Client: NSW Ambulance

Document: Storyboard for **EoLPC Management Module**

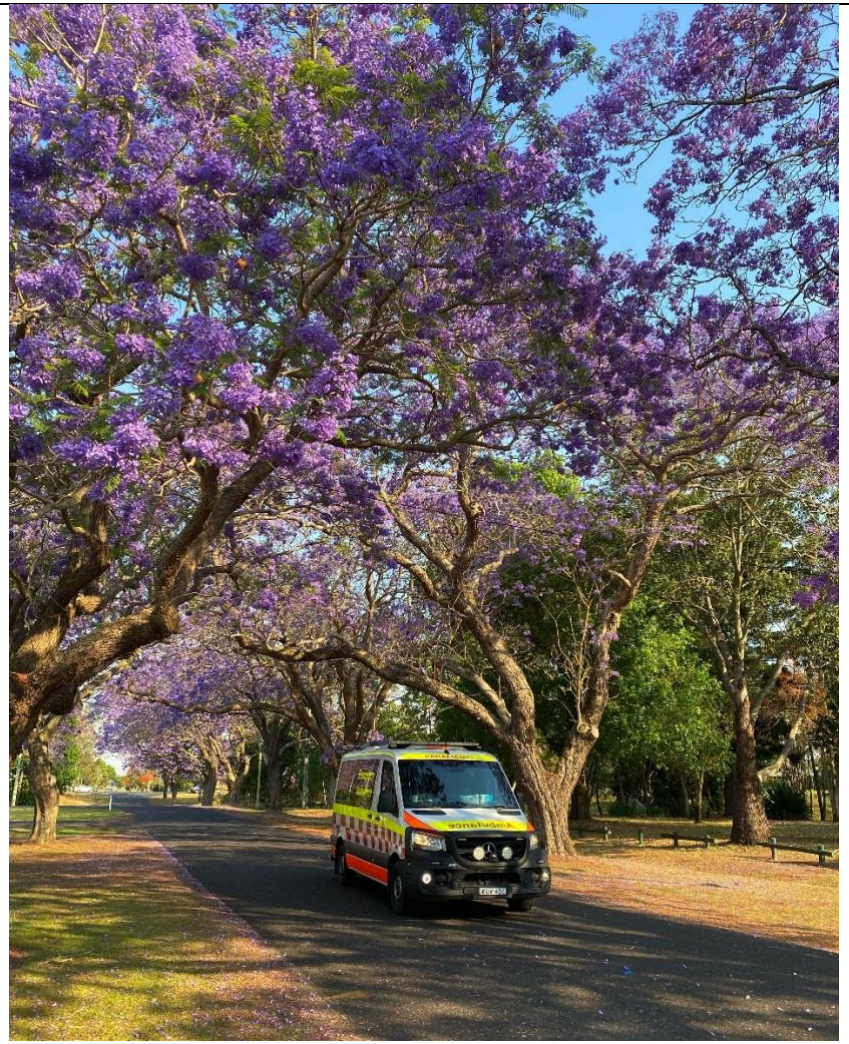
Version History:

Version No.	Edited By	Date	Remarks
001	Sheetal Mehta	5th June, 2024	SB Creation
002	Sheetal Mehta	12th July, 2024	SB update (Client feedback)

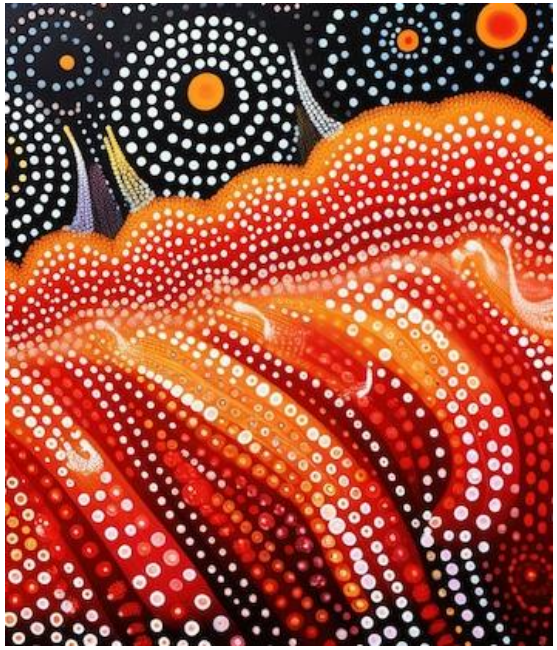
Notes to Developers:

- Please refer to **EoLPC Management Module 20240520 FC**.*pptx*.
- Please refer to https://www.digital.nsw.gov.au/delivery/digital-service-toolkit for Design Standards.
- Please refer to \\192.168.1.88\01_e-learning\Learning_Factor\02_NSW_Ambulance\01_source\01_client_input\03_Images for images without stock ids.
- **IMP:** This is a very serious topic, so please use graphics/icons and images that are in keeping with the topic being taught.

Topic	EoLPC Management		Screen type	Text only
Screen Title	*<Splash Screen>*		Screen label	001
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	NA		 *IMP: **DO NOT** use the word Welcome. Only use the Topic title as OST seen in white font. IT should read Management of End of Life and Palliative Care Patients* *Use image given below as the landing image in place of the above image.* *Note: This image will be the same across all modules except aboriginal and torres strait islander course.*	



2023-10-31 Grafton Jacaranda.jpeg

Topic	EoLPC Management		Screen type	Static
Screen Title	*Acknowledgement to Country*		Screen label	002
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	NSW Ambulance acknowledges and pays our deepest respect to the past, present, and future Traditional Custodians and Elders of the many lands on which we work and live, and the continuation of cultural, spiritual, and educational practices of Aboriginal and/or Torres Strait Islander peoples.	NSW Ambulance acknowledges and pays our deepest respect to the past, present, and future Traditional Custodians and Elders of the many lands on which we work and live, and the continuation of cultural, spiritual, and educational practices of Aboriginal and/or Torres Strait Islander peoples.	 *Display above image on the right side with OST in sync with VO on the left.*	

Topic	EoLPC Management	Screen type	Static
Screen Title	*Content Warning*	Screen label	003

No.	Audio/VO	Visuals and Development instructions

1.	Some of our content today will be discussing death and topics surrounding death.
	
	We understand that some people could be affected by the content of this module.
	
	If you think you may be, feel free to leave this module for the meantime.
	
