

Appendices

Appendix 1. Survey questionnaire.

Appendix 2. Detailed characteristics of GP Respondents and association with awareness and use of NDIs and HANDI

Appendix 3. GPs' Wishlist of NDIs

Appendix 4. Response count by question number

A Survey of General Practitioners on Non-Drug Interventions (NDIs): Awareness, Knowledge, Attitudes, Beliefs, Use, and Uptake.

Welcome and Introduction

The Institute for Evidence-Based Healthcare at Bond University invites you to participate in a survey on GP's awareness, knowledge, attitudes, beliefs, use, and uptake of non-drug interventions (NDIs). You are invited to participate in this study because you are a practising GP. Your views are vital to this research as you are a primary user of NDIs.

About us

This survey is being conducted by the Institute for Evidence-Based Healthcare at Bond University in collaboration with the Royal Australian College of General Practitioners (RACGP).

What are NDIs?

NDIs are treatments that use non-pharmacological interventions such as exercise, physical therapies, diets, or psychological interventions, rather than pharmacological treatments. Despite many being as effective as pharmacological therapies, NDIs are currently under-utilised in patient management.

Aim of the study

This study aims to (i) identify GPs awareness, knowledge, attitudes, beliefs, use and uptake of NDIs, and of the RACGP Handbook of Non-Drug Interventions (HANDI), and (ii) identify barriers and facilitators of the use of NDIs in general practice.

What does participation in this research involve?

- This survey will take less than 20 minutes to complete.
- Your identity and any information you provide is anonymous.
- Your participation is voluntary, and you are free to withdraw at any time without penalty.
- By clicking **agree and continue** below, you consent to take part in this survey.
- If you have any questions regarding the study, please do not hesitate to contact Dr Loai Albarqouni at lalbarqo@bond.edu.au. This research has been approved by the Bond University Human Research Ethics Committee (Approval number: LAO3354).

Thank you for your time and for taking part in this survey!

By clicking NEXT below, you agree to the terms and consent to participate in this survey.

Survey: GP's non-drug interventions (NDI's)

Section 1: About You

Q1 How old are you?

- 1) Younger than 35 years
- 2) 35 to 44 years
- 3) 45 to 54 years
- 4) 55 to 64 years
- 5) 65 years and older

Q2 What is your gender?

- 1) Male
- 2) Female
- 3) Other – Please specify: _____
- 4) I'd prefer not to say

Q3 How many years have you worked in general practice?

- 1) <5 years
- 2) 5-10 years
- 3) 11-15 years
- 4) >15 years

Q4 What proportion of your work time per week (FTE) is in clinical practice?

- 1) 0-20%
- 2) 21-40%
- 3) 41-60%
- 4) 61-80%
- 5) 81-100%

Q5 How many patients, on average, do you consult in your general practice per day?

- 1) <10 patients
- 2) 10-20 patients
- 3) 21-30 patients
- 4) >30 patients

Q6 How would you describe your primary general practice?

The primary practice is the one where you spend most time

- 1) Primarily bulk billing
- 2) Primarily private billing
- 3) Both bulk and privately billing
- 4) Other – Please specify: _____

Scripter instructions: numeric response, validate postcode

Q7 What is the postcode of your primary general practice?

The primary practice is the one where you spend most time

Survey: GP's non-drug interventions (NDI's)

Section 2: Use of Non-Drug Interventions (NDIs)

Q8 Thinking about the last 4 weeks, how often did you recommend NDIs to your patients, when appropriate?

- A. Never
- B. Rarely
- C. Sometimes
- D. Often
- E. Always

Q9 What is the most favoured NDI you recommend to your patients in your clinical practice?

Randomise question order

Q10 We want to understand which NDIs you are aware of, agree with the usefulness of and use in practice. For the following NDIs, how would you say you are:

Q	Non-drug Intervention	Unaware	Aware, but disagree	Aware and agree, but do not use	Aware, agree, and use occasionally	Aware, agree and use frequently
a	Exercise rehabilitation for coronary heart disease					
b	Exercise for chronic low back pain					
c	Cognitive behavioural therapy for depression					
d	Mediterranean diet for reducing cardiovascular disease risk					
E	Brief behavioural treatments for chronic insomnia					
f	Modified Valsalva manoeuvre for supraventricular tachycardia					
G	Autoinflation for glue ear in children					
h	Honey for cough in children					
i	Probiotics in pregnancy for infant atopic eczema					
j	Mother's kiss for nasal foreign bodies					
k	Elevate the head for GERD (Gastro-oesophageal reflux disease)					
l	Aquatic exercise for knee and hip osteoarthritis					
m	The Epley manoeuvre for vertigo					

Survey: GP's non-drug interventions (NDI's)

Section 3: What do you think of NDIs?

