



THE UNIVERSITY OF  
**NOTRE DAME**  
A U S T R A L I A

**Matrix Styled Rating:** Always 100%-80% Very often 80%-60% Sometimes 60%-40% Rarely 40%-20% Never 0%-20%

## Participant Information

Q1. What state do you practice in?

ACT/NT/TAS

NSW

QLD

WA

VIC

SA

Q2. What is your gender?

Female

Male

Q3. Please indicate your age

Q4. What year did you become a registered Physiotherapist?

Q5. How many years of experience do you have working in general surgery?

Less than 1 year

1-2 years

3-5 years

More than 5 years

Q6. What type of hospital do you currently work at? Please select all that apply.

Public

Private

Mixed

Secondary

Tertiary

Metropolitan

Regional

Other (please specify)

Q7. How many beds are there in the General Surgery ward(s)?

0-10

10-20

20-30

More than 30

Q8. Approximately, how many full time physiotherapists work in the general surgical ward(s) on a standard workday during the week?

Q9. On an average working day, approximately how many patients do you see who have undergone upper abdominal surgery (UAS)?

Q10. In a standard week, what percentage of patients do you see that have undergone the following types of surgeries?

0 10 20 30 40 50 60 70 80 90 100

Oesophagectomy

Open gastric surgery

Whipple's/PPPD

Other pancreatic surgery

Hepatectomy/Lobectomy

Other liver surgery

Colorectal

Other (please specify)

## Patient Demographics

Q11. Do you screen/assess your patients prior to their UAS?

Never

Rarely

Sometimes

Often

Always

Q12. If yes, what do you use to screen your patients?

	Never	Rarely	Sometimes	Often	Always
Melbourne Risk Prediction Tool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physician referral	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoking history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASA Score (American Society of Anaesthesiology)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Past clinical experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BMI (body mass index)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National Surgical Quality Improvement Project (NSQIP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fitness level/exercise tolerance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q13. What **outcome measures (OCM)** do you use to identify a patient at high-risk of PPC development?

	Never	Rarely	Sometimes	Often	Always
Pain (high VAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respiratory PMHx	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raised blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Rate of Perceived Exertion (RPE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Auscultation (abnormal findings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chest X-Ray (abnormal findings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raised respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of assistance required (mobility)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sputum classification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Altered ABGs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-compliance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Decreased SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q14. After surgery, when would you first see your patient?

- Day of surgery (day 0)
- Day after surgery (day 1)
- Two (2) days after surgery
- Three to five (3-5) days after surgery

Q15. What pre-existing postoperative pulmonary complication (PPC) risk factors do your UAS patients commonly present with?

	Never	Rarely	Sometimes	Often	Always
Smoking history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malnutrition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ASA Score of >2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obesity/high BMI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respiratory conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surgical duration (5+ hours)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Duration of anaesthesia (>120 mins)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Older age (>59 yo)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neurological conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Need for mechanical ventilation +/- ICU admission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diabetes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Compromised lung volumes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscle weakness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

### Patient-Physiotherapy Factors for Commencing Treatment

Q16. How frequently, on average, would a standard post-operative patient receive physiotherapy intervention?

- Never
- Once daily
- Twice daily
- Three times a day
- Hourly
- Other (please specify)

Q17. In your opinion, what **patient factors** limit the commencement of your intervention?

	Never	Rarely	Sometimes	Often	Always
Pain (high VAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduced exercise tolerance/fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of ventilation/O2 requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BMI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of attachments (catheter, IV drip, O2 therapy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Abnormal heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abnormal respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decreased SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ABGs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient readiness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety level of patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presence of spontaneous breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VO2 max	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physio judgement of medical stability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fatigue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) please specify	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q18. In your opinion, what **general care factors** limit the commencement of your intervention?

	Never	Rarely	Sometimes	Often	Always
Physician instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistance required (mobility)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pressure to discharge from ward	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conflicts with MDT appointments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other(s) (please specify)

## Prescription and Dosage of Interventions

Q19. What is your **primary focus/goals for physiotherapy management** over consecutive days post UAS? What do you aim to achieve?