	If you do find you are affected, please reach out to any of our staff support services.
		• Some of our content today will be discussing death and topics surrounding death.
		• We understand that some people could be affected by the content of this module.
		• If you think you may be, feel free to leave this module for the meantime.
		• If you do find you are affected, please reach out to any of our staff support services.
		  ○ Your Manager
		  ○ Peer Support Officer – as per MyShift
		  ○ Chaplaincy Service – as per MyShift
		  ○ EAPS – Converge International - Phone EAPS 24/7 on: 1300 687 327
		  ○ Staff Psychology Service
		  ○ Teledoc Health (via AWARE Super) - 1800 830 082
		  ○ Black Dog Institute – www.BlackDogInstitute.org.au

Stock Photo ID: 1810780027

Display above image as background for OST in sync with VO.

Topic	EoLPC Management		Screen type	Static
Screen Title	*Reminder: Look after yourself…*		Screen label	004
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	There are many issues discussed in this learning guide related to serious illness, dying, end-of-life care, and death, as well as the impact on families, caregivers, and communities. It can be upsetting to reflect on and learn about these issues.	There are many issues discussed in this learning guide related to serious illness, dying, end-of-life care, and death, as well as the impact on families, caregivers, and communities. It can be upsetting to reflect on and learn about these issues.	 *Display above image on the right side with OST in sync with VO on the left.*	

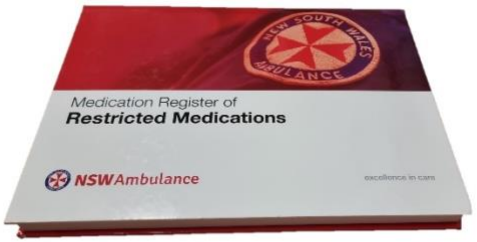
Topic	EoLPC Management	Screen type	Text and image
Screen Title	*Learning Objectives*	Screen label	005

No.	Audio/VO	OST	Visuals and Development instructions
1.	At the end of this module, you should be able to: • **Discuss** the notion that treatment priorities and management goals may be different to our other patients and relate them to the phases of palliative care. • **Outline** specific symptom management through a step wise approach. • **Outline** the medications relating to palliative care symptoms, both from the New South Wales Ambulance Formulary and the Authorised medications. • **Describe** non-pharmacological management of palliative care symptoms. • **Implement** the opioid dose calculator into calculating opioid doses required for patients with opioid tolerance. • **Identify** referral options for guidance.	 Shutterstock ID: 2218316467	

Topic	EoLPC Management		Screen type	Text and image
Screen Title	*Introduction*		Screen label	006
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Effective symptom management can avoid unwanted admissions to hospital, enable patients to receive care in their preferred place and have a positive impact on family members and carers grief experience. Palliative care aims to prevent and relieve suffering and improve the quality of life of people facing problems associated with life-limiting illness.	Effective symptom management • Avoids unwanted admissions to hospital • Enables patients to receive care in their preferred place • Have positive impact on family members and carers grief experience • Relieves suffering	*Display OST header in sync with VO* *.* *Divide the screen in three parts vertically with the given images as background.* *Display OST in the same order on the images in sync with VO..* Stock Photo ID: 1927582913 Stock Photo ID: 2315087295	

			 Stock Photo ID: 154462034
2.	Symptom management must take into consideration the cause, potential benefits and burdens of treatment, the patient's place in the course of their illness, their overall goals of care and their wishes.	Symptom Management • Cause • Potential Benefits • Burdens Of Treatment • Patient's Place • Goals Of Care • Wishes	 Stock Video ID: 4733219 *Display OST header in sync with VO in the centre in place of 'Risk Management'.* *Display OST in place of text on the image at random places in sync with VO.*
3.	Patients may experience symptoms due to the underlying disease processes, disease-modifying treatments, co-morbid illness and/or psychosocial distress.	• Underlying disease processes • Disease-modifying treatments • Co-morbid illness • Psychosocial distress	*Retain the previous screen.* *Fade out the OST except 'Symptom* Management*'.* *Display OST in the same way as shown in the reference image.*

			Reference image 2258046501
4.	Symptom management should be provided utilising a stepwise approach and non-pharmacological symptom management should be considered prior to medication administration.	• Symptom management • Non-pharmacological symptom management • Medication administration	*Retain the previous screen.* *Fade out the words, circle, and arrows except 'Symptom Management'.* *Show three steps.* *Display first bullet point on the lowest step.* *Display second bullet point on the middle higher step and last bullet point on the highest step.*
5.	The goal of symptom relief at end of life is to reduce suffering and neither hasten nor postpone death.	• Symptom Relief • Neither hasten nor postpone death • Reduce suffering	*Retain the previous screen.* *Fade out the words.* *Display OST from the lowest step to the highest step.*

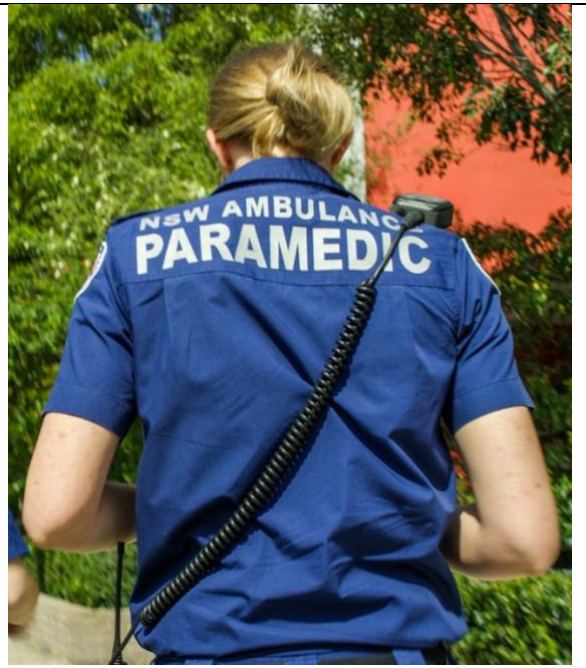
Topic	EoLPC Management		Screen type	Interactivity
Screen Title	*Pharmacological Symptom Management*		Screen label	007
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	**Let's take a look at the medication administration from the New South Wales Ambulance Formulary** Medication doses should be titrated to effect and adjusted to consider the individual needs of the patient, including frailty, co-morbidities and medication tolerance.	**Medication administration from the NSW Ambulance Formulary** • Doses should be titrated and adjusted to consider frailty, co-morbidities and medication tolerance of the patient	 Book no background.png *Display OST in sync with VO with above image as background*	
2.	Medication doses of the patients who have not previously been given a medication, receiving regular interval doses of medication, requiring a medication outside of the New South Wales Ambulance formulary *Select each type of patient to learn more.*	• No previous medication • Regular medication • Require outside medication *Select each type of patient to learn more.*	*Retain the image and OST.* *Display the OST in the form of flashcards/flipcards.* *The flashcards display the images given below on the front with OST written on it.* Stock Photo ID: 2076430522	

