PERITONEAL DIALYSIS: AFTER HOURS MANAGEMENT OF OUTPATIENTS

Cross References (including NSW Health/ SESLHD policy directives)	PACE - Deteriorating ADULT & MATERNITY Patient - Patient with Acute Condition for Escalation (PACE): Management SESLHDPR/283 PACE – Management of the Deteriorating Patient at SGH SGH CLIN353 Peritoneal Dialysis Catheter (and Extension set) – Management of Contamination SGH CLIN 357 Management of poor/no flow PD catheter – Afterhours; Renal Department
1. What it is	A clinical business rule (CLBR) to describe the process for the management of peritoneal dialysis outpatients after hours When a peritoneal dialysis outpatient requires after hours assistance with troubleshooting and clinical management. To ensure safe and timely management of peritoneal dialysis outpatient clinical issues.
2. Risk Rating	Medium
3. Employees it Applies to	Nurses and medical officers (MO) across St George Hospital

4. Process

4.1 Background

Peritoneal dialysis (PD) patients manage their own treatment at home. There are two forms of PD

1. Continuous Ambulatory Peritoneal Dialysis (CAPD) which involves the patient performing a manual exchange of fluid four times a day.
2. Automated Peritoneal Dialysis (APD) which is an automated system in which the patient self-connects to a machine at night (usually 8 hours) and the machine controls the inflow and outflow of the dialysis fluid.

Patients are fully trained in their own PD management but complications/problems can occur. The PD unit nurses attend to all outpatient concerns during operating hours – Monday to Friday, 0730 to 1600. 4 South is the contact ward after hours, on weekends and during public holidays.

4.2 Possible Scenarios

4.2.1 Planned simple procedures

Planned simple PD procedures are defined as anticipated PD procedures that require less than 3 hours to perform and can be managed by 4 South. These procedures are: manual draining of PD effluent (with or without additives) and intraperitoneal antibiotic administration via CAPD.

- When a simple PD procedure is booked for afterhours, the PD nurse and renal team must attend to the direct admission and verbally hand-over and deliver the appropriate documentation to the 4 South team leader/registered nurse (RN) in-charge
- Patients presenting after 2200hrs or after the main hospital entrance door is closed will need to obtain access to 4S via the Emergency Department (ED). Patients need to advise ED Clerical staff of their appointment, security will then be contacted to escort patients to the ward.
- When the patient presents to 4 South, RN in charge must:

- Inform the After Hours Nurse Manager (AHSNM), Bed Manager and after-hours 4th Floor (4/F) RMO
- Hotline patient and generate front sheet and labels
- Perform or allocate a senior nurse to perform the procedure in the 4S PD Treatment room.

- If the patient becomes unwell during the procedure: inform the after-hours 4/F RMO, renal consultant on-call, AHSNM and/or Bed Manager. PACE criteria applies according to PD 208 and the adult observation chart
- If the patient remains well until the procedure is completed the patient is discharged with post procedure instructions. The AHSNM and/or Bed Manager are informed of the discharge.
- Document procedure in the clinical notes and forward to the PD Unit. Notify the PD unit via voicemail X33770/33775

4.2.2 Decontamination of PD catheter

A contaminated PD catheter and extension set can lead to peritonitis. PD catheter decontamination must be performed immediately to reduce the risk of peritonitis.

