MEDICATION COVERAGE POLICY

PHARMACY AND THERAPEUTICS ADVISORY COMMITTEE

Health Plan of San Joaquin

POLICY:	Complications Secondary to Chronic Kidney Disease	**P&T DATE:**	12/14/2017
CLASS:	Renal Disease/Genitourinary Disorders	**REVIEW HISTORY** (MONTH/YEAR)	5/10, 12/16
LOB:	Medi-Cal		

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the HPSJ Pharmacy and Therapeutic Advisory Committee.

OVERVIEW

Chronic kidney disease (CKD) is a public health problem with an overall prevalence of 14% in the United States.[1] It is associated with poor prognosis and high healthcare costs and may lead to complications that result in higher hospitalizations, morbidity, and mortality rates. Disorders of renal tubular reabsorption and secretion can cause electrolyte disturbances, which are markers of kidney damage. These include hyperphosphatemia, hyperkalemia, hypernatremia, hyponatremia, and hypocalcemia. Consequently, hyperphosphatemia and vitamin D deficiency/hypocalcemia may lead to secondary hyperparathyroidism. Electrolyte imbalances in the body can be detrimental and cause serious complications if untreated; therefore, they must be managed accordingly to improve health outcomes. The purpose of this coverage policy is to review the coverage criteria of HPSJ's formulary agents available to treat electrolyte disorders secondary to CKD *(Table 1)*.

TABLE 1: Oral Electrolyte Disorder Agents Formulary Positioning: *(Current as of 12/2017)*

Therapeutic Class	Generic Name (Brand Name)	Available Strengths	Formulary Limits	Average Cost* per 30 days	Notes
HYPERPHOSPHATEMIA					
Phosphate Binders	**Calcium Acetate (Phoslo, Calphron, Eliphos, Phoslyra)**	Tablet: 667 mg	--	$97.81	Calcium Acetate capsules/gelcaps are reserved for documented intolerance to tablets.
		Capsule: 667 mg	PA		
		Oral Solution: 667mg/5mL	NF		
	Sevelamer Carbonate (Renvela)	Tablet: 800 mg	PA	$1,013.48	Second line after Phoslo (Calcium Acetate), unless on dialysis, corrected serum calcium > 10.2 mg/dl, or evidence of soft tissue calcification. Powder packets are reserved for a documented inability to swallow Sevelamer tablets.
		Powder packet: 0.8 g, 2.4 g	PA	$1,552.33	
	Sevelamer Hydrochloride (Renagel)	Tablet: 400 mg, 800 mg	PA	$1,699.87	Reserved for treatment failure or have documented intolerance to Renvela (Sevelamer Carbonate).
	Lanthanum Carbonate (Fosrenol)	Chewable tablet: 500 mg, 750 mg 1000 mg	PA, QL	$2,730.86	Third line therapy for patients with treatment failure of Calcium Acetate and Sevelamer. Fosrenol 500 mg and 750 mg tablets are limited to 3 tablets per day of each strength.
	Ferric Citrate (Auryxia)	Tablet: 210 mg	NF	$1,201.62	
	Sucroferric Oxyhydroxide (Velphoro)	Tablet: 500 mg	NF	$1,706.87	

Therapeutic Class	Generic Name (Brand Name)	Available Strengths	Formulary Limits	Average Cost per 30 days	Notes
HYPERPARATHYROIDISM					
Vitamin D Analogs	**Calcitriol (Calcijex, Rocaltrol)**	Capsule: 0.25 mcg 0.5 mcg Oral Solution: 1 mcg/mL	--	$13.12	Calcitriol 0.5mcg capsules are NON-FORMULARY.
	Paricalcitol (Zemplar)	Capsule: 1 mcg, 2 mcg, 4 mcg	PA	$228.93	Reserved for patients who have failed Calcitriol.
	Doxercalciferol (Hectorol)	Capsule: 0.5 mcg, 1 mcg, 2.5 mcg	NF	--	
Calcimimetics	**Cinacalcet (Sensipar)**	Tablet: 30 mg, 60 mg, 90 mg	PA, QL, SP	30 mg: $837.55 60 mg: $1,601.76	Step therapy to patients with secondary hyperparathyroidism with BiPTH > 200 pg/ml despite compliant use of phosphate binders or with CKD-5D. Sensipar 30 mg and 60 mg tablets are limited to two tablets per day of each strength.
HYPERKALEMIA					
Cation-Exchange Resins	**Sodium Polystyrene Sulfonate (Kayexalate, Kalexate, Kionex)**	Oral suspension: 15 g/60 mL	--	$269.97	
		Oral powder	PA	$299.50	For hyperkalemia in patients with vomiting not successfully treated by oral anti-nausea medications, or have upper GI problems.
		Rectal enema: 30 g/120 mL		--	
	Patiromer (Veltassa)	Powder packet: 8.4 g, 16.8 g, 25.2 g	PA, QL	$680.15	For hyperkalemia in patients at risk for colonic necrosis, hypernatremia, or have heart failure. Limited to 1 packet per day per strength.
HYPONATREMIA					
ADH Receptor Antagonists	**Tolvaptan (Samsca)**	Tablet: 15 mg, 30 mg	NF	--	

