Research Centre
for Palliative Care,
Death & Dying

'My Learning': Results of Pre-Test, Post-Test Evaluation

Evaluation Program: Report No. 21

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About this White Paper

This publication is a RePaDD White Paper and Research Report. This report was developed as an evaluation study within the CareSearch 2015-2017 project period.

The RePaDD White Paper and Research Report Series provide researchers and policy makers with evidence-based data and recommendations. By organising, summarising and disseminating previous and current studies, the series aim to inform ongoing and future research in palliative care, death, and dying.

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About the RePaDD

The Flinders Research Centre for Palliative Care, Death, and Dying (RePaDD) works to make a difference to the care of persons at the end of life.

RePaDD researchers examine the universal experience of dying and create innovative solutions for people living with a life-limiting illness, their carers, and the clinicians caring for them.

RePaDD leads major national palliative care projects in Australia. Its team of multidisciplinary researchers and experts work collaboratively with various organisations and funding agencies to deliver impact. The Centre also strengthens research capacity by offering evidence-based resources, researcher education and training, and scholarships.

RePaDD's current research areas are:

• Palliative care across the health system
• Death and dying across the community
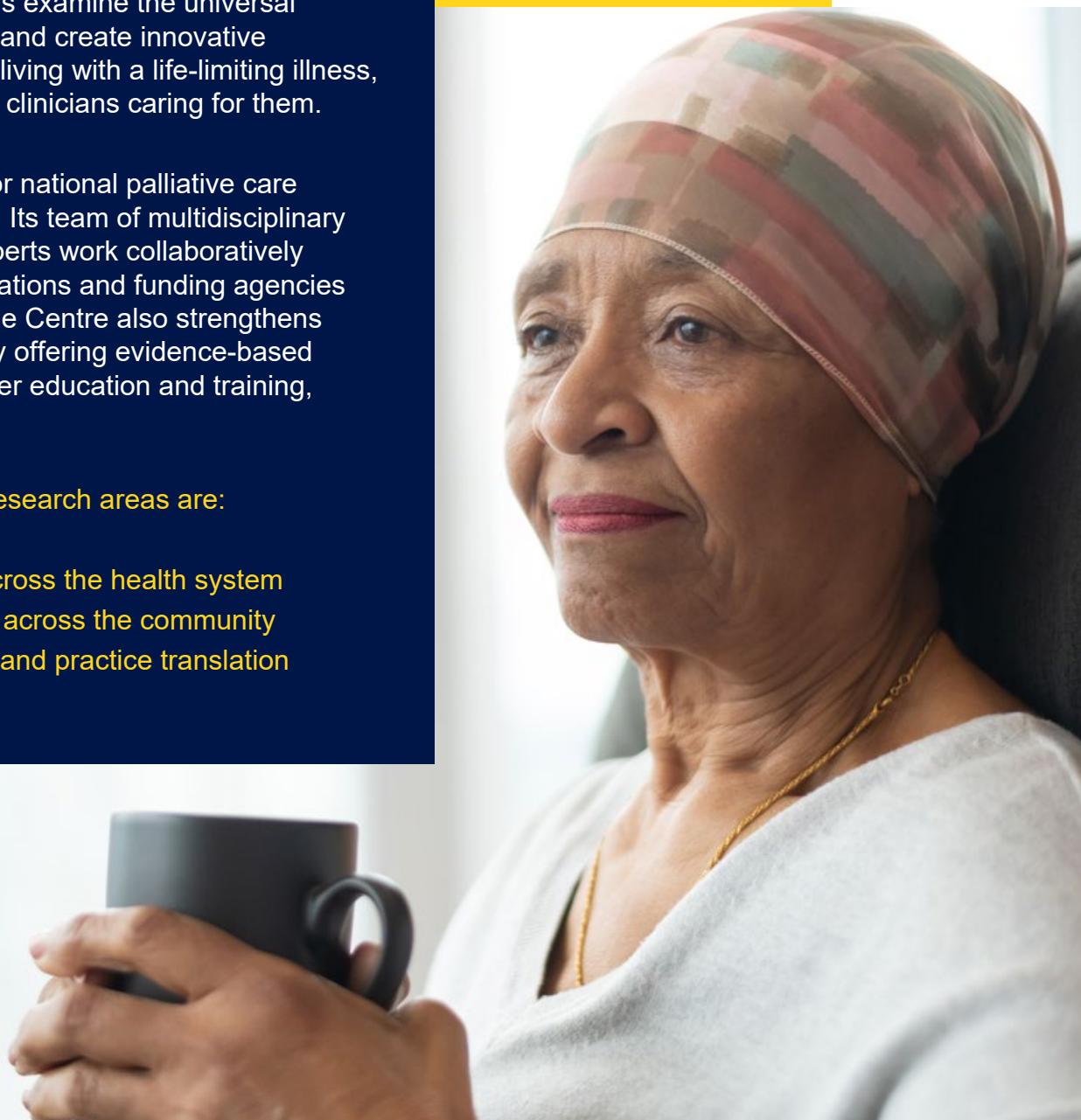• Online evidence and practice translation

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Executive Summary

For professionals who are seeking to implement Evidence Based Practice (EBP), understanding how to use evidence in clinical practice can be difficult. While research evidence can be important in highlighting the efficacy of various treatments and therapies, translating available evidence into practice can be challenging for clinicians and act as an obstacle to the provision of high-quality care.

Developed as part of the Australian Government's CareSeach initiative[*], the 'My Learning' modules were created to showcase some of the ways in which evidence can be used to improve care and help clinicians understand:

• How to effectively translate evidence into practice
• The role of evidence in practice
• How to find relevant evidence
• How to use the evidence resources available in CareSearch

The My Learning modules were designed around a clinically realistic case story and provided free of charge to clinicians and others. Open access was chosen to reduce the barriers to learning about the use of evidence in practice.

