (46.4%)	5 (50.0%)
Home with dietetic follow-up	12 (41.1%)	2 (20.0%)
Residential aged care facility	12 (21.4%)	3 (30.0%)
Deceased	5 (8.9%)	0 (0.0%)
Hospitalised at conclusion of data collection period	9 (16.1%)	2 (20.0%)

^aThis data was only available for 52 participants

1 **Table 1.** Quality indicators of dietetic services identified from surveys (n=56) and interviews (n=10)
 2 with older malnourished patients.

Structure	
	Continuity of care through regular contact and post-discharge dietetic follow-up
	High quality hospital food services
	Interdisciplinary coordination and collaboration
Process	
	Addressing the patients' primary medical concern
	Involving the patients' family
	Providing clear and simple dietetic information
	Providing expert dietary knowledge
	Utilising interpersonal communication skills
Outcome	
	Improvement in health status
	Improvement or maintenance of independence
	Weight gain

3 **N.B.** Quality indicators in each category are listed alphabetically
 4