the Remedi Pulse

Remedi SeniorCare®

A CLINICAL AND REGULATORY UPDATE FROM REMEDI SENIORCARE

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# Survey Solutions

## with William Vaughan, BSN, RN
## VP of Education & Clinical Affairs

"Weighing" in on Scales and Surveyors

In a typical American household, it begins with Halloween candy that lingers for weeks after the kids finish trick or treating. Next comes the gluttony that is Thanksgiving dinner followed closely by the caloric onslaught during the weeks surrounding Christmas and New Year's. Weight gain during this period promotes the sale of bathroom scales, fuels ambitious resolutions, and keeps Jared, of Subway fame, gainfully employed. Ironically, most of us focus on losing weight during our adult lives, but that quickly shifts to maintaining or even gaining weight once we enter a nursing home.

For nursing home residents, the focus on weight is not limited to the holiday season. From the day of admission until discharge most residents are weighed regularly, typically each month but sometimes more often. Facilities spend considerable resources, both in personnel and equipment, in managing their weight programs. Surveyors are skilled at examining the process facilities use to evaluate weight change, and failures in this area can lead to significant deficiencies. Below, several concepts are discussed, which can limit negative outcomes for both the resident and facility, relating to the monitoring of weights.

• First and foremost, only weigh residents if doing so will impact their care in a meaningful way. Many facilities operate under the erroneous belief that federal nursing home regulations mandate weighing all residents -- they do not. While the MDS has an entry for weights and F 325

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Please do not hesitate to contact your Remedi consultant pharmacist or account manager if you have any questions or concerns.

# Sliding Scale Insulin Use in the Elderly

Prepared by Laura Cannon, R.Ph.,CGP, Clinical Consultant Pharmacist

The Beers Criteria is a list of potentially inappropriate medications developed by the American Geriatric Society derived from evidence-based recommendations. The target population of this criterion is the elderly defined as 65 years or older. The list does not indicate medications to be strictly avoided, but rather those with which one should carefully consider risk versus benefit of the medication. The last update of this list occurred in 2012 and one of the more notable additions to this list was sliding scale insulin. The recommendation is to avoid sliding scale insulin due to a higher risk of hypoglycemia without improvement in glucose control.

Diabetes Mellitus (DM) affects approximately one-third of elderly patients admitted to nursing home facilities. Insulin is commonly used in the elderly due to disease progression, decreased beta-cell function, and contraindications to oral antidiabetic agents. Beta-Cells are the cells in the body's pancreas that produce insulin. Sliding scale insulin regimens consist of rapid acting insulins , e.g., Novolog, Humalog, Apidra, with doses adjusted according to a scale based on preprandial glucose measures. Sliding scale is a reactive way of treating hyperglycemia after it has occurred rather than preventing it. Good evidence exists that sliding scale insulin is neither effective in meeting the body's insulin needs nor is it efficient in the long-term care setting. It leads to greater patient discomfort and increased nursing time because the resident's blood glucose levels are monitored more frequently than necessary and more insulin injections may be given. Sliding scale insulin is still commonly used in the elderly even though it increases the risk of hypoglycemia because it runs the risk of being administered without regard to meal intake. It also increases the risk of prolonged periods of hyperglycemia. Preventing hypoglycemia and severe hyperglycemia may help to prevent falls, infections, dehydration, and cognitive dysfunction.

The American Medical Directors Association's (AMDA) population-specific Diabetes Mellitus clinical practice guidelines encourage a patient-centered approach to DM management with an individualized plan of care. AMDA recommends that sliding scale regimens be converted to safer medications and insulin regimens. However, they state that sliding scale insulin can, in fact, be useful for new admissions or for newly diagnosed DM when a patient's insulin needs are not known, when there is a change of condition, and/or when new therapies, such as enteral feedings, are added. Sliding scale orders should be reevaluated within 1 week of initiation. Nursing home residents are often admitted from acute care settings with sliding scale orders. The goal for short-stay skilled residents should be overall glucose control and a simplification of the insulin regimen prior to discharge. Sliding scale regimens can be difficult to maintain and understand in the home setting and can lead to medication errors. The goal for long-term stay residents is to reduce hyperglycemia, avoid hypoglycemia, and improve quality of life. Simplified insulin regimens can save nursing time and reduce medication errors.

Basal Bolus Insulin is an effective regimen for blood glucose control. Basal bolus insulin regimens consist of a basal (long-acting insulin) and rapid-acting insulin with one or more meals. Basal insulin injections more closely match the natural physiology of the pancreas by providing a baseline level of insulin throughout the day which is similar to normal pancreatic action. Basal insulin reduces the incidence of hypoglycemic events compared to other insulins because basal insulin does not have a true peak action.

