

Supplementary Material

Implementing patient-reported outcomes into routine care: an audit of cancer patients from two local health districts in New South Wales to understand their capabilities and preferences

Adeola Bamgboje-Ayodele^{A,B,E} (PhD, Postdoctoral Research Associate), *Belinda Arnold*^C (MRT(RT), Senior Radiation Therapist), *Ivana Durcinoska*^A (MPH, Project Manager), *Sandra Avery*^{A,B,D} (Grad Cert, Cancer Systems Innovation Manager), *Shalini Vinod*^{A,B,D} (PhD, Radiation Oncologist), *Orlando Rincones*^A (MRes, Research Assistant), *Tien Thomas*^D (MBA, Clinical Stream Manager), *Joseph Descallar*^{A,B} (MBiostats, Statistician), *Ben Smith*^{A,B} (PhD, Senior Research Fellow), *Geoff P Delaney*^{A,B,D} (PhD, Director of Cancer Services) and *Afaf Girgis*^{A,B,*} (PhD, Director of Psycho-Oncology Research Group on behalf of The PROMPT-Care Implementation Authorship Group)

^AIngham Institute for Applied Medical Research, Liverpool, NSW 1871, Australia

^BSouth Western Sydney Clinical School, UNSW Medicine and Health, UNSW Sydney, Kensington, NSW 2052, Australia

^CWollongong Hospital, Illawarra Shoalhaven Local Health District, Wollongong, NSW 2500, Australia

^DLiverpool Cancer Therapy Centre, Liverpool Hospital, South Western Sydney Local Health District, Liverpool, NSW 1871, Australia

^EPresent address: Faculty of Medicine and Health, School of Medical Sciences, Biomedical Informatics and Digital Health, The University of Sydney, Camperdown, NSW 2006, Australia

*Correspondence to: Email: Afaf.girgis@unsw.edu.au

1 Appendix 1.

2 **Patient introduction:** Hello *[patient name]*. Before you go into your next appointment, we just need to ask you a few questions to help us improve the way we
3 deliver our cancer services and communicate with our patients. As part of this we would like to know about your internet usage and access, and preferences
4 for answering questions about how you are tracking, physically and emotionally.” **[show patient paper and tablet/mobile assessment]**

5 **Date:** / /

Get from patient records (Mosaik)					Discuss with patient							
MRN or NAME	Sex	Age	Postcode	Appointment type	Internet/ mobile access at home	Email address (record if willing)	Preference (tick both if <u>willing</u> to complete using either method)	Can complete in English	Preferred language (freetext)	Needs assistance to complete	Person to provide assistance	Reason for assistance
	☐ M ☐ F			☐ In-patient ☐ Out-patient	☐ Yes ☐ No	☐ don't have email ☐ don't want to provide Free text email: _____	☐ Paper ☐ Electronic (tablet/mob)	☐ Yes ☐ No		☐ Yes ☐ No	☐ Carer ☐ Interpreter ☐ Healthcare staff ☐ _____	☐ Too ill ☐ Poor literacy ☐ Don't understand instruction/ item ☐ _____

Appendix 2

Table 1: Logistic regression analysis of internet/mobile access at home vs no internet/mobile access at home.

	OR	Univariate Lower 95% CI	Upper 95% CI	P-value	OR	Multivariable [†] Lower 95% CI	Upper 95% CI	P-value
LHD								
SWSLHD	Reference				Reference			
ISLHD	2.19	1.49	3.22	<0.0001	3.06	2.02	4.65	<0.0001
Sex								
Male	Reference				Reference			
Female	1.71	1.18	2.48	0.0048	1.64	1.1	2.43	0.0149
Appointment Type								
Inpatient	0.74	0.37	1.5	0.4010				
Outpatient	Reference							
ARIA				0.0065				
Major City	Reference							
Inner Regional	2.21	1.35	3.6	0.0405				
Outer Regional	1.06	0.33	3.39	0.5696				
Age	0.95	0.94	0.97	<0.0001	0.95	0.93	0.96	<0.0001

[†]Variables in the multivariable regression model were identified using backward elimination.

Table 2: Logistic regression analysis of 'Have or use email' vs 'not have or used email.'

	OR	Univariate Lower 95% CI	Upper 95% CI	P-value	OR	Multivariable [†] Lower 95% CI	Upper 95% CI	P-value
LHD								
SWSLHD	Reference				Reference			
ISLHD	1.9	1.32	2.72	0.0005	2.72	1.83	4.03	<0.0001
Sex								
Male	Reference							
Female	1.28	0.9	1.83	0.1709				
Appointment Type								
Inpatient	0.76	0.38	1.54	0.4515				
Outpatient	Reference							
ARIA				0.0048				
Major City	Reference							
Inner Regional	1.91	1.24	2.94	0.9426				
Outer Regional	3.43	0.76	15.43	0.2359				
Age	0.95	0.93	0.96	<0.0001	0.94	0.92	0.96	<0.0001

[†]Variables in the multivariable regression model were identified using backward elimination.

Table 3: Logistic regression analysis of PROM completion preference Electronic/both vs Paper only.

	OR	Univariate		P-value
		Lower 95% CI	Upper 95% CI	
LHD				
SWSLHD	Reference			
ISLHD	1.21	0.88	1.67	0.2355
Sex				
Male	Reference			
Female	1.31	0.95	1.8	0.0985
Appointment Type				
Inpatient	0.58	0.3	1.11	0.0984
Outpatient	Reference			
ARIA				0.3769
Major City	Reference			
Inner Regional	1.25	0.87	1.81	0.2157
Outer Regional	0.72	0.25	2.07	0.4146
Age	0.96	0.94	0.97	<0.0001

Table 4: Logistic regression analysis of can complete in English vs cannot complete in English.

	OR	Univariate		P-value
		Lower 95% CI	Upper 95% CI	
LHD				
SWSLHD	Reference			
ISLHD	17.21	6.18	47.91	<0.0001
Sex				
Male	Reference			
Female	1.09	0.66	1.81	0.7356
Appointment Type				
Inpatient	0.3	0.14	0.63	0.0014
Outpatient	Reference			
ARIA				
Major City				
Inner Regional				
Outer Regional				
Age	1	0.98	1.02	0.7513

Table 5: Logistic regression analysis of ‘needed assistance’ vs ‘not needed assistance’ to complete PRO.

	OR	Univariate Lower 95% CI	Upper 95% CI	P-value	OR	Multivariable Lower 95% CI	Upper 95% CI	P-value
LHD								
SWSLHD	Reference				Reference			
ISLHD	0.37	0.25	0.53	<0.0001	0.27	0.18	0.41	<0.0001
Sex								
Male	Reference							
Female	0.99	0.69	1.41	0.9356				
Appointment Type								
Inpatient	2.25	1.18	4.28	0.0137				
Outpatient	Reference							
ARIA				0.0005				
Major City	Reference							
Inner	0.39	0.24	0.63	0.1065				
Regional								
Outer	0.55	0.15	1.96	0.8347				
Regional								
Age	1.04	1.03	1.06	<0.0001	1.05	1.04	1.07	<0.0001

† Variables in the multivariable regression model were identified using backward elimination.