

# Sick Day Medication Management (for physicians and pharmacists)

Patients frequently present to hospital with hypotension, acute kidney injury, hypoglycemia, or elevated INR (on warfarin) following a period of illness. Providing your patient with a sick day management plan may help prevent or mitigate these admissions.

The patient should be asked to call your office in 24 hours so you can provide further advice. If the office is closed an alternative contact could be their local Pharmacy or BC HealthLink 811.

## Decreased Fluid Intake

If patients become ill and are unable to maintain adequate fluid intake (e.g. due to gastrointestinal illness) they should be instructed to hold medications which:

- Will increase risk for a decline in kidney function (e.g. ACEi/ARB)
- Have reduced clearance and increase risk for adverse effects (metformin, sulfonylureas, SGLT-2 inhibitors).

If decreased FLUID intake, to avoid side effects and AKI, stop these SADMANS drugs:

- S** sulfonylureas (e.g. gliclazide)
- A** ACE-inhibitors (e.g. ramipril)
- D** diuretics, direct renin inhibitors (aliskiren)
- M** metformin, mineralocorticoid receptor blockers (e.g. spironolactone, eplerenone)
- A** angiotensin receptor blockers (e.g. candesartan)
- N** non-steroidal anti-inflammatory drugs
- S** SGLT2 inhibitors (e.g. canagliflozin)

But in addition, if patients are eating significantly less (regardless of fluid intake) they are at increased risk of hypoglycemia (sulfonylureas / insulin). Reduced intake can also affect warfarin (risk of a high INR) by a reduction in vitamin K intake. In addition diarrhea can also lead to a high INR due to sloughing of normal bowel flora (a source of vitamin K).

## Diabetes and Decreased Caloric Intake

If the patient is eating significantly less (regardless of fluid intake) and is taking, insulin (nutritional/prandial) or oral hypoglycemics (glyburide, gliclazide, glimepiride):

- Check blood sugar before meals
- For above oral meds advise patient to “ skip a dose if skipping a meal”
- Give a written action plan for specific adjustment of nutritional insulin component

## Warfarin and Decreased Intake and/or Diarrhea

If the patient has any of the following: Eating less than half of what they normally eat; OR have 3 or more diarrhea watery stools; OR are eating less than usual AND having any diarrhea stool:

- Hold warfarin for 24 hours
- Get an INR in 3 – 4 days

# Sick Day Medication Management: Using the TEACH-BACK Method to Confirm Patient Understanding

This tool is intended to provide a framework for healthcare providers to confirm patient / family understanding of key information provided. Ideally review with the patient's support person present. Open-ended questions are used to get the patient to "teach-back" by describing **what** they will do, explain **why** it's important and **how** they will remember to carry out the plan. For physicians, if time does not permit, consider referring the patient to their pharmacist or other healthcare provider to confirm understanding.

**Example:** Patient is taking furosemide, spironolactone, gliclazide, warfarin, metoprolol and amlodipine. (Note: Beta blockers and calcium channel antagonists are not part of **SADMANS** so you would **not** list these (to stop) on the patient's "Your Medication Plan for Sick Days", when he or she is not drinking enough.

**Provider:** "Before you leave, I just want to make sure that I have explained this clearly. Can you tell me in your own words, what are you going to do if you have an illness which means you aren't drinking enough fluid?"

**Patient:** "I am going to stop my furosemide (water pill), and my spironolactone. I am going to call my doctor's office (or my Pharmacy or 811 if my doctor's office is closed)."

**Provider:** "When are you going to restart those pills?"

**Patient:** "When I am drinking closer to normal again or whenever my doctor tells me when I call my doctor"

**Provider:** "Why is it important that you follow this advice? "

**Patient:** "This may prevent my kidney function from getting worse or having low blood pressure. This may help me from getting sicker and needing to go to hospital."

**Provider:** "What if you are not eating enough calories?"

**Patient:** "I am to stop my gliclazide until I am eating normally and measure my blood sugar more often."

**Provider:** "How do you know what is enough calories?"

**Patient:** "At least a juice box worth in a day."

**Provider:** Why is it important to stop gliclazide if you are not eating properly?"

**Patient:** "This is to prevent me from getting low blood sugar, which can make me feel unwell, lightheaded."

**Provider:** "Is there another medication that you need to do something with?"

**Patient:** "Yes, warfarin, I am to not take it for 1 day and make sure I get to the lab to check my INR within 3-4 days".

**Provider:** "When do you need to act with the warfarin?"

**Patient:** "If I am eating less than half of what I normally eat or if I am having diarrhea as written on this sheet or have diarrhea and eating less."

**Provider:** "So what warfarin dose are you going to take on the next day?"

**Patient:** "My usual dose."

**Provider:** "And the warfarin, what are we trying to avoid by not taking it for 1 day?"

**Patient:** "For this one, I just miss one day and get my INR checked, to avoid my blood getting too thin which could put me at increased risk of a bleed. "

**Provider:** "How will you remember to follow and carry out this advice?"

**Patient:** "I am going to keep this on my fridge and make sure my husband and daughter knows; I am going to tell them what I just told you."