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which has been published in final form at <https://doi.org/10.1002/eat.23732>

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Number of Words (text only) = 1999  
Number of Words (Abstract) = 200  
Tables/figures = 2  
References = 15  
Supplements = 2

**Turning Eating Disorders Screening in Primary Practice into Treatment: A clinical  
practice approach**

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*Acknowledgements:* The Sunshine Coast ED Access project was an initiative of the Australian Department of Health and delivered by the Butterfly Foundation in partnership with the Central Queensland, Wide Bay, Sunshine Coast Primary Health Network (PHN) in regional Queensland, Australia.

*Declarations of interest:* The authors declare no conflict of interest.

*Data Availability Statement:* The data that support the findings of this study are available from the Butterfly Foundation. Restrictions apply to the availability of these data, which were used for a Department of Health report.

*In press:* International Journal of Eating Disorders: Brief Report (special issue on screening)

34 **Abstract**

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**Objective:** The rate of screening for eating disorders (EDs) by general practitioners (GPs) in primary health care is low. We examined an approach to increase screening and the impact on referrals.

**Method:** Low cost assessment/treatment pathways were established in February 2019 for patients with an ED. Between October 2020 and June 2021 information was sent to GP practices about screening for EDs, along with provision of an online screening tool and training.

**Results:** Of the 44 GP practices invited to participate in the screening initiative, 42 (95.5%) agreed. Only 12 (27%) had referred patients before the initiative, 53 patients over 19 months (2.8/month). Over the 10-month initiative 90 patients were referred and started treatment from 50% of the practices (8.2/month); 73 (81%) had an ED and 6 had disordered eating but not an ED. Qualitative feedback from GPs suggested they would not screen for a condition if there were no readily identifiable treatment pathway available.

**Discussion:** Results suggest that the three elements of the initiative (provision of assessment and treatment pathways, access to a screening tool, provision of information on screening) increased the likelihood that GPs would use a screening tool, leading to an almost three-fold increase in referrals.

*Key words:* screening, early identification, general practice, primary health, qualitative

**Public Significance Statement:** An initiative used to translate screening for an eating disorder to treatment in primary health care had three components. First, provision of an easy referral process to assessment as well as treatment. Second, screening tools were made available on computer desktops. Third, information and training provided to GPs was used to support their clinical observation and increase confidence in initiating screening. Adoption of this initiative almost tripled referrals for assessment.

59 While general practitioners (GPs) have a recognised role in screening to prevent serious  
60 illnesses (Australian Government Preventive Health Taskforce, 2009), there is a noted lack of  
61 recognition of eating disorders (EDs) in primary health-care settings (Waller et al., 2014). Further, the  
62 US Preventive Services Task Force (2022) concludes that the current evidence is insufficient to assess  
63 the balance of benefits and harms of screening for EDs in adolescents and adults. We report on an  
64 initiative aimed to support GPs to identify patients with EDs and examine the impact on referrals for  
65 treatment.

66 The Sunshine Coast ED Access project (hereafter known as SCEDAT) aimed to improve  
67 access to evidence-based treatment for people in one regional area in Australia by creating pathways  
68 between GPs who wished to refer people with EDs for psychological assessment and increasing the  
69 numbers of treatment providers who had skills in delivery of low cost ED assessment and treatment  
70 (partially subsidised by the national Medicare scheme). A care navigator was employed through the  
71 project to liaise between the GPs and treatment providers. Treatment eligibility criteria for patients  
72 were (1) meeting the DSM5 diagnostic criteria for an ED, (2) residing in the health network area; (3)  
73 aged 14 years and over; (4) referral finalised by a GP; and (5) assessed as safe to receive community-  
74 based treatment by a medical professional and a mental health professional.

75 Referrals were accepted by SCEDAT from February 2019 to June 2021 from 200 GPs (out of  
76 around 250 available GPs). A screening initiative was introduced from October 2020 to August 2021  
77 for a subset of GP practices to identify patients with EDs and thus increase the proportion of earlier  
78 intervention referrals to SCEDAT. Qualitative data was collected to investigate GPs' opinions and  
79 practices of screening and to identify functional barriers and facilitators of screening practice.

## 80 **Method**

### 81 **Participants**

82 Information about the screening initiative was promoted to 44 GP practices in the region  
83 between October 2020 and May 2021 with an initial phone call to the GP using pre-screening  
84 questions (**Supplement 1**) followed by emailed information (**Supplement 2**). Forty-two practices  
85 decided to participate (95.5%).

