Helping to achieve safe medication use

HYPOGLYCEMIA AWARENESS—A REMINDER TO “ASK ABOUT LOWS” EACH AND EVERY TIME

Submitted by: Paul Fina, PharmD, BCACP & Sandra Hedin, PharmD, BCACP (VHA Choosing Wisely Hypoglycemia Safety Initiative Task Force)

The number of Veterans with diabetes is substantial: approximately one in four Veterans treated by the VA has diabetes.1 Nearly one in three Veterans treated with insulin and/or a sulfonylurea are at increased risk for hypoglycemia due to also having at least one of the following risk factors: age ≥ 75, serum creatinine > 2.0mg/dL, dementia, or cognitive impairment.2 The VHA Choosing Wisely Hypoglycemia Safety Initiative (CW-HSI) combines informatics tools (CPRS template, CPRS clinical reminder, and online panel reports) with educational efforts to increase both the health care team and patient/caregiver awareness of hypoglycemia risks and ways to reduce that risk.

The CW-HSI tools identify patients who meet a specific set of criteria indicating high-risk for hypoglycemia, though the CPRS template may be used with any patient. Over 34,000 hypoglycemia screenings have been completed to date using the CW-HSI CPRS template. When questioned about low blood glucose, 22% of patients reported some type of hypoglycemic event in the recent past. Whether you are identifying patients via these tools or you are seeing any patient with diabetes, the first step to hypoglycemia prevention, which everyone on the health care team can assist with, is to ASK ABOUT LOWS!

Patients may not report hypoglycemia on their own. Therefore, it’s critical that we, as part of the health care team, ask the right questions to better identify who may need more evaluation.

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INFECTIONOUS DISEASES

FDA to evaluate potential risk of neural tube birth defects with HIV medicine dolutegravir (Juluca, Tivicay, Triumeq)

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Serious cases of neural tube birth defects involving the brain, spine, and spinal cord have been reported in babies born to women treated with the HIV integrase inhibitor, dolutegravir (Juluca, Tivicay, Triumeq). The highest risk for these defects occurred early in the first trimester and, to date, in the observational study in Botswana from which these effects were noted, there are no reported cases of babies born with neural tube defects to women starting dolutegravir later in pregnancy.

FDA recommends that providers should:
- Inform women of childbearing age about the potential risk of neural tube defects when a dolutegravir-containing regimen is used at the time of conception and early in pregnancy.
- Weigh the benefits and the risks of dolutegravir when deciding upon an antiretroviral regimen for women of childbearing age. Alternative antiretroviral regimens should be considered. Discuss the relative risks and benefits of appropriate alternative antiretroviral therapies.
- If the decision is made to use dolutegravir in a woman of childbearing age, the consistent use of effective birth control should be re-enforced at every visit.
- Perform pregnancy testing before initiating a dolutegravir-containing regimen in women of childbearing age to exclude pregnancy.

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<th>Instead of asking…</th>
<th>Try…</th>
<th>Why?</th>
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<tr>
<td>“Are you having any low blood sugars?”</td>
<td>“When do you check your blood sugars and what is the lowest number you have seen recently?”</td>
<td>This allows you to determine if the blood glucose readings being reported are pre-prandial vs. random and gives you specific numbers for evaluation. Despite education, many patients are still unable to define what a low blood sugar is.</td>
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<td>“Do you have any symptoms of low blood sugars?”</td>
<td>“Do you ever feel sweaty, shaky, or dizzy? What about feeling fatigued or just not your usual self?”</td>
<td>Not all patients have or know the ‘typical’ hypoglycemia symptoms, so it’s important to list some out so that they might be able to better identify what symptoms they should be reporting.</td>
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<td>“Do you have difficulties getting regular meals?”</td>
<td>“In the past several months, did you ever run out of food and were not able to access more food or have money to buy more food?”</td>
<td>This is a validated screening tool to assess for food insecurity issues. Positive identification should result in referral to dietitians or social workers. Missed meals/food insecurity is one of the top causes of severe hypoglycemia. Do not assume that a food insecure patient qualifies for Supplemental Nutrition Assistance Program (SNAP). The dietitian can provide guidance on budget friendly food options.</td>
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<td>“Do you take your medications as directed?”</td>
<td>“When and how do you take each of your diabetes medications every day?”</td>
<td>This allows the patient to verbalize how he/she takes the medication; also, you will be able to determine if the patient does any self-management of his medications or takes as directed. Lastly, this will help you identify if certain meds, which should be taken with meals, are in being taken correctly. Medication administration errors is one of the top causes of hypoglycemia.</td>
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Getting the most from our safety surveillance

THE VHA CHOOSING WISELY – HYPOGLYCEMIA SAFETY INITIATIVE (CW-HSI): INCREASING HYPOGLYCEMIA AWARENESS AND PROMOTING SHARED DECISION MAKING THROUGH EDUCATION AND INFORMATICS TOOLS