Day of surgery (day 0)

Day after surgery (day 1)

Two (2) days after surgery

Three to five (3-5) days after surgery

Not applicable (N/A)

Q20. If the patients condition is not limited, what **interventions** do you frequently prescribe and use over consecutive days post UAS?

	DAY 1					Never	Rarely	Sometimes	Often	Always	Never	Rarely	Sometimes
	Never	Rarely	Sometimes	Often	Always								
Deep breathing exercises (TEE, SMI, PLB)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	
Active Cycle of Breathing Technique (ACBT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	
Forced Expiratory Techniques (FET - huff + breathing control)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	
Positive Expiratory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	



Pressure (PEP)							
Incentive Spirometry (IS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CPAP (Continuous Positive Airway Pressure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aerosol therapy (humidification, nebulisers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bed mobility (rolling, bridge etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upright sitting on edge of bed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sit to stand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambulation/walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stairs/steps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper limb exercises	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cough (unsupported)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supported coughing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cycle pedals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cough assist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21. What options have we missed? Please state other interventions you use.

Q22. Of the interventions listed below, rank from 1 to 3 the **interventions** you most commonly use on a standard post-op patient.  
(Rank where 1 is the most commonly used intervention)

- Deep breathing exercises (LET, TEE, SMI, PLB)
- Active Cycle of Breathing Technique (ACBT)
- Forced Expiratory Techniques (FET - huff + breathing control)
- Positive Expiratory Pressure (PEP)
- Incentive Spirometry (IS)
- CPAP (Continuous Positive Airway Pressure)
- Aerosol therapy (humidification, nebulisers)
- Bed mobility (rolling, bridge etc)
- Upright sitting on edge of bed
- Sit to stand
- Ambulation/walking
- Stairs/steps
- Upper limb exercises
- Cough (unsupported)
- Supported coughing
- Suction

Education

Cycle pedals

Cough assist

Q23. What factors do you take into account when prescribing interventions?

	Never	Rarely	Sometimes	Often	Always
Physician instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O2 requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rate of Perceived Exertion (RPE) Score	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharge status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2 level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ABGs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gut feel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chest x-ray	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistance required (mobility)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG score	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pain (VAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility/functional status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q24. What components of **breathing exercises** do you incorporate into your post-operative treatment?

	Never	Rarely	Sometimes	Often	Always
Inspiratory hold	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustained Maximal Inspiration (SMI)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Huff +/- cough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Positive Expiratory Pressure (PEP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incentive Spirometry (IS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thoracic Expansion Exercises (TEE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Breathing control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CPAP (Continuous Positive Airway Pressure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IPPB (Intermittent Positive Pressure Breathing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proprioceptive facilitation/input for chest expansion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Positioning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rib springing concept	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pursed lip breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(PLB)

Other(s) (please specify)



Q25. Of the breathing exercise components listed below, rank from 1 to 3 the components you most commonly use on a standard post-op patient.  
*(Rank where 1 is the most commonly used intervention)*

Inspiratory hold

Sustained Maximal Inspiration (SMI)

Huff +/- cough

Positive Expiratory Pressure (PEP)

Incentive Spirometry (IS)

Thoracic Expansion Exercises (TEE)

Breathing control

CPAP (Continuous Positive Airway Pressure)

IPPB (Intermittent Positive Pressure Breathing)

Proprioceptive facilitation/input for chest expansion

Positioning

Rib springing concept

Pursed Lip Breathing (PLB)

Other (please specify)

Q26. Do you prescribe independent breathing exercises for your patients?

Never

Rarely

Sometimes

Often

Always

Q27. If yes, what is your prescription of breathing exercises?

Once every waking hour

Every physiotherapy treatment session

As often as patient believes they can manage

Other(s) (please specify)

Q28. What **outcome measures** do you use to monitor the effectiveness of your interventions?

	Never	Rarely	Sometimes	Often	Always
FiO2/O2 requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ABGs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Progression of assistance required	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chest x-ray	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clinical Pulmonary Infection Score (CPIS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sputum clearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance mobilised	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Readiness for discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rate of Perceived Exertion (RPE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG score	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pain (VAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxiety level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Auscultation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q29. Of the **outcome measures** listed below, rank from 1 to 3 the OCM you most commonly use on a standard post-op patient.

