Kansas City

PAYMENT INTEGRITY COMPLIANCE
Parathyroid Hormone, Phosphorus, Calcium, and Magnesium Testing

POLICY INFORMATION			
Policy Number:	POL-PP-299 AHS – G2164 – Parathyroid Hormone, Phosphorus, Calcium, and Magnesium Testing	Original Effective Date:	07/01/2025
Version Number:	001	Revision Date:	
Policy Status:	Active	Next Revision Date:	07/01/2026

Blue KC reserves the right to review and revise these policies when necessary. When there is an update, we will publish the most current policy to: https://providers.bluekc.com/ContactUs/PaymentPolicies.

PROVIDER/ENTITY IMPACTED					
☒ PROFESSIONAL	☒ FACILITY	☐ DME	☐ AMBULATORY SURGERY	☒ LAB	☐ OTHER

LINES OF BUSINESS IMPACTED						
☒ COMMERCIAL	☒ BLUE MEDICARE ADVANTAGE	☒ ACA QHP[1]	☒ SMALL GROUP ACA	☒ JAA[2]	☒ FEP[3]	☐ DENTAL

[1] ACA QHP: Affordable Care Act Qualified Health Plan for Individual/Family [2] JAA: Joint Administrative Account [3] FEP: Federal Employee Program

Disclaimer

Blue KC has developed Provider Payment Policies to provide guidance on payment methodologies as they pertain to submitted claims. These policies are written following industry standard recommendations from sources such as:

- Current Procedural Terminology
- Centers for Medicare and Medicaid
- American Medical Association
- National Correct Coding Initiative
- Other professional organizations and societies

Coverage of any service is determined by date of service, a member's eligibility and benefit limits for the service or services rendered, all terms of the Provider Service Agreement, and other standards of coding rules and guidelines.
Final payment is subject to the application of claims adjudication and edits common to the industry.
For confirmation of which services may be eligible for coverage and description of when medical services are considered medically necessary, not medically necessary, or investigational, please contact:

- Blue KC Provider Hotline for Commercial lines of Business 816-395-3929
- Affordable Care Act Provider Hotline 866-859-3822
- Blue Medicare Advantage Provider Hotline 866-508-7140

In the event of a conflict between any policies, the Member's coverage document will gove

Description/Application

Parathyroid hormone (PTH), along with calcitriol and fibroblast growth factor 23 (FGF23), regulate calcium and phosphate homeostasis. PTH modulates the serum ionized calcium concentration by stimulating kidney reabsorption of calcium as well as increasing bone resorption within minutes of PTH secretion. Primary hyperparathyroidism presents itself with hypercalcemia and elevated PTH levels and is typically caused by parathyroid adenoma or hyperplasia. Secondary hyperparathyroidism is seen "in patients with kidney failure who have increased secretion of PTH [and] is related not only to gland hyperplasia and enlargement but also to reduced expression of CaSRs [calcium-sensing receptors] and, perhaps, its downstream signaling elements" (Mannstadt, 2023).

Calcium is an essential metal found in its biologically relevant divalent cation (Ca^{2+}) form in vivo. It is involved in many important biological processes, including cell signaling, signal transduction, and muscle contraction. Only 45% of the plasma calcium is in the ionized form (or 'free' form), which is the physiologically active form, while the rest is bound to albumin or complexed to anions, such as phosphate or citrate (Singh., 2023). Both total calcium and ionized calcium can be tested from a blood sample. Occasionally, calcium concentration is determined from a 24-hour urine sample (Fuleihan & Silverberg, 2023).

Phosphorus is typically used in its oxidized phosphate polyatomic ionic form (PO_4^{3-}) in vivo and is an important functional group in all classes of biomolecules—carbohydrates, proteins, lipids, and nucleic acids. The cytosol uses a phosphate-based buffer to maintain pH homeostasis. Plasma phosphorus can be in either organic or inorganic form, but the inorganic phosphates are regulated by hormones, primarily PTH. Typically, phosphate/phosphorus testing is performed on a blood sample but it can also be performed on a urine sample (Jason R Stubbs, 2024).

