

**WARD/UNIT DEPARTMENT TITLE  
Workplace Instruction (WPI)**

**PERITONEAL DIALYSIS (PD) – COMMENCEMENT AND MANAGEMENT OF PD PATIENTS  
AT HOME**

<p><b>Cross references</b></p>	<p><a href="#">Renal SGH WPI Peritoneal Dialysis Catheter post-insertion exit site care</a></p> <p><a href="#">SGH WPI 053 Peritoneal Dialysis – 1L Flush on a Peritoneal Dialysis Catheter</a></p> <p><a href="#">Renal SGH Clin364 PDC – Heparin lock</a></p> <p><a href="#">Renal SGH WPI PDC – Break-In Management For Patients Requiring Urgent PD with Newly Inserted PD Catheter</a></p> <p><a href="#">Renal SGH WPI Management of Patients Requiring Intermittent Peritoneal Dialysis</a></p> <p><a href="#">Renal SGH WPI 096 Dialysis Adequacy Tests (Creatinine Clearance and Kt/V)</a></p> <p><a href="#">Renal SGH WPI 097 Peritoneal Equilibration Test (PET)</a></p> <p><a href="#">SGH Renal Department; <a href="https://stgrenal.org.au/dialysis">https://stgrenal.org.au/dialysis</a></a></p> <p><a href="#">Renal SGH WPI 095 Transitioning from PD</a></p>
<p><b>1. Purpose</b></p>	<p>A workplace instruction (WPI) to describe the process for the care and management of new and existing peritoneal dialysis patients at home</p>

**Background**

Patients are fully trained and supported by the PD nurses to manage their own treatment at home for Continuous Ambulatory Peritoneal Dialysis (CAPD) and/or Automated Peritoneal Dialysis (APD).

PD nurse support begins at the time patient is enlisted on the PD pathway and ends after PD is ceased.

PD nurse support are provided during operating hours – Monday to Friday, 0730 to 1600. Patients can contact Baxter Healthcare toll free number 1800 063 093 for afterhours machine related issues and technical support and 4 South (x33458 or x33446) for afterhours clinical support.

**2. Process**

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- 2.1 Pre – PD support: patients on the PD pathway are scheduled for pre- PD assessment and education prior to PD catheter (PDC) insertion. Assessment result and action plan are forwarded to the nephrologist
- 2.2 PDC insertion is either surgical or percutaneous
1. Surgical PDC insertion is performed by the vascular surgeon in operating theatre in the public or private hospital under general anaesthesia
  2. Percutaneous PDC insertion is performed by the interventional nephrologist in a procedure room in the public hospital under local anaesthesia
- 2.3 Upon PDC insertion:
1. Review patient to assess PDC and exit site
  2. Flush PDC and change dressing as per [Renal SGH WPI PDC post-insertion exit site care](#) and [SGH WPI 053 1L Flush on a PDC](#) if necessary
  3. Heparin lock new PDC as per [Renal SGH Clin364 PDC – Heparin lock](#)
  4. Schedule patient for weekly PDC exit site dressing change, PDC flush and heparin locks as per [Renal SGH WPI PDC post-insertion exit site care](#), [SGH WPI 053 1L Flush on a PDC](#) and [Renal SGH Clin364 PDC – Heparin lock](#) for 3 weeks or more whilst resting PDC
- 2.4 For patients requiring urgent dialysis prior to PD training, renal team is to decide between haemodialysis or PD. If for urgent PD, manage PD as per [Renal SGH WPI PDC – Break-In Management For Patients Requiring Urgent PD with Newly Inserted PD Catheter](#) or [Renal SGH WPI Management of Patients Requiring Intermittent Peritoneal Dialysis](#)
- 2.5 PD training: schedule and tailor daily PD training appropriate to the patient’s learning needs once patient is stable and PDC is ready for dialysis:
1. APD – 8 am to 2 pm everyday Monday to Friday for 2 weeks or more
  2. CAPD – to come at 8 am then again at 2pm everyday Monday to Friday for 1 week or more
- Note: Book an interpreter as required
- 2.6 During PD training:
1. Attend to and document routine observations and weight (including blood sugar level for patients with diabetes)
  2. Request for and monitor results of blood tests i.e. FBC, UEC and etc as necessary
  3. For patients requiring top-up dialysis, arrange a hospital admission for inpatient IPD as per [Renal SGH WPI Management of Patients Requiring Intermittent Peritoneal Dialysis](#) or haemodialysis (HD) sessions in 4 West HD unit if patient was transferred from HD
  4. Establish PD prescription for training and for home
  5. Discuss the importance of suitable area to dialyse and to store dialysis equipment and supplies:
    - a) Dialysis area should have adequate space for PD equipment, close to a sink or basin for hand hygiene, well-ventilated, away from pets and clean.

