

**Patient Name: David Thomas**

**Diagnosis: Tracheostomy, Cancer**

## Simulated Learning Environment Rules

### General Rules

1. Students will be issued with nametags at the commencement of the learning activity. These should be worn at all times.
2. Participating students must wear their clinical uniform.
3. Students are not to bring food or drink into the simulation laboratories.
4. To prevent tripping hazards, all bags and coats must be stored in the bag racks/lockers provided.
5. For your safety we recommend that you wear protective clothing (lab coat, gown, goggles, mask and/or gloves) relevant to the task being undertaken.
6. Wash your hands upon entering and leaving the simulation laboratories.
7. Immediately report any injury or near miss to a member of staff.
8. In the event of damage to or malfunction of equipment, immediately stop using it and advise staff.
9. Do not remove equipment or models from the laboratories without prior approval of staff.
10. Be considerate: keep noise to a minimum; there is often more than one group working in the labs.
11. Consult staff about any lost or found property.
12. Any deliberate damage, defacing or theft of University property must be dealt with as outlined in the Incident Reporting and Investigation policy; <http://policy.unimelb.edu.au/UOM0364>
13. You may be asked to leave the laboratories if your behaviour is inappropriate.
14. Mobile phones must be placed on silent and conversations with external parties during laboratory lessons are to be avoided.
15. If you are unsure of something, please ask staff.

### Dress Code

An appropriate code of dress applies to the simulated learning environment. This is to encourage students to reflect upon their own professional image, practice the implementation of Infection Control principles and Occupational Health and Safety (OH&S) standards as well as facilitating best practice.

- **Shoes** must be clean and in good repair. Sensible, flat-soled and comfortable shoes are encouraged to promote safety and prevent trauma. Open toed or slip-on backless shoes are not suitable.
- **Jewellery** should be plain and restricted to minimum usage. The following items of jewellery are permitted: wrist or fob watch, wedding ring, stud earrings (earrings of any other description are not permitted). Facial rings are not permitted for Occupational Health and Safety reasons. If necessary they may be replaced by studs. Nail rings are not permitted.
- **Nails** are to be kept short (less than  $\frac{1}{4}$  cm), natural fingernails with fresh clear nail polish or none at all. Please note that artificial / acrylic nails harbour pathogens, especially gram-negative bacilli and yeasts and are not suitable for clinical practice.
- **Hair** should be clean, neat and tidy. It should be kept off the face and secured as to not interfere with patient care procedures. To facilitate this, hair should be tied back once it is collar-length. Hair accessories should be plain / neutral and in keeping with a professional image.

This project was possible due to funding made available by Health Workforce Australia

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Student Guide

## Overview

**Target Audience:** 2<sup>nd</sup> year Speech Pathology, Social Work, Physiotherapy and Nursing students

**Estimated pre briefing time:** 20 minutes

**Estimated simulation time (Part A):** 30 minutes

**Estimated simulation time (Part B):** 30 minutes

**Estimated debriefing time:** 60 minutes

**Setting (Part A):** pre-admission clinic in a tertiary hospital.

**Setting (Part B):** Surgical ward (ear nose and throat / plastic surgery) in a tertiary hospital.

**Simulation method (Part A):** simulated patient playing role of David.

**Simulation method (Part B):** immersive simulation using SimMan 3G manikin and simulated patient.

## Brief summary of scenario

Cancer is a major health problem in Australia today. This year, more than 530,000 new cases of cancer will be diagnosed in the Australian population. Of these, roughly 430,000 people will be treated for one or more non-melanoma skin cancers - two in three Australians will develop at least one of these cancers by the time they are 70. It is estimated that more than 43,000 people will die of cancer this year (National Health and Medical Research Council, 2012). This case presents a patient who has recently been diagnosed with tongue cancer and is to undergo complex head and neck surgery with a temporary tracheostomy.

