Decreased Blood Glucose
Hypoglycemia

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Proposal for New ICD-10-CM Code Expansion for Hypoglycemia Levels

What are we requesting?

- We seek to separately establish three ICD-10-CM codes to code documented hypoglycemia levels.
- We seek to utilize the established tabular notation to the current codes in chapters ICD-10-CM chapters 4 and 16: "Use additional code for hypoglycemia level, if applicable"

Why are we asking for these ICD-10-CM Codes?

Accurate measurement of the hypoglycemic population as it relates to care management and the use of technology.

Ability to conduct effective research, epidemiological studies, and clinical trials for all hypoglycemic patients with and without diabetes.

Accurate capture of resource utilization in hypoglycemic patients.

Current Coding of Hypoglycemia

There are ICD-10-CM tabular codes to report hypoglycemia within or associated with another disease state or hypoglycemia individually. Our request has no impact on current coding of patients with hypoglycemia or hypoglycemic disease states.

Decreased Blood Glucose / Hypoglycemia

Hypoglycemia is clinically defined as a blood sugar (glucose) level lower than the normal range; below 70 mg/dL, with clinically established signs and symptoms.

In 2017, The "Level System" was created to sub-classify hypoglycemia into three brackets. As the level increases, patient symptomology worsens and need for clinical intervention increases. The classification is a universal system, applying to *any* patient with documented hypoglycemia.

- Level 1
  - Blood glucose concentration <70 mg/dL (used as a clinical 'alert value').
- Level 2
  - Blood glucose concentration <54 mg/dL (threshold at which neuroglycopenic symptoms begin to occur).
- Level 3 hypoglycemia
  - Blood glucose levels concentration <54 (defined as a threatening event characterized by altered mental and/or physical functioning).

Clinical Background and Significance

Who Created the Level System?

The level system was created in 2017 under the International Hypoglycemia Study Group (IHSG) by leading experts from the following clinical groups and non-profit organizations:

- American Association of Clinical Endocrinology
- American Association of Diabetes Educators
- American Diabetes Association
- Endocrine Society
- Juvenile Diabetes Research Foundation (JDRF) International
- The Leona M. and Harry B. Helmsley Charitable Trust
- Pediatric Endocrine Society
- T1D Exchange

The new Level System was published in endocrine and diabetic journals and is used in the standards of care of the American Diabetes Association and the American Association of Clinical Endocrinology .

Why Was the Level System Created?

- Historically, and in some current practice, clinical hypoglycemia was/is documented with subjective terms such as mild, moderate, and severe.
- In 2017, the ‘level system’, created an objective classification system. The glucose levels translate from specific laboratory values to natural, whole numbers 1-3.
- The echelons are termed Level 1, Level 2, and Level 3.
- Physicians and clinical staff may still rely on the use of the terms mild, moderate, and severe; as the level system creates an objective patient state. Levels do not contradict or redefine documented terms.

Why Was the Level System Created? (continued)

As the hypoglycemia level system is universal in application to all patients, it allows for hypoglycemia to be objectively classified. Hypoglycemia largely occurs in type 1 diabetes and type 2 diabetes patients but hypoglycemia can also occur in patients without diabetes:

- Pancreatic carcinoma patients
- Benign insulinoma patients
- Post bariatric surgery patients
- Chemotherapy patients
- Neonates
- Occasionally hypoglycemia can be idiopathic in origin

Review of the Level System

Hypoglycemia Severity Levels Established by IHSG Blood Glucose	
Level	**Hypoglycemic criteria/description**
Level 1	Glucose level <70 mg/dL, blood glucose levels between 54 and 69 mg/dL
Level 2	Glucose <54 mg/dL (3.0 mmol/L) blood glucose levels 53 and under.
Level 3	A severe event characterized by altered mental and/or physical status requiring assistance. (No laboratory hypoglycemic threshold established)

Final Review of Requested ICD-10-CM Coding

- Hypoglycemia “level assignment” is uniquely separate to any physician determined diagnosis or symptomology.
- Level 1-3 may only be reported as documented by providers. Coders may not use laboratory findings to seek or report levels.
- If hypoglycemia levels change throughout admission and/or there are scenarios with multiple levels*:
  - Report Hypoglycemia level upon admission, if followed by decline and resolution, one code is assigned.
  - If hypoglycemia is erratic and worsening (higher) levels are reported/documented during stay, two separate codes should be assigned: One code for the hypoglycemic level on admission and a second code for the highest hypoglycemia level documented.

*Reference for multiple level code assignment: ICD-10-CM Official Guidelines for Coding and Reporting FY 2023 Page 56 of 118.

Support for ICD-10-CM code application from the Following Organizations

- American Diabetes Association (ADA)
- American Association of Clinical Endocrinology (AACE)
- Association of Diabetes Care & Education Specialists (ADCES)
- Juvenile Diabetes Research Foundation (JDRF)
- The Endocrine Society

References:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6608552/
https://diabetesjournals.org/care/article/40/12/1622/36909/Standardizing-Clinically-Meaningful-Outcome
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https://www.uspharmacist.com/article/addressing-hypoglycemic-emergencies
https://www.ihsgonline.com/tools-for-healthcare-providers-researchers/

Thank you!

- Requestor sincerely appreciates the guidance provided by NCHS for this proposal.
- Requestor appreciates the support from clinical associations for this proposal.

Questions?