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- b) Dialysis storage area should be away from direct sunlight & moisture, well-insulated, well-ventilated, away from pets and clean
6. Organise for the renal dietitian to educate and review patient during training
7. Provide patient the shopping list to set-up home for PD (Appendix A)
8. Discuss PD stocktake and organise delivery of PD supplies with Baxter Healthcare
9. Provide appropriate phone numbers and advise patient to call if any dialysis problems occur:
  - a) PD unit ph 9113 3770 for clinical and technical support during business hours Monday to Friday, 0730 – 1600 hours
  - b) 4 South (9113 3458 or 9113 3446) for afterhours clinical support
  - c) Baxter Healthcare toll free number 1800 063 093 for 24 hours a day, 7 days a week technical support and 1800 229 837 for stocktake and delivery during business hours Monday to Friday, 0800 – 1630 hours
10. Provide PD problem-solving guide and technical troubleshooting education  
For patients with diabetes:
  - a) Monitor blood sugar level (BSL) during training
  - b) Advise patients to consult and update their Endocrinologist
  - c) Refer to and organise a diabetes education centre appointment
  - d) Advise patients to continue to monitor their BSL at home and after PD training

2.7 Upon completion of training:

1. Educate and provide patient the PD prescription for home
2. Schedule an initial home visit to assist patient with home set-up for PD on the day or day after completion
3. Book a renal clinic appointment for nephrologist to review patient within 2 – 6 weeks
4. Provide a pathology request form for a blood tests (i.e. FBC, UEC, LFT, hepatitis serology and etc) prior to renal clinic appointment
5. Schedule peritoneal equilibration and dialysis adequacy tests in 4 to 8 weeks as per [Renal SGH WPI 096 Dialysis Adequacy Tests \(Creatinine Clearance and Kt/V\)](#) and [Renal SGH WPI 097 Peritoneal Equilibration Test \(PET\)](#)
6. Complete PD training summary form (Appendix B) and send to nephrologist

2.8 For data collection and outcome monitoring, new PD patients' clinical and dialysis details are entered into the: renal database (RISC), renal folder (RISCDOC), national registry (ANZDATA), PD spreadsheets (Patient Flow, Infection Rates, Biochem Main, PDC insertion, Consultant numbers, Postcodes, Admission Workbook and PD regimen) and ANZDATA Acceptance Main Worksheet

2.9 PD at home support:

1. Phone follow-up and home visits to continue as required including clinical and technical troubleshooting over the phone from PD nurses, Baxter or 4 South (afterhours)
2. Nephrologist and PD nurses to review patient in renal clinic every 8-12 weeks or as required
3. Provide pathology request forms and reminder for routine blood tests:

