EDDIE+ Researching Early Detection of Deterioration in Elderly residents

WORKBOOK

INTRODUCTION TO EDDIE+ TRAINING SESSION

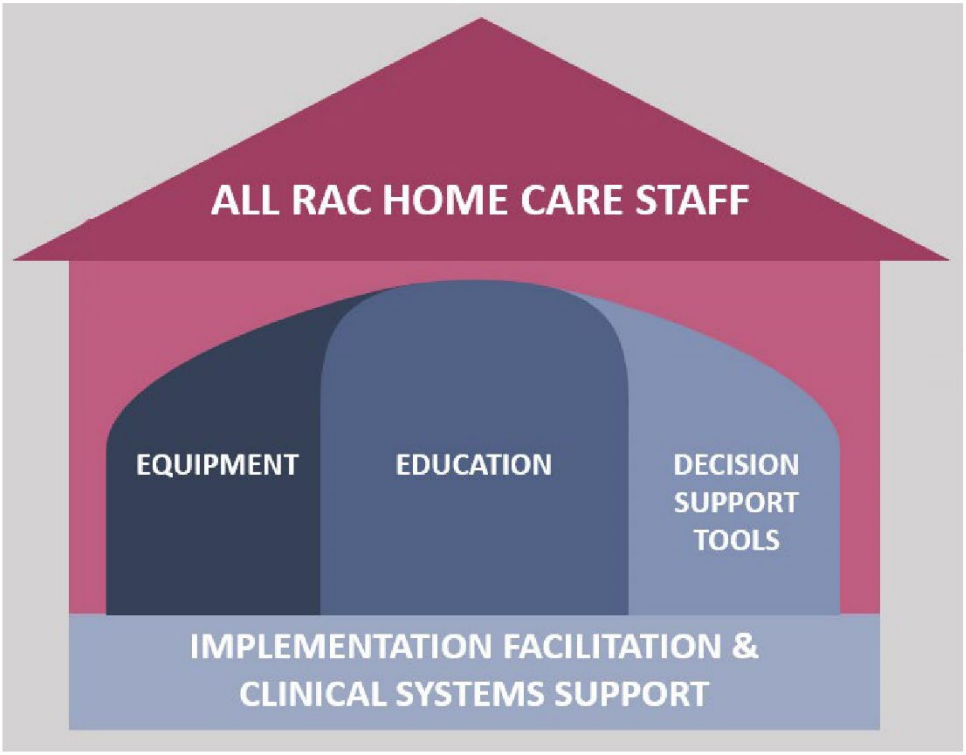
REGISTERED NURSES & ENROLLED NURSES

April 2022

ABOUT EDDIE+

The EDDIE+ program is a research project that aims to upskill and support nursing and personal care staff to detect when a resident is in early stages of deterioration and to know what steps to take to best care for that resident. Researchers from the Australian Centre for Health Services Innovation (AusHSI) at the Queensland University of Technology (QUT) are working with participating Bolton Clarke Residential Aged Care (RAC) homes to introduce and run the EDDIE+ program. EDDIE+ is funded by the National Health and Medical Research Council, Medical Research Future Fund, Keeping Australians Out of Hospital Project Grant (GNT1177501).

THE EDDIE+ PROGRAM COMPONENTS



EQUIPMENT	• Bladder scanner and vital signs monitors • Equipment training
EDUCATION	• Education sessions to upskill nursing and care staff • Learning resources
DECISION SUPPORT TOOLS	• Communication tools • Clinical decision-making guidelines, prompts and resources

IMPLEMENTATION FACILITATION & CLINICAL SYSTEMS SUPPORT
• On-site EDDIE+ Clinical Facilitator 1 day/week • Ongoing support activities and resources • Awareness raising and engagement activities

EDDIE+

Researching Early Detection of Deterioration in Elderly residents

April 2022

RN & EN Education

AusHSI AUSTRALIAN CENTRE FOR HEALTH SERVICES INNOVATION

QUT

1

Acknowledgement of Country

EDDIE+

We acknowledge the First Nations owners of the lands on where we gather today and pay our respects to the Elders,lores, customs and creation spirits of this country.

For thousands of years, the First Nations owners have gathered to share their knowledge and stories.

We pay our respects to all Aboriginal and Torres Strait Islander peoples and acknowledge the important role they play within our communities.

We recognise their long and continuing connection to country, the lands, winds and waters throughout Australia.

We recognise that these lands have always been places of teaching, researching and learning.

