

Summary of supplementary files for:

**Australian airway clearance services for adults with chronic lung conditions: a National survey.**

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**Appendix 1 – Airway Clearance Survey Questions**

Domain		Question	Answer	Data Type
<b>1. Health care context</b>				
	1.1	Which of the following best describes the type of organisation that provides the airway clearance service?	<ul style="list-style-type: none"> <li>• Public health service</li> <li>• Private healthcare provider</li> <li>• Not for profit organisation</li> <li>• Research</li> <li>• Other</li> </ul>	Tick a box, allows one choice only “Other” allows space for free text
	1.2	Which of the following best describes the location of your service?	<ul style="list-style-type: none"> <li>• Inner City</li> <li>• Metropolitan</li> <li>• Regional</li> <li>• Rural</li> <li>• Remote</li> </ul>	Tick a box, allows one choice only
	1.3	Which of the following venues does your service provide airway clearance intervention from? (tick all that apply)	<ul style="list-style-type: none"> <li>• Public hospital outpatient department</li> <li>• Private hospital</li> <li>• Community clinic</li> <li>• Primary care setting</li> <li>• Patient’s home</li> <li>• Other</li> </ul>	Tick a box, allows one choice only “other” allows space for free text
	1.4	How many sites does your	<ul style="list-style-type: none"> <li>• 1</li> </ul>	Tick a box,

		service operate at?	<ul style="list-style-type: none"> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5 or more</li> </ul>	allows one choice only
	1.5	What is the method of airway clearance intervention service delivery? (tick all that apply)	<ul style="list-style-type: none"> <li>• 1:1 face to face delivery</li> <li>• Group based delivery</li> <li>• Phone consultation</li> <li>• Tele-health delivery</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
		Does your site provide outreach PT services to other locations?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
		Do these outreach services provide 1:1 airway clearance intervention?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
<b>2. Referrals</b>	2.1	From which sources does your airway clearance service <u>accept</u> referrals from? (tick all that apply)	<ul style="list-style-type: none"> <li>• Private physicians</li> <li>• Public physicians</li> <li>• GP's</li> <li>• Nursing staff</li> <li>• Allied Health</li> <li>• Respiratory Scientists</li> <li>• Home oxygen teams</li> <li>• Self-referred</li> <li>• Other (please specify)</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	2.2	Which referral sources do you receive referrals from? (tick all that apply)	<ul style="list-style-type: none"> <li>• Private physicians</li> <li>• Public physicians</li> <li>• GP's</li> <li>• Nursing staff</li> <li>• Allied Health</li> <li>• Respiratory Scientists</li> <li>• Home oxygen teams</li> <li>• Self-referred</li> <li>• Other (please specify)</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	2.3	Which referral source do you receive the most referrals from?	<ul style="list-style-type: none"> <li>• Private physicians</li> <li>• Public physicians</li> <li>• GP's</li> <li>• Nursing staff</li> <li>• Allied Health</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text

			<ul style="list-style-type: none"> <li>• Respiratory Scientists</li> <li>• Home oxygen teams</li> <li>• Self-referred</li> <li>• Other (please specify)</li> </ul>	
	2.4	Are the patients referred on a needs basis or by blanket referral?	<ul style="list-style-type: none"> <li>• Needs basis</li> <li>• Blanket referral</li> </ul>	Tick a box, allows one choice only
	2.5	Does your service have specific inclusion criteria? If so, please list here		Free text
	2.6	Does your service have specific exclusion criteria? If so, please list here		Free text
	2.7	Approximately how many referrals did the airway clearance service receive in the year 2018?	<ul style="list-style-type: none"> <li>• &lt;30</li> <li>• 31-60</li> <li>• 61-90</li> <li>• 91-120</li> <li>• 120+</li> </ul>	Tick a box, allows one choice only
	2.8	How were referrals to the airway clearance service received? (tick all that apply)	<ul style="list-style-type: none"> <li>• Email</li> <li>• Fax</li> <li>• Paper form</li> <li>• Phone</li> <li>• Electronic database</li> </ul>	Tick all that apply
	2.9	Which conditions would be accepted by your airway clearance service? (tick all that apply)	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Asthma</li> <li>• Bronchiectasis</li> <li>• ILD</li> <li>• Lung cancer</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	2.10	Please rank the three conditions most frequently referred to your service in 2018, with 1 being the most frequently referred	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Asthma</li> <li>• Bronchiectasis</li> <li>• ILD</li> <li>• Lung cancer</li> <li>• Other</li> </ul>	Number accordingly
	2.11	Does your service triage referrals into categories of urgency?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
<b>3. Service provision (include staffing, funding)</b>	3.1	Is there a waiting time for patients to be seen by the airway clearance service?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	3.2	If so, which of the following best describes an average wait time?	<ul style="list-style-type: none"> <li>• &lt; 1 week</li> <li>• 1-3 weeks</li> <li>• 3-6 weeks</li> </ul>	Tick a box, allows one choice only