- When the patient contacts 4 South, staff must advise the patient to:
  - Stop dialysis and disconnect
  - Clamp the dialysis line, close the valve and cover the PD catheter with minicap
  - Present to 4 South immediately. (After 2200hrs or if main door is closed patient is to present to ED to gain access to 4South. Patients need to advise ED Clerical staff of their appointment, security will then be contacted to escort patients to the ward).
- The In-charge RN must inform the AHSNM, Bed Manager, after-hours 4/F RMO and renal consultant-on-call of the expected admission.
- When the patient presents to 4 South, the in-charge RN must initiate the admission process as per Peritoneal Dialysis Catheter (and Extension set) – Management of Contamination SGH CLIN 357
- When the patient is admitted, the RN in charge or delegate performs the decontamination process as per Peritoneal Dialysis Catheter (and Extension set) – Management of Contamination SGH CLIN 357
- If patient becomes unwell during the procedure: inform the 4/F afterhours RMO, renal consultant on-call, AHSNM and/or Bed Manager. PACE criteria applies according to SESLHDPR/283 and the adult observation chart
- If patient remains well until the procedure is completed BUT peritoneal dialysis culture result revealed white cell count (WCC) greater than 100: inform the 4/F afterhours RMO, renal consultant-on-call, AHSNM and/or Bed Manager that the patient will need a longer stay admission.
- If patient remains well until procedure is completed and peritoneal dialysis culture WCC was less than 100: discharge patient and inform AHSNM and/or bed manager of discharge.
- Document procedure in the clinical notes and forward to the PD Unit. Notify the PD unit via voicemail X33770/33775

4.2.3 Management of blocked PD catheter

The PD catheter is considered the lifeline of patients on peritoneal dialysis. A poor flowing or blocked PD catheter must be assessed and investigated immediately before patients become unwell due to missed dialysis.

- When the patient contacts 4 South, staff must advise the patient to:
    - Stop dialysis and disconnect
    - Clamp the dialysis line, close the valve and cover the PD catheter with minicap
    - Present to 4 South immediately. (After 2200hrs or if main door is closed patient is to present to ED to gain access to 4South. Patients need to advise ED Clerical staff of their appointment, security will then be contacted to escort patients to the ward).
- The In-charge RN must inform the AHSNM, Bed Manager, after-hours 4/F RMO and renal consultant-on-call of the expected admission.
- When the patient presents to 4 South, the in-charge RN must initiate the admission process as per Management of poor/no flow PD catheter – Afterhours protocol.
- When the patient is admitted, the RN in charge or delegate performs the PD catheter flushing process as per Management of poor/no flow PD catheter protocol – Afterhours protocol.
- If patient becomes unwell during the procedure: inform the 4/F afterhours RMO, renal consultant on-call, AHSNM and/or Bed Manager. PACE criteria applies according to PD 208 and the adult observation chart
- If patient remains well until the procedure is completed BUT the PD catheter flushing is unsuccessful: inform the 4/F afterhours RMO, renal consultant-on-call, AHSNM and/or Bed Manager that the patient will need a longer stay admission.
- If patient remains well until procedure is completed and PD catheter flushing is successful: discharge patient and inform AHSNM and/or bed manager of discharge.
- Document procedure in the clinical notes and forward to the PD Unit. Notify the PD unit via voicemail X33770/33775

4.2.4 Other situations including peritonitis

PD patients presenting with other clinical issues including symptomatic peritonitis SHOULD NOT be transferred to 4S for initial treatment. These patients must present (with their patient card) to ED immediately for assessment and management and be triaged as per the Australasian Triage Scale (ATS).

4.2.5 Patients presenting unexpectedly to ED for contaminated/blocked PD catheters

PD patients with a contaminated or blocked PD catheter may present to ED prior to speaking to ward staff on 4 South. In this instance, the patient will need to be assessed by the triage nurse in order to confirm the patient has no other acute problems.. If the presenting problem is relating ONLY to contaminated or blocked PD catheter the ED nurse is to contact 4 south and patient can be directed to the ward (refer to section 4.2.2 or 4.2.3) following assigning an ATS category. If any other clinical symptoms are identified at triage please refer to section 4.2.4. Immediately notify the Bed manager or AHSNM for any potential patient transfer to 4S or other wards.

