



Republic of the Philippines

# PHILIPPINE HEALTH INSURANCE CORPORATION

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TO

ALL ACCREDITED HEALTH CARE PROVIDERS,

PHILHEALTH MEMBERS, PHILHEALTH OFFICES (HEAD OFFICE AND REGIONAL OFFICES) AND ALL OTHERS

CONCERNED

SUBJECT

Quality Standards on Maintenance Hemodialysis Procedure as

Reference of the Corporation

#### I. RATIONALE

The Universal Health Care Act (Republic Act No. 11223) identifies quality of care as one of the major goals to be achieved. Quality is also stipulated in the revised Implementing Rules and Regulations (IRR) of National Health Insurance Act of 2013 (Republic Act No. 10606) wherein quality assurance standards shall be used as reference in ensuring quality of health care services. With this mandate, the Corporation provides quality standards of care for specific conditions that is in accordance with evidence-based information and opinion from recognized clinical experts in the field. Specifically Hemodialysis Procedure, which is the top procedure in claims reimbursement. <sup>1</sup>

Recently, the Corporation adjusted the HD benefit package in terms of benefit coverage and financial protection among Chronic Kidney Disease (CKD) 5 patients undergoing hemodialysis. Thus, there is a recognized need for a quality policy to ensure the appropriate performance of hemodialysis relative to claims.

The policy contained herein are based on consultations with the Philippine Society of Nephrologists (PSN) and the Philippine College of Physicians (PCP) including the Philippine Alliance Patient Organization (PAPO). Further, the policy recommendations were approved by the PhilHealth Quality Assurance Committee (QAC) as reference in ensuring quality of care.

#### II. OBJECTIVES

This PhilHealth Circular aims to establish the policy in ensuring quality in the performance of hemodialysis by PhilHealth-accredited health care providers.

https://www.philhealth.gov.ph/about\_us/statsncharts/SNC\_2023\_20240306.pdf





#### III. SCOPE

This PhilHealth Circular covers the Quality Standards on Maintenance Hemodialysis Procedure.

This policy shall serve as reference for all accredited health care providers (HCPs), members, and PhilHealth Regional Offices (PROs) in ensuring quality of care relative to hemodialysis claims.

# IV. DEFINITION OF TERMS

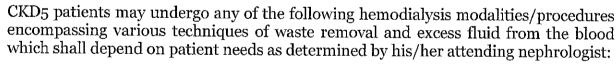
- A. Chronic Kidney Disease (CKD) Stage 5 or End Stage Kidney Disease a severe illness with poor life expectancy if untreated. It is the complete or almost complete failure of the kidneys to function and may require kidney replacement therapy to improve outcome.<sup>2</sup>
- **B. Hemodialysis (HD)-** a general for a blood-based medical procedure of removing excess fluid and solutes or commonly known as waste and toxic products from the blood. It can also correct electrolyte imbalances that partially takes the function of the failing kidney. This is accomplished using a synthetic membrane or dialyzer, also called an "artificial kidney" and the use of a processed dialysate or ultrapure fluids.<sup>3</sup>

#### V. POLICY STATEMENTS

A. Indications in Performing Hemodialysis

Hemodialysis, a specialized medical procedure is performed for patients diagnosed with clinical conditions of acute complexity and chronicity usually as maintenance procedure for Chronic Kidney Disease (CKD) stage 5.

B. Modalities of Hemodialysis Procedure



1. Conventional Hemodialysis works by the principle of diffusion which is the movement of solutes from a greater concentration to a lesser concentration. Small molecular weights solutes represented by creatinine, BUN, potassium, phosphorus etc., are removed from an area of high concentration (i.e. blood side) to a lesser concentration (dialysate side). Treatment is usually 4 hours. Duration can be adjusted from 5 to 12 hours (extended dialysis or slow efficient dialysis or SLED) based patient's hemodynamic status or ability to tolerate large solute or fluid removal.