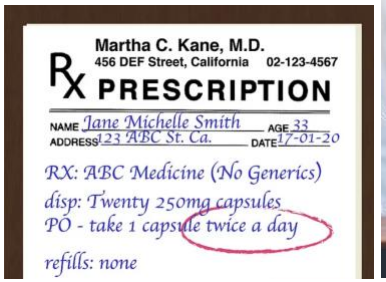
			 tock Photo ID: 2036344079 Stock Photo ID: 2279097277
3.		Patients who have not previously been given a medication, should be given the lowest effective dose Patients receiving regular interval doses of medication may require larger breakthrough doses and/ or repeat doses to achieve adequate symptom relief. The dosage regimens within the CPG are starting doses and	*On click, flip the cards to show the medication doses of each type of patient on the other side.*

		should be titrated as clinically indicated If a patient requires a medication outside of the New South Wales Ambulance formulary, repeat doses exceeding the maximum total dose, or where senior clinical support would be of benefit, clinicians should contact the Clinical Assistance Line.	
4.		Flip card activity ends	
5.	When administering medications, consider the patient's total 24-hour dose to ensure maximum doses are not exceeded.		 *Blister-Pack-Grayscale.jpg*

6.	The subcutaneous (SC) route is preferred because it is less invasive and has less risk of causing infection.	Subcutaneous (SC) Route is preferred. • less invasive • less risk of causing infection	 Stock Vector ID: 1683656065 *Display OST in sync with VO with above image on the left side.* *A note icon will be shown at the end.* *The user will be able to click that icon to see the information below:* Note: 'As patients deteriorate or approach end of life they may develop subcutaneous oedema, administration of SC medications above the heart makes absorption more efficient (i.e. administer SC medications in the upper arm if possible)'.

Topic	EoLPC Management		Screen type	Text and image, Interactivity
Screen Title	*Pharmacological Symptom Management- Authorised Medications*		Screen label	008
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	"Authorised Medications" are anticipatory medications listed in New South Wales Ambulance Pharmacology. Clinicians are authorised to administer "Authorised Medications".	Authorised Medications Clinicians	 ALS Kit no background.png *Display OST '*Authorised Medications' *in sync with VO.* *Display 'Clinicians' along with the image of the clinician in the centre of the screen in sync with VO.*	

			 *Paramedics-arriving-to-the-scene_3.jpg*
2.	• Medical practitioners may prescribe anticipatory medications to be used when common symptoms associated with a life limiting illness can be anticipated/occur or during a crisis. • Documentation of anticipatory management plans is variable across service providers, and clinicians should apply their clinical judgement to determine the appropriateness of instigating an anticipatory management plan. • Anticipatory management plans may include the administration of prescribed medication, which is available in the home or facility. • Where valid and clinically appropriate, clinicians should provide care in accordance with the established management plan and/or	• May prescribe anticipatory medications to be used when symptoms occur or during a crisis • Should apply their clinical judgement to determine the appropriateness of instigating an anticipatory management plan • May include the administration of prescribed medication, which is available in the home or facility. • Should provide care in accordance with the established management	*Retain the screen.* *Display OST around the image of the clinician in sync with VO.* *A note icon will be shown at the end.* *The user will be able to click that icon to see the information below:* Note: Medications which are not listed as “Authorised” in the pharmacology may be administered in consultation with the Clinical Assistance Line.

	assist family or carers to administer these medications. • Clinicians must document the details of the anticipatory management plan and their relevant decision making on the Health Care Record (HCR).	plan and/or assist family or carers to administer these medications • Must document the details of the anticipatory management plan and their relevant decision making on the Health Care Record (HCR)	
3.	Medication can be administered if: • It is clearly prescribed for the patient by a medical or nurse practitioner. • The indication, route of administration is clear and clinically appropriate. • The medication is physically available at point of care. • The concentration of the medication, frequency of dosage and trade name is clearly visible. • The dose does not exceed the 24-hour dosage recommendation. *Hover over each element to know when the medication can be administered.*	• It is clearly prescribed for the patient by a medical or nurse practitioner. • The indication, route of administration is clear and clinically appropriate. • It is physically available at point of care. • The concentration of the medication, frequency of dosage and trade name is clearly visible. • The dose does not exceed the 24-hour dosage recommendation. *Hover over each element to know when the medication can be administered.*	Hover Activity *Display OST when the learner hovers over each element of 'prescription, indication on prescription, the side table, medicines on the side table, watch' of the image in sync with VO.* *Recreate the prescription image and place it on the side table along with the medicine and the watch/clock as shown below for reference.*  Martha C. Kane, M.D. 456 DEF Street, California 02-123-4567 ℞ PRESCRIPTION NAME Jane Michelle Smith AGE 33 ADDRESS 123 ABC St. Ca. DATE 17-01-20 RX: ABC Medicine (No Generics) disp: Twenty 250mg capsules PO - take 1 capsule twice a day refills: none *From internet, for reference* Stock Photo ID: 2240734855

			  Stock Photo ID: 2183885905 Stock Photo ID: 1827455231

			Stock Photo ID: 2320713269
	INSERT SLIDE A Breakthrough dose is considered to be an additional dose of medication given to relieve pain or other symptoms that break through the relief provided by the regular medication regimen. This is a medication that is addition to a medication that is prescribed at regular intervals	•	
4.	As a general principle, if 3 or more breakthrough medication doses are required in 24 hours (in addition to the patient's regular medication regime), further assessment and amendments to the patient's care plan is indicated. In these cases, patients should be referred to their treating health care professionals (where possible).	If 3 or more **breakthrough medication doses** are required in 24 hours, further assessment and amendments to the patient's care plan is indicated. Patients should be referred to their treating health care professionals.	*Typography*
5.	Let's know more about a few authorized medicatons. These are: • Glycopyrrolate/Glycopyrronium • Haloperidol • HYDROmorphone • Hyoscine butylbromide *Drag the slider to each authorised medicine to know more.*	• Glycopyrrolate/Glycopyrronium • Haloperidol • HYDROmorphone • Hyoscine butylbromide *Drag the slider to each authorised medicine to know more about it.*	*Refresh the screen.* *Slider activity (This activity starts after the accordion activity)* *Display image given below as the background image.* *Display the slider and the medicine names on a horizontal bar on the lower end of the screen.*

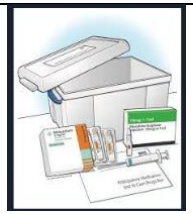
<table>
<tr><td></td><td></td><td></td><td>Stock Photo ID: 269315990</td></tr>
<tr><td>4A.</td><td>It is important to remember to practice safe medication administration and follow the six R’s of medication safety.