Data from the modules was accumulated over a nine-month period from 1 April 2016 to 4 Jan 2017. Of the 1,852 learners who visited one of the eight CareSearch My Learning modules landing pages, 1,137 opted in to complete evaluation (92% pre-module and 32% for post-module). Evaluation questions were embedded at the beginning and end of each module and collected using data capture tools within the website. Data was accessed via the Research Data Management System, collated and analysed.

This White Paper/Research Report describes:

• The role of the modules
• Key characteristics of participants including profession and location
• Participants' views on the impact of the modules
• Participants' views on the modules' ease of use

Baseline data obtained pre-completion revealed the majority of learners were middle-aged, female nurses. Beyond nursing professionals, learners were working in aged care, as allied health professionals, doctors or classed themselves as other. Overall, carers/family carers were the least represented group of learners who responded to evaluation.

Post-module evaluation revealed overall high levels of satisfaction and benefit of CareSearch My Learning. Learners reported that the modules were easy to use (99%), with most reporting that they would undertake another module (96%) and would visit CareSearch again within the next three months (93%). More than nine out of ten learners indicated the information presented would be used in their practice (92%), and that they would recommend the module to a colleague (93%).

Limitations of the study included self-selection, basic data capture and the fact that not all participants completed all the evaluation questions. Some users may also have completed evaluation items for more than one module, resulting in an overrepresentation of those users within the dataset.

Our findings indicate that the suite of My Learning modules are useful and have the potential to support awareness and use of evidence by health care professionals.

[*]*The CareSearch Project consolidates online palliative care knowledge for health professionals, people needing palliative care and their families, and for the general community. The Project is responsible for the CareSearch and palliAGED websites.*

They also show that it is possible to collect meaningful data in a passive and ongoing way that contributes to our understanding of who is using resources such as My Learning and the impact of these resources. Cost-effective, easy to modify, and easy to use, such resources have the potential to support greater evidence-based practice among clinicians.

Introduction

The introduction to My Learning in the CareSearch website summarises the difficulties that health professional's face when looking to implement Evidence Based Practice (EBP):

"We all know that research evidence can be important in highlighting how effective a treatment or therapy is or in making us aware of the differences between groups and care settings. But it can be more difficult to understand how to use this evidence in your clinical practice"

The 'My Learning' modules were developed to help build an understanding of evidence into practice which CareSearch has identified as a major gap. The modules were designed to prompt and remind clinicians about the role of evidence in practice, to demonstrate how to find relevant evidence, and to show how to use the evidence resources in CareSearch to make a difference in clinical care. The modules were designed around a clinically realistic case story with experiential aspects relating to the use of the CareSearch website. Moreover, the modules were designed to be open access and free to use to reduce barriers to learning about using evidence in practice. The ability to print a certificate for use in a continuing professional development (CPD) portfolio was also seen to be an attractive benefit. The benefits of e-learning are well documented in terms of increased accessibility to education, efficacy, cost effectiveness, learner flexibility and interactivity.[1]

The first CareSearch My Learning modules were introduced in January 2012. Personal and relevant to practice, learners could (and can) study when time and capacity allow. These modules were designed to be quick and easy to access, free to use, open to all health professionals and be based around a case story. A further four modules were added until the end of 2014. The modules included a quiz and enabled the downloading of a certificate of completion for professional records. No formal evaluation of the modules and their impact on learning or practice was attempted. Numbers opening the modules were tracked and users were invited to email comments. Emails such as the one below suggested that the modules were useful.

"Accessed from ipad. Completed the six modules: very interesting and relevant information for my work practice. Enjoyable reading and learning. Learnt a lot."

In 2015, a review of these CareSearch resources was scheduled to provide a more contemporary presentation of the content and to ensure that the content was current. The review led to a revision to each of the existing six modules with the work being completed in the second half of 2015 and the new modules being released in April 2016. As part of the redevelopment the possibility of enhancing data collection to support evaluation of the modules was investigated. From the evidence we know that active education can increase the chance of practice change – such as when learners can look at things, do things and engage with content. We also know that we needed to be specific (for example, time-bonded) as that is an indication of potential action.[2] It suggests that learning has occurred and that change is likely to follow. Further there are indications that a measure of motivation is related to the intent to change practice.[3]

Two sets of data were designed to be collected to assist in evaluating the reach and effectiveness of the revised My Learning modules. Both data points needed to be optional, simple to collect and brief. It was intended that potential users not be discouraged from accessing the free modules. The first related to a systematic collection of basic sociodemographic materials to be able to report on users of the product. This was collected prior to

commencing any module. The second set of data would be collected at the completion of the module and capture basic indicators of value such as likelihood of doing another as well as capturing data about whether the user intended to do anything as a result of the module. Intent to act is part of an approach described as the "Theory of Planned Behaviour" which is a commonly used approach in guideline implementation.[4] In the "Theory of Planned Behaviour", behavioural achievement depends on both motivation (intention) and ability (behavioural control). It distinguishes between three types of beliefs - behavioural, normative, and control.[5] Brief questions included in the post module survey could seek to determine the attitude of the learner to the desired behaviour covered in the module and the likelihood that the learner would undertake a specific action related to the activity. The questions related to the following:

• Was the module easy and useful?
• Would it encourage you to use the information? and
• Would it build your relationship with CareSearch?

Data would be collected passively and ongoingly by those willing to provide it and would not require self-identification in any form. The general purpose of this data would be to help understand who uses the modules and whether the modules are valued and potentially influence behaviour.

All revised and new modules were peer reviewed prior to release of the website and the data collection system was user tested prior to release as well.

Aims

The specific aims of this report are:

• To describe the role of the modules and their uptake
• To obtain a description of our learners: who they are, what profession they are in and where they are living from the CareSearch My Learning pre module evaluation and
• To determine whether the modules influence learners' palliative care practice and are easy to use from the CareSearch My Learning post-module evaluation.