			<ul style="list-style-type: none"> <li>• 6 weeks -3 months</li> <li>• 3 months+</li> </ul>	
	3.3	How long is allocated for an initial appointment?	<ul style="list-style-type: none"> <li>• 15 mins</li> <li>• 30 mins</li> <li>• 45 mins</li> <li>• 60 mins</li> <li>• &gt;60 mins</li> </ul>	Tick a box, allows one choice only
	3.4	How long is allocated for a review appointment?	<ul style="list-style-type: none"> <li>• 15 mins</li> <li>• 30 mins</li> <li>• 45 mins</li> <li>• 60 mins</li> <li>• &gt;60 mins</li> </ul>	Tick a box, allows one choice only
	3.5	Does your airway clearance service have regular set clinic hours or are appointments made on an ad hoc basis?	<ul style="list-style-type: none"> <li>• Regular set clinic times</li> <li>• Ad hoc appointments</li> </ul>	Tick a box, allows one choice only
	3.6	How is your airway clearance service funded?	<ul style="list-style-type: none"> <li>• Operational budget</li> <li>• Activity based funding</li> <li>• Project / research grant</li> <li>• Do not know</li> </ul>	Tick a box, allows one choice only
	3.7	Is there a cost for patients to attend the airway clearance service?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	3.8	If airway clearance devices are prescribed how are they funded?	<ul style="list-style-type: none"> <li>• Patient funded</li> <li>• Program funded</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.9	Which airway clearance devices does your service have access to? (tick all that apply)	<ul style="list-style-type: none"> <li>• Flutter</li> <li>• Pari-O-Pep</li> <li>• Turboforte</li> <li>• PEPE</li> <li>• Acapella Blue</li> <li>• Acapella Green</li> <li>• Acapella Duet</li> <li>• Acapella Choice</li> <li>• RC-Cornet</li> <li>• Aerobika</li> <li>• Aeroeclipse</li> <li>• Bottle PEP</li> <li>• Therabubble</li> <li>• Pari PEP System 1</li> <li>• Pari PEP S</li> <li>• TheraPEP</li> <li>• PARI Sprint</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text

			<ul style="list-style-type: none"> <li>• PARI Sprint Star</li> <li>• PARI LC Plus</li> <li>• Other</li> </ul>	
	3.10	On average how many one on one assessment/education sessions would your patients receive in a course of therapy?	<ul style="list-style-type: none"> <li>• 1 visit</li> <li>• 2-3 visits</li> <li>• 4-5 visits</li> <li>• 6-7 visits</li> <li>• 8+ visits</li> </ul>	Tick a box, allows one choice only
	3.11	Which of the following clinicians / programs does your service have access to? (tick all that apply)	<ul style="list-style-type: none"> <li>• Pulmonary Rehabilitation</li> <li>• Respiratory Nurse</li> <li>• Speech pathology</li> <li>• Occupational Therapy</li> <li>• Psychology</li> <li>• Dietetics</li> <li>• Exercise Physiology</li> <li>• Social Work</li> <li>• Incontinence Physiotherapist</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.12	Which of the following clinicians / programs do you refer airway clearance patients to? (tick all that apply)	<ul style="list-style-type: none"> <li>• Pulmonary Rehabilitation</li> <li>• Respiratory Nurse</li> <li>• Speech pathology</li> <li>• Occupational Therapy</li> <li>• Psychology</li> <li>• Dietetics</li> <li>• Exercise Physiology</li> <li>• Social Work</li> <li>• Incontinence Physiotherapist</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.13	Do you routinely follow the patients up at regular intervals, for example 6 or 12 monthly?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• Comment (optional)</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.14	Which medical professionals do you have access to if you are concerned about your airway clearance patient?	<ul style="list-style-type: none"> <li>• Respiratory specialist</li> <li>• Medical officer</li> <li>• General Practitioner</li> </ul>	Tick a box, allows one choice only "Other" allows space for