The Six R's of Medication Safety

1. Right Patient
○ Verify the patient's identity
2. Right Medication
○ Ensure that the medication being administered is exactly what was prescribed.
3. Right Dose
○ Confirm that the dosage of the medication is correct, including the strength and quantity.
4. Right Time
○ Administer the medication at the correct time, taking into account frequency and duration.
5. Right Route
○ Check that the medication is being given via the correct route (e.g., oral, intravenous, topical).
6. Right Documentation
○ Document all aspects of medication administration accurately and promptly.</td><td>Always practice safe medication administration

The Six R's of Medication Safety

1. Right Patient
2. Right Medication
3. Right Dose
4. Right Time
5. Right Route
6. Right Documentation</td><td>accordion activity

<table>
<tr><td>
1.</td><td> 
2.</td><td>
3.</td></tr>
<tr><td>2336636255</td><td>authorised meds large.jpg</td><td>1046242816</td></tr>
<tr><td>Verify the patient's identity</td><td>Ensure that the medication being administered is exactly what was prescribed.</td><td>Confirm that the dosage of the medication is correct, including the strength and quantity.</td></tr>
<tr><td>
4.</td><td>
5.</td><td>
6.</td></tr>
<tr><td>Blister-Pack-Grayscale.jpg</td><td>2448787307</td><td>2123593646</td></tr>
<tr><td>Administer the medication at the correct time, taking into account frequency and duration.</td><td>Check that the medication is being given via the correct route (e.g., oral, intravenous, topical).</td><td>Document all aspects of medication administration accurately and promptly.</td></tr>
</table></td></tr>
</table>

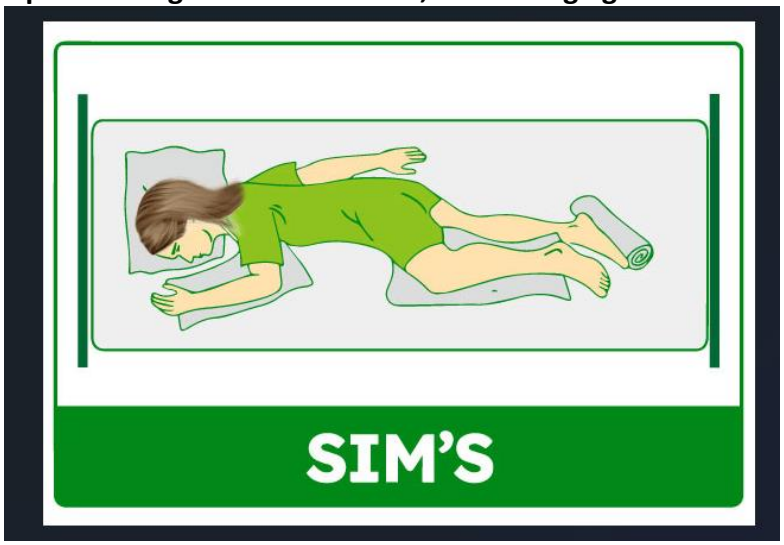
				Show above image with OST after the learner clicks. *Slider activity (5) starts after this activity.*
	Glycopyrrolate/Glycopyrronium			
6.	For: All patients Indication: Excess respiratory tract secretions Route: SC Refer to the patient's prescribed dose	 Stock Photo ID: 2331508573		*When the learner moves the slider to* Glycopyrrolate, *this OST and the image fade in*.
	Haloperidol			
7.	For: All patients Indication: Nausea and / or vomiting only when other agents are in effective. Restlessness, agitation and / or delirium only when other agents Route: SC Refer to the patient's prescribed dose	 Stock Photo ID: 2316778083		*When the learner moves the slider to Haloperidol*, *this OST and the image fade in*.
	HYDROmorphone			
8.	For: Adult Indication: Pain management where morphine in adult patients Route: IV/IO Diluted Consultation/Authorisation from Clinical Assistance Line required.	 Stock Photo ID: 2179362837		*When the learner moves the slider to HYDROmorphone*, *this OST and the image fade in*.

	It's important to note that this medication is 5 times more potent than regular morphine. Clinicians are advised to practice with 6 R's of medication safety and proceed with caution.			
Hyoscine butylbromide				
9.	For: Adult Indication: Excess respiratory tract secretions Route: SC Refer to the patient's prescribed dose This medication has a different pharmacokinetic action than Hyoscine Hydrobromide. Please remember to practice the 6 R's of medication safety.	 Stock Photo ID: 2199452799		*When the learner moves the slider to* Hyoscine butylbromide, *this OST and the image fade in*.

Topic	EoLPC Management		Screen type	Interactivity
Screen Title	*Symptoms*		Screen label	009
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Common symptoms associated with a life limiting illness can be • Dyspnoea • Excess Respiratory Tract Secretions • Nausea and / or vomiting • Restlessness, agitation and / or delirium • Pain *Click on each Symptom to learn more.*	• Dyspnoea • Excess Respiratory Tract Secretions • Nausea and / or vomiting • Restlessness, agitation and / or delirium • Pain *Click on each Symptom to learn more.*	*Tab Activity* *This is the landing screen with Tab interactivity.* *Display OST in sync with VO as Tab.* *When the learner clicks a tab, display the popup.* *Infographics* Stock Photo ID: 252001516 (2nd bullet point)	

			 Stock Photo ID: 2191563235 (3rd bullet point) Stock Photo ID: 2262337379(4th bullet point) Stock Photo ID: 2264100023 (5th bullet point)
Dyspnoea			
2.	• Dyspnoea is a common and distressing subjective symptom, which can cause significant anxiety. • Dyspnoea can have physical, psychological, social and causes and providing reassurance should not be undervalued.	**General Notes:** • Common and distressing subjective symptom • Dyspnoea can have physical, psychological, social and causes and providing	*Add an* X *to the top right corner of the pop-up. Blink when VO is done. (Global for all the tab content)*

	• Assessment of the patient's level of distress should guide management and include consideration of their ability to function and psychological wellbeing. **Non medication management** • Where possible, position a fan near the patient face or increase room ventilation • Reassurance is key in managing these patients. Remember to always reassure your patients. **Managing Dyspnoea requires Medication like** • Morphine is the first line agent • Midazolam is the preferred agent where dyspnoea is associated with anxiety • Fentanyl should be used where morphine is contraindicated	reassurance should not be undervalued. • Assessment of the patient's level of distress should guide management and include consideration of their ability to function and psychological wellbeing. **Non medication management** • Position a fan near the patient face or increase room ventilation Remember to always reassure your patients**Medication management** • Morphine is the first line agent • Midazolam is the preferred agent where dyspnoea is associated with anxiety. • Fentanyl should be used where morphine is contraindicated	
Excess Respiratory Tract Secretions			
3.	• Pooling of respiratory secretions occurs when patients are in the terminal phase and are unable to cough, swallow or clear saliva. • Noisy breathing occurs with the movement of air through mucous and phlegm and is a normal part of the dying process.	**General Notes:** • Pooling of respiratory secretions occurs when patients are in the terminal phase and are unable to cough, swallow or clear saliva. • Noisy breathing occurs with the movement of	 Stock Vector ID: 134798888

