



Date: January 25, 2021
To: Chinook Regional Hospital (CRH): Nurse Educators, Physicians, Laboratory Staff
From: Clinical Biochemistry, South Sector, Alberta Precision Laboratories (APL)
Re: Ionized Calcium (iCa) measurement on CRH Inpatients

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Key Message:

- Ionized Calcium (iCa) measurement should be reserved for unstable or acutely ill patients, patients with kidney disease, those with abnormal total Calcium results, or in investigation of Parathyroid Hormone-related disease and is not required for routine monitoring.
- In the vast majority of patients, total Calcium levels provide sufficient information on Calcium status.

Why this is Important:

- Recently, the ordering of iCa on stable inpatients at CRH has increased significantly.
- iCa is measured on blood gas analyzers, which comes at a higher cost with greater labour requirements compared to total Calcium.
- The increased iCa test volume adds unnecessary workload to lab staff, preventing them from performing other routine duties.

Action Required:

- Ensure appropriate utilization of iCa measurement.
- Order total Calcium for routine monitoring of inpatients and reserve iCa for specific indications.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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