## 86 **The screening initiative**

87           The screening initiative consisted of three active elements. First, the practices were reminded  
88 of their access to the SCEDAT pathway. Each GP received at least 3 to 4 reminders, where at least  
89 two of these were email reminders and the remainder were phone calls. The pathway consisted of two  
90 assessment sessions provided by a psychologist, supplemented with the EDE-Q (Fairburn & Beglin,  
91 1994), along with access to a low-cost 20-session course of treatment for eligible patients.  
92 Additionally, a dietetic care pathway of three sessions was introduced for people identified as having  
93 disordered eating who did not meet the diagnostic criteria for an ED.

94           Second, the use of the *Screen for Disordered Eating* (SDE; Maguen et al., 2018) was  
95 promoted with this tool being made available to GPs on their desktops. Some GPs preferred to use the  
96 SCOFF (Morgan et al., 1999), the Eating Disorders Examination questionnaire (EDE-Q; Fairburn &  
97 Beglin, 1994) or their own practice approach. GPs were told to initiate screening if they received a  
98 “no” to the following question: “Are you satisfied with your eating patterns?” While GPs were  
99 encouraged to screen all patients, this was not monitored.

100           Third, GPs received individual information (written format) on how to screen and were also  
101 offered a follow-up training session in June 2021 to consolidate learning on identifying, and  
102 supporting people with, an ED.

## 103 **Data Collection**

104           First, we used de-identified patient information from referral forms submitted to SCEDAT.  
105 Second, brief semi-structured qualitative telephone interviews with GPs were used as well as a focus  
106 group for six GPs. Third, we received feedback from participants attending the training session for  
107 GPs. Inductive thematic analysis was applied by LC to identify the shared priorities and practices of  
108 GPs when making decisions about screening and referral for EDs. The research was approved by the  
109 Bellberry Human Research Ethics Committee, Application No: 2018-09-728-FR-1.

## 110 **Results**

### 111 **General practitioner referrals for assessment**

112           Only 12 of the 42 (27%) practices had previously referred patients with EDs (n=53) in the 19  
113 months before the initiative (2.8 patients/month). Of the 73 GPs across the 42 practices, twenty-nine  
114 (40%) participated in the training session. During the 11 months of the screening initiative 21  
115 practices, representing 39 GPs, referred 90 patients for assessment (8.2 patients/month). The timelines  
116 and patients referred are summarised in *Figure 1*. We did not capture data about time between  
117 screening and referral, but once referrals were received, a treatment team assigned within 48 hours,  
118 and then there was a wait for up to 2 weeks for assessment.

### 119 **Screening and diagnosis**

120           Of the 73 patients with an ED, 68.8% were identified using the SDE tool either alone or  
121 followed by the EDE-Q, 19% with the SCOFF and 14.4% with GPs using their own approach. Of the  
122 90 patients referred for psychological assessment, 73 (81.1%) met the diagnostic criteria for an ED  
123 and started treatment. Six (6.67%) were identified as having disordered eating but not an ED and  
124 received a brief dietetic care intervention. Only 10 (11.11%) were found not to have an ED or  
125 disordered eating at this time. Use of any screening tool identified 40 (61.5%) people in the first three  
126 years since onset of symptoms of an ED and 75 (83.3%) people who had never received treatment for  
127 an ED before. Further demographics for the patients are presented in *Table 1*.

### 128 **Qualitative feedback from general practitioners**

129           Five themes were identified across all sources of feedback from GPs. The first was *early case*  
130 *identification*. Screening tools were exclusively used with individual patients (rather than across high  
131 risk population groups) based on a greater awareness of the need to probe about eating even when the  
132 patient's presenting symptoms were not severe. One GP reported: *I realize that eating disorders are*  
133 *lot more complex than most GPs are aware of. The project made me more aware of sub-clinical*  
134 *because there was a pathway we could use. When there is nowhere to go there is no point in referring.*  
135 *We need to start earlier with awareness of nutrition and wellbeing, rather than waiting until someone*  
136 *meets the diagnostic criteria for an eating disorder.* Feedback from GPs who did not refer people  
137 suggested that they had not used screening because they did not think that they had patients with



164 initiating screening questions. Adoption of this initiative almost tripled referrals for assessment, which  
165 translated to more people with EDs receiving treatment.

166 It is well established that GPs can find diagnosing EDs a challenge (Johns et al., 2019; Marks  
167 et al., 2003), with limited opportunity to develop confidence if they are only seeing a small number of  
168 cases each year. While providing sufficient education to GPs that fits with their usual approach to  
169 practice has been shown to be important in other areas of screening such as depression (e.g.,  
170 Braunschneider et al., 2021), two key aspects of the project may have further increased incidence for  
171 screening and referral. The first was the provision of a low-cost assessment pathway that reduced the  
172 burden on GPs to make a final diagnosis and the second was provision of clear referral pathways  
173 (Banas et al., 2013).

