



Australian Government

HLTRNL004 Apply renal replacement therapy

Release: 2

HLTRNL004 Apply renal replacement therapy

Modification History

Release	Comments
Release 2	Release 2 HLTRNL004 Apply renal replacement therapy supersedes and is equivalent to Release 1 HLTRNL004 Apply renal replacement therapy. Updated: Mapping details and minor corrections.
Release 1	HLTRNL004 Apply renal replacement therapy supersedes and is not equivalent to HLTRNL002 Provide care and support to a person undergoing renal replacement therapy.

Application

This unit describes the performance outcomes, skills and knowledge required to provide care and support to a person in health and community settings undergoing renal replacement therapy including peritoneal dialysis and haemodialysis.

This unit applies to enrolled nurses, registered with the Nursing and Midwifery Board of Australia (NMBA), seeking specialisation in enrolled nurse work that is carried out in consultation and collaboration with registered nurses, and under direct or indirect supervisory arrangements aligned to the NMBA regulatory authority legislative requirements.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian Standards and industry codes of practice.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Renal

Unit Sector

Nursing

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1. Establish therapeutic relationship to support self-management of renal replacement therapy.

2. Assess physical health status for dialysis.

3. Perform peritoneal dialysis exchange.

4. Assist with self-care management of

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Perform physical assessment to establish cognitive ability to support self-management of renal replacement therapy.
- 1.2. Provide opportunity for care dialogue and clarify elements of concern.
- 1.3. Encourage open dialogue and comprehensive engagement in therapeutic intervention.
- 1.4. Provide education to encourage self-care management of renal replacement therapy.
- 1.5. Identify areas of concern relating to self-management of renal replacement therapy, and report to multidisciplinary health care team.
- 1.6. Provide referral to primary health, tertiary health and community services in collaboration with multidisciplinary health care team.
- 2.1. Perform physical pre-dialysis assessment and report outcomes to multidisciplinary health care team.
- 2.2. Inspect person's access device for suitability for dialysis for foreseeable treatment risks.
- 2.3. Perform specimen collection of access and catheter sites for microbiological analysis.
- 2.4. Identify physical health risks related to dialysis prescription, and document and report.
- 3.1. Examine peritoneal dialysis catheter exit site and perform exit site dressing.
- 3.2. Prepare peritoneal dialysis additives for dialysis bag in line with delegation and identify causes of peritoneal fluid failure to drain.
- 3.3. Perform peritoneal exchange according to prescribed treatment order and organisational policies and procedures.
- 3.4. Monitor risks associated with treatment during procedure.
- 3.5. Document and refer identified risks and clinical features suggestive of dialysis-related peritonitis.
- 3.6. Identify acute and delayed adverse reactions to dialysis additives and respond within scope of work role.
- 3.7. Document and report treatment outcomes.
- 4.1. Appraise competence and readiness for the procedure and self-management including technique for Tenckhoff catheter

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| peritoneal dialysis. | care and provide education. |
| | 4.2. Provide assistance and education relating to peritoneal dialysate fluid exchange. |
| | 4.3. Monitor treatment progress and ensure supporting documentation is complete. |
| | 4.4. Identify and respond to procedural variations and risk during peritoneal dialysis treatment. |
| | 4.5. Collect effluent specimen for microbiological analysis. |
| | 4.6. Assess response to treatment and document and report outcomes. |
| | 4.7. Perform self-management appraisal on peritoneal dialysis consumables, sustainable practice and waste minimisation. |
| 5. Prepare person and equipment for haemodialysis. | 5.1. Explain procedure and prepare for treatment. |
| | 5.2. Apply hand hygiene and use of personal protective equipment (PPE) in accordance with infection prevention and control guidelines. |
| | 5.3. Prepare dialysis machine and determine dialysis settings. |
| | 5.4. Identify site for cannulation and signs of fistula stenosis and infection, and report abnormalities prior to commencement of procedure. |
| | 5.5. Prepare and perform cannulation according to organisational policies and procedures. |
| 6. Perform haemodialysis. | 6.1. Connect haemodialysis machine according to organisational policies and procedures and infection prevention and control guidelines. |
| | 6.2. Monitor for signs of deterioration during haemodialysis and report variations in health status. |
| | 6.3. Identify and respond to machine alarms and other problems with haemodialysis. |
| | 6.4. Assess response to treatment and other interventions as administered. |
| | 6.5. Identify, respond and document adverse reactions. |
| | 6.6. Complete haemodialysis machine disconnection in accordance with organisational policies and procedures. |
| | 6.7. Provide equipment care in accordance with infection prevention and control guidelines and manufacturer instructions. |
| | 6.8. Inspect vascular access site pre- and post-procedure and report adverse findings. |
| 7. Evaluate health status at completion of dialysis. | 7.1. Complete post-dialysis assessment. |
| | 7.2. Evaluate treatment and report. |
| | 7.3. Provide feedback of physical health assessment. |