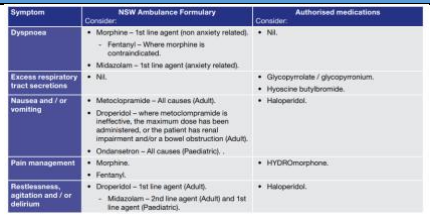
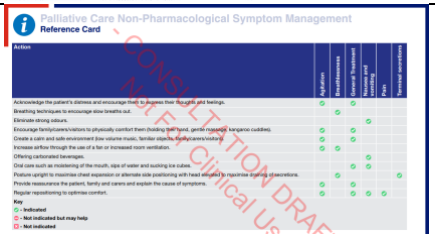
	• Noisy breathing is unlikely to cause the patient distress but can be distressing for family members, carers and clinicians. • Normalising this symptom and providing reassurance and explanation is the most effective management approach. • The Sims position may be beneficial for the patient. This is when you Position the patient semi-prone and on alternative sides to encourage postural drainage *Click on the practice point icon to view the Sims position.* • Consider Hyoscine Butylbromide or Glycopyrrolate for these symptoms if the patient has these medications available in their home in their palliative care kit. • Suction is not recommended as it can induce a gag reflex and cause further distress to the patient. Where suction is included in the patient's anticipatory management plan, caution should be taken to ensure that a gag reflex is not induced.	air through mucous and phlegm • Noisy breathing can be distressing for family members, carers and clinicians. **Non Medication management** • Normalising this symptom and providing reassurance and explanation The Sims position – Position the patient semi-prone and on alternative sides to encourage postural drainage *Click on the practice point icon to view the Sims position.* **Medication management** • Hyoscine Butylbromide or Glycopyrrolate if these medications are available in their palliative care kit. • Where suction is included in the patient's anticipatory management plan, caution should be taken to ensure that a gag reflex is not induced.	Show OST 'The Sims position' under the icon. **Upon clicking of the above icon, show image given below.**  **Sims.jpg**
Nausea and / or vomiting			
4.	**General Notes** • Nausea and/or vomiting is a common and distressing symptom, which may occur due	**General Notes** • Occurs due to underlying disease processes,	

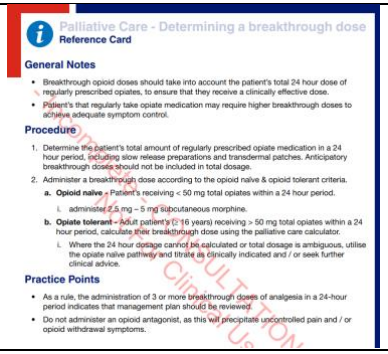
	to underlying disease processes, disease-modifying treatments and medications such as opiates and chemotherapy agents.
	• Consideration of the underlying cause of symptoms should guide the management approach and alternate anti-emetics should be considered if the first line agent is ineffective.
	Non medication management of nausea
	• Inhaled isopropyl alcohol (IPA) has been shown in studies to reduce nausea and potentially negate the need for antiemetic administration for nausea.
	Medication management of nausea and vomiting
	• Adult
	  • Metoclopramide is the first line agent for nausea and vomiting.
	  • Droperidol should be used where metoclopramide is ineffective, the maximum dose has been administered, or the patient has renal impairment and/or a bowel obstruction.
	• Paediatric
	  • Ondansetron is the preferred anti-emetic for managing nausea and/or vomiting in paediatric patients.
	Click on the practice point icon to know more about Ondansetron.
	
	Note that Ondansetron is not the preferred option as an anti emetic due to its possible outcome of constipation. Most, if not all, patients on an opiate pain relief regime will already be on a prokinetic such as Metoclopramide. If this is the case and the
		disease-modifying treatments and medications such as opiates and chemotherapy agents.
		• Consideration of the underlying cause of symptoms should guide the management approach and alternate anti-emetics should be considered if the first line agent is ineffective.
		Non medication management of nausea
		• Inhaled isopropyl alcohol (IPA) has been shown in studies to reduce nausea and potentially negate the need for antiemetic administration for nausea.
		Medication management of nausea and vomiting
		• Adult
		  • Metoclopramide is the first line agent
		  • Droperidol should be used where metoclopramide is ineffective, the maximum dose has been
			
			Stock Vector ID: 134798888
			
			*Show OST '*Ondansetron*' under the icon.*
			
			On clicking the icon, show OST in sync with VO:
			
			'Ondansetron is not the preferred option as an anti emetic due to its possible outcome of constipation. Most, if not all, patients on an opiate pain relief regime will already be on a prokinetic such as Metoclopramide. If this is the case and the patient is still experiencing nausea and vomiting, then proceed to Droperidol'.

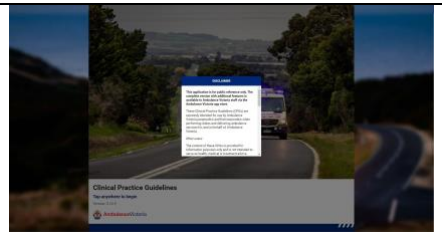
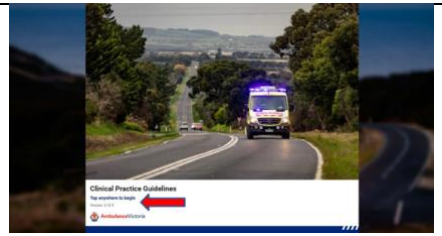
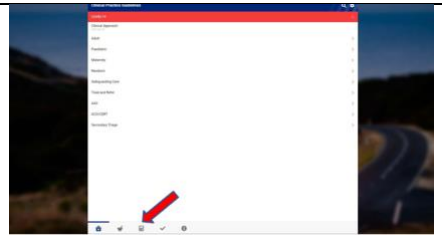
	patient is still experiencing nausea and vomiting, then proceed to Droperidol.	administered, or the patient has renal impairment and/or a bowel obstruction. • Paediatric • Ondansetron is the preferred anti-emetic *Click on the practice point icon to know more about* Ondansetron.	
Restlessness, agitation and / or delirium			
5.	General Notes • Restlessness, agitation and / or delirium are symptoms commonly experienced during the terminal phase, and can be distressing for patients, families and carers. • The goal of management is to reduce the patients distress and manage underlying causes. Medication management of restlessness, agitation and / or delirium • Haloperidol is commonly prescribed for palliative care patients and has similar pharmacokinetic properties to droperidol, for the management of restlessness and agitation. • In New South Wales Ambulance, droperidol is the preferred antipsychotic and can be administered as a substitute where haloperidol may be indicated and is not available. It is important to remember not	**General Notes** • Commonly experienced during the terminal phase • Can be distressing for patients, families and carers. • The goal of management is to reduce the patients distress and manage underlying causes. **Medication management** • Haloperidol is commonly prescribed for palliative care patients and has similar pharmacokinetic properties to droperidol, for the management of	 Stock Vector ID: 134798888 *Show OST 'Droperidol' under the icon.* *On clicking the icon, show OST in sync with VO:* 'It is important to remember not to administer both Haloperidol and Droperidol.