174 GPs in Australia typically use screening tools for case finding rather than for population  
175 screening (RACGP, 2015) and this was the case for some GPs despite being encouraged to screen all  
176 patients. Qualitative feedback suggested that the benefit of the training was to encourage GPs to use a  
177 screening tool with patients whose symptoms they had not previously classed as an ED, such as  
178 people living in bigger bodies.

179 Managing the limited time available in an appointment session was a key theme. This is  
180 consistent with research into GP priorities in brief consultation session which has shown that GPs are  
181 most likely to prioritise physical health issues and least likely to consider mental health or  
182 contributory lifestyle factors such as diet (Andre et al, 2012; Cohidon et al., 2019; Junius-Walker et  
183 al., 2012; Zhang et al., 2020).

184 The results should be interpreted in the context of the following factors and limitations. The  
185 model examined in this report may not be replicable in other settings. The results were achieved in the  
186 context of a popular and well-resourced larger project that is likely to have influenced the rate of GP  
187 engagement. Access to low-cost treatment options through SCEDAT also influenced patient decisions  
188 to engage in treatment. Similar translation of GP screening to referral to treatment may be achieved  
189 through factors idiosyncratic to specific GP practices without an assessment and treatment pathway,



190 influenced by wait time, rapport with the GP who did the screening, and subsequent GP follow-up  
191 with the patient they referred. Further limitations include limited patient demographic data which did  
192 not enable us to examine provider biases in screening, assessments were not conducted using  
193 standardised diagnostic tools (except for the EDE-Q for 72% of the patients), and only one rater  
194 derived qualitative themes.

195           While in many communities throughout the world there are not government funded programs  
196 for screening and low-cost treatment, the results of the study suggest that translating screening in  
197 primary health settings requires multiple components regardless of such funding. Provision of low-  
198 cost assessment and treatment pathways were in place before the screening initiative, but the use of  
199 screening and consequent referral only increased when these pathways were assertively  
200 communicated, along with making online screening tools available and linked with information and  
201 training on screening for GPs. The feedback from GPs, however, suggested these two latter  
202 components would have been insufficient without clear referral pathways that resulted in treatment.  
203 Governmental failure to adequately fund mental health care services should not be a barrier to experts  
204 calling for the need to make such funding more widely available given the benefits for people with  
205 EDs.

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254 *Table 1: Profile of Screening Referrals*

<b>Variable</b>	<b>Categories</b>	<b>N (%)</b>
Duration of illness N = 90	<i>Early Intervention</i>	
	0 – 12 months.	31 (34.44%)
	1-3 years	11 (12.22%)
		42 Early Intervention (46.66%)
	<i>Later Intervention</i>	
	3 – 10 years	14 (15.55%)
	10 years or longer	23 (25.55%)
	No useable data	11 (12.22%)
EDE-Q Global Scores N = 65	Equal to or greater than 3	40 (61.53%)
	2.0 to 2.96	12 (18.46%)
	Less than 2.0	13 (20.01%)
Age N = 90	14 – 17 years	37 (41.1%)
	18 – 29 years	27 (30.0%)
	30 to 50 years	13 (14.44%)
	Over 50 years	11 (12.2%)
	Not eligible (under 14 years)	2 (2.22%)
Previous Treatment N = 90	No previous treatment	75 (83.33%)
	Previous ED treatment	11 (12.22%)
	Not determined	4 (4.44%)

255 *Note:* Information included in referrals was variable therefore sample sizes vary

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258 Figure 1: *Timeline of the project and referral of patients*

<p>Project provided pathways to low cost assessment and treatment from February 2019 to August 2021.</p> <p>From the 73 GPs across 42 practices who participated in the screening initiative, 143 patients were referred over this period.</p>		
<p>53 patients referred over the 19-month period from March 2019 to September 2020 (2.8 patients per month)</p>	<p>Screening initiative starts                  October 2020 to May 2021:                  GPs invited to participate in screening project;                  information/training about treatment pathways and screening provided; online screening tool provided                  June 2021: Training of GPs</p>	<p>90 patients referred over 11-month period from October 2020 to August 2021 (8.2 patients per month)</p>

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## Supplement 1

### SCEDAT– Pre-screening Service Provider Questions

**Clinician name:** **Date:** [Click here to enter a date.](#)

**Type of service:**

<input type="checkbox"/>	GP
<input type="checkbox"/>	Dietician
<input type="checkbox"/>	Psychologist
<input type="checkbox"/>	Mental Health Social Worker
<input type="checkbox"/>	Headspace intake
<input type="checkbox"/>	Others (please specify):