Methods

Data collection and ethics

Optional evaluation questions were presented to each learner, at the beginning and the end of each module. Items at baseline (pre-module) included demographics and previous completion of My Learning modules. Post-module, evaluation items focused on the content of the module, and included whether the module was easy to use, whether the user would apply the information in their practice, if they would recommend the module to a colleague and if they would visit CareSearch again in the next three months.

As the evaluation questions were voluntary, not all participants completed evaluation questions, and sometimes may not have provided a response for each question. As such, there are various levels of missing data for all evaluation items and individual n-values are reported throughout for ease of understanding the completeness of the data. Some users may have completed evaluation items for more than one module, and hence there may be overrepresentation of these users within the dataset.

The need for Ethics approval was considered and the planned evaluation was discussed *a priori* with the Chair of the Flinders University Social and Behavioural Research Ethics Committee. On 25 February 2016, the decision was made that ethics approval was not required following advice from the Chair of the Committee and that the research fits the exempt category as it poses a negligible risk and involves the collection and use of non-identifiable data.

Data analysis

Evaluation questions were embedded at the beginning and end of each CareSearch My Learning module and collected using data capture tools within the website and accessed via the Research Data Management System.[6] Data were collated and analysed in IBM® SPSS® Version 23.

Mapping of Australian postcodes

Valid Australian postcodes were geocoded and mapped across Australia using Google Fusion Tables and Google Maps tools.[7] The public dissemination of these maps in reports and publications is permitted with due acknowledgement to the developers.

Socio-economic status

The Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-economic Disadvantage (IRSD) was used as a broad measure of disadvantage based on postcode which is developed from nationwide census data.[8] Those in the lowest quintile have a low IRSD score which indicates relatively greater disadvantage in general, while those in the highest quintile have a high score, indicating a relative lack of disadvantage in general.[9]

Browser and device specifics

User agent strings captured by the website were parsed to extract device, browser and version specifics using an online tool.[10]

Results

Module learners and data collected by module

Over the course of nine months from 1 April 2016 to 4 Jan 2017, 1,852 learners visited one of the eight CareSearch My Learning modules landing pages. Of those, 1,137 opted in to complete evaluation, with 92% completing pre-module evaluation and 32% completing post-module evaluation. Figure 1 details the flow of evaluation completed pre- and post-module. Data collection differed by module, with the highest volume of pre- and post-module evaluation for module 1 and module 7; *Finding Evidence* (Published Literature) and *Knowledge Translation* (total evaluation and proportion by module are reported in Table 1). The lowest level of pre- and post-module evaluation was completed for module 8 *Disseminating Research Findings*. However, higher levels of evaluation completion were generally reflective of module visits.

My Learning module visits	n = 1852 From 1 April 2016 to 4 January 2017
Evaluation responders	**n = 1137 Evaluation response rate: 61% Evaluation completion rate: 57% (n = 1054)**
Completion of premodule data	**n = 1043 Pre-module evaluation completion rate: 92%**
Completion of post module data	**n = 366 Post-module evaluation completion rate: 32%**
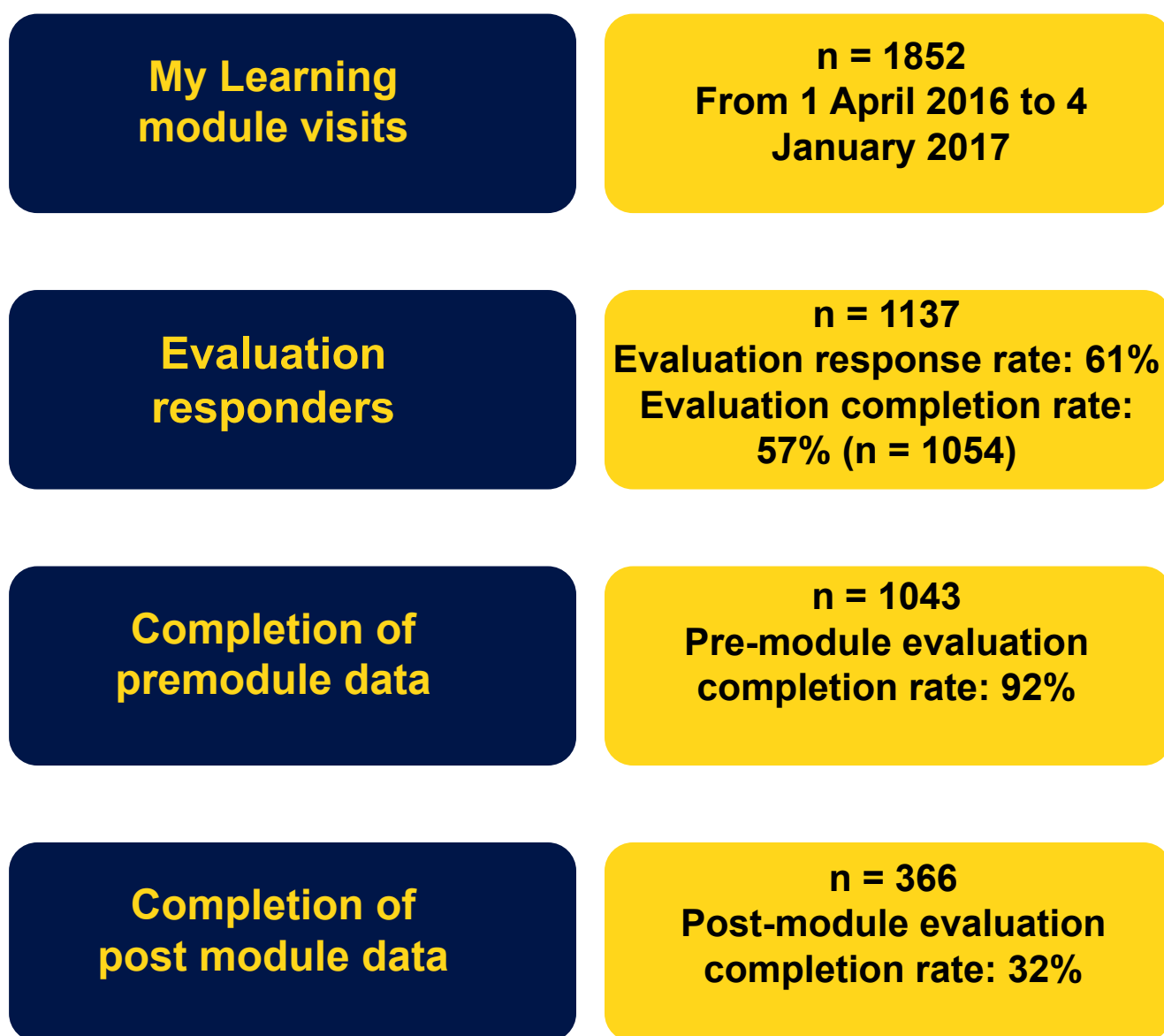
Figure 1: Flow chart of evaluation completed for CareSearch My Learning Modules