Magnesium, like calcium, in vivo is in its divalent cation (Mg^{2+}) form. It is involved in many enzymatic mechanisms as well as structural functions for both proteins and nucleic acids. Magnesium is required for maintenance of bone health as well as proper nerve conduction, muscle contraction, and energy production. Currently, magnesium is tested from a blood sample or less frequently from a 24-hour urine sample. Due to the large amounts of magnesium that is filtered and the degree of reabsorption and secretion in urine levels, "magnesium levels in the urine do not correlate with either the amount of magnesium ingested or the magnesium status in the body." (Workinger et al., 2018)

Policy

Application of coverage criteria is dependent upon an individual's benefit coverage at the time of the request.

Serum intact parathyroid (PTH) testing **may be reimbursed** in **any** of the following situations:

- To assess for possible hyperparathyroidism in individuals with hypercalcemia.
- To assess post-operative results of parathyroid surgery.
- As part of annual testing of an individual previously diagnosed with hyperparathyroidism.
- As part of an assessment of chronic kidney disease (CKD).
- As part of an assessment of osteoporosis.
- As part of a diagnosis and/or an assessment of cancer or cancer therapy.

For individuals suspected of having hypoparathyroidism, pseudohypoparathyroidism, or a related disorder, serum intact

parathyroid (PTH) testing (see Note 1) **may be reimbursed** in **any** of the following situations:

- In the initial assessment and diagnosis of the disorders listed in Note 1.
- To monitor disease and/or therapy.

Serum intact parathyroid (PTH) testing to screen for asymptomatic hyperparathyroidism **may not be reimbursed**
For individuals presenting for a wellness visit or a general exam without abnormal findings, the following tests **may not be reimbursed**

- Serum, blood, or fecal magnesium testing.
- Serum phosphorus or phosphate testing.
- Urine phosphorus or phosphate testing.
- Serum total calcium, serum ionized calcium, or urine calcium testing.
- Serum parathyroid hormone testing.

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of an individual's illness.

Testing serum for truncated parathyroid hormone metabolites (e.g., amino-terminal and carboxy-terminal fragments) **may not be reimbursed**

NOTES:

Note 1: Conditions of hypoparathyroidism, pseudohypoparathyroidism, and related disorders (Mantovani et al., 2018)

- Hypoparathyroidism
- Pseudohypoparathyroidism Type 1A (PHP1A)—due to maternal loss of function mutation at the *GNAS* coding sequence
- Pseudohypoparathyroidism Type 1B (PHP1B)—due to methylation defect at the *GNAS* coding sequence
- Pseudopseudohypoparathyroidism (PPHP)—due to paternal loss of function mutation at the *GNAS* coding sequence
- Progressive Osseous Heteroplasia (POH)—due to paternal loss of function mutation at the *GNAS* coding sequence
- Acrodysostosis (ACRDYS1)—due to mutation in *PRKAR1A*
- Acrodysostosis (ACRDYS2)—due to mutation in *PDE4D*

Coding

CPT	Code Description
86060	Antistreptolysin 0; titer
86063	Antistreptolysin 0; screen
86215	Deoxyribonuclease, antibody
86317	Immunoassay for infectious agent antibody, quantitative, not otherwise specified
86318	Immunoassay for infectious agent antibody(ies), qualitative or semiquantitative, single step-method (eg, reagent strip);
87040	Culture, bacterial; blood, aerobic, with isolation and presumptive identification of isolates (includes anaerobic culture, if appropriate)
87070	Culture, bacterial; any other source except urine, blood, or stool, aerobic, with isolation and presumptive

	identification of isolates
87071	Culture, bacterial; quantitative, aerobic with isolation and presumptive identification of isolates, any source except urine, blood, or stool
87077	Culture, bacterial; aerobic isolate, additional methods required for definitive identification, each isolate
87081	Culture, presumptive, pathogenic organisms, screening only;
87430	Infectious agent antigen detection by immunoassay technique, (eg, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; Streptococcus, group A
87650	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group A, direct probe technique
87651	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group A, amplified probe technique
87652	Infectious agent detection by nucleic acid (DNA or RNA); Streptococcus, group A, quantification
87797	Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; direct probe technique, each organism
87798	Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; amplified probe technique, each organism
87799	Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; quantification, each organism
87880	Infectious agent antigen detection by immunoassay with direct optical (ie, visual) observation; Streptococcus, group A

References and Resources

Avalon Medical Policy AHS – G2164 – Parathyroid Hormone, Phosphorus, Calcium, and Magnesium Testing

Related Documents

Policy Number	Policy Title
AHS-G2005	Vitamin D Testing

Revision History

Version	Date	Summary of Revisions
001	06/01/2025	Initial version