PA = Prior Authorization; QL = Quantity limit; SP = Specialty Pharmacy; NF = Non-Formulary
*Based on standard rates and standard dosing

EVALUATION CRITERIA FOR APPROVAL/EXCEPTION CONSIDERATION

Below are the coverage criteria and required information for each agent. These coverage criteria have been reviewed and approved by the HPSJ Pharmacy & Therapeutics (P&T) Advisory Committee. For conditions not covered under this Coverage Policy, HPSJ will make the determination based on Medical Necessity as described in HPSJ Medical Review Guidelines (UM06).

Vitamin D Analogs
Calcitriol (Calcijex, Rocaltrol); Paricalcitol (Zemplar)

Calcitriol 0.25mcg capsules (Calcijex, Rocaltrol)

- ❒ **Coverage Criteria:** N/A
- ❒ **Limits:** None
- ❒ **Required Information for Approval:**
- ❒ **Other notes:**
  - Calcitriol 0.5mcg capsules are non-formulary.

Paracalcitol (Zemplar)

- ❒ **Coverage Criteria:** Reserved for patients who have failed Calcitriol.

- ❒ **Limits:** None
- ❒ **Required Information for Approval:** Medication fill history showing patient has tried Calcitriol at any point.
- ❒ **Other notes:** None

Calcimimetics
Cinacalcet (Sensipar)

- ❒ **Coverage Criteria:** Reserved for patients with secondary hyperparathyroidism with BiPTH > 200 pg/ml despite compliant use of phosphate binders or with CKD-5D.
- ❒ **Limits:** PA required.
- ❒ **Required Information for Approval:** Medication fill history showing continuous fills of phosphate binders OR CKD-5D AND clinic notes or laboratory data showing patient has BiPTH > 200 pg/mL.
- ❒ **Other notes:**
  - Restricted to specialty pharmacy.
  - Sensipar 30 mg tablets are limited to 2 tablets per day.
  - Sensipar 60 mg tablets are limited to 2 tablets per day.
  - Parsabiv (Etelcalcetide) is non-formulary.

Phosphate Binders
Calcium Acetate (Phoslo, Phoslyra, Calphron, Eliphos); Sevelamer Carbonate (Renvela); Sevelamer HCl (Renagel); Lanthanum Carbonate (Fosrenol)

Calcium Acetate (Phoslo, Phoslyra, Calphron, Eliphos)

- ❒ **Coverage Criteria:**
  - Calcium Acetate Capsules/Gelcaps: Reserved for treatment failure to calcium acetate tablets and have documented inability to swallow tablets.
- ❒ **Limits:** PA required for Calcium Acetate Capsules/Gelcaps.
- ❒ **Required Information for Approval:** N/A
- ❒ **Other Notes:**
  - First-line treatment for hyperphosphatemia.
  - Concurrent use of Vitamin D helps with absorption of calcium.
  - Phoslyra is non-formulary.

Sevelamer Carbonate (Renvela), Sevelamer HCl (Renagel)

- ❒ **Coverage Criteria:**
  - **Sevelamer Carbonate Tablets:** Second line treatment for hyperphosphatemia after Calcium Acetate, unless on dialysis, corrected serum calcium > 10.2 mg/dl, or evidence of soft tissue calcification**.**
  - **Sevelamer Packets:** Must have documented inability to swallow Sevelamer Tablets.
  - **Renagel tablets:** Reserved for treatment failure or have documented intolerance to Renvela (Sevelamer Carbonate).
- ❒ **Limits:** PA required.
- ❒ **Required Information for Approval:**
  - **Sevelamer Carbonate Tablets:** Fill history of Calcium Acetate OR one of the following: on dialysis, corrected serum calcium > 10.2 mg/dl, or evidence of soft tissue calcification**.**
  - **Sevelamer Packets:** Inability to swallow Sevelamer Tablets.
  - **Renagel tablets:** Fill history of Sevelamer Carbonate or documented intolerance to Sevelamer Carbonate.
- ❒ **Other Notes:** None

Lanthanum Carbonate (Fosrenol)

- ❒ **Coverage Criteria:** Third line therapy for patients with treatment failure of Calcium Acetate and Sevelamer.
- ❒ **Limits:** PA required.
- ❒ **Required Information for Approval:** Medication fill history showing patient has tried Calcium Acetate and Sevelamer in the past.
- ❒ **Other Notes:**
  - Fosrenol 500mg tablets are limited to 3 tablets per day.
  - Fosrenol 750mg tablets are limited to 3 tablets per day.

