Supplementary material

Title: Cost-utility and cost consequence of a telehealth intervention targeting improvement in addictive eating for Australian adults (the TRACE program)

Authors: Janelle A Skinner^{1,2}, Mark Leary^{1,2}, Olivia Wynne², Phillipa J Hay^{3,4}, Clare E Collins^{1,2}, Tracy L Burrows^{1,2*}

Author affiliations:

¹School of Health Sciences, College of Health, Medicine and Wellbeing, University of Newcastle, Callaghan NSW 2308, Australia

²Hunter Medical Research Institute, University of Newcastle, New Lambton Heights, NSW, 2305, Australia

³Translational Health Research Institute, Western Sydney University, Campbelltown, NSW, 2751, Australia

⁴Mental Health Services, Camden and Campbelltown Hospitals, SWSLHD, Campbelltown, NSW, 2751, Australia

***Corresponding Author:** Professor Tracy Burrows. Mailing address: School of Health Sciences, University Drive, University of Newcastle, Callaghan, NSW, Australia, 2308. Ph: +610249215514. Email: <u>tracy.burrows@newcastle.edu.au</u>

CHEERS 2022 Checklist

Торіс	No.	Item	Location where item is reported
Title			
	1	Identify the study as an economic evaluation and specify the interventions being compared.	Page 1
Abstract			
	2	Provide a structured summary that highlights context, key methods, results, and alternative analyses.	Page 2
Introduction			
Background and objectives	3	Give the context for the study, the study question, and its practical relevance for decision making in policy or practice.	Lines 26 - 58
Methods			
Health economic analysis plan	4	Indicate whether a health economic analysis plan was developed and where available.	Line 64; Protocol paper (Ref 9)
Study population	5	Describe characteristics of the study population (such as age range, demographics, socioeconomic, or clinical characteristics).	Lines 72 - 77; Table 1
Setting and location	6	Provide relevant contextual information that may influence findings.	Lines 63 - 64; Protocol paper (Ref 9); Main outcomes paper (Ref 10)
Comparators	7	Describe the interventions or strategies being compared and why chosen.	Lines 79 - 89; Protocol paper (Ref 9)
Perspective	8	State the perspective(s) adopted by the study and why chosen.	Lines 56 -58
Time horizon	9	State the time horizon for the study and why appropriate.	Lines 92 - 93
Discount rate	10	Report the discount rate(s) and reason chosen.	Lines 151 - 152
Selection of outcomes	11	Describe what outcomes were used as the measure(s) of benefit(s) and harm(s).	Lines 96 - 103

Торіс	No.	Item	Location where item is reported
Measurement of outcomes	12	Describe how outcomes used to capture benefit(s) and harm(s) were measured.	Lines 104 - 126
Valuation of outcomes	13	Describe the population and methods used to measure and value outcomes.	Lines 98 – 100, 104 - 115
Measurement and valuation of resources and costs	14	Describe how costs were valued.	Lines 128 -142
Currency, price date, and conversion	15	Report the dates of the estimated resource quantities and unit costs, plus the currency and year of conversion.	Lines 144 - 152
Rationale and description of model	16	If modelling is used, describe in detail and why used. Report if the model is publicly available and where it can be accessed.	NA
Analytics and assumptions	17	Describe any methods for analysing or statistically transforming data, any extrapolation methods, and approaches for validating any model used.	Lines 154 - 188
Characterising heterogeneity	18	Describe any methods used for estimating how the results of the study vary for subgroups.	NA
Characterising distributional effects	19	Describe how impacts are distributed across different individuals or adjustments made to reflect priority populations.	Lines 160 - 172
Characterising uncertainty	20	Describe methods to characterise any sources of uncertainty in the analysis.	Lines 185 - 188
Approach to engagement with patients and others affected by the study	21	Describe any approaches to engage patients or service recipients, the general public, communities, or stakeholders (such as clinicians or payers) in the design of the study.	Protocol paper (Ref 9)
Results			
Study parameters	22	Report all analytic inputs (such as values, ranges, references) including uncertainty or distributional assumptions.	Lines 195 - 198
Summary of main results	23	Report the mean values for the main categories of costs and outcomes of interest and summarise them in the most appropriate overall measure.	Lines 200 - 207

Торіс	No.	Item	Location where item is reported
Effect of uncertainty	24	Describe how uncertainty about analytic judgments, inputs, or projections affect findings. Report the effect of choice of discount rate and time horizon, if applicable.	Lines 241 - 246
Effect of engagement with patients and others affected by the study	25	Report on any difference patient/service recipient, general public, community, or stakeholder involvement made to the approach or findings of the study	NA
Discussion			
Study findings, limitations, generalisability, and current knowledge	26	Report key findings, limitations, ethical or equity considerations not captured, and how these could affect patients, policy, or practice.	Lines 248 - 375
Other relevant information			
Source of funding	27	Describe how the study was funded and any role of the funder in the identification, design, conduct, and reporting of the analysis	Lines 392 - 395
Conflicts of interest	28	Report authors conflicts of interest according to journal or International Committee of Medical Journal Editors requirements.	Line 397

From: Husereau D, Drummond M, Augustovski F, et al. Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) Explanation and Elaboration: A Report of the ISPOR CHEERS II Good Practices Task Force. Value Health 2022;25. <u>doi:10.1016/j.jval.2021.10.008</u>

Table S1: Resources by intervention components

Item	Description	Approach to valuation	
Labour time	Labour time incurred during intervention	Staff time was recorded in minutes and job title was recorded in trial management logs and cost-capture templates. Labour time was valued using Fair Work Australia Award Wages or University of Newcastle Academic Staff and Teachers or Professional Staff enterprise agreement*	
Materials	Material items used during intervention. For example, participant workbooks.	Purchase receipts and trial management logs were used to value material items.	
Miscellaneous	Miscellaneous included telehealth delivery platform and website costs	Purchase receipts and trial management logs were used to value all items.	

*Labour time was costed at 1.3 to account for additional overhead costs (on-costs) associated with employment. Labour for the telehealth session was costed at University of Newcastle Hew 5 Step 3 (2021) for a professional with an undergraduate degree. Telehealth session labour costs were \$40.19 per hour. Telehealth session costs which include some fixed costs (e.g., Vsee telehealth platform) total = \$6,952,28 for 38 participants = \$82.95 p/p. Min = \$8.46 (participants who attended no telehealth sessions), max \$209.39 (participants who attended 5 telehealth sessions).

Table S2: Resources by intervention components

Intervention				
component	Component details	Resource use details		
Telehealth sessions	Interventionist (Dietitian)	Accredited Practicing dietitian consultation time and administration time (as per protocol)		
	Booking telehealth session	Research team member time Professor level academic trainer		
	Trainer for telehealth session	time		
	Trainees for telehealth session	Registered dietitian time		
	Facilitator manuals	Printing costs		
	VSee platform	Platform subscription fee		
Participant Resources	Online social support group component (Facebook)	Research team member time		
	live Q&A session on Facebook	Research team member time		
	Workbook printing	Printing costs		
	Postage	Pre-paid postage envelopes		
	Website	Website hosting fees		
	Website domain name	Domain name fee		
Other intervention				
costs	Feedback reports	Registered dietitian time		
	Questionnaire/tool costs (part of intervention)	Licensing of published tool		