2

Learning outcomes

EDDIE+

Aged Care Quality Standards

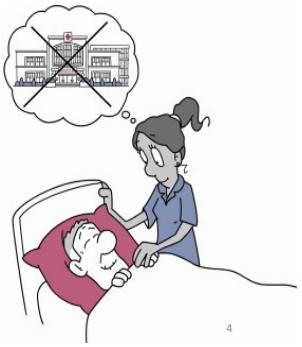
1	2	3	4	5	6	7	8	
✓	✓	✓				✓	✓	Review physical, psychological or cognitive changes in residents that may indicate a risk profile for deterioration
	✓	✓	✓			✓	✓	Identify key clinical assessments, care and referral/review pathways fo residents at risk of deterioration
✓	✓	✓						Use reporting processes and communication tools to support early escalation of resident deterioration

3

Why avoid hospital?

EDDIE+

- Increased risk of healthcare associated complications
- Loss of independence
- Deconditioning
- Distress
- Worse or extended illness, delayed recovery
- Decreased quality of life and shortened life span



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Residents at higher risk of deterioration

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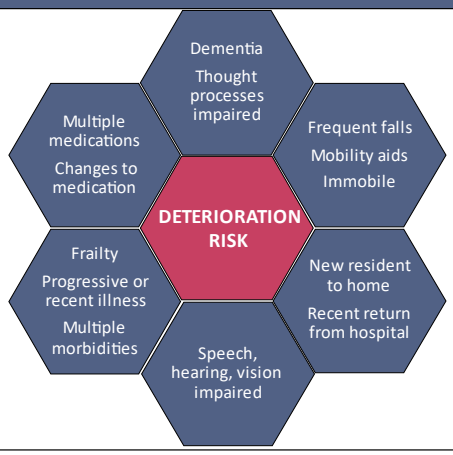


5

Noticing changes

EDDIE+

How are they responding to you?

Aggressive, not talking, tired?

Has a family member/ carer/advocate told you of a change?

Are they in pain, distressed, confused?

Is this behaviour normal for them?

How is their eating drinking, toileting and sleep?

Are they less active or overactive?

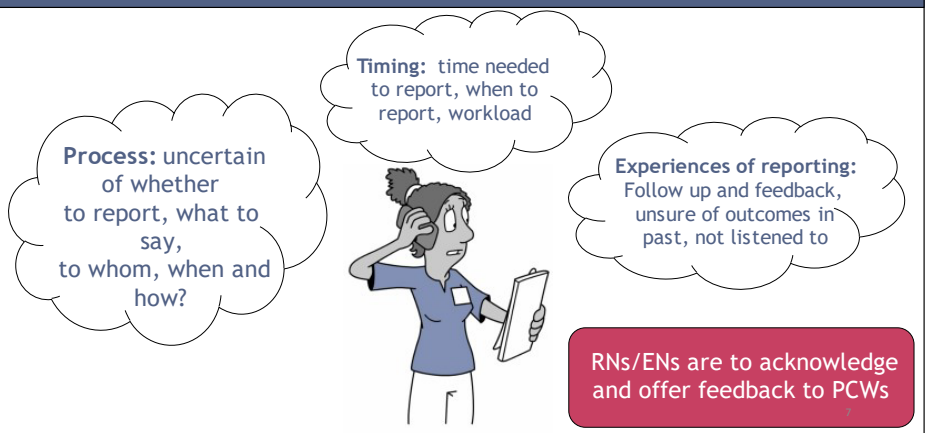
Unsteady on feet?

ALL staff encouraged to report <u>early</u> changes in a resident's condition

6

Barriers to early reporting

EDDIE+



RNs/ENs are to acknowledge and offer feedback to PCWs

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Communication

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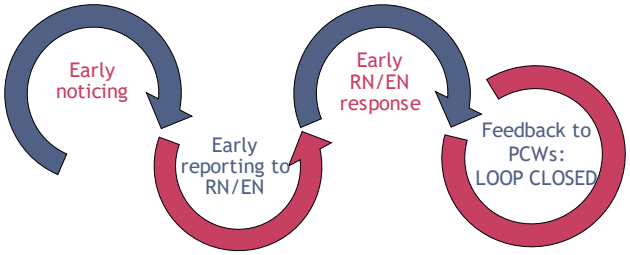

LOOP CLOSED:

- ❑ PCWs concern & reporting acknowledged
- ❑ PCWs made aware of what follow-up action has been taken for the resident