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- a) Quarterly CMP, FBC, UEC, LFT, Urate, Iron studies and PTH screening for all PD patients
  - b) Quarterly HbA1C for patients with diabetes
  - c) 6-monthly Troponin T and serology screening for all PD patients
  - d) 6-monthly fasting lipids screening for patients with history of cerebro-vascular, cardio-vascular and/or peripheral vascular disease.
4. Schedule repeat dialysis adequacy testing every year or as required as per [Renal SGH WPI 096 Dialysis Adequacy Tests \(Creatinine Clearance and Kt/V\)](#)
  5. Schedule PD catheter extension set change every year or as required as per [Renal SGH WPI 093 Changing PD Catheter Extension Set](#)
  6. Schedule peritoneal equilibration testing as needed or as requested by nephrologist as per [Renal SGH WPI 097 Peritoneal Equilibration Test \(PET\)](#)
  7. Renal dietitian to review patient every 6 months or as required
- 2.10 Prolonged PD at home ( $\geq 2$  years):  
Patients who have been on PD for 2 years or over are to be categorised, reviewed and supported as per PD risk assessment and management pathway and flowchart in [Renal SGH WPI 095 Transitioning from PD](#)

2.11 Appendix A

**Shopping List: To set-up your home for Peritoneal Dialysis**

**Ongoing purchase:**

1. Paper towel (preferably with dispenser or holder)
2. Antibacterial soap in a pump bottle (\*Do not refill pump bottle)
3. 1 bottle Methylated Spirit  
(Mix one part of Methylated Spirit to 4 parts of water in the spray bottle)

**One-off purchase:**

1. Spray bottle or container
2. 20 Litre white bucket with lid (for APD patients)
3. Trolley for bucket
4. Coat hook or hook stand (for CAPD patients)
5. Digital weigh scale
6. Work tray (plastic or stainless)
7. Appropriate table (glass-top, glossed or stainless table) to perform dialysis and to fit the APD machine

**3. Network file**

Renal, Peritoneal Dialysis

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	<p><a href="http://seslnweb/sgshhs/Business_Rules/Clinical/Peritoneal/default.asp">http://seslnweb/sgshhs/Business_Rules/Clinical/Peritoneal/default.asp</a> <a href="https://stgrenal.org.au/dialysis">https://stgrenal.org.au/dialysis</a></p>
<p><b>4. External references / further reading</b></p>	<p>Arramreddy, R., Zheng, S., Saxena, A. B., Liebman, S. E., &amp; Wong, L. (2014). Urgent-Start Peritoneal Dialysis: A Chance for a New Beginning. <i>Am J Kidney Dis</i>, 63(3), 390-395. doi: 10.1053/j.ajkd.2013.09.018</p> <p>Bento, C., Fuerbringer, R., Tabisz, A., &amp; Riella, M. (2016). Live or let die: when intermittent peritoneal dialysis is the only plausible solution for survival. <i>Minerva Urol Nefrol</i>, 68(1), 45-46.</p> <p>Blake, P. G., Bargman, J. M., Brimble, K. S., Davison, S. N., Hirsch, D., McCormick, B. B., . . . Tonelli, M. (2011). Clinical Practice Guidelines and Recommendations on Peritoneal Dialysis Adequacy 2011. <i>Perit Dial Int</i>, 31(2), 218-239. doi: 10.3747/pdi.2011.00026</p> <p>Figueiredo, A. E., Bernardini, J., Bowes, E., Hiramatsu, M., Price, V., Su, C., . . . Brunier, G. (2016). A Syllabus for Teaching Peritoneal Dialysis to Patients and Caregivers. <i>Peritoneal Dialysis International</i>, 36(6), 592-605. doi: 10.3747/pdi.2015.00277</p> <p>Ghaffari, A. (2012). Urgent-start peritoneal dialysis: a quality improvement report. <i>Am J Kidney Dis</i>, 59(3), 400-408. doi: 10.1053/j.ajkd.2011.08.034</p> <p>Groenhoff, C., Delgado, E., McClernon, M., Davis, A., Malone, L., Majirsky, J., &amp; Guest, S. (2014). Urgent-start peritoneal dialysis: nursing aspects. <i>Nephrology nursing journal : journal of the American Nephrology Nurses' Association</i>, 41(4), 347-352; quiz 353.</p> <p>Li, P. K.-T., 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. <i>Peritoneal Dialysis International</i>, 36(5), 481-508. doi: 10.3747/pdi.2016.00078</p> <p>Oei, E., &amp; Fan, S. (2015). Peritoneal Dialysis Adequacy in Elderly Patients. <i>Peritoneal Dialysis International</i>, 35(6), 635-639. doi: 10.3747/pdi.2014.00336</p> <p>Szeto, C.-C., Li, P. K.-T., Johnson, D. W., Bernardini, J., Dong, J., Figueiredo, A. E., . . . Brown, E. A. (2017). ISPD Catheter-Related Infection Recommendations: 2017 Update. <i>Peritoneal Dialysis International</i>, 37(2), 141-154. doi: 10.3747/pdi.2016.00120</p>