			<ul style="list-style-type: none"> <li>• Respiratory Nurse</li> <li>• Medical emergency team</li> <li>• Ambulatory Care team</li> <li>• Other</li> </ul>	free text
	3.15	Which intervention categories best describe the format of the service? (tick all that apply)	<ul style="list-style-type: none"> <li>• Education</li> <li>• Exercise prescription</li> <li>• Device prescription</li> </ul>	Tick a box, allows one choice only
	3.16	Are educational resources provided? In what form?	<ul style="list-style-type: none"> <li>• Paper based</li> <li>• Web based</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.17	Which health professionals provide the airway clearance service? (tick all that apply)	<ul style="list-style-type: none"> <li>• Physiotherapists</li> <li>• Occupational therapists</li> <li>• Respiratory nurses</li> </ul>	Tick a box, allows one choice only
	3.18	Is the service provided by generalist physiotherapists (see a range of client types) or dedicated cardiorespiratory physiotherapy staff?	<ul style="list-style-type: none"> <li>• Generalist Physiotherapists</li> <li>• Cardiorespiratory Physiotherapists</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	3.19	Approximately how many health professional hours were spent providing airway clearance per week in 2018?		Free text
	3.20	Is there administrative support for your service?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	3.21	If so, how many hours per week is the administrative support available?	<ul style="list-style-type: none"> <li>• 1-5 hours</li> <li>• 6-15 hours</li> <li>• 16-25 hours</li> <li>• 26-38 hours</li> </ul>	Tick a box, allows one choice only
<b>4. Outcomes / Program Metrics</b>	4.1	Does your service focus on: (tick all that apply)	<ul style="list-style-type: none"> <li>• Hospital avoidance</li> <li>• Reducing length of stay</li> <li>• Chronic condition self-management</li> <li>• Management of acute exacerbations</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text

	4.2	Which measures, if any, of health care utilisation do you record? (tick all that apply)	<ul style="list-style-type: none"> <li>• Number of GP visits</li> <li>• Number of hospital presentations</li> <li>• Number of hospital admissions</li> <li>• Number of specialist appointments?</li> </ul>	Tick a box, allows one choice only
	4.3	If health care utilisation data is recorded for your patients, how long is it captured for before intervention?	<ul style="list-style-type: none"> <li>• 3 months</li> <li>• 6 months</li> <li>• 12 months</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	4.4	If health care utilisation data is recorded for your patients, how long is it captured for after intervention?	<ul style="list-style-type: none"> <li>• 3 months</li> <li>• 6 months</li> <li>• 12 months</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	4.5	Which, if any, measures of functional exercise capacity are used? (tick all that apply)	<ul style="list-style-type: none"> <li>• 6MWT</li> <li>• 4MGS</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text
	4.6	Which if any measures of health status do you use? (tick all that apply)	<ul style="list-style-type: none"> <li>• COPD Assessment Tool</li> <li>• The Quality Of Life Questionnaire - Bronchiectasis</li> <li>• 12-Item Short Form Health Survey (SF-12)</li> <li>• 36-Item Short Form Health Survey (SF-36)</li> <li>• St Georges Respiratory Questionnaire (SGRQ)</li> <li>• Chronic Respiratory Questionnaire (CRQ)</li> <li>• Other</li> </ul>	Tick a box, allows one choice only "Other" allows space for free text

	4.7	Do you use any other outcome measures routinely with your patients? Please list		Free text
	4.8	Are all outcome measures measured before and after intervention where possible?	<ul style="list-style-type: none"> <li>• Before only</li> <li>• After only</li> <li>• Before and after</li> <li>• Other</li> </ul>	Tick a box, allows one choice only “Other” allows space for free text
	4.9	Do your patients have the opportunity to provide feedback on the service?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	4.10	If so, how is feedback provided?	<ul style="list-style-type: none"> <li>• Verbal</li> <li>• Written</li> <li>• Other</li> </ul>	Tick a box, allows one choice only “Other” allows space for free text
	4.11	Does your service inform referrers of the outcome of the service for each patient routinely?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	4.12	Does your service inform the GP of the outcome of the service for each patient routinely?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Tick a box, allows one choice only
	4.13	Do you feel that the current airway clearance service and how it operates meets the needs of the respiratory cohort in your region?	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> <li>• If no, please comment</li> </ul>	Tick a box, allows one choice only “Other” allows space for free text