7.4. Provide opportunities to listen to concerns and respond.

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

HLTRNL004 Apply renal replacement therapy supersedes and is not equivalent to HLTRNL002 Provide care and support to a person undergoing renal replacement therapy.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTRNL004 Apply renal replacement therapy

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Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- perform renal replacement therapy in the workplace on three different people, one of which must be using peritoneal dialysis and one of which must be using haemodialysis involving:
 - identifying signs of uraemia and electrolyte imbalance
 - identifying signs of fluid overload
 - identifying signs of dehydration
 - checking peritoneal dialysis exit site
 - assessing patency of vascular access including:
 - palpating fistula for thrill
 - auscultating fistula for bruit
 - checking for signs of infection
 - checking last needle sites

The tasks must be undertaken in accordance with the Nursing and Midwifery Board of Australia (NMBA) professional practice standards, codes and guidelines.

Knowledge Evidence

Demonstrate knowledge required to complete the tasks outlined in elements and the performance criteria of this unit:

- techniques for assessing for blood clots in the line post haemodialysis
- techniques for adjusting next haemodialysis treatment parameters as per outcome of latest session
- use of clamps during haemodialysis
- indication for dialysis needle size
- indication for dialyser size
- indication for use of safety fistula catheters
- infection control principles of nursing care during renal replacement therapy
- standards and guidelines for renal care to improve the quality of care and outcomes for persons with kidney disease:
 - education
 - renal diet and nutrition
 - hygiene to minimise risk of fistula and access device infection
 - risk of skin infection
 - principles of aseptic technique for practice
 - common dialysates and dialysers
- pathophysiology of renal impairment and routine diagnostic testing
- normal and abnormal biochemical and haematological markers for undergoing renal replacement therapy
- national immunisation program recommendations for immunosuppressed people.
- types and principles of renal replacement therapies:
 - blood volume monitor (BVM)
 - haemodiafiltration (HDF)
 - heparin-free haemodialysis.
- haemodialysis machine cleaning and testing
- principles of haemodialysis and peritoneal dialysis
- medicines in common use to treat renal impairment
- impact of renal replacement therapy on quality of life and self-esteem including issues related to:
 - fluid and electrolytes
 - diet and nutritional
 - infection control
 - renal transplant
- signs and symptoms of actual and potential problems of renal replacement therapy and responses:
 - hypertension
 - hypotension
 - hyperglycaemia
 - hypoglycaemia
 - hypovolaemia due to rapid and excess fluid and electrolyte removal
 - altered nutritional status

- haemolysis
- vascular access
- clotted and stenosed vascular access
- prolonged bleeding
- peritonitis
- care of:
 - leakage from site, extravasation and bag
 - blocked catheter
 - catheter breaches including movement and cracking
 - fibrin plug
 - cuff extrusion
 - extravasation to surrounding tissue
 - contamination of catheter and Y line on bag during exchange process
 - Tenckhoff care
- accidental break in sterile pathway
- hernia
- obesity
- psychosocial issues
- dietary management
- vascular access site inspection for:
 - decreased thrill
 - high pitched bruit
 - difficulty in needling fistula
 - abnormal arterial and venous pressure readings
 - pain, swelling, redness and trauma
 - false aneurysms
 - blood leak from cannulation site
- own role and responsibilities and those of other multidisciplinary health care team members.

Assessment Conditions

To be eligible to apply for registration as an enrolled nurse and to practice in Australia, each applicant must complete a Diploma of Nursing program accredited by the Australian Nursing and Midwifery Accreditation Council (ANMAC) and approved as ‘an approved program of study’ by the Nursing and Midwifery Board of Australia (NMBA) in accordance with the Enrolled Nurse Accreditation Standards.

For more detail visit <https://www.ahpra.gov.au>.

Skills must be demonstrated in the workplace or in a simulated environment as specified in the performance evidence that model industry operating conditions including access to real people for simulations and scenarios in enrolled nursing work.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Assessors must also hold current registration as a registered nurse with the Nursing and Midwifery Board of Australia (NMBA).

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