Cation-Exchange Resins
Sodium Polystyrene Sulfonate (Kayexalate, Kalexate, Kionex); Patiromer (Veltassa)

Sodium Polystyrene Sulfonate (Kayexalate, Kalexate, Kionex)

- ❒ **Coverage Criteria:**
  - SPS Solution: None
  - SPS Rectal Enemas: Reserved for patients with vomiting not successfully treated by oral anti-nausea medications, or have upper GI problems, including paralytic ileus.
- ❒ **Limits:**
  - SPS Solution: None
  - SPS Rectal Enemas: PA required.
- ❒ **Required Information for Approval:** For approval of rectal enemas, documentation of past anti-nausea medications tried and/or history of upper GI problems.
- ❒ **Other Notes:** None

Patiromer (Veltassa)

- ❒ **Coverage Criteria:** Reserved for patients with Potassium >5.5 mEq/L AND one of the following: at risk of colonic necrosis (impaction, chronic constipation, inflammatory bowel disease, ischemic colitis, vascular intestinal atherosclerosis, or bowel obstruction), OR Hypernatremia, OR Diagnosis of Heart Failure.
- ❒ **Limits:** Limited to 1 packet per day per strength.
- ❒ **Required Information for Approval:** Labs showing potassium (K^+) > 5.5 mEq/L AND one of the following: Clinic notes documenting risk for colonic necrosis, labs documenting hypernatremia, or diagnosis of heart failure.
- ❒ **Other Notes:** None

Clinical Justification:

HYPERPHOSPHATEMIA AND HYPERPARATHYROIDISM

HPSJ's coverage policy for electrolyte disorders secondary to CKD, specifically hyperphosphatemia and hyperparathyroidism, is based on recommendations by the National Kidney Foundation (NKF) Kidney Disease Outcome and Quality Initiative (K/DOQI) and Kidney Disease, Improving Global Outcomes (KDIGO). Hyperphosphatemia and hyperparathyroidism are two common complications that arise from CKD, so it is crucial to treat them accordingly. Serum phosphorus, calcium, vitamin D, and parathyroid (PTH) concentrations are all correlated to each other, so treatment of disorders of each parameter requires evaluation of the other parameters. KDIGO guidelines recommend the evaluation and treatment for hyperphosphatemia, hypocalcemia, and vitamin D deficiency in patients with intact parathyroid (PTH) levels above the upper limit normal. The guidelines recommend calcium- and non-calcium-containing phosphate binders for the treatment of hyperphosphatemia, and vitamin D analogs and calcimimetics for the treatment of severe and progressive secondary hyperparathyroidism.

HYPERKALEMIA

The current treatments available to treat hyperkalemia include reduction of dietary potassium intake, modification of contributing medications, and use of cation-exchange resins [e.g., Sodium Polystyrene Sulfonate (SPS) and Patiromer]. SPS has historically been used in the treatment of hyperkalemia, but its use is limited by (1) questionable efficacy in reducing serum potassium levels, (2) poor gastrointestinal (GI) tolerability, and (3) rare occurrences of colonic necrosis. Newer agents, such as Patiromer, have shown adequate efficacy in clinical trials in lowering elevated potassium levels with better side effect profiles than SPS.

HYPONATREMIA

The American Academy of Family Physicians (AAFP) recommends treatment with 3% saline for severe symptomatic hyponatremia. Vaptans may also be used for hospitalized patients with clinically significant euvolemic and hypervolemic hyponatremia, but the AAFP recommends against their routine use. In the

United States, the only available vaptans are oral Tolvaptan (Samsca®) and intravenous Conivaptan (Vaprisol®).

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⌗ REVIEW & EDIT HISTORY

Document Changes	Reference	Date	P&T Chairman
Creation of Policy	Phosphate Binder 5-18-10.doc	05/2010	Allen Shek, PharmD
Update to Policy	HPSJ Coverage Policy – Renal – Complications Secondary to CKD 2016-12.docx	12/2016	Johnathan Yeh, PharmD
Update to Policy	HPSJ Coverage Policy – Renal – Complications Secondary to CKD 2017-12.docx	12/2017	Johnathan Yeh, PharmD

Note: All changes are approved by the HPSJ P&T Committee before incorporation into the utilization policy.