Randomise question order

Q11 Thinking about NDIs, please indicate to what degree you agree or disagree with the following statements

Q	Text	Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
a	For some acute and chronic health conditions, NDIs can be effective management options					
b	For many health conditions, NDIs can be as effective as drug interventions					
c	Using NDIs can reduce the need to prescribe inappropriate drug interventions					
d	Using NDIs can reduce risks to adverse reactions from drug interventions					
e	Patients prefer drug interventions to NDIs					
f	There is not enough time in the consultation to recommend NDIs					
g	Most NDIs are not applicable to my patients					
h	There is no or limited access to evidence-based information about NDIs					
i	NDIs are not appropriately covered by Medicare					

Survey: GP's non-drug interventions (NDI's)

Section 4: Knowledge and use of HANDI

Q12 Have you heard of the RACGP HANDI (Handbook of Non-Drug Interventions)?

1. Yes
2. No

If Q13 = 1, if Q13 = 2 skip to Q18

Q13 How did you hear of RACGP HANDI?

1. Colleagues
2. Professional networks
3. Training programs
4. Online e.g., social media
5. Other (please specify)

If Q13 = 1

Q14 How often do you use HANDI as a clinical resource or guideline when considering management plans for patients?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

If Q13= 1 and Q14 = 1,2,3

Randomise question order, anchor 'other' multiple choice

Q15 You are aware of HANDI, but [PIPE Q15 response] use it when considering a treatment plan for patients. What are the main barriers preventing you from using HANDI regularly? Select all that apply

1. Not enough time in consultations
2. Website hard to use
3. Unclear how to prescribe HANDI interventions
4. I don't believe they are effective
5. Not integrated into existing systems e.g. Medicare - make appropriate for context/setting
6. Patient expectation, e.g. prefer script
7. Other, please specify
 - a. _____

If Q13= 1 and Q14 = 1,2,3

Q16 Can you think of anything that would help you to use HANDI more often?

- a. [OPEN END]

Randomise question order, anchor 'other', multiple choice

Q17 Throughout this survey, we have used the term NDIs (non-drug interventions). Please let us know the terminology you use to describe this set of clinical interventions. Select all that apply.

1. Non-drug treatment/therapy
2. Lifestyle therapy/treatment/intervention
3. Non-pharmaceutical therapy/treatment/intervention

Survey: GP's non-drug interventions (NDI's)

4. Non-pharmacological therapy/treatment/intervention
5. Other, please specify
 - a. _____

Section 5: Wish-list

We are always looking for ways to grow and improve RACGP HANDI.

Q18 What NDIs would you want to see included in RACGP HANDI?

Please specify: _____

Q19. Do you have any final suggestions or comments on ways HANDI can be improved?

Please specify: _____

Thank you for taking the time to complete this survey. Please click DONE below when you are ready to submit your responses.

Appendix 2. Characteristics of GP Respondents and association with awareness and use of NDIs and HANDI (n=366)

	Heard of HANDI? (Q12)	Frequency of NDI Use (Q8) (n=335)			Frequency of HANDI Use (Q14) (n=199) *		
		Yes (n = 205/338) (n; %)	Never/ Rarely/ Sometimes (n = 46/335)	Often (n = 175/335)	Always (n =114/335)	Never/ Rarely/ Sometimes (n=180/199)	Often (n= 19/199)
Age (years), n (%)							
<35 (1)	28 (67%)	1 (2%)	23 (55%)	14 (33%)	24 (86)	4 (14)	0 (0)
35- 44 (2)	49 (64%)	8 (11%)	37 (49%)	21 (28%)	42 (89)	5 (11)	0 (0)
45-54 (3)	55 (59%)	15 (16%)	41 (44%)	34 (36%)	50 (94)	3 (6)	0 (0)
55-64 (4)	50 (57%)	11 (13%)	40 (45%)	32 (36%)	46 (96)	2 (4)	0 (0)
>65 (5)	23 (35%)	11 (17%)	34 (52%)	13 (20%)	18 (78)	5 (22)	0 (0)
Gender, n (%)							
Male	59 (49%)	17 (14%)	57 (48%)	36 (30%)	51 (89)	6 (11)	0 (0)
Female	143 (59%)	28 (12%)	115 (48%)	78 (32%)	126 (91)	13 (9)	0 (0)
Prefer Not to Say	3 (75%)	1 (25%)	3 (75%)	0 (0%)	3 (100)	0 (0)	0 (0)
Years of Clinical Practice, n (%)							
<5 years	41 (76%)	6 (11%)	31 (57%)	13 (24%)	34 (87)	5 (13)	0 (0)
5-10 years	41 (61%)	5 (7%)	32 (48%)	23 (34%)	37 (95)	2 (5)	0 (0)
11-15 years	24 (55%)	6 (14%)	18 (41%)	15 (34%)	21 (88)	3 (12)	0 (0)
>15 years	99 (49%)	29 (14%)	94 (47%)	63 (31%)	88 (91)	9 (9)	0 (0)
Time spent in general practice (%FTE), n (%)							
0-20%	12 (50%)	4 (17%)	11 (46%)	3 (13%)	9 (75)	3 (25)	0 (0)
21-40%	22 (71%)	3 (10%)	16 (52%)	9 (29%)	18 (86)	3 (14)	0 (0)
41-60%	35 (56%)	8 (13%)	30 (48%)	21 (33%)	30 (91)	3 (9)	0 (0)
61-80%	35 (70%)	4 (8%)	24 (48%)	20 (40%)	32 (94)	2 (6)	0 (0)