In Part A, students from speech pathology and social work will be introduced to the patient in the preadmission clinic, where he is being prepared for his operation. Pre-admission assessments are conducted for patients who have planned admissions to hospital. The pre-admission assessment determines the patient's fitness for procedures and ensures that adequate arrangements are made in preparation for hospitalisation (Queensland Health, 1998). Social work students will explore the patient's coping skills in relation to his cancer diagnosis and upcoming surgery. The surgery will leave the patient with speech changes (due to tongue and mouth surgery) and a temporary loss of voice (due to the temporary tracheostomy); therefore the focus for speech pathology students will be education regarding alternative methods of communication. A 30 minute appointment for both speech pathology and social work has been made. Students are to work together to plan their intervention and then complete their initial assessment and intervention within this time frame.

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In Part B, students from nursing and physiotherapy will be involved in the care of the patient in the early period after his operation. The scenario will take place on a surgical ward and students will be required to work together to optimise the patient's respiratory function. A 30 minute period will be available for the completion of a joint assessment and intervention, prior to the patient being transferred from the ward. The scenario will be delivered using a high fidelity patient manikin as well as a simulated patient, with changes in the patient's parameters occurring in response to intervention.

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## Learning objectives

### Interprofessional

- ☐ **Interpersonal and Communication Skills:** Communicates sensitively in a responsive and responsible manner demonstrating the interpersonal skills necessary for interprofessional collaboration
  - ☐ **Patient-Centred and/or Family-Focused Care:** Through working with others negotiates and provides optimal integrated care by being respectful of and responsive to patient/client and/or family perspectives, needs and values
  - ☐ **Collaborative Decision Making:** Establishes and maintains effective and healthy working partnerships with other professionals whether or not a formalised team exists
  - ☐ **Roles and Responsibilities:** Consults, seeks advice and confers with other team members based on an understanding of everyone's capabilities, expertise and culture
  - ☐ **Team Functioning:** Uses team building skills to negotiate, manage conflict, mediate between different interests and facilitate building of partnerships within a formalised team setting
- (Source: The British Columbia Competency Framework for Interprofessional Collaboration, 2008)

### Discipline Specific - Speech Pathology

- ☐ Educate a patient about communication changes following surgery and related to the temporary tracheostomy
- ☐ Determine an appropriate method(s) of non-verbal communication for a patient undergoing complex head and neck surgery + tracheostomy, taking into consideration the patient's unique abilities, preferences and circumstances.
- ☐ Explain and educate a patient regarding the selected non-verbal method(s) of communication
- ☐ Assess patient performance using non-verbal method(s) of communication and make appropriate modifications based on assessment findings
- ☐ Work with the client to establish his communication needs and discuss education of his communication partners

### Discipline Specific - Social Work

- ☐ Establish the client-worker relationship in the context of a brief intervention
- ☐ Explore the client's story around his cancer diagnosis and treatment
- ☐ Conduct a psychosocial assessment of the client's situation
- ☐ Work with the client to identify key goals for the immediate term
- ☐ Enable client in developing a viable intervention plan to achieve agreed goals
- ☐ Support client to implement actions and decisions

### Discipline Specific - Physiotherapy

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- ☐ Conduct an appropriate respiratory assessment for a patient who has recently undergone complex head and neck surgery + tracheostomy
- ☐ Select and implement appropriate modifications to respiratory management (including oxygen therapy and humidification) based on assessment findings
- ☐ Demonstrate a safe and clean technique when suctioning via a tracheostomy
- ☐ Make appropriate recommendations for ongoing respiratory management

**Discipline Specific - Nursing**

- ☐ Conduct an appropriate respiratory assessment for a patient who has recently undergone complex head and neck surgery + tracheostomy
- ☐ Select and implement appropriate modifications to respiratory management (including oxygen therapy and humidification) based on assessment findings
- ☐ Demonstrate safe and clean technique when suctioning via a tracheostomy
- ☐ Demonstrate safe and appropriate administration of inhaled medications via a tracheostomy

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## Patient story (Part A)