The rapid-acting bolus insulins are used to cover the resident's insulin needs to convert mealtime glucose into energy to avoid postprandial hyperglycemia. Novolog, Humalog, and Apidra are all available in prefilled pens or vials. The prefilled pens are easier to use and cause less pain with injection as the needles are shorter and thinner than syringe needles. The dosing dial of the prefilled pens also helps to determine the correct amount of insulin to administer, avoiding medication errors that are often times associated with drawing insulin out of a vial with a syringe.

Lantus and Levemir are common basal or long-acting insulins that are used to account for a resident's basal metabolic insulin requirements and prevent the liver from overproducing glucose, which leads to hyperglycemic episodes. Both Lantus and Levemir are available in prefilled pens and vials. However, Lantus has a pH of 4 while Levemir has a more neutral pH, making injections much less painful for the resident. Once opened for use, Lantus can be stored at room temperature for up to 28 days while Levemir can be stored at room temperature for up to 42 days. Levemir is also FDA approved for once OR twice daily dosing, should a resident need a second dose, while Lantus is FDA approved for once daily dosing.

Sliding scale insulin regimens are still highly prevelant in the elderly and tend to be continued once started. Evidence based policies for glycemic control have the potential to improve resident care. Consider evaluating residents' current sliding scale regimens for effectiveness and the potential to initiate basal bolus insulin regimens. This could potentially help facilities avoid F329 Unnecessary Medication citations in the future.

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# Warnings Regarding Use of Transdermal Fentanyl Patches in LTC

Prepared by: Rob Shulman, BS, R.Ph., CGP, FASCP, Director of Consultant Pharmacy Services

The Institute for Safe Medication Practices (ISMP) continues to issue warnings as deaths continue to occur from improper use and disposal of transdermal fentanyl patches. Marketed under the Duragesic™ brand names and available from several generic manufacturers, the patches are listed by the ISMP as a high-alert medication meaning it carries a greater risk of harm or death.

USE:

- Wear gloves at all times while handling patch to prevent skin absorption of fentanyl.
- Never cut, puncture or chew patch.
- Never apply or use heat (e.g., heating pad, electric blanket, heat lamp, sauna, heated waterbed, hot tub) to or near the patch location area. Heat increases skin permeability and vasodilation thereby increasing absorption of fentanyl leading to serious toxicity.
- Febrile patients should be monitored for signs of hypoventilation as increased body heat can also increase fentanyl absorption.
- If multiple patches are prescribed to attain a specific dose not commercially available as a single patch, keep patches on the same application and removal schedule.
- If a patch is not adhering, secure the edges of the patch with nursing tape.
- Ascertain back of patch is removed and dose re-checked prior to application.
- Rotate and document patch location with each application. Document patch location every shift in the MAR.

DISPOSAL:

- Upon patch removal, thoroughly check patient until previous patch is located. Even after 72 hours, the used patch contains approximately 28-84.4 % of the original content.
- Two nurses must document in the control record the "wasting" of the patch. MAR should reflect patch removal date and time.
- Per the FDA, ISMP, and manufacturer guidelines, fold used patches with the sticky sides together and either flush down the toilet or dispose into a secure bio-hazard device per facility policy. Do NOT dispose in trash receptacle.
- If a patient is being discharged home with a fentanyl patch order, thoroughly educate the patient and caregivers on proper administration and disposal of used patches.
- If a patient is being discharged home without a fentanyl patch order, ascertain that the patch was removed prior to discharge.

Transdermal fentanyl patches should be a cause for concern and used with extreme caution in long-term care. Staff should be educated and re-educated on the hazards of improper patch use. Nurses new to long-term care should especially be educated prior to providing direct care.

If you have questions or would like additional information, please contact your Remedi consultant pharmacist.

References

Duragesic (fentanyl transdermal system) full prescribing information. 2014. Available at http://www.duragesic.com/sites/default/files/pdf/duragesic_0.pdf

Grissinger M., Guant M. Reducing Patient Harm with the Use of Fentanyl Transdermal Systems. TCP 2009; 24:864-872

Institute for Safe Medication Practices (ISMP). ISMP list of high-alert medications in acute care settings, 2014. Available at https://www.ismp.org/Tools/institutionalhighAlert.asp

## Sliding Scale Insulin Use in the Elderly

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If you have questions or would like additional information, please contact your Remedi consultant pharmacist.

Selected References

American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012;60(4):616-631

American Medical Directors Association. Diabetes management in the long-term care setting: clinical practice guideline. Columbia, MD: American Medical Directors Association, 2011.