**Where is your practice located? (postcode)**  
**How long have you worked in the Practice?**  
**How many years ED experience do you have?**

**Baseline questions**  
**What would trigger you to suspect & ask about disordered eating symptoms?**  
**Have you previously screened for eating disorders?**  
**If yes, how do you screen (e.g. SCOFF)?**  
**Do you screen clients for eating disorders now?**  
**If yes, how do you screen & how often do you use a screening tool? (e.g. SCOFF)?**  
**How many clients with a diagnosed eating disorder would you usually see in a year?**  
**How many new eating disorder presentations have you seen in the past 3 months?**  
**How confident do you feel about early detection of eating disorders (on a scale of 1: not confident to 10: very confident)**  
**What other info or tools would be useful to assist you to screen for disordered eating or eating disorders?**

## Supplement 2

Hi Dr..... Great to speak with you today. Thanks for completing the pre-screening questions for disordered eating. Please find attached information on our Disordered Eating Screening initiative for those age 14 years up including easy to use Screening Tool Questions you can print out & use.

Also check out the Link to PHN eating disorders page to find out more: <https://www.ourphn.org.au/eating-disorder-access-trial/> (no longer accurate)

### **Below is other Info you might find helpful on the Sunshine Coast Eating Disorder Access Trial (SCEDAT):**

- Accepting referrals since January 2019 for those with Eating Disorders or suspected Eating Disorders.
- Since the introduction of the MBS items in Nov 2019 the Trial shifted its focus to its original aim of early intervention & Eating Disorder diagnosis for people (age 14 years up) with mild to moderate presentation & comorbidities (e.g. **The Trial accepts those who aren't eligible for EDP under Medicare**).
- Research shows people in the early stages of developing an eating disorder rarely volunteer information to health professionals on their eating behaviours making early identification challenging.
- For this reason SCEDAT is providing information & outreach to GP Practices, and other Service Providers on ways to promote screening practices for high risk groups in order to, among other things improve early identification of an eating disorder. Enclosed are **screening tools** (see attachments) which can be used to help identify those at risk.
- The emphasis will be on **'disordered eating'** as an indicator of risk for eating disorders and the medical consequences for several high risk groups of people including people with: weight related health issues, depression, diabetes & infertility to name a few.

### **The Sunshine Coast Eating Disorder Access Trial (SCEDAT) will provide:**

1. **Two psychology assessment sessions** for anyone with a **'yes'** response to **two** or more of the disordered eating screening questions or those with suspected ED.
2. Care Navigation & acceptance into the Trial for those identified (after 2 assessment psychology sessions) as having a DSM-5 Eating Disorder, mild to moderate presentation. They will receive **20 ED evidenced based psychology sessions & 10 dietetic sessions**.
3. Up to 3 dietetic sessions for those with **'disordered eating'** only & **don't qualify for a DSM-5 Eating Disorder**.
4. The Trial will provide GP's one Case consult / Client with the Psychologist & dietitian (in addition to other Medicare case consults) to encourage collaboration & multidisciplinary care at \$117.50/ case consult.

### **SCEDAT Processes:**

After receiving a referral the Care Navigator confirms & where needed, organises the Client care team, which consists of a psychologist & dietitian, plus their GP. We then notify the Client of the treatment team and that they will be contacted, first by the Psychologist to begin assessment sessions and later by the Dietitian or Practice to begin dietetic supports (unless referred in by dietitian).

We also identify any existing barriers which may need to be worked through so the Client can be given every opportunity to complete a full course of treatment.

In order to ensure best practice and collaboration, the Psychologist generally notifies the dietitian when it is best to begin dietetic input. The Care Navigator will confirm GP medical clearance if this hadn't been done at time of referral by referring Clinician.

Under the Trial Clinicians can also provide Telehealth & video conferencing sessions as needed. Clients will still be entitled to use MHCP for other comorbidities should they be eligible and not have exceeded the Governments requirements.

### **Please find Attached:**

1. SCEDAT Screening Disordered Eating Referral Form – (Referral for patients, complete and email SCEDAT or fax)
2. **Disordered Eating Screening Tool Questions** – (these can be printed & used by GP's, Practice Nurse)
3. GP, Nurse, GO's & Other Health Providers Disordered Eating Fact Sheet (to be shared)

347 4. *Disordered Eating Screening Tool Questions tick box (Patients can fill out in waiting room/ or with*  
348 *Nurse/GP)*

349 5. *Disordered Eating Fact sheet for Participants of all ages including adolescents (hand out)*  
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351 *Please let me know if you would like for more info re: claiming financial rebates for case consults for Patients*  
352 *accepted into the Trial.*

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