Table 1. Data collected by CareSearch My Learning module

CareSearch Module	Module visits	Pre-module evaluation only	Pre-post-module evaluation	Total evaluation	Total Pre-module evaluation
	n	n (% visits)	n (% total eval)	n	n
My Learning 1: Finding evidence (Published literature)	364	196 (54)	78 (28)	274	267
My Learning 2: Finding Evidence (Searching for evidence)	181	71 (39)	44 (38)	115	113
My Learning 3: Searching the Web	176	59 (34)	46 (44)	105	104
My Learning 4: Residential Aged Care	190	69 (36)	45 (39)	114	114
My Learning 5: Dementia	202	75 (37)	48 (39)	123	121
My Learning 6: Carers	181	53 (29)	41 (44)	94	94
My Learning 7: Knowledge Translation	441	145 (33)	58 (29)	203	203
My Learning 8: Disseminating Research Findings	117	20 (17)	6 (23)	26	27
Total	1,852	688 (37)	366 (35)	1,054	1,043

NB not all those who completed evaluation post-module provided responses to pre-module

Baseline data obtained pre-completion of a CareSearch My Learning module

Table 2 presents the demographics of CareSearch My Learning module learners. The majority of learners were middle-aged, female nurses. Outside of nursing professionals, learners were working in aged care, as allied health professionals, doctors or classed themselves as other. Overall, carers/family carers were the least represented group of learners who responded to evaluation. This may indicate less use of the modules overall, or less propensity to participate in voluntary evaluation.

CareSearch My Learning module 8 was on *Disseminating Research Findings* and correspondingly, there was an additional evaluation item within this module to identify those in typical research roles. Of the 33 participants completing pre-module 8 evaluation, 42% (n = 14) were a research higher degree student, researcher, or academic.

Overwhelmingly, 98% of learners were from Australia, with just 2% (n = 23) based overseas (in New Zealand, Canada, USA, UK or Hong Kong). Australian learners came from every State and Territory (Figure 2) and as expected, there were clusters of learners in many capital cities (Perth, Adelaide, Melbourne, Sydney and Brisbane; Figure 3). The majority of learners were in the third SEIFA IRSD quintile (27%), and there was access to My Learning from those in areas with relatively greater levels of disadvantage (32%) and a relative lack of disadvantage (42%).

An analysis of demographics by module shows some trends in module use (Table 3). Proportionally, those who were older (≥41 y) were more highly represented in My Learning modules 4, 5 and 6 (84% versus 16% aged 18 – 40 y) compared to the other modules (average 72%). Indicative of greatest professional needs/interests, the highest proportion of nurses completed My Learning module 4 (Residential Aged Care; 73%) compared to the lowest for module 8 Disseminating Research Findings (41%). Along with doctors (11%), those who classified themselves as other were most highly represented in module 8 (44%). With the exclusion of carers who were poorly represented in all modules, doctors were least likely to undertake module 1 on Finding Evidence (Published Literature), reflecting their expertise in seeking evidence within their regular practice.

Just 24% of My Learning module 1 learners reported previous completion of a My Learning module, indicating that more than three quarters of the time, this was the first module learners commenced (Table 4). Those undertaking My Learning modules 4, 5 and 6 had the lowest levels of prior completion of any other My Learning module, indicating that these learners may have started on content-specific modules of most relevance/interest to them (Residential Aged Care, Dementia, and Carers).

Table 2: Demographics of CareSearch My Learning Module learners

Demographic		n	%
Sex (n= 1029)	Female	934	91
	Male	93	9
	Other	2	<1
Age (n= 1029)	18 - 30 y	67	7
	31 - 40 y	174	17
	41 - 50 y	270	26
	51 - 60 y	384	37
	≥61 y	134	13
Profession (n=1021	Nurse	662	65
	Other	168	16
	Aged care worker	77	8
	Allied health professional	65	6
	Doctor	44	4
	Carer/family carer	5	<1
Country (n= 973)	Australia	950	98
	Canada	12	1
	New Zealand	5	<1
	United States of America	4	<1
	United Kingdom	1	<1
	Hong Kong	1	<1
SEIFA IRSD[a] (n=950)	Quintile 1 (relatively greater disadvantage in general)	161	17
	Quintile 2	140	15
	Quintile 3	254	27
	Quintile 4	205	22
	Quintile 5 (relative lack of disadvantage in general)	190	20