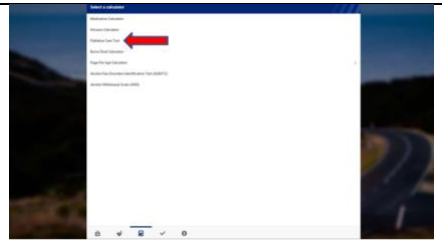
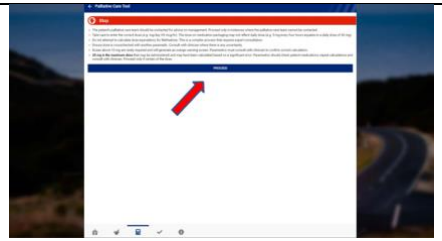
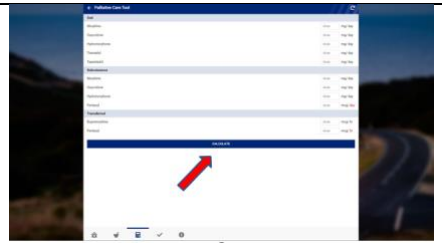
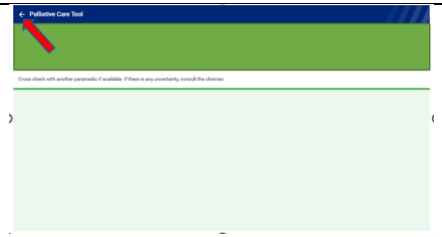
	to administer both Haloperidol and Droperidol. • Midazolam is the second line approach where droperidol is contraindicated or ineffective and is the recommended agent for paediatric patients. *Click on the practice point icon to know more about Droperidol.*	restlessness and agitation. • In NSW Ambulance, droperidol is the preferred antipsychotic and can be administered as a substitute where haloperidol may be indicated and is not available. • Midazolam is the second line approach where droperidol is contraindicated or ineffective and is the recommended agent for paediatric patients. *Click on the practice point icon to know more about Droperidol.*	
Pain			
6.	General Notes • A common and complex symptom which may occur due to underlying disease processes, disease-modifying treatments, co-morbid illness and psychosocial distress. • Pain can be anticipated and prevented with regularly dosed analgesia, in conjunction with 'as required' doses for breakthrough pain. • For acute pain presentation, focus on prompt pain relief and then consider the underlying cause.	**General Notes** • A common and complex symptom which may occur due to underlying disease processes, disease-modifying treatments, co-morbid illness and psychosocial distress. • Pain can be anticipated and prevented with regularly dosed analgesia, in conjunction	

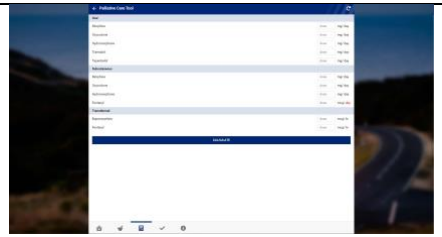
	• Ongoing management of pain should be based on the patient's likely illness trajectory, their goals of care, wishes and whether their current management plan is adequately managing their symptoms. • Fentanyl should be used where morphine is contraindicated & HYDROmorphone can be administered under a standing authority if it is available. • Consider reversible causes and non-pharmacological management prior to medication administration. • Exclude reversible conditions such as urinary retention, constipation, infection, positioning, anxiety or fear.	with 'as required' doses for breakthrough pain. • For acute pain presentation, focus on prompt pain relief and then consider the underlying cause. • Ongoing management of pain should be based on the patient's likely illness trajectory, their goals of care, wishes and whether their current management plan is adequately managing their symptoms. **Medication management** • Fentanyl should be used where morphine is contraindicated & HYDROmorphone can be administered under astanding authority if it is available. • Consider reversible causes and non-pharmacological management prior to medication administration. • Exclude reversible conditions such as urinary retention, constipation, infection,	

		positioning, anxiety or fear.	
Tab activity ends			
7.	Here's the list of symptoms and the authorised medications from New South Wales Ambulance Formulary used in the treatment.		*Display the OST (card) in sync with VO.* *Pause for 5 seconds.*
8.	Non-pharmacological symptom management should be considered prior to medication administration. Refer to the reference card of **Non pharmacological symptom management and treatment**		*Display the OST (card) in sync with VO.* *Pause for 5 seconds.*

Topic	EoLPC Management		Screen type	Simulation
Screen Title	*Determining a breakthrough dose*		Screen label	010
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Refer to the reference card of **Determining a breakthrough dose.**		*Display the OST (card) in sync with VO.* *Pause for 5 seconds.*	
1A	**If the patients 24-hour dose is lower than what the Clinical Practice Guidelines states, revert to the dosages listed in the Clinical Practice Guidelines.** **If there is any doubt in the amount of medication administered in a 24-hour period, then clinicians are advised to revert to the doses listed in the clinical practice guidelines or seek advice from the patients regular care team.** **If unavailable, clinicians are to contact the clinical Assistance line for further guidance.**	Clinicaians should revert to • The dosage listed in Clinical Practice Guidelines, if the patients 24-hour dose is lower than what the Clinical Practice Guidelines states • The doses listed in the clinical practice guidelines or seek advice from the patients regular care team, if there is any doubt in the amount of medication administered in a 24-hour period • Contact the clinical Assistance line for further guidance, if dosage information is not available	 *Ambo at Computer.jpg*	
2.	Here are the URL links which will assist in your determination of breakthrough dose.	**Visit** **Ambulance Victoria CPGs** **or** **https://cpg.ambulance.vic.gov.au/#/entry**		

3.	Scroll down on the disclaimer	 1. Scroll down on the disclaimer	
4.	Click on OK	 2. Click on OK	
5.	Click anywhere on the screen to proceed	 3. Click anywhere on the screen to proceed	
6.	Click on the calculator icon on the bottom of the screen	 4. Click on the calculator icon on the bottom of the screen	

7.	Select ‘Palliative Care Tool’	 5. Select ‘Palliative Care Tool’	
8.	Read the Disclaimer and click ‘Proceed’	 6. Read the Disclaimer and click ‘Proceed’	
9.	Input doses administered over a 24-hour period and click calculate	 7. Input doses administered over a 24-hour period and click calculate	
10.	Click back to calculate a new dose	 8. Click back to calculate a new dose	