8

Early Detection of the Deteriorating Resident

- DELIRIUM
- CHEST PAIN
- DYSPNOEA
- DEHYDRATION
- UTIs
- CONSTIPATION
- FALLS
- PALLIATIVE CARE

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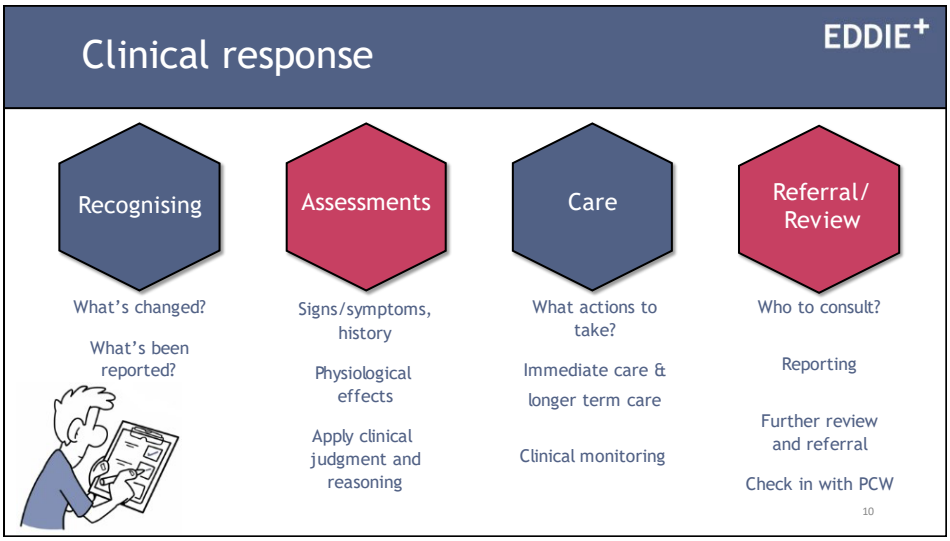