Total n = 1043; NB Proportions may not add up to 100% due to rounding to nearest whole number;[a]Socio-economic Index for Areas, Index of Relative Socio-economic Disadvantage determined derived from Australian postcode (ABS).
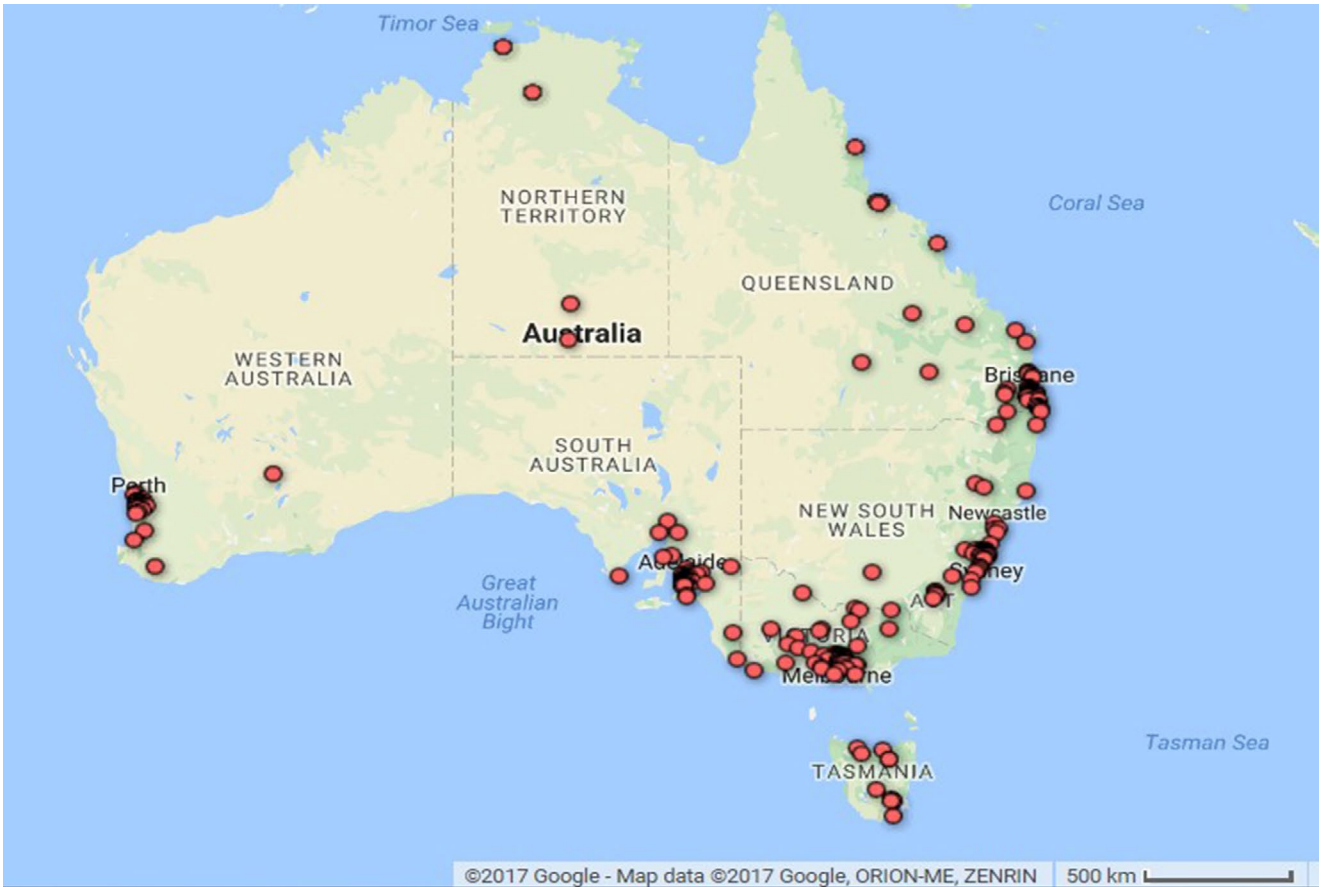
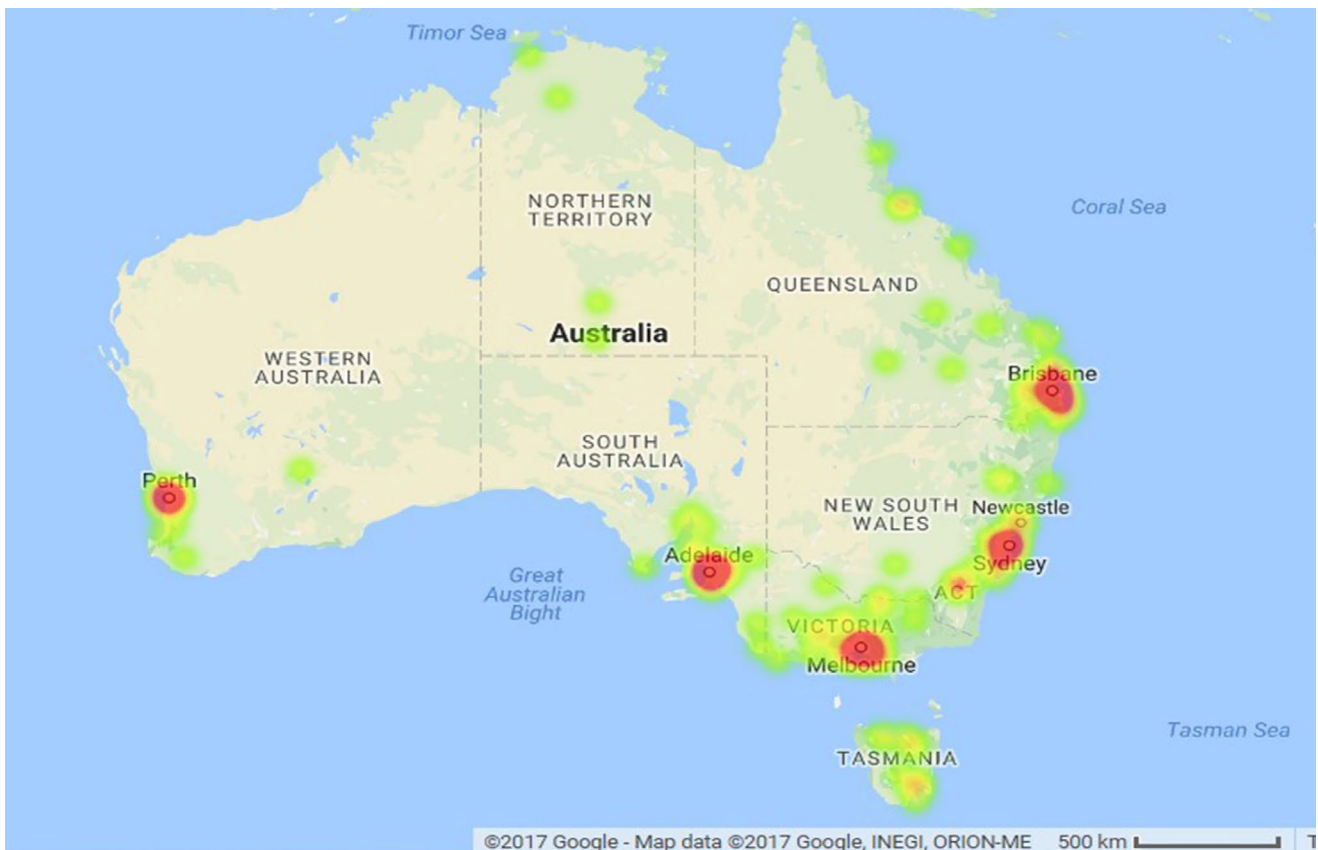Figure 2: Access of CareSearch My Learning modules across Australia