*(Rank where 1 is the most commonly used intervention)*

- FiO2/O2 requirements
- Level of mechanical ventilation
- VO2 max
- Respiratory rate
- SpO2
- ABGs
- Progression of assistance required
- Blood pressure
- Heart rate

- Chest x-ray
- Clinical Pulmonary Infection Score (CPIS)
- Sputum clearance
- Distance mobilised
- Readiness for discharge
- Rate of Perceived Exertion (RPE)
- BORG score
- Pain (VAS)
- Anxiety level
- Patient appearance
- Auscultation
- Other(s) (please specify)

### **Mobility Prescription Following UAS**

Q30. Is it part of your role as a physiotherapist to prescribe **mobility programs** to patients following UAS?

Never

Rarely

Sometimes

Often

Always

Q31. If yes, are you prescribing mobility with the intention of someone else carrying it out?



Never

Rarely

Sometimes

Often

Always

Q32. Who carries out the mobility programs that you prescribe? *Tick all that apply.*

Medical staff

Nurse

Physiotherapy assistant

Physiotherapy student

Patient relative/s

Nursing assistant/ patient care assistant

Other(s) (please specify)

Q33. Do you record any of the following patient information in regards to mobilisation? *Tick all that apply*

Day patient first ambulates from the bedside

Length of time physiotherapist spent mobilising the patient

N/A

Q34. Do you believe the above factors listed in the above question (Q32) predict/ dictate patient outcomes?

Yes

No

Q35. Why?

Q36. What are the **aims** of mobilisation in patients on each consecutive day following UAS? *Tick one option per day*

DAY 1

	Never	Rarely	Sometimes	Often	Always	Never	Rarely
Increased V/Q ratio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved airway clearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased lung volumes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevention of atelectasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved patient mood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved circulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fulfill hospital protocols	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allow patient to be discharged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved exercise tolerance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved bladder and bowel function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Normalise blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevention of pneumonia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevention of PPC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>							

Q37. What are the **milestones** you expect patients to achieve on each consecutive day following UAS? *Tick all that apply.*

Sitting in bed, bed exercises: including rolling, bridging, active exercises, cycle ergometry and active assisted exercises.

Day 0    Day 1    Day2    Day3-5

Patient passively moved to chair (no standing) using a hoist, passive lift or slide transfer

Day 0    Day 1    Day2    Day3-5

Sitting over edge of bed (+/- assistance)

Day 0    Day 1    Day2    Day3-5

Transferring bed to chair	Day 0	Day 1	Day2	Day3- 5
Marching on the spot (at bedside)	Day 0	Day 1	Day2	Day3- 5
Walking away from the bed (5+m) with assistance of 1 person	Day 0	Day 1	Day2	Day3- 5
Walking independently with a gait aid away from the bed (5+m)	Day 0	Day 1	Day2	Day3- 5
Walking independently without a gait aid away from the bed (5+m)	Day 0	Day 1	Day2	Day3- 5
Stairs	Day 0	Day 1	Day2	Day3- 5
Other(s) (please specify): <input type="text"/>	Day 0	Day 1	Day2	Day3- 5

### Frequency, Intensity and Duration of Mobility Prescription

Q38. How **frequently** would patients undergo **structured mobility** (*mobility prescribed by physiotherapist based on assessment*) on day one (1), day two (2) and day three to five (3-5) post-operatively? *Tick one option per day.*

	Never	Rarely	Sometimes	Often	Always
Day one (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Day two (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Day three to five (3-5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q39. What **determines** the **frequency** of structured patient mobility provided by physiotherapists on each consecutive day following UAS?

Never      Rarely      Sometimes      Often      Always

Staff availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient condition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pressure to discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equipment availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physician instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient compliance with physiotherapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q40. What information do you use to guide your decision making in regards to the **frequency** of your mobility prescription?