David Thomas is a 54 year old male who was recently diagnosed with an invasive left lateral tongue squamous cell carcinoma. He is scheduled to undergo a partial glossectomy to excise the tumour next week. The tongue and floor of mouth defect will be reconstructed with a left radial free forearm flap. The radial defect will be closed with a split skin graft from the left thigh. In addition, a surgical tracheostomy will be inserted to manage his airway and secretions in the early postoperative period. This is a complex procedure involving participation from multiple surgical teams - oromaxillary facial surgeons, ear, nose and throat surgeons and plastic surgeons. The procedure will be performed via a general anaesthetic and is likely to take up to 12 hours to complete. Depending on his progress, David will remain in hospital for up to two weeks after surgery. In the early period after surgery, David will not be able to eat and drink and will be fed via a nasogastric tube. While the tracheostomy is in place, David will be unable to vocalise. Following removal of the tracheostomy (approximately one week after surgery), he will continue to have difficulties with his speech due to the swelling and trauma associated with the operation as well as the loss of half his tongue. David has been diagnosed with Stage II cancer - investigations have indicated that David's tumour is approximately 3cm in size, with no spread to the lymph nodes. While surgery will give him a good chance of cure, he will most likely require a period of radiotherapy and chemotherapy to improve his prospects.

Today David will be attending the preadmission clinic for multidisciplinary assessment and operative preparation. The following Allied Health referrals have been made:

### Speech Pathology:

*Please review this 54 year old male scheduled for L RFFF reconstruction of L FOM and lateral tongue defect + temporary tracheostomy. Needs advice re communication options for post op period.*

### Social Work:

*Please review this 54 year old male scheduled for complex facial surgery following tongue cancer diagnosis. Patient anxious in regards to surgery and reports he has struggled emotionally with cancer finding.*

The preadmission clinic has scheduled a 30 minute appointment for speech pathology and social work to review David prior to his surgery.

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## Patient story (Part B)

David Thomas is a 54 year old male who was recently diagnosed with an invasive left lateral tongue squamous cell carcinoma. Yesterday he underwent a partial glossectomy to excise the tumour. The tongue and floor of mouth defect were reconstructed with a left radial free forearm flap. The radial defect was closed with a split skin graft from the left thigh. In addition, a surgical tracheostomy was inserted to manage his airway and secretions in the early postoperative period. This was a complex procedure involving participation from multiple surgical teams - oromaxillary facial surgeons, ear, nose and throat surgeons and plastic surgeons. Despite the long operation time, the surgery went as planned and initial reports from the surgeons suggest that he has a good chance of cure.

David is currently being cared for on the surgical ward. He has recovered well from the operation, but has had some difficulty with his respiratory function. He is receiving humidified oxygen via a Fisher and Paykel humidifier and a tracheostomy shield. He has thick secretions which he is unable to clear himself, and required suctioning this morning. He has also reported that his chest feels "a little tight". The morning medical ward round has requested a physiotherapy review for respiratory management. It is usual practice on the ward for the nurse and physiotherapist to work collaboratively when managing the patient's respiratory care.

David is due to go to radiology to have a chest x-ray performed in approximately 30 minutes time. The nurse in charge has instructed you to "have a look" at David and try to improve his respiratory status prior to his transport.

## Patient Information

*The remaining pages contain the patient history for the pre-admission and postoperative period.*

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# Pre-admission History Form

David Thomas 016897  
M 04/09/59 English  
3/8 William Street, Cohuna VIC

## Admission Details

Proposed Procedure	<i>Partial glossectomy and reconstruction</i>		
Date of Schedule	<i>9/5/13</i>		
Surgeon	<i>Wright/ Li</i>	Admitting Unit	<i>OMFS/Plastics</i>
Expected length of stay	<i>7 days</i>	Height: <i>172cm</i>	Weight: <i>73kg</i>

## Allergies

No	Yes	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Details:

Do you have any allergies to medication, food, sticking plaster, latex/ rubber (e.g. balloons, gloves) or other substances?