Figure 3: Heat map of CareSearch My Learning module access across Australia

Table 3: Demographics of CareSearch My Learning Module learners, by module

CareSearch Module		1	2	3	4	5	6	7	8	P
		Finding Evidence (Published Literature)	Finding Evidence (Searching for Evidence)	Searching the Web	Residential Aged Care	Dementia	Carers	Knowledge Translation	Disseminating Research Findings	
Demographic[a]		n = 258 – 265	n = 110 – 112	n = 100 – 109	n = 112 – 114	n = 114 – 119	n = 91 –94	n = 200 – 202	n = 25 – 27	χ2
Sex (n = 1029)	Female	238 (90)	102 (93)	94 (92)	102 (89)	105 (88)	84 (89)	187 (94)	22 (88)	0.830
	Male	21 (10)	8 (7)	8 (8)	12 (11)	14 (12)	9 (10)	12 (6)	3 (12)	
	Other	–	–	–	–	–	1 (1)	1 (0.5)	–	
Age (n = 1029)	18 – 30 y	23 (9)	9 (8)	9 (9)	7 (6)	6 (5)	2 (2)	9 (5)	2 (7)	0.097
	31 – 40 y	51 (19)	25 (22)	18 (17)	11 (10)	12 (11)	13 (14)	37 (18)	7 (26)	
	41 – 50 y	72 (27)	23 (21)	30 (29)	29 (25)	30 (26)	29 (31)	47 (23)	10 (37)	
	51 – 60 y	82 (31)	42 (38)	35 (34)	49 (43)	56 (49)	34 (37)	81 (40)	5 (19)	
	≥61 y	35 (13)	13 (12)	12 (12)	18 (16)	10 (9)	15 (16)	28 (14)	3 (11)	
Profession (n=1021)	Nurse	168 (65)	77 (69)	66 (66)	82 (73)	78 (66)	55 (60)	125 (62)	11 (41)	0.011
	Other	45 (17)	20 (18)	18 (18)	14 (13)	12 (10)	14 (15)	33 (16)	12 (44)	
	Aged care worker	22 (9)	7 (6)	6 (6)	8 (7)	13 (11)	9 (10)	12 (6)	–	
	Allied health professional	14 (5)	5 (4)	7 (7)	2 (2)	9 (8)	9 (10)	18 (9)	1 (4)	
	Doctor	6 (2)	3 (3)	3 (3)	6 (5)	6 (5)	4 (4)	13 (6)	3 (11)	
	Carer/family carer	3 (1)	–	–	–	1 (1)	–	1 (0.5)	–	

Total n = 1043; n ranges are given as not everyone provided a response to each demographic question[a] data are shown as n (%); proportions may not add up to 100% due to rounding to nearest whole number

Table 4: Previous completion of CareSearch My Learning Modules, by module

Q: Have you taken a MyLearning Module before?	Total respondents	Yes	
	n	n	%
My Learning 1: Finding Evidence (Published Literature)	266	63	24
My Learning 2: Finding Evidence (Searching for Evidence)	69	49	71
My Learning 3: Searching the Web	100	75	75
My Learning 4: Residential Aged Care	106	63	59
My Learning 5: Dementia	121	72	60
My Learning 6: Carers	93	59	63
My Learning 7: Knowledge Translation	NA		
My Learning 8: Disseminating Research Findings			

Total n = 755

Desktop devices were most frequently used to access My Learning modules (87%) compared to mobiles (7%) and tablets (6%; Table 5). Overall, learners were more likely to access the modules from Windows platforms (82%) compared to Apple (15%) and Android/ Linux (3%), with Internet Explorer (40%) and Chrome (26%) the most popular browsers.