4.3 Contact Numbers

After hours: 4 South Ward: 33458/32253
Nursing staff 4 West PD Unit 33770/33775
PD Clinical Nurse Consultant (CNC): p1091

5. Keywords	Peritoneal dialysis, PD catheter, peritonitis, decontamination, CAPD, APD, After-hours
6. Functional Group	Renal Emergency
7. External References	Australasian College for Emergency Medicine (2006). Policy on The Australasian Triage Scale. *ACEM.* http://www.acem.org.au/media/policies_and_guidelines/P06_Aust_Triage_Sc ale_-_Nov_2000.pdf 2000 (reviewed 2006) Campbell, D. J., Johnson, D. W., Mudge, D. W., Gallagher, M. P., & Craig, J. C. (2014). Prevention of peritoneal dialysis-related infections. *Nephrology Dialysis Transplantation*. doi: 10.1093/ndt/gfu313 Cho, Y., & Johnson, D. W. (2014). Peritoneal Dialysis–Related Peritonitis: Towards Improving Evidence, Practices, and Outcomes. *American Journal of Kidney Diseases, 64*(2), 278-289. doi: http://dx.doi.org/10.1053/j.ajkd.2014.02.025 Li, P. K., Szeto, C.-C., Piraino, B., de Arteaga, J., Fan, S., Figueiredo, A. E., . . . Johnson, D. W. (2016). ISPD Peritonitis Recommendations: 2016 Update On Prevention And Treatment. *Peritoneal Dialysis International*. doi: 10.3747/pdi.2016.00078 Piraino, B., Bernardini, J., Brown, E., Figueiredo, A., Johnson, D. W., Lye, W.-C., . . . Szeto, C.-C. (2011). ISPD Position Statement on Reducing the Risks of Peritoneal Dialysis–Related Infections. *Peritoneal Dialysis International*, 31(6), 614-630. doi: 10.3747/pdi.2011.00057 Walker, A., Bannister, K., George, C., Mudge, D., Yehia, M., Lonergan, M. and Chow, J. (2014), KHA-CARI Guideline: Peritonitis treatment and prophylaxis. *Nephrology*, 19: 69–71. doi:10.1111/nep.12152
8. Consumer Advisory Group (CAG) approval of patient information brochure (or related material)	N/A
9. Implementation and Evaluation Plan Including education, training, clinical notes audit, knowledge evaluation audit etc	Inservices Publication on SGSHHS CIBR intranet page
10. Knowledge	Q1: What situations require the patient to present directly to ED?