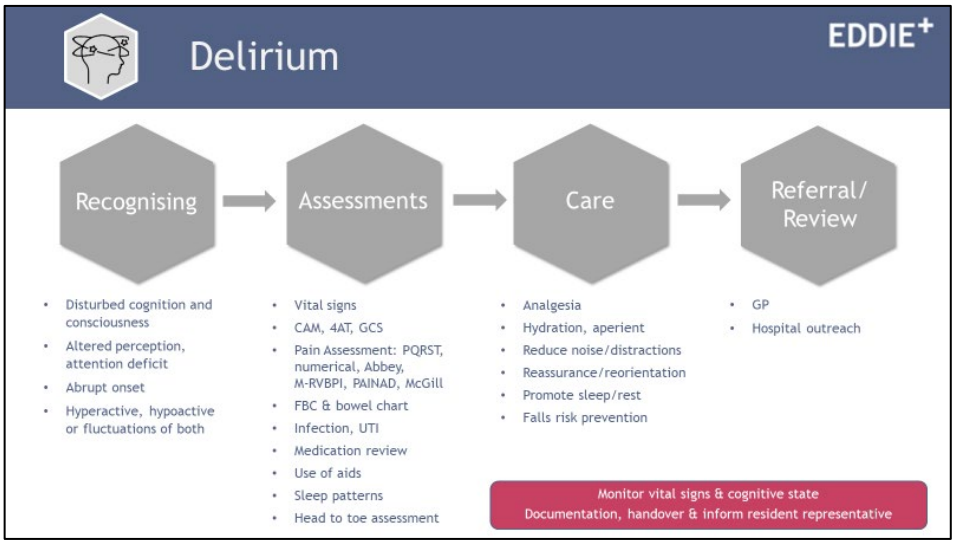
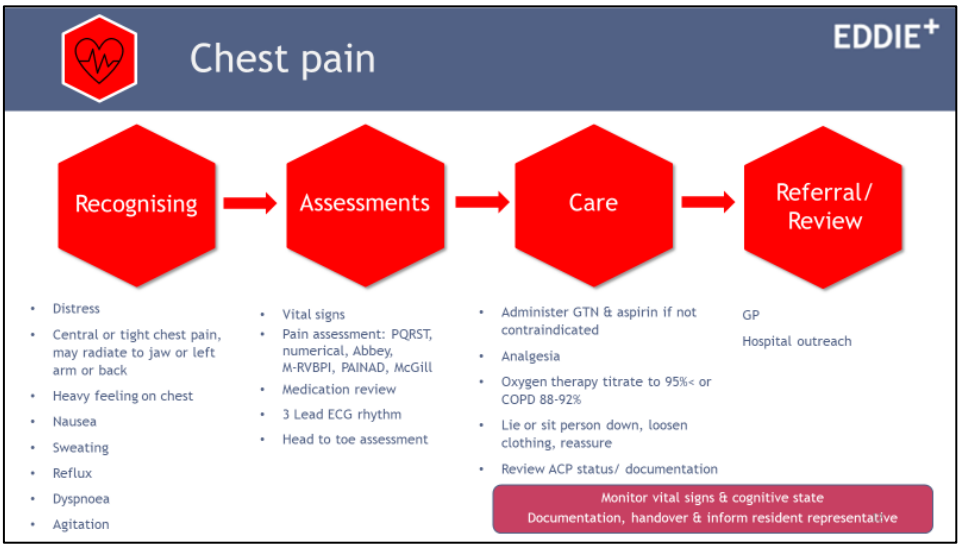
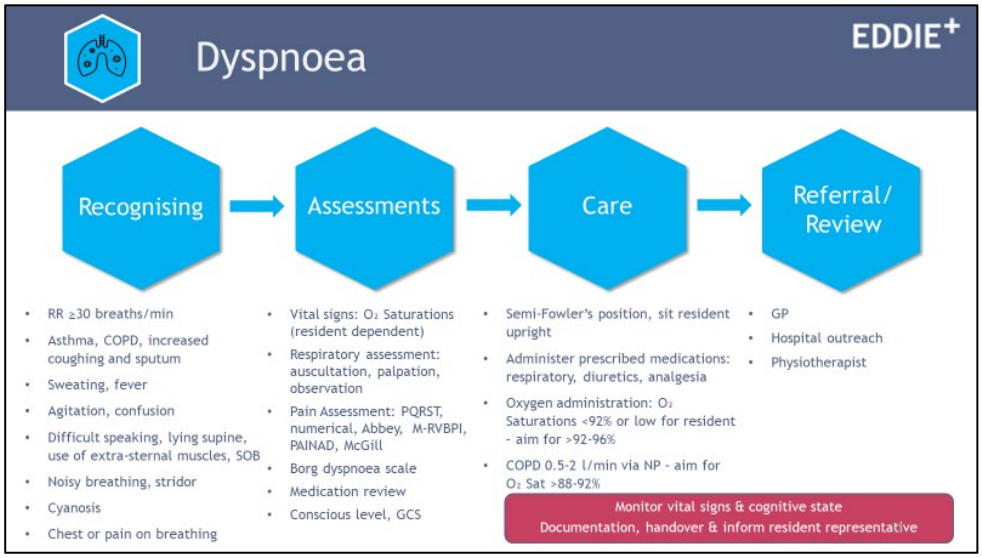
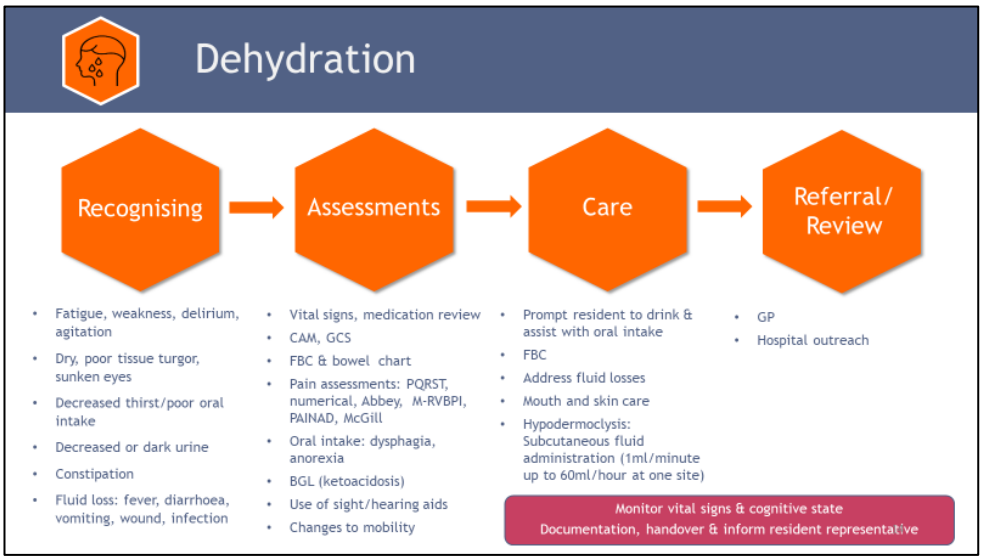
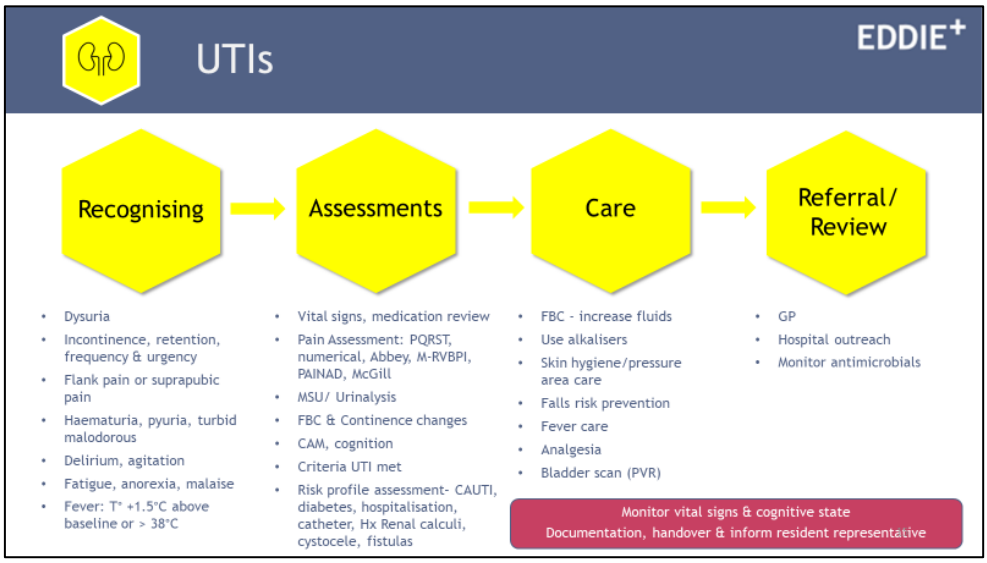