Table 5: System and browser specifics of My Learning module learners

Specifics		n	%
Platform	Desktop	992	87
	Mobile	76	7
	Tablet	69	6
Operating system	Windows	937	82
	iOS	116	10
	MacOS	54	5
	Android	29	3
	Linux	1	<1
Platform and operating system	Desktop Windows	937	82
	Tablet Mac (iPad)	69	6
	Desktop Mac	54	5
	Mobile Mac (iphone)	47	4
	Mobile Android	29	3
	Desktop Linux	1	<1
Browser	Internet Explorer	459	40
	Chrome	294	26
	Firefox	125	11
	Safari Mobile	116	10
	Microsoft Edge	64	6
	Safari	37	3
	Chrome Mobile	24	2
	SeaMonkey	13	1
	Android Browser	1	<1
	Opera	2	<1
	Samsung Browser	2	<1

Total n = 1137; proportions may not add up to 100% due to rounding to nearest whole number

Post-module evaluation of CareSearch My Learning modules

Demographics for pre- and post-module evaluation completers are compared to pre-module only evaluation completers in Table 6. There appeared to be no striking differences between those who completed pre-post module evaluation and those who completed pre-module evaluation only. However, there was a statistically significant difference in the SEIFA IRSD measure, whereby those who completed pre-post evaluation were more likely to have relatively greater levels of relative disadvantage based on their postcode. Overall, these data indicate that those who provided pre-post module evaluation are generally representative of those who provided pre-module evaluation only.

Table 6: Demographics of CareSearch My Learning Module learners, by evaluation completed

Demographic		Pre-module evaluation only		Pre- and post- module evaluation		P
		n	%	n	%	
Sex	Female	615	90	319	92	
	Male	64	9	29	8	0.570
	Other	2	<1	-	-	
Age	18 – 30 y	51	8	16	5	
	31 – 40 y	116	17	58	17	
	41 – 50 y	182	27	88	25	0.306
	51 – 60 y	243	36	141	41	
	≥61 y	91	13	43	12	
Profession	Nurse	422	63	240	69	
	Other	120	18	48	14	
	Aged care worker	53	8	24	7	0.396
	Allied health professional	46	7	19	6	
	Doctor	30	4	14	4	
	Carer/family carer	4	1	1	<1	
Country	Australia	625	95	325	96	
	Canada	8	1	4	1	
	New Zealand	4	<1	1	<1	0.943
	United States of America	3	<1	1	<1	
	United Kingdom	1	<1	-	-	
	Hong Kong	1	<1	-	-	
SEIFA IRSD[a]	Quintile 1 (relatively greater disadvantage in general)	103	16	58	18	
	Quintile 2	86	14	54	17	
	Quintile 3	159	25	95	29	0.049
	Quintile 4	135	22	70	22	
	Quintile 5 (relative lack of disadvantage in general)	142	23	48	15	

Total pre-module only n = 625 – 683 of 771; pre- and post-module n = 325 – 348 of 366; Chi Square Monte Carlo tests used NB Proportions may not add up to 100% due to rounding to nearest whole number; [a]Socio-economic Index for Areas, Index of Relative Socio-economic Disadvantage determined derived from Australian postcode (ABS).

Post-module evaluation revealed overall high levels of satisfaction and benefit of CareSearch My Learning (Table 7). Learners reported that the modules were easy to use (99%), with most reporting that they would undertake another module (96%) and would visit CareSearch again within the next 3 months (93%). More than nine out of ten learners indicated the information presented would be used in their practice (92%), and that they would recommend the module to a colleague (93%). These results show that the My Learning modules are user-friendly, and contain information which will inform practice.

Analysis was performed to determine whether demographic characteristics were associated with post-module satisfaction. Proportionately fewer doctors would recommend the modules to a colleague (77% versus 93% for all other professions), however this was not statistically significant (P = 0.062) and there were a very small number of doctors completing post-module evaluation (n = 13 compared to n = 325). Compared to younger learners, those aged ≥61 years were significantly less likely to use information from the module in their practice (81% compared to 93%; P = 0.048) and tended to be less likely to indicate they intended to undertake a future module (88% compared to 97%; P = 0.080). However, only a small number of those ≥61 y responded to these questions post-module (n = 26 – 33). There were no significant differences when age was dichotomised at either age 40 years or age 50 years.

Post-module evaluation is presented by module in Table 8. Modules 1 and 7 were the less easy to use and less likely to be recommended to a colleague. Pleasingly there are broad, high levels of module satisfaction for all modules 1 – 7, with no modules standing out as performing much better or much worse.

Table 7: Post-module satisfaction evaluation

	Total respondents	Yes		Unsure/Maybe		No	
	n	n	%	n	%	n	%
I found this module easy to use[a]	359	354	99	1	<1	4	1
I am likely to use information from this module in my practice[b]	299	274	92	23	8	2	<1
I would recommend this My Learning module to a colleague[a]	358	331	93	26	7	1	<1
I will undertake another My Learning module[b]	261	250	96	11	4	-	
I will visit CareSearch in the next 3 months[b]	299	278	93	21	7	-	

[a]*CareSearch My Learning modules 1 – 7;* [b]*CareSearch My Learning modules 1 – 6 only*

Table 8: Post-module satisfaction evaluation, by module

Demographic	Total respondents	Yes	
	n	n	%
I found this module easy to use			
My Learning 1: Finding Evidence (Published Literature)	78	77	99
My Learning 2: Finding Evidence (Searching for Evidence)	44	44	100
My Learning 3: Searching the Web	46	46	100
My Learning 4: Residential Aged Care	44	44	100
My Learning 5: Dementia	48	48	100
My Learning 6: Carers	41	41	100
My Learning 7: Knowledge Translation	58	54	93
My Learning 8: Disseminating Research Findings	–		
I am likely to use information from this module in my practice			
My Learning 1: Finding Evidence (Published Literature)	78	69	89
My Learning 2: Finding Evidence (Searching for Evidence)	42	40	95
My Learning 3: Searching the Web	46	41	89
My Learning 4: Residential Aged Care	45	43	96
My Learning 5: Dementia	47	43	92
My Learning 6: Carers	41	38	93
My Learning 7: Knowledge Translation	–		
My Learning 8: Disseminating Research Findings	–		
I would recommend this My Learning module to a colleague			
My Learning 1: Finding Evidence (Published Literature)	78	68	87
My Learning 2: Finding Evidence (Searching for Evidence)	44	41	93
My Learning 3: Searching the Web	46	45	98
My Learning 4: Residential Aged Care	45	44	98
My Learning 5: Dementia	47	44	94
My Learning 6: Carers	41	39	95
My Learning 7: Knowledge Translation	57	50	88
My Learning 8: Disseminating Research Findings	–		