81-100%	101 (51%)	27 (14%)	94 (47%)	61 (31%)	91 (92)	8 (8)	0 (0)
Average number of patients consulted per day? n (%)							
<10	10 (42%)	4 (15%)	10 (38%)	7 (27%)	8 (73)	3 (27)	0 (0)
10-20	88 (63%)	18 (14%)	74 (57%)	35 (27%)	50 (89)	6 (11)	0 (0)
21-30	84 (57%)	19 (13%)	70 (48%)	54 (37%)	27 (96)	1 (4)	0 (0)
>30	22 (41%)	5 (9%)	21 (39%)	18 (33%)	76 (92)	7 (8)	0 (0)
Remoteness Area, n (%)							
Major City	131 (55%)	28 (12%)	109 (46%)	74 (31%)	118 (90)	13 (10)	0 (0)
Inner Regional	46 (58%)	13 (16%)	40 (50%)	26 (33%)	41 (89)	5 (11)	0 (0)
Outer Regional	15 (50%)	3 (10%)	17 (57%)	9 (30%)	14 (93)	1 (7)	0 (0)
Remote	8 (67%)	0 (0%)	7 (58%)	4 (33%)	7 (88)	1 (12)	0 (0)
Very Remote	5 (83%)	2 (33%)	2 (33%)	1 (17%)	4 (100)	0 (0)	0 (0)
Socioeconomic Score of GP Area, n (%)							
1-2	25 (61%)	10 (24%)	17 (41%)	10 (24%)	30 (83)	6 (17)	0 (0)
3-4	35 (49%)	10 (14%)	34 (48%)	21 (30%)	25 (89)	3 (11)	0 (0)
5-6	44 (56%)	9 (11%)	38 (48%)	24 (30%)	29 (91)	3 (9)	0 (0)
7-8	49 (69%)	7 (10%)	38 (54%)	22 (31%)	27 (96)	1 (4)	0 (0)
9-10	51 (50%)	10 (10%)	46 (45%)	37 (36%)	73 (91)	7 (9)	0 (0)
Australian States, n (%)							
NSW	59 (56%)	12 (11%)	41 (39%)	43 (41%)	45 (87)	7 (13)	0 (0)
NT	8 (80%)	1 (10%)	7 (70%)	2 (20%)	7 (100)	0 (0)	0 (0)
QLD	44 (63%)	6 (9%)	38 (54%)	17 (24%)	38 (86)	6 (14)	0 (0)
SA	16 (57%)	6 (21%)	15 (54%)	5 (18%)	15 (94)	1(6)	0 (0)
TAS	6 (50%)	2 (17%)	6 (50%)	4 (33%)	5 (83)	1 (17)	0 (0)
VIC	46 (45%)	17 (16%)	50 (48%)	32 (31%)	42 (93)	3 (7)	0 (0)
WA	26 (72%)	2 (6%)	18 (50%)	11 (31%)	24 (92)	2 (8)	0 (0)
Primary practice billing description, n (%)							
Primarily bulk billing	40 (48%)	19 (23%)	31 (37%)	21 (25%)	37 (97)	1 (3)	0 (0)