**Table 1 – Supplementary Data** Referral information of airway clearance services (ACSs) provided, n (%)

Sources of referrals for ACSs	All data (N=91)			Private (N=4)			Public - Metropolitan (N=34)			Public – Non-metropolitan (N=53)		
	Accept	Receive	Receive most	Accept	Receive	Receive most	Accept	Receive	Receive most	Accept	Receive	Receive most
- Private physicians	77	74	14	4	4	3	29	30	5	44	40	6
- Public physicians	(85)	(81)	(15)	(100)	(100)	(75)	(85)	(88)	(15)	(83)	(75)	(11)
- GPs	84	79	40	)	)	0	32	33	26	48	44	14
- Nursing staff	(92)	(87)	(44)	4	2	(0)	(94)	(97)	(76)	(91)	(83)	(26)
- Allied health	80	80	22	(100)	(50)	1	29	29	0	47	47	21
- Respiratory scientists	(88)	(88)	(24)	)	4	(25)	(85)	(85)	(0)	(89)	(89)	(40)
- Home oxygen teams	72	65	6	4	(100)	0	25	25	1	43	37	5 (9)
- Client self-referred	(79)	(71)	(7)	(100)	)	(0)	(74)	(74)	(3)	(81)	(70)	4 (8)
- Blank	83	75	5	)	3	0	31	30	1	48	42	0 (0)
	(91)	(82)	(5)	4	(75)	(0)	(91)	(88)	(3)	(91)	(79)	0 (0)
	33	12	0	(100)	3	0	11	4	0	20	8	0 (0)
	(36)	(13)	(0)	)	(75)	(0)	(32)	(12)	(0)	(38)	(15)	3 (6)
	26	7	0	4	0	0	9	4	0	15	3 (6)	
	(29)	(8)	(0)	(100)	(0)	(0)	(26)	(12)	(0)	(28)	22	
	37	38	0	)	0	0	11	12	0	22	(42)	
	(41)	(42)	(0)	2	(0)	(0)	(32)	(35)	(0)	(42)	3 (6)	
	0	0	4	(50)	4	0	1	1	1	3		
	(0)	(0)	(4)	2	(100)	(0)	(3)	(3)	(3)	(6)		
				(50)	)							
				4	0							
				(100)	(0)							
				)								
				0								
				(0)								