Demographic	Total respondents	Yes	
	n	n	%
I will undertake another My Learning module			
My Learning 1: Finding Evidence (Published Literature)	77	72	94
My Learning 2: Finding Evidence (Searching for Evidence)	42	42	100
My Learning 3: Searching the Web	46	44	96
My Learning 4: Residential Aged Care	45	43	96
My Learning 5: Dementia	47	45	96
My Learning 6: Carers	4	4	100
My Learning 7: Knowledge Translation	–		
My Learning 8: Disseminating Research Findings	–		
I will visit CareSearch in the next 3 months			
My Learning 1: Finding Evidence (Published Literature)	77	71	92
My Learning 2: Finding Evidence (Searching for Evidence)	43	40	93
My Learning 3: Searching the Web	46	41	89
My Learning 4: Residential Aged Care	45	43	96
My Learning 5: Dementia	47	43	92
My Learning 6: Carers	41	40	98
My Learning 7: Knowledge Translation	–		
My Learning 8: Disseminating Research Findings	–		

NB not all post-module questions were presented after each module

Module 7 on Knowledge Translation had different post-module evaluation which included items on the utilisation of module content (Table 9). Post-module, more than three quarters of learners were more confident to participate in a knowledge translation project in the workplace (77%, with n = 9 unsure and n = 4 reporting no increase in confidence). Learners unanimously believed evidence should be an important part of change management (100%). Finally, when asked about the barriers to undertaking a knowledge translation project, most frequently reported were tailoring and implementing interventions for change (34%); sustaining knowledge use over time (22%); and assessing barriers locally (18%). Conversely, learners perceived finding evidence (4%); and monitoring knowledge use (4%) to be the least difficult.

To-date, post-module evaluation for module 8 Disseminating Research Findings has only been completed by six learners and so these data have not been reported.

Table 9: CareSearch My Learning Module 7 post-module evaluation

	Total respondents	Yes	
	n	n	%
After completing this module, I feel more confident to participate in a knowledge translation project at my workplace	57	44	77
I believe evidence should be an important part of change management?	56	56	100
If you were undertaking a knowledge translation project, which part would you expect to find most difficult			
Adapting knowledge locally		3	6
Assessing Barriers locally		9	18
Evaluating outcomes		3	6
Finding evidence		2	4
Identifying a knowledge-practice gap	50	3	6
Monitoring knowledge use		2	4
Sustaining knowledge use over time		11	22
Tailoring and implementing interventions for change		17	34

There were no significant associations with device type or operating system and whether the My Learning modules were easy to use (Table 10). However, this may be due to high levels of ease of use reported by learners (99%) and the high proportion of learners using desktop computers running Windows (99%).

Table 10: Device and operating system details and module ease of use by platform

	Total respondents	Yes		P
	n	n	%	
I found this module easy to use				
Desktop	317	313	99	
Mobile	19	18	95	0.259
Tablet	23	23	100	
I found this module easy to use				
Androi/Linux	8	7	88	
Apple	41	41	100	0.119
Windows	310	306	99	
I found this module easy to use				
Windows 7	200	197	99	
Windows 8	31	31	100	
Windows Vista	8	8	100	1.0
Windows 10	71	70	99	

n = 359; Chi Square Monte Carlo tests used

Discussion and Conclusion

This analysis shows that it is possible to collect meaningful data in a passive and ongoing way that contributes to our understanding of who is using these resources and about the impact of the use of these resources. Data on over 1,000 users was accumulated in a nine-month period. This data collection enabled us to determine that users reside in all states and territories, are predominantly but not exclusively nurses, and come from areas of relatively greater disadvantage and advantage. The data also shows that nurses, aged care workers, allied health professionals and doctors are accessing these resources. This indicates that CareSearch is meeting its purpose in providing a national service and is sensitive to equity and access.

The inclusion of basic data capture is a powerful vehicle to understand the user cohort without being burdensome. Further, data will continue to be collected as new users find and complete the modules. As well as increasing the data pool, continuous data collection can highlight changes over time. It will be particularly interesting to track if there are changes in the devices being used to undertake online learning over time and to determine the effect of the move to responsive design on the use of devices.

Responses by modules show that different groups may be more interested in different topics. While there are already suggestions from the data that different groups may be more interested in particular topics, it will be interesting to see if this trend consolidates over time. This may be useful in determining marketing and communication strategies for the modules.

In general, respondents found the modules easy to use and importantly over 90% indicated that they would use the information in their practice. Being willing to recommend a module to a colleague is also a marker of satisfaction with the content and usability. In terms of intended concrete actions, 96% indicated they would take another module and 93% indicated they would visit CareSearch within three months. This suggests that there is both motivation and intent.

For the project, these simple data metrics support the worth of the modules. The modules are cost effective to develop, easy to modify and appear to be easy to use. They provide value for the project and for the user for minimal costs.

Continuing promotion of the availability of the modules is likely to extend their reach and increase uptake. The data could also help to highlight specific benefits for users based on the data. New modules will also provide an opportunity to promote the suite of modules as well. Promotion should also highlight the quality processes involved in producing the modules.

Understanding attitudes to the modules also provide possible ways of increasing reach and use. For example, it may be possible to create a capacity to activate the willingness to recommend to a friend by creating an automated email promoting the module in real time to a colleague. It may also be possible to create a sign up to alert a learner to new modules when they are released.

While there are limitations to this data collection including the self-selected nature of respondents and the basic data capture, the responses are voluntary and not burdensome to capture.

The analysis demonstrates that the suite of My Learning modules is useful and has the potential to support awareness and use of evidence by health professionals.

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