## Medications

No	Yes	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date last taken Or still take <input type="checkbox"/> Yes
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Name of medication: Date last taken:

Do you take any anti-coagulant or blood-thinning therapy? (warfarin, Coumadin, Plavix, Iscover, Aspirin)

Do you take any steroids, anti-inflammatory drugs or cortisone tablets/ injections

## All regular medications not listed above

Dose / Frequency	Reason for taking
<i>Ventolin</i>	<i>Asthma</i>
<i>Omeprazole</i>	<i>Reflux</i>

## Previous Operations / Procedures

Year	Hospital
<i>2013</i>	<i>Bendigo</i>

## Do you have or have you ever had any of the following conditions?

No	Yes	Details:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

High blood pressure

Chest pain or angina

Heart attack

Palpitations or irregular heartbeat

Pacemaker or prosthetic heart valve

Rheumatic fever

Heart murmur

Any other heart condition

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Asthma	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Ventolin puffer</i>
Bronchitis or emphysema	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumonia or tuberculosis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Obstructive sleep apnoea as diagnosed by your doctor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Shortness of breath that prevents you from climbing one flight of stairs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Home oxygen therapy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hepatitis, jaundice, cirrhosis or pancreatitis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Kidney disorders- stones, infection, failure, dialysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Organ transplant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Diabetes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Gastric reflux, hiatus hernia, heartburn, indigestion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Take daily medication</i>
Stroke	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Epilepsy, fits, fainting or "funny turns"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cancer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Significant neck or back injury / disorder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Bleeding disorder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Blood transfusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Blood clot in the legs or lungs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Exposure to Creutzfeldt Jakob Disease (CJD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Psychiatric condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Thyroid problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Any problems with anaesthetics or surgery before	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Do you have any other conditions or infections that may require further explanation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Lifestyle</b>			
Have you ever smoked?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Daily amount: _____ or Date ceased: <i>2 years ago</i>
Do you drink alcohol?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Daily amount: <i>4-5 drinks</i>
Do you use recreational drugs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type: _____
Do you require a special diet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type of diet: _____
<b>Prostheses / Aids</b>	<b>No</b>	<b>Yes</b>	
Glasses/ Contact lenses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hearing Aid or other hearing device	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Dentures / Caps/ Crowns/ Loose teeth	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Discharge Planning</b>	<b>No</b>	<b>Yes</b>	
Do you live alone?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Do you have someone to look after you after discharge?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Name of person: <i>Kathy Bruce</i> Relationship: <i>Partner</i>

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			Contact number: 0409 010 112
Are you solely responsible for the care of another person at home?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Do you currently receive community support services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Do you require assistance with any aspect of day to day living?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Where do you plan to go after discharge?			
<b>Preadmission Health Assessments</b>			
	Appointment Made	Name	Date
Nursing	09:00	Kate Ryan	3/5/2013
Medical	10:30		
Anaesthetics	10:00		
Allied Health	9:30 Social Work & Speech Pathology		

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## Patient Admission Form

<b>Surname</b> Thomas		<b>URN</b> 016897	
<b>Given Name</b> David		<b>DOB</b> 04/09/59	
<b>Sex</b> Male		<b>Country of Birth</b> Australia	
<b>Spoken Language</b> English		<b>Ab or TSI Status</b> N	
<b>Religion</b> Methodist		<b>Marital Status</b> Single	
<b>Residential Address</b> 3/8 William Street		<b>Suburb</b> Cohuna VIC	
<b>Postcode</b> 3568		<b>Contact Telephone</b> 0415 106 658	
<b>Medicare Number</b> 3315 68975 4	<b>Medicare Expiry</b> 08/2016	<b>Pension Number</b>	
<b>Insurance Fund</b>	<b>Insurance Plan</b>	<b>Insurance Number</b>	
<b>NOK/ Contact Person</b>			
<b>NOK Name</b> Kathy Bruce		<b>Address</b> 4 Dunn Street, Cohuna 3568	
<b>NOK Phone</b> 0409 010 112		<b>Relationship</b> Partner	
<b>GP Details</b>			
<b>Name</b> Cohuna Clinic		<b>Address</b> 111 King George Street	
<b>Suburb</b> Cohuna		<b>Postcode</b> 3568	
<b>Ph number</b> 5456 2605		<b>Fax Number</b> 5456 2051	
<b>Admission Details</b>			
<b>Presenting Problem</b> Partial Glossectomy		<b>Admitting Unit</b> OMFS/ Plastics	