	Never	Rarely	Sometimes	Often	Always
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Readiness for discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VO2 max	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arterial Blood Gases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence/ literature (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Other(s) (please specify)



Q41. Of the objective measures listed, please **rank** the components you most commonly use to prescribe the **frequency** of your mobility program. (*Rank from 1 to 3, with 1 being the most common.*)

Respiratory rate

Level of ventilation

Blood pressure

Readiness for discharge

SpO2

Exercise test

Heart rate

VO2 max

BORG

FiO2

Arterial Blood Gases

Evidence/ literature (please specify)

Other(s) (please specify)

Q42. What information do you use to guide your decision making in regards to the

**intensity** of your mobility prescription?

	Never	Rarely	Sometimes	Often	Always
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Readiness for discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VO2 max	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arterial Blood Gases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence/ literature (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

Q43. Of the objective measures listed, please **rank** the components you most commonly use to prescribe the **intensity** of your mobility program. (*Rank from 1 to 3, with 1 being the most common.*)

Respiratory rate

Readiness for discharge

Level of ventilation

SpO2

Exercise test

Heart rate

VO2 max

Blood pressure

BORG

FiO2

Arterial Blood Gases

Evidence/ literature (please specify)

Other(s) (please specify)

Q44. What information do you use to guide your decision making in regards to the **duration** of your mobility prescription?

	Never	Rarely	Sometimes	Often	Always
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Readiness for discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VO2 max	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence/ literature (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					
Other(s) (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/>					

**Q45.** Of the **objective measures** listed, please **rank** the components you most commonly use to **prescribe** the **duration** of your mobility program. (*Rank from 1 to 3, with 1 being the most common.*)

- Respiratory rate
- Readiness for discharge
- Level of ventilation
- SpO2
- Exercise test
- Heart rate
- VO2 max
- Blood pressure
- FiO2
- Arterial blood gases
- BORG



Evidence/ literature (please specify)

Other(s) (please specify)

Q46. What factors do you consider when judging a patient's ability to progress exercise in order to achieve patient milestones?

	Never	Rarely	Sometimes	Often	Always
Physician request	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gut feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of ventilation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SpO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistance required	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VO2 max	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BORG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FiO2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arterial Blood Gases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pain (VAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Respiratory rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence/ literature (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient able to ambulate length of corridor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other(s) (please specify)					



Q47. What, if anything, do you monitor during mobilisation of UAS patients? *Tick all that apply*

Respiratory rate

Gut feeling

Readiness for discharge

Level of ventilation

SpO2

Exercise test

Assistance required

Pain (VAS)

Availability of equipment

Patient appearance

Other(s) (please specify)

Q48. What **outcome measures** do you most commonly use to determine the effectiveness of mobility prescription in UAS patients? (*Rank from 1 to 3, with 1 being the most commonly used.*)

Readiness for discharge  Level of ventilation  Blood pressure

Rate of perceived exertion  FiO2  Heart rate  BORG

VO2 max  Chest x-ray  Pain (VAS)  Respiratory rate

Clinical Pulmonary infection Score  Anxiety level  SpO2

Sputum clearance  Patient appearance  ABGs

Distance mobilised  O2 requirements

Progression of assistance required

Walk test (2 minute, 6 minute, 10m self paced walk test, 40m self paced walk test, 20m self paced walk test)

Functional mobility index  De Morton Mobility Index (DEMMI)

Timed Up and Go (TUG)

Other(s) (please specify)

## Discharge Planning

Q49. What are your discharge criteria for UAS patients from physiotherapy services? *Tick all that apply*

Functional independence

Home exercise program

No longer physiologically deranged

Adequate cough

Able to climb stairs

Distance mobilised (please specify)

Physician instruction (please specify)

Other (please specify)

Q50. On average, what day post-operatively do you usually stop seeing your patients from a physiotherapy perspective?

Day 1

Day 2

Day 3

Day 4

Day 5

Other (please specify)

Q51. Do you ever refer your patients for follow up physiotherapy management following discharge?

Never

Rarely

Sometimes

Often

Always

Q52. If yes, where do you refer your patients? *Tick all that apply*

General Practitioner

Physiotherapy private practitioner

Hospital outpatient department

Community physiotherapy services

Falls management clinics

Other (please specify)

Q53. Do you supply patients with a mobility program to follow upon discharge?

Never

Rarely

Sometimes

Often

Always

Q54. What do you typically include in your mobility program?

Q55. If you wish to make any additional comments, please write them below.