11.	Make sure you clear the previous calculations prior to a new calculation	 9. Make sure you clear the previous calculations prior to a new calculation	*A note icon will be shown at the end.* *The user will be able to click that icon to see the information below:* ***IMPORTANT TO NOTE:*** • ***Doses are to be rounded up to the nearest 2.5mg dose (if applicable)*** • ***For education purposes , consultation with a Clinical Assistance Line (CAL) clinician and speaking with a doctor is considered expert consultation.***

Topic	**EoLPC Management**		**Screen type**	Text and image
Screen Title	*Knowledge Check*		**Screen label**	011
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.			***Instructions** Person completing the task is not allowed to progress further into the course until they achieve a 100% score. Allow the person to complete all scenarios and then give them a score with the option of repeating the knowledge check. If they scored lower than 100% with a suggestion of reviewing material on "Determining a breakthrough dose "slide. Once they achieve 100% then they can progress.*	

Topic	EoLPC Management		Screen type	Text and image
Screen Title	*Case Scenario One*		Screen label	012
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Kristy is a 53-year-old woman with extensive metastatic invasive ductal carcinoma. She has multiple metastases to bone, and liver, and two brain metastases. She has had palliative radiotherapy for bone metastases pain a few months ago. She is linked to the community palliative care team. She has been living at home, but in the past two weeks has become increasingly weak and anorexic. She has had increasing pain and some episodes of brief confusion and short-term memory loss. She feels mildly nauseated (no vomiting) and is now unable to eat very much and has been having increasing difficulty swallowing her tablets. Her current background opioid medications are a Fentanyl patch 75 mcg/hr, with PRN Oxycodone (Oxynorm) 20mg capsule 4 hrly for breakthrough pain. She has taken five Oxycodone (Oxynorm) capsules in the past 24hrs. She is reviewed at home by an NSW Ambulance Clinician and a decision is made to provide a PRN subcutaneous injection dose of morphine for breakthrough pain. What is the breakthrough morphine dose for Anne?	Kristy is a 53-year-old woman with extensive metastatic invasive ductal carcinoma. She has multiple metastases to bone, and liver, and two brain metastases. She has had palliative radiotherapy for bone metastases pain a few months ago. She is linked to the community palliative care team. She has been living at home, but in the past two weeks has become increasingly weak and anorexic. She has had increasing pain and some episodes of brief confusion and short-term memory loss. She feels mildly nauseated (no vomiting) and is now unable to eat very much and has been having increasing difficulty swallowing her tablets. Her current background opioid medications are a Fentanyl patch 75 mcg/hr, with PRN Oxycodone (Oxynorm) 20mg capsule 4 hrly for breakthrough pain. She has taken five Oxycodone (Oxynorm) capsules in the past 24hrs.	*MCQ* *Answers are in bold.* *Right answer:* That's correct. ***20.0 mg Subcut*** • ***Kristy has a 75mcg/hr transdermal fentanyl patch*** • ***She has taken a total of 5 Oxycodone tablets in 24 hours totalling 100mg of oxycodone.*** *Wrong answer:* That's incorrect.	

		She is reviewed at home by an NSW Ambulance Clinician and a decision is made to provide a PRN subcutaneous injection dose of morphine for breakthrough pain. What is the breakthrough morphine dose for Anne? **1.*20.0 mg Subcut*** ***2.16.5mg subcut*** ***3.18.0mg subcut*** ***4.*** 12.0mg subcut	

Topic	EoLPC Management		Screen type	Text and image
Screen Title	*Case Scenario Three*		Screen label	014
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Geoff, a 52-year-old owner/operator of a pest control franchise, lives at home with his wife and eight-year-old son. He was diagnosed with pancreatic cancer six months ago and underwent a Whipple's procedure with initially good outcomes. Geoff has a history of Diabetes Mellitus Type II which was previously well controlled with diet but is now taking Metformin 500mg and NovoRapid PRN in case he experiences spikes in his blood sugar levels. He is also taking Amlodipine, Atorvastatin, Paracetamol. No allergies. His care has been managed by the GP since his discharge after the Whipple's procedure. The last 24 hours have been increasingly painful for Geoff with episodes of significant abdominal pain for which he was given basic analgesia by his wife, with little effect. Geoff's wife spoke with his GP late yesterday afternoon and prescribed oral morphine (Ordine) 5mg orally 4 hrly but the prescription has not been filled as the chemist in town was already closed. Geoff initially agreed not to accept referral to the local community palliative care services but due to increasing immobility and burden of care on Geoff's wife, he has reluctantly agreed to be assessed by the local palliative care team, but his appointment is not until 1100 today. It is currently 0200 and his wife has called triple zero to see if the NSW ambulance can help get his pain under control.	Geoff, a 52-year-old owner/operator of a pest control franchise, lives at home with his wife and eight-year-old son. He was diagnosed with pancreatic cancer six months ago and underwent a Whipple's procedure with initially good outcomes. Geoff has a history of Diabetes Mellitus Type II which was previously well controlled with diet but is now taking Metformin 500mg and NovoRapid PRN in case he experiences spikes in his blood sugar levels. He is also taking Amlodipine, Atorvastatin, Paracetamol. No allergies. His care has been managed by the GP since his discharge after the Whipple's procedure. The last 24 hours have been increasingly painful for Geoff with episodes of significant abdominal pain for which he was given basic analgesia by his wife, with little effect. Geoff's wife spoke with his GP late yesterday afternoon and prescribed oral morphine (Ordine) 5mg orally 4 hrly but	*MCQ* *Answers are in bold.* *Right answer:* That's correct. **Current S9: 2.5 – 5mg SC, repeat 15 mins. Total max dose: 10mg per episode, 15mg within 24 hours.** **Geoff has NOT had any opiate based pain relief medications administered in the last 24 hours – he has only been prescribed it and the script has not been dispensed yet** *Wrong answer:* That's incorrect.	

