

# ICP Consultant Connection

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## More Than One Good Reason to Use Skin Prep

by Susan M Cleveland BSN, RN, WCC, CDP

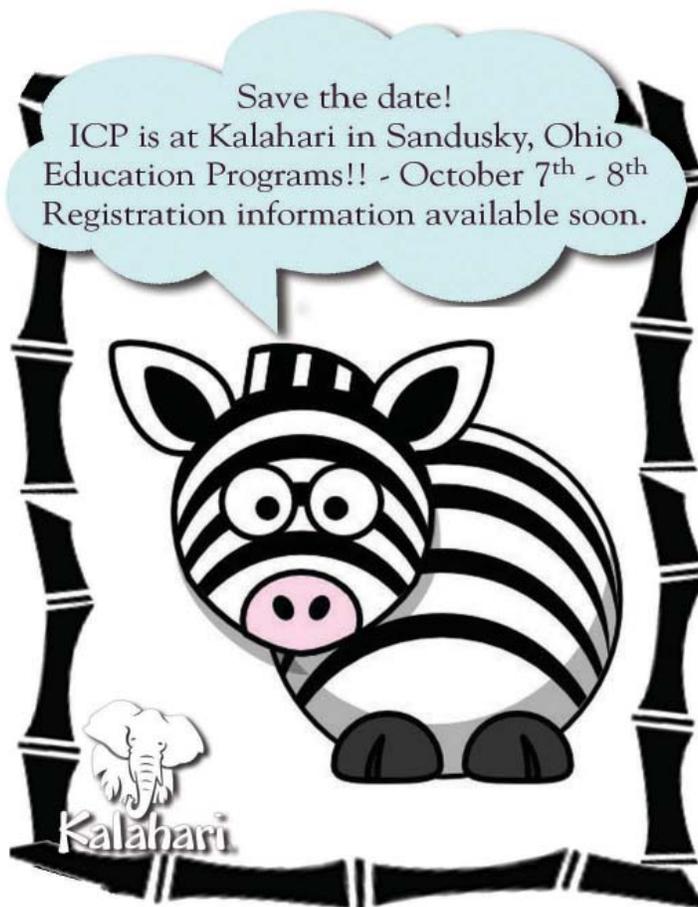
Skin, largest organ of the body, is designed to protect against outside forces of evil. The world's daily caustic barrage of fluids and other traumatic events can take their toll on the healthiest skin. Consider tissues weakened by age and co-morbidities now attempting to withstand these assaults. The care provided must include consideration for maintaining the skin's integrity. This includes applying barriers that allow for dressing adherence and the natural process of skin sloughing.

During recent wound rounds, five out of nine residents were experiencing dressing adherence problems. All of these elderly individuals had dry skin, dehydration, poor circulation, lack of mobility, and other issues. We are treating pressure injuries (new National Pressure Ulcer Advisory Panel term), stoma sites and moisture associated injuries on the group. My first question is: Are you using any skin prep? Although skin prep is recommended as part of the dressing application protocol, it was skipped, in this example, 55% of the time.

Two of the residents had excessive moisture related to incontinence and required frequent dressing replacement. The other three had several denuded areas from either shearing or the dressing pulling off 'good' tissue. In all five cases an application of skin prep could very likely have prevented the adherence problem.

Thorough wound and peri-wound cleansing and skin prep application as part of wound care protocol are essential to maintaining skin integrity and a lasting dressing adherence. Skin prep is often utilized in prevention with application to mushy heels, superficial tissue injuries, without hesitation. Many other uses for skin prep include protection from moisture associated skin damage (MASD), skin tears, and ostomy device adherence. There is more than one reason to use skin prep and they are all for the good of the resident in measured outcomes.

There are many non-sting prep products on the market. Marathon Cyanoacrylate Skin Protectant and 3M Cavilon are examples. Visit ICP's website, [www.icppharm.com/News-Resources.aspx](http://www.icppharm.com/News-Resources.aspx), to review studies on Medline's Marathon product.



Save the date!

ICP is at Kalahari in Sandusky, Ohio Education Programs!! - October 7<sup>th</sup> - 8<sup>th</sup> Registration information available soon.

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# Diabetes Care: A Paradigm Shift is Underway

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In a recent publication of “Diabetes Care” (Diabetes Care 2016;39:308-311) the American Diabetes Association released a position statement for strategies and goals of diabetes management in LTC. Three specific patient populations seen in long term care were identified: 1) Transitional care/rehab; 2) general LTC; and 3) hospice/palliative care. Each of the 3 areas have unique problems, goals, and treatment strategies. A truly patient specific approach is necessary due to the complexities of the patients, complicating comorbidities, and transitions in care. A change in approach to diabetes management is underway in LTC. The tight glycemic control that is the goal of treatment in younger patients and hospitalized patients is not appropriate for the frail elderly due to the risk of hypoglycemia and the complications that occur.

The risk for hypoglycemia is greater in the elderly due to decreased renal function, variable appetites, cognitive impairment, altered GI motility, and altered GI absorption. This risk is compounded by recent hospitalization, advanced age, medication changes, and polypharmacy.