<sup>&</sup>lt;sup>2</sup> Philippine Society of Nephrology (PSN) Position on the Quality Policy on Hemodialysis Procedure dated August 5, 2024

<sup>&</sup>lt;sup>3</sup> Philippine Society of Nephrology (PSN) Position on the Quality Policy on Hemodialysis Procedure dated August 5, 2024

- 2. Hemofiltration works on principle of convection. With the use of a replacement or substitution fluid, middle to large molecular weight substances are moved from blood side to dialysate side. This removes substances that are not otherwise removed by conventional hemodialysis including inflammatory markers and beta 2 microglobulin responsible for chronic inflammation and accelerated aging among CKD 5 patients.
- 3. Hemodiafiltration (HDF) combines Conventional Hemodialysis and Hemofiltration which results to a more effective solute clearance across varied molecular weight substances. In the latest randomized trial (CONVINCE Trial), patients on hemodiafiltration showed better survival rate compared to conventional hemodialysis. It is the best treatment option for a selected group of patients or medical conditions as recommended by the attending nephrologist with informed consent from the patient.
- 4. Hemoperfusion or Hemadsorption is not a form of kidney replacement therapy. It uses an additional special filter added in series to either HD or HDF dialyzer where blood passing through the filter removes the highest molecular weight substances such as inflammatory mediators like Interleukin 6 (IL-6) (COVID-19 and Sepsis), ammonia and bilirubin (liver failure), or toxins (poisoning). It complements convection and diffusion (the main modalities of solute removal). This is a treatment option for a selected group of patients on the recommendation of the Attending Nephrologist with the informed consent of the patient.

## C. Emergency Hemodialysis Procedure

- 1. A non-scheduled dialysis procedure that requires immediate treatment for a life-threatening condition or acute complications of CKD stage 5.
- 2. The life-threatening conditions that needs to be addressed includes but not limited to the following:
  - a. Volume Overload (e.g. heart congestion, lung congestion)
  - b. Symptomatic and Intractable Hyperkalemia (high levels of potassium)
  - c. Drug Toxicity
  - d. Uremia

# D. Diagnostics

The minimum laboratory or diagnostic tests expected are any of the following as prescribed by the attending nephrologist:

- 1. Complete Blood Count with Platelet (CBC w/PLT)
- 2. Pre and Post Dialysis Blood Urea Nitrogen (BUN) to compute for the adequacy of dialysis
- 3. Serum Creatinine Level
- 4. Inorganic Phosphorus
- 5. Liver Function Test (ALT/SGPT)
- 6. Serum Electrolytes (e.g. sodium, potassium, total calcium)
- 7. Albumin

8. Qualitative Hepatitis B surface antigen (HBsAg), Anti-Hepatitis C virus (HCV) and Anti Hepatitis B (HBs)

#### E. Medications

- 1. Anticoagulant is the only medication needed during HD session either in the form of unfractionated heparin or low molecular weight heparin (e.g. enoxaparin).
- 2. Patients are commonly prescribed with the following medications depending on patient's condition and whose dose and type of drug would depend on the evaluation of his/her attending nephrologist:

Medications	Dosage
Erythropoetin Stimulating Agent (Epoetin Alpha or Beta)	30 to 50 units/kg/dose
	Note: frequency depending on patient's condition
Iron (iron sucrose), Intravenous	100 to 200 mg per month as maintenance dose

Table 1: Prescribed Drugs/Medicines with Dosage

# F. Equipment and Supplies

- 1. The following are expected instruments and supplies may be utilized depending on the clinical condition of patient:
  - a. Hemodialysis Machine
  - b. Dialysis Chair/Patient Bed
  - c. Supplies (e.g. basic medicines)

#### 2. Dialyzer

- a. The type of dialyzer used may vary depending on the patient's clinical condition and attending nephrologist's evaluation. The type of dialyzer can be any of the following:
  - a.1. Low Flux dialyzer
  - a.2. High Flux dialyzer
- b. Reusing of dialyzer can be adapted in a dialysis center as long as an established reuse protocol is in place and the evaluation of reused dialyzer fulfills total cell volume (TCV) of at least 80%.

# G. Appropriate Health Facilities

1. Hemodialysis Center (HDC) can be located in any of the following DOH-licensed and PhilHealth-accredited facilities:



- a. Hospital; or
- b. Free Standing Dialysis Clinic (FSDC)