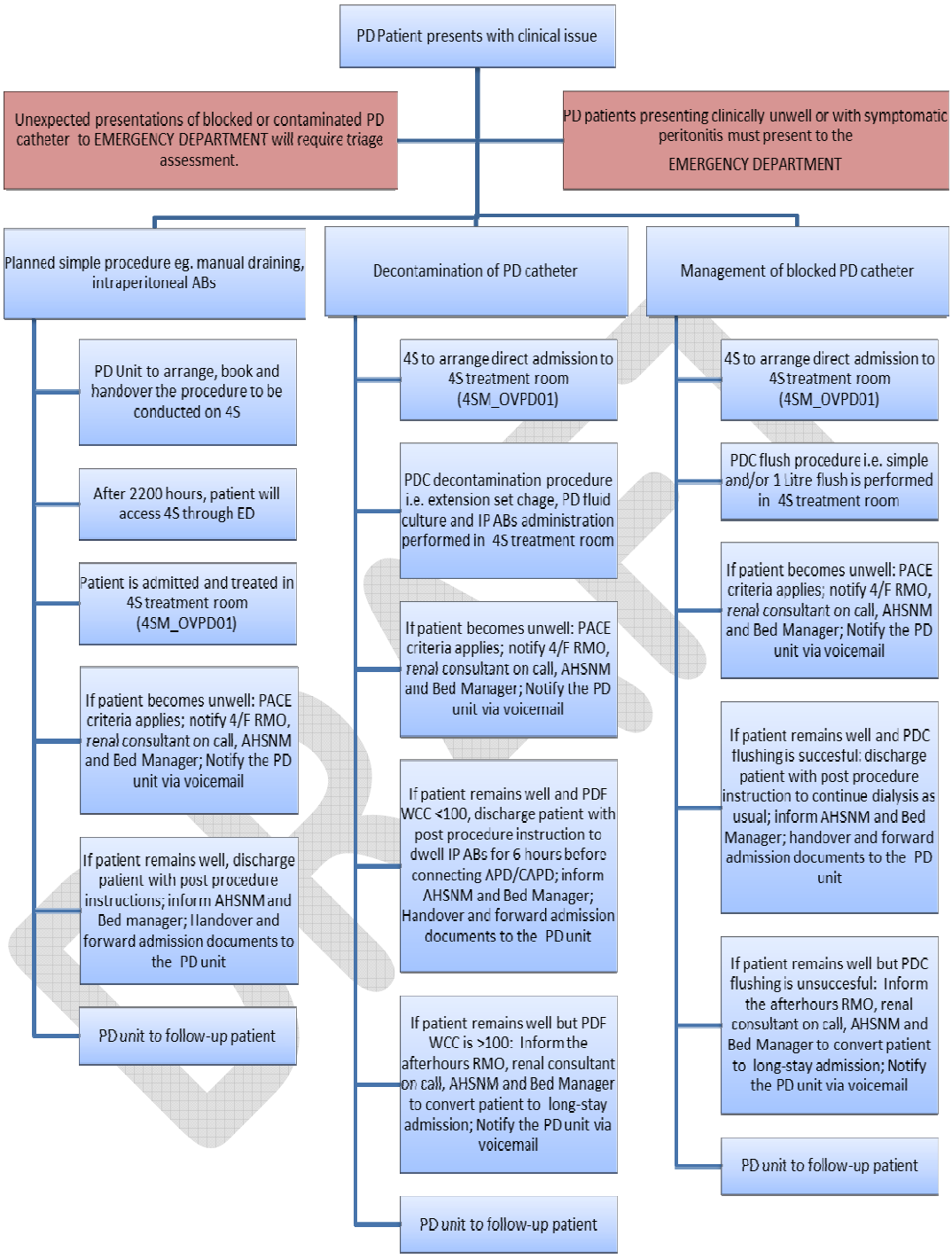
Evaluation	A: Unwell patients or patients with symptomatic peritonitis. Q2: What ward covers the management of the PD outpatient afterhours? A: Ward 4 South, X33458/32253 Q3: What situations require the patient to present directly to 4S? A: Patients requiring PD catheter decontamination, patients with suspected PDC blockage or patients booked for simple PD procedures.
11. Who is Responsible	Director of St George and Sutherland Renal Service Nurse Manager, Medicine
Approval for (Insert Clinical Business Rule Title)	*** N/A where appropriate**
***Specialty/Department Committee**	Committee title: Peritoneal Dialysis Committee Chairperson name/position: Franziska Pettit, Staff Specialist Signature Date
***Nurse Manager**	Name/position: Christine Day, Nurse Manager Medicine Signature Date
***Medical Head of Department**	Name /position: Mark Brown, Department Head Renal Services Signature Date
***Drug and Therapeutics Committee (SGH)**	Chairperson's Name: N/A Signature Date
***Drug and Therapeutics Committee (TSH)**	Chairperson's Name: N/A Signature Date
Executive Sponsor	Name/Position Signature Date
Contributors to CIBR development e.g. CNC, Medical Officers (names and position title/specialty)	Bernardine Romero, CNC Emergency Department Lauren Neuhaus, CNE Emergency Department Andrea Matisan, CNE 4South Shelley Tranter, CNC Renal Ray Andraos, Manager Security Mervat Dawoud, Manager Clinical Information Systems

Revision and Approval History

Date	Revision number	Author (Position)	Revision due
December 2013	0	Anna Claire Cuesta Peritoneal Dialysis CNC	December 2016
April 2017	1	Anna Claire Cuesta Peritoneal Dialysis CNC	April 2019

General Manager's Ratification		
Name Cath Whitehurst	Signature	Date: December 2013
Name Leisa Rathborne	Signature	Date:

St George Hospital - Peritoneal Dialysis: Afterhours management of outpatients



For further information related to the clinical management of these issues, see Clinical Business Rule SGSHHS CLIN238 or contact St George Hospital PD Unit X33770