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## Inpatient Progress Notes

David Thomas 016897  
M 04/09/59 English  
3/8 William Street, Cohuna VIC

09/05/13	Nursing (night)	
	Pt adm to ward from OT @ 2300hrs post partial glossectomy, L RFFF reconstruction of L FOM, lateral tongue deficit, donor primary closed with SSG. Trache Size 7 in situ. DT x1 in situ in L side of neck. IDC in situ. IVT 8/24 CSL, PCA morph. Pt c/o 5/10 P. Pt also c/o anxiety. Reassured + +. Flap pale/pink, warm, strong Doppler, soft. 1/2 hourly flap obs until 2000hrs, Pt alert and communicating with iPad.	
		L. Smith (RN)
10/05/13	Plastics (am WR)	
	D1 post WLE L lat tongue, R SDHND + L RFFF	
	Borderline UD - 30 mL/hr	
	DT 90 mLs	
	Currently O <sub>2</sub> dependent 5L F&P	
	Maintaining BP - 100	
	Flap looks good, pink, warm, strong Doppler	
	P: fluid bolus	
	Sit up, SDOB	
	Monitor BP & UD	
	Chest PT	
	Ok to start NGT feeds	R. Friedman
		#20568
10/05/13	OMFS (am WR)	
	D1 postop	
	DT 150mLs (1x redirac)	
	Ht 106, WCC 15.7	
	Pt well, GCS 15, obs stable, afebrile	
	Fluid state: BP slightly lower than usual	
	UD borderline - bolus and observe	
	Flap looks good	
	Trache in situ, O <sub>2</sub> sats 93%	
	Pt many questions.	S. Singh
	P: PT review	#21989

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## Operation Notes

David Thomas 016897  
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CHx: Panendoscopy 1/12 ago and biopsy of superficially invasive SCC L tongue. Unable to fully visualise, therefore MRI performed. T2, N0 SCC diagnosed – 2-3cm in size.

PHx: ex-smoker, quit 2 years ago (20 cpd), GORD, asthma

Meds: salbutamol MDI prn, Omeprazole 20mg daily

ASA: 2

### Summary of Operation

09/05/13 Partial glossectomy and reconstruction performed

OFMS component: WLE L lateral tongue and L SOHND

Plastics component: reconstruction of L FOM and lateral tongue defect with L RFFF and L thigh SSG

NGT placed intraoperatively for feeds

11.5 hour operation via GA

Operation completed as planned, routine postoperative recovery

### Postop orders:

RPAO

Head up 30°

Half hourly flap obs

IV ABs

DVT prophylaxis

Drains in situ – suction

Aim: SBP ≥ 100 mmHg, HR ≥60 ≤100 bpm, T ≥ 36.5°C, UO ≥ 30mL/hr, Hb ≥ 80

Check FBE and U&Es in am

Start NGT feeds in am

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Medication Chart				David Thomas 016897 M 04/09/59 English 3/8 William Street, Cohuna VIC									
Date 9/5	Medication (Print Generic Name) Morphine			Date									
Route IV	Dose PCA	Hourly frequency		Time									
Indication		Pharmacy DD		Dose									
Prescriber signature <i>J Marr</i>		Print your name J Marr		Sign									
Date 9/5	Medication (Print Generic Name) Omeprazole			Date	10/5								
Route IV	Dose 40mg	Hourly frequency daily		Time	0800								
Indication		Pharmacy		Dose	40								
Prescriber signature <i>J Marr</i>		Print your name J Marr		Sign	KN								
Date 9/5	Medication (Print Generic Name) Salbutamol			Date									
Route inh	Dose 5mg	Hourly frequency 4 hourly PRN		Time									
Indication Wheeze		Pharmacy		Dose									
Prescriber signature <i>J Marr</i>		Print your name J Marr		Sign									
Date 9/5	Medication (Print Generic Name) Normal Saline 0.9%			Date									
Route inh	Dose 10mL	Hourly frequency 4 hourly PRN		Time									
Indication		Pharmacy		Dose									
Prescriber signature <i>J Marr</i>		Print your name J Marr		Sign									

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