Some general guidelines for diabetes care in the elderly residing in LTC include:

- Avoiding HYPOGLYCEMIA
- MINIMIZING severe Hyperglycemia
- Avoid Sliding Scale insulin use as the only strategy for glucose management
- Avoiding sliding scales insulin - transition to basal insulin
- Simplifying diabetes regimen
- Avoiding “diabetic”, “no concentrated sweets”, “no sugar” diets
- Developing facility protocols for management of HYPO and HYPER glycemia
- Avoiding dehydration

Treatment goals for diabetics on hospice and/or near end of life (residing at home or in a LTC facility include:

- Avoiding symptomatic hyperglycemia
- Not checking HgbA1c levels, there are no benefits
- Fasting glucose readings of 200-300, if asymptomatic, are appropriate
- Checking blood sugar only if symptomatic (either hyper or hypo glycemc)
- Simplify medication regimens to avoid hypoglycemia
- Avoiding dehydration
- Consider discontinuing medications not providing comfort

Tight glycemic control in younger persons will improve and increase longevity along with decreasing complications of diabetes. However, in the frail elderly, this risk of hypoglycemia outweighs any benefits of tight control due the frequency of hypoglycemia and to the potential increased costs of care due to complications of hypoglycemia and its management. Signs of hypoglycemia in the elderly may not be typical (palpitations, sweating, tremors), but more likely can include confusion, delirium, and dizziness. Change in mental status in diabetics might also include checking a blood sugar to check for

hypoglycemia in addition to the urine dip to rule out a UTI.

Residents and families of persons on hospice services may be resistant to changing diabetes regimens and tightly managing glucose levels because health care has done a good job of educating them on the benefits of this practice. Education of families and in some cases providers may be necessary to explain the risks and lack of evidence of more aggressive glucose management at the end of life.

Persons in transition are at greatest risk of problems with diabetes care due to lack of adequate communication between providers and a distinct plan of care with goals of therapy. The ADA position statement recognizes the American Medication Directors Association (AMDA) Guidelines for management of safe transitions in care of diabetes. The AMDA guidelines include:

- CAREFUL medication reconciliation between providers, PCP, Specialists
- Considering living arrangement goals once acute treatment/ therapy is completed. Living arrangements and caregiver support may be significant in successful safe outpatient management
- Considering comorbidities
- Considering cognitive status

All too frequently insulin is initiated during hospitalization and inadvertently ordered at discharge in persons not receiving any medication for diabetes, and discharged home with an insulin pen and no instructions for use. Other diabetes related medication issues at transitions of care include holding metformin during hospitalization due to test interactions, and not restarting at discharge, or therapeutic substitutions made during inpatient stay for oral agents, discharging with prescriptions for the substituted medications resulting in duplicate therapy and overuse at home leading to hypoglycemia and readmission. Inaccurate medication histories on hospital admission get compounded and confused when specialists are involved in care and the different providers do not keep accurate updated medication lists which can result in medication misadventures not only related to diabetes, but many other conditions.

So, how can LTC facility jump on the pendulum and join the paradigm shift?

- Avoid sliding scale insulin as the only treatment of diabetes
- Establish protocols regarding when to call a physician regarding a hypo/hyperglycemia event
- Establish protocols for management of a hypoglycemic event
- Develops resident specific goals for diabetes management with A1c goals documented and specific to each resident based on comorbidities and functional status.

There are now 8 different classes of medications available for management of glucose, each with advantages and disadvantages to use, along with a multitude of combination products with the classes below. The categories of agents include:



## Upcoming Webinar

Caring for those with COPD -  
7/21/16

Speaker: Shawn Yaprugur, RRT, RCP

Purpose: To educate long-term care nurses on the current treatment of COPD to help prevent hospital readmissions

Outcomes:

- 1) Define COPD & its stages
- 2) Discuss the current management of COPD
- 3) Recognize the indications for possible hospital readmission for acute exacerbations of COPD

Successful completion requires attendance at 80% of the one-hour program and completing an evaluation

Information on this and other webinars offered by ICP is available at [www.icppharm.com/News-Resources.aspx](http://www.icppharm.com/News-Resources.aspx). Contact Mary Burkart, RN, [nurses@icppharm.com](mailto:nurses@icppharm.com) for information regarding continuing education credit.