ACS: airway clearance service; GP: general practitioner

**Table 2 – Supplementary Data** Service provision characteristics of airway clearance services (ACSs) provided, n (%)

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	All data (N = 91)	Private (N = 4)	Public – Metropolitan (N = 34)	Public - Non- metropolitan (N = 53)	p Value
Wait time for ACSs					
Yes	68 (75)	2 (50)	29 (85)	37 (70)	
No	17 (19)	2 (50)	4 (12)	11 (21)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Time allocated to initial ACS appointments					
15 minutes	0 (0)	0 (0)	0 (0)	0 (0)	
30 minutes	8 (9)	0 (0)	2 (6)	6 (11)	
45 minutes	16 (18)	1 (25)	4 (12)	11 (21)	
60 minutes	51 (56)	1 (25)	20 (59)	30 (57)	
>60 minutes	8 (9)	1 (25)	6 (18)	1 (2)	
Other <sup>1</sup>	2 (2)	1 (25)	1 (3)	0 (0)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Time allocated to review appointments					
15 minutes	0 (0)	0 (0)	0 (0)	0 (0)	
30 minutes	62 (68)	3 (75)	19 (56)	40 (74)	
45 minutes	12 (13)	0 (0)	7 (21)	5 (9)	
60 minutes	10 (11)	1 (25)	7 (21)	2 (4)	
>60 minutes	0 (0)	0 (0)	0 (0)	0 (0)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Funding for ACSs					
Operational budget	44 (48)	0 (0)	18 (53)	26 (49)	
Activity based funding	33 (36)	1 (25)	13 (38)	19 (36)	
Do not know	10 (11)	0 (0)	3 (9)	7 (13)	
Project / research grant	0 (0)	0 (0)	0 (0)	0 (0)	
Other <sup>2</sup>	7 (8)	3 (75)	2 (6)	2 (4)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Cost to the client for ACSs					
No	72 (79)	0 (0)	33 (97)	39 (74)	0.015
Yes	13 (14)	4 (100)	0 (0)	9 (17)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Airway clearance devices accessible in ACSs					
Bottle PEP	55 (60)	1 (25)	23 (68)	31 (58)	
Flutter	40 (44)	3 (75)	17 (50)	20 (38)	
Acapella Green	30 (33)	2 (50)	16 (47)	12 (23)	
Pari-O-Pep	27 (30)	3 (75)	16 (47)	8 (15)	
Aerobika	23 (25)	3 (75)	15 (44)	5 (9)	
Pari PEP S	22 (24)	2 (50)	13 (38)	7 (13)	
Acapella Choice	18 (20)	1 (25)	14 (41)	3 (6)	
Therabubble	17 (19)	0 (0)	10 (29)	7 (13)	
TheraPEP	16 (18)	1 (25)	6 (18)	9 (17)	
Acapella Blue	15 (16)	1 (25)	10 (29)	4 (8)	
Aeroeclipse	13 (14)	3 (75)	7 (21)	3 (6)	
Turboforte	12 (13)	1 (25)	7 (21)	4 (8)	
PARI Sprint	10 (11)	0 (0)	8 (24)	2 (4)	
Pari PEP System 1	9 (10)	0 (0)	5 (15)	4 (8)	
PARI LC Plus	9 (10)	0 (0)	6 (18)	3 (6)	
PARI Sprint Star	5 (5)	0 (0)	4 (12)	1 (2)	
Other <sup>3</sup>	22 (24)	1 (25)	7 (21)	14 (26)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Routine follow up at regular intervals in ACSs					
Yes	11 (12)	2 (50)	6 (18)	3 (6)	
No	74 (81)	2 (50)	27 (79)	45 (85)	
Other <sup>4</sup>	19 (21)	1 (25)	11 (32)	7 (13)	

Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Access to medical professionals for unstable clients in ACSs					
General Practitioner	69 (76)	4 (100)	22 (65)	43 (81)	<b>0.000</b> <b>0.010</b> <b>0.001</b>
Respiratory Physician	54 (59)	4 (100)	29 (85)	21 (40)	
Respiratory Nurse	49 (54)	0 (0)	25 (74)	24 (45)	
Medical Officer	34 (37)	0 (0)	10 (29)	24 (45)	
Medical Emergency Team	34 (37)	0 (0)	21 (62)	13 (25)	
Ambulatory Care Team	10 (11)	1 (25)	5 (15)	4 (8)	
Other <sup>5</sup>	10 (11)	1 (25)	3 (9)	6 (11)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Format of education resources provided in ACSs					
Paper based	83 (91)	4 (100)	33 (97)	46 (87)	
Web based	38 (42)	2 (50)	19 (56)	17 (32)	
N/A	1 (1)	0 (0)	0 (0)	1 (2)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Health professionals providing ACSs					
Physiotherapists	85 (93)	4 (100)	33 (97)	48 (91)	0.087
Respiratory Nurses	12 (13)	0 (0)	2 (6)	10 (19)	
Occupational Therapists	1 (1)	0 (0)	1 (3)	0 (0)	
Exercise Physiologists	1 (1)	0 (0)	0 (0)	1 (2)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Title of physiotherapists providing intervention in ACSs					
Cardiorespiratory Physiotherapists	47 (52)	4 (100)	30 (88)	13 (25)	<b>0.000</b>
General Physiotherapists	38 (42)	0 (0)	3 (9)	35 (66)	
Other <sup>6</sup>	11 (12)	0 (0)	5 (15)	6 (11)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Weekly health professional hours spent on ACSs in 2018					
<free text>	85 (93)	4 (100)	33 (97)	48 (91)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	
Administrative support for ACSs					
Yes	39 (43)	2 (50)	20 (59)	17 (32)	<b>0.040</b>
No	46 (51)	2 (50)	13 (38)	31 (58)	
Blank	6 (7)	0 (0)	1 (3)	5 (9)	

ACS: airway clearance service; PEP: positive expiratory pressure. For p values <0.05 the values were in bold  
<sup>1</sup>90 minutes'

<sup>2</sup>Private health insurance', 'EPC'

<sup>3</sup>Threshold PEP'

<sup>4</sup>unable due to service constraints', 'patients can make contact if needed'

<sup>5</sup>Emergency Department'