Primarily private billing	51 (68%)	7 (9%)	34 (45%)	29 (39%)	43 (86)	7 (14)	0 (0)
Both bulk and private billing	102 (53%)	18 (9%)	103 (54%)	58 (30%)	91 (92)	8 (8)	0 (0)
Other	12 (71%)	2 (12%)	7 (41%)	6 (35%)	9 (75)	3 (25)	0 (0)
Frequency of NDI Use (Q8), n (%)							
Never/Rarely/Sometimes	24 (56)	NA	NA	NA	33 (62)	20 (38)	0 (0)
Often	107 (63)	NA	NA	NA	100 (91)	10 (9)	0 (0)
Always	66 (58)	NA	NA	NA	59 (88)	8 (12)	0 (0)
Heard of HANDI? (Q12), n (%)*							
Yes	NA	24 (12)	107 (54)	66 (34)	180 (90)	19 (10)	0 (0)
No*	NA	19 (15)	64 (49)	47 (36)	0	0	0
Frequency of HANDI Use (Q14), n (%)							
Never/Rarely/Sometimes	184 (90)	33 (17)	100 (52)	59 (31)	NA	NA	NA
Often	20 (10)	2 (10)	10 (50)	8 (40)	NA	NA	NA
Always	0	0	0	0	NA	NA	NA
Missing	1(1)	1 (100)	0	0	NA	NA	NA

*= This question was only asked to 199 participants based on requirements from previous answers; all 199 participants who were asked this question responded. Remoteness Area determined using Australian Statistical Geography Standard (ASGS) Remoteness Structure, July 2016(17). Socioeconomic Score Determined by ABS Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016 using Index of Relative Socio-economic Disadvantage (IRSD) (16)

Appendix 3: NDI Wishlist

Systemic	Musculoskeletal	Mental Health	Other
IgG Food Sensitivity for Irritable Bowel Syndrome	Brachiation for shoulder pain	Exercise for ADHD	Honey for wound care
Dietary interventions for constipation	Exercises or splints for carpal tunnel syndrome	Exercise for Autism Spectrum Disorder	Low carbohydrate diet (metabolic syndrome/disease)
Hygiene, urinating after intercourse for Urinary Tract Infection	Taping for Ingrown toenails	Exercise for Post Traumatic Stress Disorder	<i>TENS (Transcutaneous electrical nerve stimulation)</i>
Low level laser treatment for Chronic Pain & Inflammation	Exercises for Torticollis	Social prescribing and animals for Depression and Anxiety	<i>Hypnotherapy</i>
Warm compress for Eyelid Infections	*Acupuncture for neck and back pain	Social prescribing for Loneliness/isolation	<i>Osteopathy</i>
Breathing exercises (not exercise rehab) for Chronic Obstructive Pulmonary Disease	*Good Life with osteoArthritis in Denmark GLAD Program for Knee osteoarthritis	<i>Percussive therapy</i>	<i>Kinesiotherapy</i>
Warm water gargling for Upper Respiratory Tract Infections	*More specific exercises for shoulder pain	<i>Social Connection</i>	<i>Post-malignancy management</i>
Singing exercises for Obstructive Sleep Apnea	*More specific exercises for Hip osteoarthritis	<i>Meditation and Yoga</i>	
Sodium-free salts for hypertension			
Steam inhalation for congestion			
Social prescribing for Diabetes			
Saline gargles for Sore throat			

Italicized indicated suggestion was made without the condition for which the intervention is to be used for. N(suggestions) = 104. Not all Recommendations met the definition of Non-Drug Interventions as described in the introduction of the study and to the participants, and have been removed from this wish list (e.g. fertility optimization, hypnotherapy, toilet training for infants) There were a significant number of women's health recommendations (such as fertility optimization, pelvic and period pain management, and menopause management) however no particular interventions were suggested for these conditions and were hence removed from the presented table. We have not presented any suggestions where only the condition was suggested and no intervention. Note that these interventions are a wish-list of respondent GPs and may not be evidence-based; hence these interventions may likely need review and the research team does not endorse these interventions without further review. *Interventions already mentioned in HANDI.

Appendix 4. Number of responses per question and the eligible population for question completion

Question Number	Population eligible to complete question	Number of responses
1	366	366
2	366	366
3	366	366
4	366	366
5	366	366
6	366	366
7	366	366
8	366	341
9	366	335
10	366	332
11	366	332
12	366	338
13	199	166
14	205	205
15	199	199
16	199	168
17	332	332
18	332	196
19	332	126

“Population eligible” refers to the number of people who opened the survey. Only 338 participants completed the survey.