### Insulin:

5 types of insulin: short acting, rapid acting, intermediate acting, long acting, and combination products

### GLP-1 agonists:

These include Dulaglutide (Trulicity), albiglutide, (Tanzeum), Exenatide, (Byetta / Bydureon ), Liraglutide (Saxenda, Victoza)

### SGLT2 inhibitors:

Canagliflozin (Invokana), Dapagliflozin (Farxiga), Empagliflozin (Jardiance)

### DPP4 inhibitors:

Alogliptin (Nesina), Linagliptin (Tradjenta), Saxagliptin (Onglyza), Sitagliptin (Januvia)

### Thiazolidinediones (TZD's):

rosiglitazone (Avandia), Pioglitazone (Actos)

### Meglitinides:

These include Nateglinide (Starlix), Repaglinide (Prandin)

### Sulfonylureas:

These include chlorpropamide, glimepiride (Amaryl), glipizide (Glucotrol), glyburide (Diabeta) , tolazamide, tolbutamide

### Biguanides:

Metformin (Glucophage)

Factors contributing to medication regimen selection might include, but not limited to:

- Renal function
- A1c Goals
- Duration of disease
- Level of insulin resistance
- Ability to comply with medication regimen
- Insurance coverage of medication / payment ability
- Concurrent comorbidities: Drug / disease interactions

The drug selection has become complicated, the patient is more complex, and the risk of untoward effects and hypoglycemia have increased, all of which are contributing to the shift in strategies for management of the diabetic across all levels of care.

## Revised Warnings for Metformin

The US Food and Drug Administration (FDA) has announced that it is revising warnings for the use of metformin in certain patients with reduced kidney function. After reviewing published studies, FDA concluded that metformin can be used safely in patients with mild impairment in kidney function and in some patients with moderate impairment in kidney function. Manufacturers will be required to make changes to the metformin labeling to provide specific recommendations on the drug's use in patients with mild to moderate kidney impairment.

One important note regarding the metformin label is that FDA will be requiring manufacturers to change the recommended measure of kidney function used to determine if a patient is appropriate for metformin therapy. The measure will change from one based on a single blood creatinine concentration (e.g., serum creatinine [SCr]) to one that estimates renal function (e.g., glomerular filtration rate estimating equation [eGFR]). In addition to blood creatinine concentration, the eGFR rate takes into account additional important patient parameters, such as age, gender, race, and/or weight.

The revised labeling recommendations on how and when kidney function is measured in patients receiving metformin will include the following information:

- Before starting metformin, obtain the patient's eGFR.
- Metformin is contraindicated in patients with an eGFR below 30 mL/minute/1.73 m<sup>2</sup>.
- Starting metformin in patients with an eGFR between 30-45 mL/minute/1.73 m<sup>2</sup> is not recommended.
- Obtain an eGFR at least annually in all patients taking metformin. In patients at increased risk for the development of renal impairment, such as the elderly, renal function should be assessed more frequently.
- In patients taking metformin whose eGFR falls below 45 mL/minute/1.73 m<sup>2</sup>, assess the benefits and risks of continuing the medication. Discontinue metformin if the patient's eGFR falls below 30 mL/minute/1.73 m<sup>2</sup>.
- Discontinue metformin at the time of or before an iodinated contrast imaging procedure in patients with an eGFR between 30 and 60 mL/minute/1.73 m<sup>2</sup>; in patients with a history of liver disease, alcoholism, or heart failure; or in patients who will be administered intra-arterial iodinated contrast. Re-evaluate eGFR 48 hours after the imaging procedure; restart metformin if renal function is stable.

Source: FDA & Long-Term Care AdviseERR Vol.4, Issue 6, June 2016



*The Advocate of Not-For-Profit  
Services For Older Ohioans*



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## What is Specialty Pharmacy?

If you haven't already heard the term specialty pharmacy or specialty pharmaceutical, you probably will soon. With new "specialty drugs" entering the marketplace each year, your patients will eventually have the need for one of these therapies. So what exactly do those two terms mean? Although this seems like a simple question, a standard, industry-wide definition for either term remains elusive.

In defining a specialty pharmaceutical, there are two main factors: cost and complexity. A medication considered a specialty pharmaceutical may have some or all of the following key characteristics:

- Treatment of complex, chronic, and/or rare conditions
- High cost, often exceeding \$10,000, with some costing more than \$100,000 annually
- Availability through exclusive, restricted, or limited distribution
- Special storage, handling, and/or administration requirements
- Ongoing monitoring for safety and/or efficacy
- Risk Evaluation and Mitigation Strategy program required by the FDA

Although this category has historically focused on injectable and infused formulations, a significant number of specialty medications in oral dosage forms are also on the market. This trend is only expected to continue, especially among oral chemotherapy.

Common disease states treated by specialty drugs include oncology, multiple sclerosis, rheumatoid arthritis, Crohn disease, HIV/AIDS, hepatitis C, and growth hormone disorders.

Although cost is a major concern for specialty drugs, restricted distribution networks can also be problematic in long term care. Some manufacturers of specialty pharmaceuticals have restricted their products to specialty, mail order pharmacies – not allowing ICP or other long term care pharmacies access to these medications. Besides the delays this system introduces, limited distribution networks require facility staff, and sometimes the responsible party or patient, to provide medical and insurance information directly with the specialty, mail-order pharmacy. Prescribers may also be asked to provide documentation of medical necessity or to complete required training or paperwork before medication may be obtained.

Specialty pharmacy, which once occupied only a small niche in the marketplace, is a growing industry. Health care personnel, regardless of their area of practice, should understand the place of specialty pharmacy within the industry, even though the field may be difficult to define. Escalating costs, heightened needs for patient monitoring, special handling requirements, and limited distribution networks will require increased attention and management in the future.