Day C. Resident-focused and evidence-based management of diabetes mellitus in the nursing home setting. Annals of Long-Term Care: Clinical Care and Aging. 2013;21(10):22-28.

Kirkman SM, Briscoe V, Clark N. Diabetes in older adults: a consensus report. Journal of the American Geriatrics Society. 2012 Dec;60(12):2342-56.

Pandya N, Thompson S, Sambamoorthi U. The prevalence and persistence of sliding scale insulin use among newly admitted elderly nursing home residents with diabetes mellitus. J Am Med Dir Assoc. 2008;9(9):663-669

# Nurse of the Month

## TERRY HILL, LPN

### The Kenwood by Senior Star, Cincinnati, Ohio

CONGRATULATIONS TO Terry Hill, LPN at The Kenwood by Senior Star in Cincinnati, Ohio for being chosen as the Remedi "Nurse of the Month." Terry was nominated by Pam Jackson, Nurse Manager and her DON. Per Pam, "Terry is the full-time day shift nurse on our memory care secured unit. She has been with our facility for several years and was an instrumental factor in the opening of our memory care unit. Terry's knowledge of the residents she cares for is impeccable! She is a driven leader, and a definite asset to our team. Terry has been an integral part of our ability to remain deficiency free in our annual Ohio Department of Health surveys. She is detail oriented and has excellent 'follow-up' skills. Terry is currently in school during the evenings pursuing her RN degree. She also maintains our community therapy dog, "Midas," who is a Golden Retriever and resides here at the community. We are honored to have her at our community!"

Remedi acknowledges a "Nurse of the Month" in each of our newsletters. DONs/ADONs/LNHAs, NOW is the time for you to reward the nurse(s) at your facility who exemplify excellence in nursing practice. The "Nurse of the Month" will receive an award and a certificate of commendation from Remedi. Please submit the following information: nominated nurse's name/title, facility name, state, years at facility, years of experience and why this nurse should be chosen, such as leadership abilities, clinical expertise, teamwork, professional and personal strengths.

Email your "Nurse of the Month nomination(s)" no later than the 30th of the month to Rebecca.Ogden@RemediRx.com. Nurses Rock!!

# Survey Solutions

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(Nutrition) reads in part, "the facility must ensure that a resident maintains acceptable parameters of nutritional status, such as body weight …" there is no absolute requirement to assess the weight of every resident. In fact, the guidance to surveyors under F 325 acknowledges that "In some cases, weight monitoring is not indicated."

• Recognize that weighing a resident, like many interventions, is not always a benign event. Injuries resulting from the use of bed/mechanical scales can and do occur due in part to the prevalence of osteoporosis and overall debility in a typical nursing facility. For certain individuals, such as those with advanced dementia, where weight loss is expected and all reasonable efforts to prevent it have failed, a thoughtful risk/benefit analysis could certainly lead a facility to stop weighing the resident. Such a decision, and the rationale for it, should be clearly documented in the medical record.

• For many nursing home residents, weight monitoring is an important component of their plan of care. As such, clinicians must be confident that the weight recorded in the medical record accurately reflects a resident's current condition. While weighing a resident appears to be a straight forward process, it can be complicated depending on what type of scale is used as well as the ability of the resident to cooperate. Make sure that staff is well trained in the use of equipment as well as approaches to put fearful, confused, or agitated residents at ease.

• Assure that scales undergo preventative maintenance, including calibration on a routine basis. Even if no problems are found with weight assessments, the failure to proactively maintain equipment can result in deficiencies.

• Have a system in place to promptly evaluate significant weight change. Although the guidance to surveyors at F 325 offers suggested parameters for evaluating the significance of unplanned/undesired weight loss, remember that guidance does not have the force of regulation. Focusing on the unique aspects of each resident's clinical situation is the best approach to determine what constitutes a significant change.

• Given that it takes a deficit of approximately 3500 calories to lose a pound of body weight, large changes in weight over a relatively short period of time (days/weeks) should be considered fluid related until proven otherwise. Prompt attention to such weight change may allow facilities to treat in-house common causes of hospitalization such as dehydration or heart failure.

• "Any symptom in an elderly patient should be considered a drug side effect until proven otherwise." -- J. Gurwitz et al. Brown University. Keep this geriatric principle in mind when evaluating weight change in a nursing home resident. Anorexia, diuresis, fluid retention, and other causes of weight change can often be attributed, at least in part, to a resident's medication regimen.

As always, the clinical and regulatory resources of Remedi SeniorCare are available to assist you in the overall management of your residents.