	Geoff does not want to go to hospital and would rather stay at home as he is worried that he will miss his appointment with the palliative care team who are visiting him at home. What medications could you give Geoff and what dose would you administer?	the prescription has not been filled as the chemist in town was already closed. Geoff initially agreed not to accept referral to the local community palliative care services but due to increasing immobility and burden of care on Geoff's wife, he has reluctantly agreed to be assessed by the local palliative care team, but his appointment is not until 1100 today. It is currently 0200 and his wife has called triple zero to see if the NSW ambulance can help get his pain under control. Geoff does not want to go to hospital and would rather stay at home as he is worried that he will miss his appointment with the palliative care team who are visiting him at home. What medications could you give Geoff and what dose would you administer? **1.2.5 – 5mg SC, repeat 15 mins. Total max dose: 10mg per episode, 15mg within 24 hours.** **Geoff has NOT had any opiate based pain relief medications administered in the last 24 hours – he has only been**	

		prescribed it and the script has not been dispensed yet **2. 10mg SC with nil repeat** **3. 18mg SC with one repeat in 5 minutes** **4. 12.5 mg IV with nil repeat.**	

Topic	EoLPC Management		Screen type	Text and image
Screen Title	*Case Scenario Four*		Screen label	015
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	
1.	Julia, a 48-year-old patient who identifies as female, is suffering from end stage liver failure secondary to former intravenous drug use. Her carer has contacted triple zero after experiencing increasing RUQ abdominal pain for the last 2 days. Julia is currently taking 80mg daily of oral methadone as part of a long-term methadone maintenance program after a history of heroin addiction. Julia is also Hep C and HIV +ive and has had a previous episode of ascites and suffers from portal hypertension, chronic renal failure, and diabetes. Julia's carer has called triple zero after her normal pain relief medications are not working. Along with her methadone, she is currently taking Gabapentin 300mg bd, Naproxen 500mg bd, Sofosbuvir 400 mg/velpatasvir 100 mg/voxilaprevir 100 mg (Vosevi) 1 tablet daily for her Hep C and Dolutegravir 50 mg/abacavir 600 mg/lamivudine 300 mg (Triumeq) for her HIV. She often self-medicates with non-medicinal cannabis. Julia has expressed that she does not want to go to hospital and would like to remain at home. Calculate her breakthrough dose of pain relief.	Julia, a 48-year-old patient who identifies as female, is suffering from end stage liver failure secondary to former intravenous drug use. Her carer has contacted triple zero after experiencing increasing RUQ abdominal pain for the last 2 days. Julia is currently taking 80mg daily of oral methadone as part of a long-term methadone maintenance program after a history of heroin addiction. Julia is also Hep C and HIV +ive and has had a previous episode of ascites and suffers from portal hypertension, chronic renal failure, and diabetes. Julia's carer has called triple zero after her normal pain relief medications are not working. Along with her methadone, she is currently taking Gabapentin 300mg bd, Naproxen 500mg bd, Sofosbuvir 400 mg/velpatasvir 100 mg/voxilaprevir 100 mg (Vosevi) 1 tablet daily for her Hep C and Dolutegravir 50 mg/abacavir 600 mg/lamivudine 300 mg (Triumeq) for her HIV.	*MCQ* *Answers are in bold.* *Right answer:* That's correct. **CALL CLINICAL ASSISTANCE LINE (CAL) FOR ADVICE; PATIENT ALREADY ON METHADONE AND A BREAKTHROUGH DOSE CANNOT BE SAFELY CALCULATED** *Wrong answer:* That's incorrect.	

		She often self-medicates with non-medicinal cannabis. Julia has expressed that she does not want to go to hospital and would like to remain at home. Calculate her breakthrough dose of pain relief. **1.CALL CLINICAL ASSISTANCE LINE (CAL) FOR ADVICE; PATIENT ALREADY ON METHADONE AND A BREAKTHROUGH DOSE CANNOT BE SAFELY CALCULATED** **2. 2.5mg-5mg subcut per the CPG for pain management** **3. 12.0mg subcut** **4.18mg subcut**	

Topic	EoLPC Management		Screen type	Blended
Screen Title	*Paediatric palliative care patients*		Screen label	016
No.	**Audio/VO**	**OST**	**Visuals and Development instructions**	

1.	• Clinicians who have been trained to use a subcutaneous intima may administer medication through the port that is not attached to a syringe driver.
	• Clinicians are permitted to administer medication/s and leave patients in the home or facility, providing all reasonable steps have been taken to mitigate risk, the patient/family/carer/person responsible have provided informed consent and a plan for ongoing management has been made (where possible).
	• Paediatric palliative care patients: -
	  • Paediatric doses (≤ 16 years) are calculated on estimated weight.
	  • For paediatric patients, it is recommended that clinicians seek further clinical advice from the Statewide Paediatric Palliative On-Call service and/or the Clinical Assistance Line if further doses are required.
	Any clinical advice provided from the Statewide Paediatric Palliative On-Call service and/or the Clinical Advice Line must be documented on the HCR, including the clinician's name, clinical position and outcome of shared decisionmaking
		Clinicians for paedeatric palliative care patients who are known to a specalised palliative care :
		• Trained to use a subcutaneous intima may administer medication through the port that is not attached to a syringe driver
		• Are permitted to administer medication/s and leave patients in the home or facility, providing all reasonable steps have been taken to mitigate risk, the patient/family/carer/person responsible have provided informed consent and a plan for ongoing management has been made (where possible)
		
		Clinicians for Paediatric palliative care patients:
		• Calculate Paediatric doses (≤ 16 years) on estimated weight
		• Seek further clinical advice from the Statewide
			Display OST in two columns in sync with VO.
			
			A note icon will be shown at the end.
			The user will be able to click that icon to see the information below:
			Note:
			Statewide Paediatric Palliative On-Call service.
			Contact via switch board at:
			✓ Sydney Children's Hospital, Randwick (02) 9382 1111
			✓ The Children's Hospital at Westmead (02) 9845 0000
			✓ John Hunter Children's Hospital (02) 4921 3000
			
			Display highlighted OST at the end of the screen in sync with VO.	

		Paediatric Palliative On-Call service and/or the Clinical Asisstance Line if further doses are required Any clinical advice provided from the Statewide Paediatric Palliative On-Call service and/or the Clinical Advice Line must be well documented on the HCR, including the clinician's name, clinical position and outcome of shared decision making	

Topic	EoLPC Management	Screen type	Blended
Screen Title	*Resource acknowledgement*	Screen label	017

No.	Audio/VO	OST	Visuals and Development instructions
1.		The NSW Ambulance End of Life and Palliative Care team acknowledges the contribution of the following individuals and groups in the development of this resource: • The PEPA/IPEPA National Project Team and Jurisdictional partners • The PCC4U National Project Team • The ELLC Project Team • Subject matter experts from university and clinical education settings who provided peer review and expert opinions	*Display OST.*

Topic	EoLPC Management	Screen type	
Screen Title	*Reflection*	Screen label	018

No.	Audio/VO	OST	Visuals and Development instructions
1.	To support you continuing professional development, please answer these following questions. 1. What did you learn in this module? 2. How will this change your practice?	Optional: Complete the sections below as supporting evidence for your Continuing Professional Development requirements 1. What did you learn in this module? 2. How will this change your practice?	*Text input fields after each question with a submit button. Both questions are optional. Also provide ability for participants to print/save as PDF.*

Topic	EoLPC Management	Screen type	
Screen Title	*Thank you*	Screen label	019

No.	Audio/VO	OST	Visuals and Development instructions
1.	*Standard course completion screen*		