<sup>6</sup>Both generalist and cardiorespiratory'

- 5 and less hours = 50 (Private = 1, metro = 16, non-metro = 33)
- 6-10 hours = 11 (Private = 1, metro = 4, non-metro = 6)
- 11-20 hours = 7 (Private = 1, metro = 4, non-metro = 2)
- 21-30 hours = 3 (Private = 0, metro = 1, non-metro = 2)
- 31-40 hours = 1 (Private = 0, metro = 1, non-metro = 0)
- 41+ hours = 7 (Private = 1, metro = 4, non-metro = 2)

**Table 3 – Supplementary Data** Program metrics of airway clearance services (ACSs), n (%)

	All data (N = 91)	Private (N = 4)	Public - Metropolitan (N = 34)	Public - Non- Metropolitan (N = 53)
Length of time health care utilisation data recorded for before intervention in ACSs				
3 months	4 (4)	0 (0)	1 (3)	3 (6)
6 months	2 (2)	0 (0)	0 (0)	2 (4)
12 months	17 (19)	0 (0)	12 (35)	5 (9)
No health care utilisation data recorded	62 (68)	4 (100)	20 (59)	38 (72)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Length of time health care utilisation data recorded for after intervention in ACSs				
3 months	2 (2)	0 (0)	0 (0)	2 (4)
6 months	2 (2)	0 (0)	1 (3)	1 (2)
12 months	9 (10)	0 (0)	6 (18)	3 (6)
No health care utilisation data recorded	72 (79)	4 (100)	26 (76)	42 (79)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Outcome measures used routinely in ACSs				
If yes, please list outcome measures used <sup>1</sup>	85 (93)	4 (100)	33 (97)	48 (91)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Timing of use of outcome measures in ACSs				
Before and after	64 (70)	4 (100)	24 (71)	36 (68)
No outcome measures used	16 (18)	0 (0)	9 (26)	7 (13)
Before only	5 (5)	0 (0)	0 (0)	5 (9)
After only	0 (0)	0 (0)	0 (0)	0 (0)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Feedback opportunities in ACSs				
Yes	79 (87)	4 (100)	30 (88)	45 (85)
No	6 (7)	0 (0)	3 (9)	3 (6)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Methods of providing feedback in ACSs				
Written	62 (68)	1 (25)	21 (62)	40 (75)
Verbal	49 (54)	3 (75)	20 (59)	26 (49)
Electronic	14 (15)	3 (75)	8 (24)	3 (6)
N/A	6 (7)	0 (0)	3 (9)	3 (6)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Routine correspondence with referrers in ACSs				
Yes	62 (68)	3 (75)	24 (71)	35 (66)
No	23 (25)	1 (25)	9 (26)	13 (25)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Routine correspondence with GPs in ACSs				
Yes	52 (57)	3 (75)	18 (53)	31 (58)
No	33 (36)	1 (25)	15 (44)	17 (32)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Adequate ACSs in regions				
No <sup>2</sup>	52 (57)	2 (50)	21 (62)	29 (55)
Yes	33 (36)	2 (50)	12 (35)	19 (36)
Blank	6 (7)	0 (0)	1 (3)	5 (9)
Free text responses (n=45)			19 (42)	26 (58)
ACSs for other client groups <sup>3</sup>	34 (37)	2 (50)	17 (52)	15 (28)

ACS: airway clearance service; GP: general practitioner.

<sup>1</sup>'DASS', 'MMRC', 'spirometry', 'Borg', 'SNOT', 'LCQ'

<sup>2</sup>Metropolitan – issues are access to devices, delays in service delivery, limited funding and resources, limited home visiting capacity. Non-metro – minimal referrals, lack of staff knowledge, ad hoc services, lack of EFT, patients have to travel+, lack of awareness of utilisation of services.

<sup>3</sup>Neuromuscular diseases and spinal cord injuries

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**Table 4 Supplementary Data** Themed responses: reasons for airway clearance needs not being met by current service, n

	Metropolitan (N=18)	Non-metropolitan (N=28)	Total (N=46)
Staffing limitation - employment	3	8	11
Unable to follow patients up	6	5	11
Limited resources (including devices)	6	4	10
No designated service / ad hoc	2	8	10
Problems with access to existing services	2	6	8
Funding limitations	3	3	6
Patients not referred	2	4	6
Staffing limitation - expertise	0	5	5