Submitted by: Sandra Hedin, PharmD & Samantha McClelland, PharmD (VHA Choosing Wisely Hypoglycemia Safety Initiative Task Force)

The American Board of Internal Medicine (ABIM) Choosing Wisely® campaign was initiated to “promote conversations between clinicians and patients by helping patients choose care that is supported by evidence, not duplicative of other tests or procedures already received, free from harm, and truly necessary.” The Veterans Health Administration (VHA) has embraced this initiative, establishing a Choosing Wisely Task Force. As its first area of focus, the Task Force chose to target glycemic overtreatment with an emphasis on hypoglycemia safety, establishing the VHA Choosing Wisely Hypoglycemia Safety Initiative (CW-HSI). This focus mirrors a concern first addressed by the Veterans Affairs/Department of Defense guidelines for Diabetes in 1997, and it is now recognized as a national health problem by the Department of Health and Human Services.

Approximately one in four Veterans receiving care in the VA has diabetes. Additionally, about 28% of these older Veterans are receiving insulin and many have concomitant conditions such as renal dysfunction and cognitive impairment, which are known risk factors for hypoglycemia. The CW-HSI oversees a voluntary program within VHA that includes education and informatics tools. Educational resources have been developed on the topics of hypoglycemia safety, shared decision making, individualizing A1c targets, medication safety, and food insufficiency. A suite of easy-to-use informatics tools that provide options for applying the messages of CW-HSI directly to patient care have also been created. The CW-HSI informatics tools aim to identify a specific, manageable patient cohort at high risk for hypoglycemia who may be overtreated [Figure 1].

Two methods developed by the CW-HSI are available to identify the patients in this cohort. One method is an EMR-based clinical alert that triggers for patients in the cohort at the point-of-care (e.g., when the patient comes in for a primary care appointment), prompting hypoglycemia screening within CPRS [Figure 2]. The second method for patient identification is the CW-HSI online panel reports, which include clinical information about patients in the high-risk cohort as well as results for patients who have been previously evaluated using the EMR template [Figure 3]. The online panel reports can be used proactively by care managers (e.g., clinical pharmacy specialists, certified diabetes educators) to find and contact patients, often by virtual modalities, such as a telephone call [Figure 3].

Figure 1: CW-HSI Informatics Tools High-Risk Cohort

![Figure 1: CW-HSI Informatics Tools High-Risk Cohort](image1)

Figure 2: CPRS Identification of Diabetes Hypoglycemia Screen

![Figure 2: CPRS Identification of Diabetes Hypoglycemia Screen](image2)

Figure 3: Online Panel Reports

![Figure 3: Online Panel Reports](image3)

(continued on page 4)
Regardless of the method used to identify patients, the EMR template can be used to assess patients and document the plan determined via shared decision making [Figure 4]. The EMR template was designed to be brief to allow easy incorporation into the patient visit and flexible for the conversation to be tailored based on the individual patient’s needs. The template provides a standard set of questions to assess the occurrence, frequency, and severity of hypoglycemia. The care plan decided upon through shared decision making between the provider and patient can also be documented. The EMR template supports data capture for summary reports, and it also allows both screening results and care plan information to be included in the online panel reports. To date, over 34,000 patients have been screened across the country using the EMR template, with 22% reporting hypoglycemia. These tools prompting the discussion about hypoglycemia represent a step toward more patient-centric, individualized diabetes care. Ultimately the hope is that these individualized, meaningful conversations about care will be applied to all diabetes management and that of other complex chronic conditions as well.

Additional Resources:
- Background information on the CW-HSI initiative may be found on the VA Pulse site titled “Choosing Wisely – Hypoglycemia Safety Initiative.”
- The online panel reports are available at https://spsites.cdw.va.gov/sites/QSV_CW/Pages/HSI.aspx
- Information on the CPRS tools can be found at https://spsites.cdw.va.gov/sites/QSV_CW/Pages/HSI_CPRSTools.aspx
- Clinical Diabetes Publication
Once a patient has been identified as being at risk for and/or experiencing hypoglycemia, developing an individualized action plan is the next step. Figure 1 outlines possible actions for these patients. It is important to identify all health care team members that can assist these patients. Roles for members of the health care team are described in Figure 2.

Additional resources for the health care team:
- VA Pulse: https://www.vapulse.net/community/choosing-wisely-at-the-va/hypoglycemia-safety-initiative

Additional resources for patients:
- https://www.prevention.va.gov/Talk_with_Your_VA_Provider_to_Avoid_Low_Blood_Sugar.asp

REFERENCES:

Figure 1: Risk stratification tool for hypoglycemia and action steps.

Figure 2: Health care team member roles in managing and preventing hypoglycemia in patients.