Clinical response
EDDIE+
Recognising
Assessments
Care
Referral/ Review
What's changed?
What's been reported?
Signs/symptoms, history
Physiological effects
Apply clinical judgment and reasoning
What actions to take?
Immediate care & longer term care
Clinical monitoring
Who to consult?
Reporting
Further review and referral
Check in with PCW
10

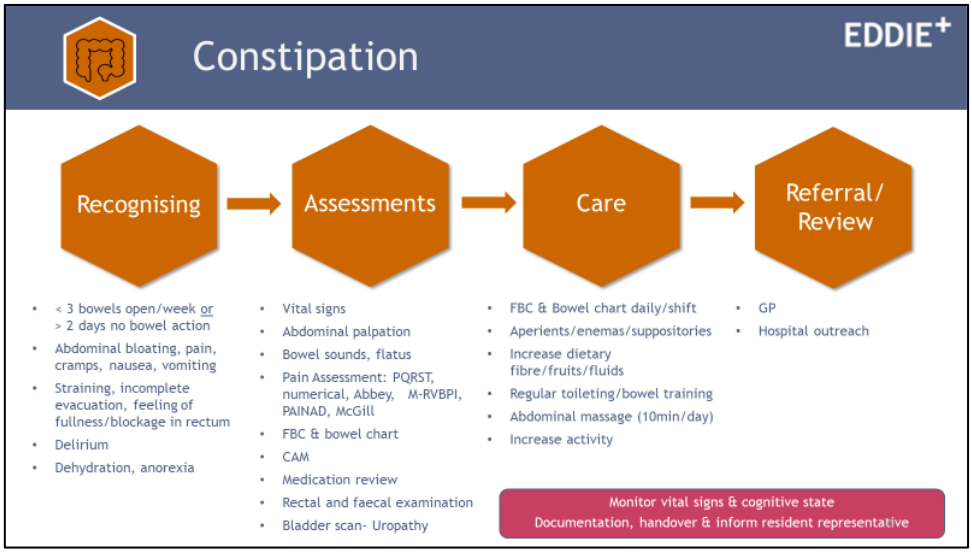

Delirium
EDDIE+
Recognising
Assessments
Care
Referral/ Review
Disturbed cognition and consciousness
Altered perception, attention deficit
Abrupt onset
Hyperactive, hypoactive or fluctuations of both
Vital signs
CAM, 4AT, GCS
Pain Assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
FBC & bowel chart
Infection, UTI
Medication review
Use of aids
Sleep patterns
Head to toe assessment
Analgesia
Hydration, aperient
Reduce noise/distractions
Reassurance/reorientation
Promote sleep/rest
Falls risk prevention
GP
Hospital outreach
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative

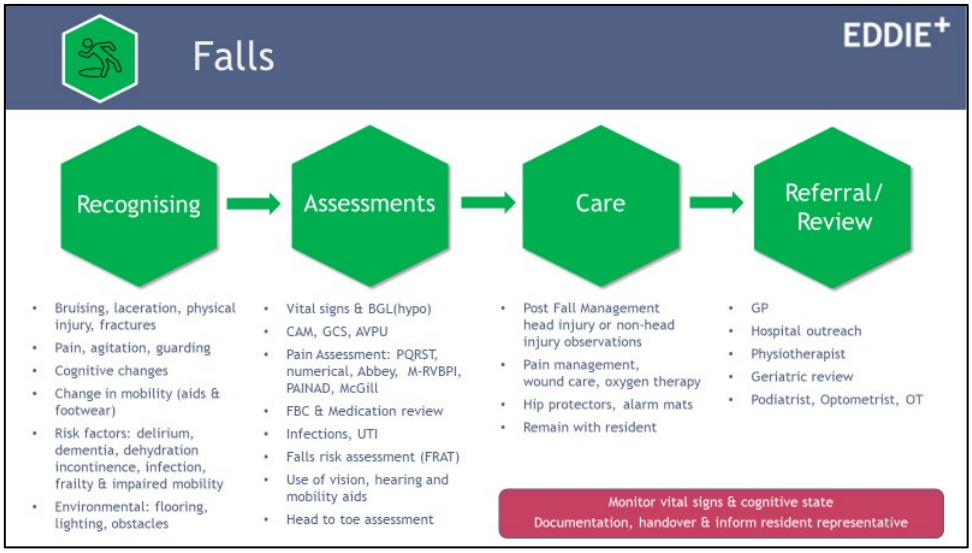

Chest pain
EDDIE+
Recognising
Assessments
Care
Referral/ Review
Distress
Central or tight chest pain, may radiate to jaw or left arm or back
Heavy feeling on chest
Nausea
Sweating
Reflux
Dyspnoea
Agitation
Vital signs
Pain assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
Medication review
3 Lead ECG rhythm
Head to toe assessment
Administer GTN & aspirin if not contraindicated
Analgesia
Oxygen therapy titrate to 95%< or COPD 88-92%
Lie or sit person down, loosen clothing, reassure
Review ACP status/ documentation
GP
Hospital outreach
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative

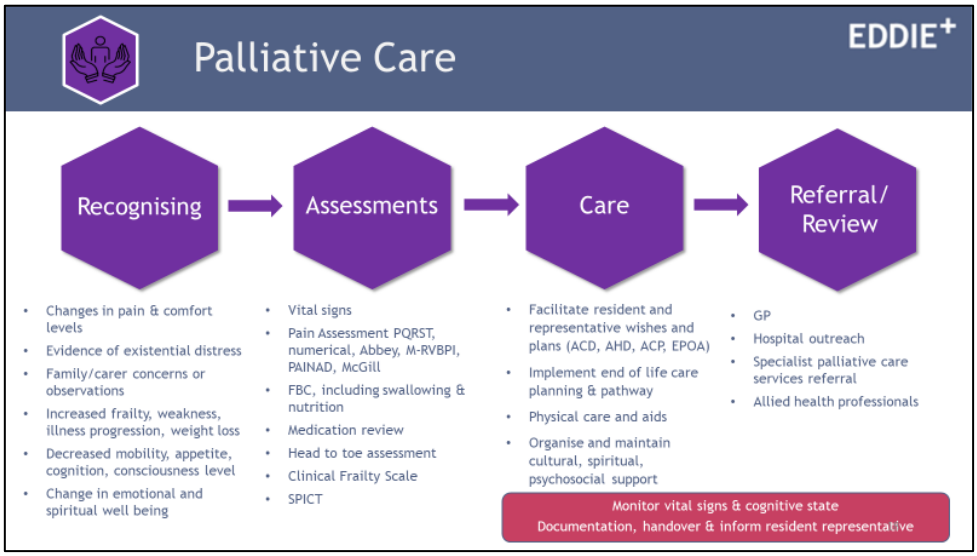

Dyspnoea
EDDIE+
Recognising
Assessments
Care
Referral/ Review
RR ≥30 breaths/min
Asthma, COPD, increased coughing and sputum
Sweating, fever
Agitation, confusion
Difficult speaking, lying supine, use of extra-sternal muscles, SOB
Noisy breathing, stridor
Cyanosis
Chest or pain on breathing
Vital signs: O2 Saturations (resident dependent)
Respiratory assessment: auscultation, palpation, observation
Pain Assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
Borg dyspnoea scale
Medication review
Conscious level, GCS
Semi-Fowler's position, sit resident upright
Administer prescribed medications: respiratory, diuretics, analgesia
Oxygen administration: O2 Saturations <92% or low for resident - aim for >92-96%
COPD 0.5-2 l/min via NP - aim for O2 Sat >88-92%
GP
Hospital outreach
Physiotherapist
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative


Dehydration
Recognising
Assessments
Care
Referral/ Review
Fatigue, weakness, delirium, agitation
Dry, poor tissue turgor, sunken eyes
Decreased thirst/poor oral intake
Decreased or dark urine
Constipation
Fluid loss: fever, diarrhoea, vomiting, wound, infection
Vital signs, medication review
CAM, GCS
FBC & bowel chart
Pain assessments: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
Oral intake: dysphagia, anorexia
BGL (ketoacidosis)
Use of sight/hearing aids
Changes to mobility
Prompt resident to drink & assist with oral intake
FBC
Address fluid losses
Mouth and skin care
Hypodermoclysis: Subcutaneous fluid administration (1ml/minute up to 60ml/hour at one site)
GP
Hospital outreach
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative


UTIs
EDDIE+
Recognising
Assessments
Care
Referral/ Review
Dysuria
Incontinence, retention, frequency & urgency
Flank pain or suprapubic pain
Haematuria, pyuria, turbid malodorous
Delirium, agitation
Fatigue, anorexia, malaise
Fever: T° +1.5°C above baseline or > 38°C
Vital signs, medication review
Pain Assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
MSU/ Urinalysis
FBC & Continence changes
CAM, cognition
Criteria UTI met
Risk profile assessment- CAUTI, diabetes, hospitalisation, catheter, Hx Renal calculi, cystocele, fistulas
FBC - increase fluids
Use alkalisers
Skin hygiene/pressure area care
Falls risk prevention
Fever care
Analgesia
Bladder scan (PVR)
GP
Hospital outreach
Monitor antimicrobials
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative


Constipation
EDDIE+
Recognising
Assessments
Care
Referral/ Review
< 3 bowels open/week or > 2 days no bowel action
Abdominal bloating, pain, cramps, nausea, vomiting
Straining, incomplete evacuation, feeling of fullness/blockage in rectum
Delirium
Dehydration, anorexia
Vital signs
Abdominal palpation
Bowel sounds, flatus
Pain Assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
FBC & bowel chart
CAM
Medication review
Rectal and faecal examination
Bladder scan- Uropathy
FBC & Bowel chart daily/shift
Aperients/enemas/suppositories
Increase dietary fibre/fruits/fluids
Regular toileting/bowel training
Abdominal massage (10min/day)
Increase activity
GP
Hospital outreach
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative


Falls
EDDIE+
Recognising
Assessments
Care
Referral/ Review
Bruising, laceration, physical injury, fractures
Pain, agitation, guarding
Cognitive changes
Change in mobility (aids & footwear)
Risk factors: delirium, dementia, dehydration incontinence, infection, frailty & impaired mobility
Environmental: flooring, lighting, obstacles
Vital signs & BGL(hypo)
CAM, GCS, AVPU
Pain Assessment: PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
FBC & Medication review
Infections, UTI
Falls risk assessment (FRAT)
Use of vision, hearing and mobility aids
Head to toe assessment
Post Fall Management head injury or non-head injury observations
Pain management, wound care, oxygen therapy
Hip protectors, alarm mats
Remain with resident
GP
Hospital outreach
Physiotherapist
Geriatric review
Podiatrist, Optometrist, OT
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative


Palliative Care
EDDIE+
Recognising
Assessments
Care
Referral/ Review
Changes in pain & comfort levels
Evidence of existential distress
Family/carer concerns or observations
Increased frailty, weakness, illness progression, weight loss
Decreased mobility, appetite, cognition, consciousness level
Change in emotional and spiritual well being
Vital signs
Pain Assessment PQRST, numerical, Abbey, M-RVBPI, PAINAD, McGill
FBC, including swallowing & nutrition
Medication review
Head to toe assessment
Clinical Frailty Scale
SPICT
Facilitate resident and representative wishes and plans (ACD, AHD, ACP, EPOA)
Implement end of life care planning & pathway
Physical care and aids
Organise and maintain cultural, spiritual, psychosocial support
GP
Hospital outreach
Specialist palliative care services referral
Allied health professionals
Monitor vital signs & cognitive state
Documentation, handover & inform resident representative

Clinical Parameters

EDDIE+

- **Serious/Life Threatening zone** - Do not leave the resident unattended; seek urgent medical review
- **Caution zone** - Increase frequency of monitoring- vital signs assessment; request a medical review
- **Normal zone** - Address any resident complaints or issues

Remember!

The parameters are a guide

They do not substitute for clinical judgment or reasoning

EDDIE+

Deterioration Parameters

CATEGORIES	NORMAL	CAUTION	SERIOUS / LIFE THREATENING
ACTIONS	Seek medical review of complaint or issue	Seek medical Increase frequency of monitor VS	URGENT MEDICAL REVIEW Do not leave the resident unattended
HEAT RATE (BEATS/MIN)	50 - 100	40 - 49 or 101 - 130	<40 or >130
SYSTOLIC (mmHg)	110 - 180 (or range specified by GP for resident)	90 - 109 or 181 - 200 (or higher in well resident)	<90 or >200 symptomatic
RESPIRATORY RATE (BREATHS/MINUTE)	10 - 24	6 - 9 or 25 - 30	<6 or >30
O2 SATURATIONS	92-100% with or without O2 (or normal for resident)	88-91% with O2 given	<88% with O2 given
RESPIRATORY EFFORT	Typical for resident	Abnormal, laboured or noisy Not typical for resident	Distress and/or cyanosis with O2 given
TEMPERATURE	35.6°C - 37.7°C	35°C - 35.5°C or 37.8° - 39°C Temperature baseline +1.5°C	<35°C or >39°C
RESPONSIVENESS	Alert, cognition normal for resident	Not alert, but responds to voice	Responsive to pain only or Newly unresponsive or Sudden change in mental state
PAIN	Nil, or tolerable with or without analgesia	Observable discomfort with analgesia	Highly distressed with analgesia
BLOOD GLUCOSE (mmol/L)	6 - 15 (or range specified by GP for resident)	4 - 5.9 or >4 responsive to treatment or Persistently >15 in well resident	< 4 AND unresponsive to treatment or Persistently >15 in unwell resident

Adapted from: Queensland Health (2020). Management of Acute Care Needs of RACF Residents: a suite of collaborative pathways for General Practitioners and Registered Nurses. Version 2.0 April 2022

PCW's- communication tools for reporting

EDDIE+

CUS
I am Concerned about...
I feel Uncomfortable because...
This is a Serious/Safety issue, can you please...

20

From today I will.....

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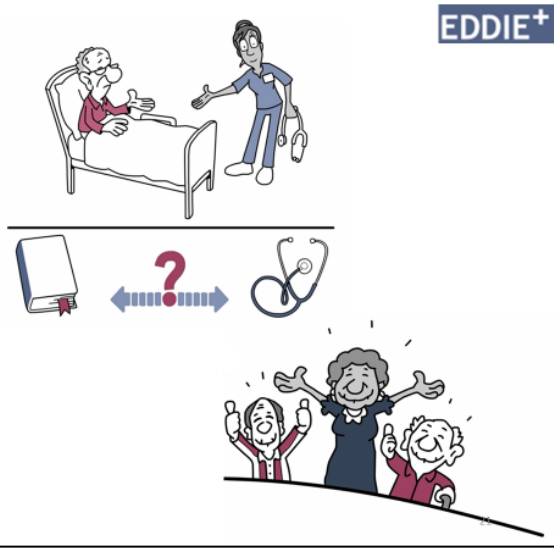

RESOURCES

Key reference

Queensland Health (2019). Management of Acute Care Needs of RACF Residents: a suite of collaborative pathways for General Practitioners and Registered Nurses. Version 21. https://clinicalexcellence.qld.gov.au/improvement-exchange/management-acute-care-needs-racf-residents

NOTES