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	<p>Virga, G., La Milia, V., Cancarini, G., &amp; Sandrini, M. (2013). Dialysis adequacy in peritoneal dialysis. <i>J Nephrol</i>, 26 Suppl 21, 96-119. doi: 10.5301/jn.2013.11636</p> <p>Wang, A. Y. M., Brimble, K. S., Brunier, G., Holt, S. G., Jha, V., Johnson, D. W., . . . Pecoits-Filho, R. (2015). ISPD Cardiovascular and Metabolic Guidelines in Adult Peritoneal Dialysis Patients Part I – Assessment and Management of Various Cardiovascular Risk Factors. <i>Peritoneal Dialysis International</i>, 35(4), 379-387. doi: 10.3747/pdi.2014.00279</p> <p>Wang, A. Y. M., Brimble, K. S., Brunier, G., Holt, S. G., Jha, V., Johnson, D. W., . . . Pecoits-Filho, R. (2015). ISPD Cardiovascular and Metabolic Guidelines in Adult Peritoneal Dialysis Patients Part II – Management of Various Cardiovascular Complications. <i>Peritoneal Dialysis International</i>, 35(4), 388-396. doi: 10.3747/pdi.2014.00278</p> <p>Woodrow, G., &amp; Davies, S. (2011). Renal Association Clinical Practice Guideline on peritoneal dialysis. <i>Nephron Clin Pract</i>, 118 Suppl 1, c287-310. doi: 10.1159/000328073</p> <p>Xu, Q., Xu, F., Fan, L., Xiong, L., Li, H., Cao, S., . . . Mao, H. (2014). Serum Potassium Levels and Its Variability in Incident Peritoneal Dialysis Patients: Associations with Mortality. <i>PLoS ONE</i>, 9(1), e86750. doi: 10.1371/journal.pone.0086750</p>
<b>5. Specialty/department committee approval</b>	Peritoneal Dialysis Committee
<b>6. Department head approval</b>	Mark Brown or Franziska Pettit, Department Head Renal Services
<b>7. Executive sponsor approval – Nurse Manager</b>	Christine Day, Nurse Manager Medicine

**Revision and Approval History**

Date published	Revision number	Author (Position)	Date revision due
June 2017	1	Anna Claire Cuesta (PD CNC)	June 2020

WPI Criteria	Yes	No
Contains ward/unit/department specific instructions only	Y	
Description of process is straight forward and without variables. <b>NOT a WPI</b> if dependent on various decision making pathways <b>e.g.</b> if something is A do B and if C do D	Y	

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Process is free from complex clinical decision making	Y	
Process is free from medications	Y	
Process is free from high risk invasive procedures	Y	
Document will be located on the ward/unit/department dedicated intranet page	Y	
Document will be listed in a local register by custodian responsible for facilitating WPI review every 3 years	Y	
Department head will approve the document and nursing co-director or clinical group manager will be the executive sponsor	Y	
<p>If <b>NO</b> to any of the criteria</p> <p>↓</p> <p><b>NOT a WPI</b> – progress to clinical business rule (CIBR) development</p>		