## H. Hemodialysis Sessions

- 1. The number of HD sessions varies per individual patient depending on patient's condition and evaluation of his/her attending nephrologist. This includes but not limited to the following:
  - a. Difficult Vascular Access
  - b. Other Medical Conditions/Comorbidities (e.g. heart failure, liver failure, cancer patient, pregnancy and malnutrition)
- 2. Intensive Hemodialysis Treatment is described as when it is done more than the usual treatment hours (i.e. more than 8-12 hours a week) or frequency (i.e. more than 3 days a week) to address symptoms or medical conditions of a dialysis patient.
- 3. Intensive HD is appropriate for patients with end renal disease who have any condition requiring more clearance and ultrafiltration which may include, but not limited, to the following conditions:
  - a. Volume or Fluid Overload
  - b. Left Ventricle Dysfunction/Decompensated Heart Failure
  - c. Uremic Pericarditis
  - d. Uncontrollable Hypertension
  - e. Severe Anemia
  - f. Malnutrition
  - g. Uremic Osteodystrophy
  - h. Pregnancy
- 4. The provider should properly document in the patients' HD record (or any equivalent) the condition of the patient that would require or warrant intensive hemodialysis treatment session as proof to support prescription of daily hemodialysis.
- 5. Shortening or Pre-Termination of hemodialysis session from the usual four-hour session may be due to patient conditions arising during the treatment session such as the following: cardiac arrest, hypotension, severe chest pain and back pain, decrease oxygen saturation or desaturation (hypoxemia) requiring invasive oxygen support, sudden severe difficulty of breathing, severe nausea and vomiting, severe headache, sudden deterioration of sensorium unresponsive to conservative management, sudden disruptive behavior, severe disequilibrium, severe dialyzer reaction, sudden severe visual and hearing loss, arrhythmia (irregular heartbeat), cardiac tamponade, intracranial bleeding, seizures, hemolysis (breakdown of red blood cell), and air embolism (blood vessel blockage).
- 6. Length of hemodialysis session is dependent on patient's condition and dialysis prescription.



# I. Location of Hemodialysis Treatment

- 1. Most patients undergo their maintenance hemodialysis session seen in an outpatient clinic. However, if the patient requires admission, the length of hospital stay is influenced by the following internal and external factors:
  - a. Vascular Access Problem
  - b. Cardiac Complications
  - c. Anemia Status
  - d. Comorbidities Conditions (e.g. diabetes mellitus, hypertension, organ failure)

# J. Reporting and Documentation of Hemodialysis Treatment

- 1. A clear and accurate documentation in the provision of healthcare is a professional and legal requirement of medical practice. Proper documentation is essential in HD management and improves patient safety.
- 2. At the start of dialysis, the health care team should record the initial assessment of the physician as well as the monitoring of the monthly laboratories and home medications.
- 3. The performance of hemodialysis requires regular and thorough documentation of any assessments made and care provided, changes in the condition of the patient, and any other relevant information. The condition of the patient should be adequately described based on the following:
  - a. The healthcare team document the patient demographics, review hemodialysis adequacy and procedure.
  - b. Recording of the initial and final weight, BP of the HD patient including the number of hours of dialysis.

# K. Reporting of Hemodialysis

- 1. A clear and accurate documentation in the provision of healthcare is a professional and legal requirement of medical practice. Proper documentation is essential in HD management and improves patient safety.
- 2. The performance of hemodialysis requires regular and thorough documentation of any assessments made and care provided, changes in the condition of the patient, and any other relevant information. The condition of the patient should be adequately described based on the following:
  - a. The healthcare team document the patient demographics, review hemodialysis adequacy and procedure.
  - b. Recording of the initial and final weight, BP of the HD patient including the number of hours of dialysis.
  - c. The team should record the initial assessment of the physician, also the treatment during the start of dialysis, including the monitoring of the monthly laboratories and home medications.



# L. Monitoring and Evaluation

- 1. The healthcare provider shall be bound by the provisions of the Performance Commitment and subject to the rules on monitoring and evaluation of performance as provided in PhilHealth Circular No. 2018-0019 Health Care Provider Performance Assessment (HCP-PAS) Revision 2.
- 2. Standards of Care issued by authorized agencies/organizations shall be regularly monitored. As deemed necessary, a revision of the policy statements shall be made.

### VI. PENALTY CLAUSE

Any violation of this PhilHealth Circular shall be dealt with and penalized in accordance with pertinent provisions of Republic Act. No. 11223 and Republic Act No. 10606, and their respective Implementing Rules and Regulations.

# VII. DATE OF EFFECTIVITY

This PhilHealth Circular shall take effect fifteen (15) days after its publication in the Official Gazette or in any newspaper of general circulation. Three (3) copies shall be forwarded thereafter to the Office of the National Administrative Register (ONAR) at the University of the Philippines Law Center.

EMMANUEL R. LEDESMA, JR
President and Chief Executive Officer

Date signed: 11 25 2024

