

STANDARDIZING PRE-OPERATIVE MEDICATION INSTRUCTIONS FOR PATIENTS HAVING ELECTIVE SURGERIES

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DESCRIPTION

Pre-operative medication instructions are a vital safety component for patients having elective surgeries as certain medication classes can lead to peri-operative complications, such as hemorrhages and hemodynamic disturbances.

The Surgical Pre-screening clinic (SPS) at Humber River Health assesses, educates, and prepares patients for upcoming elective surgeries. A gap analysis conducted identified a lack of standardized processes regarding changes to patient’s medication instructions prior to surgery. This can lead to miscommunication and increase the risk of potential peri-operative complications or delays to surgery.

To improve the peri-operative experience, a formal standardized process was created for pre-operative medication instructions; Medication Education for Developing a Well-Informed Surgical Experience (MEDWISE).

OBJECTIVE


To improve communication for patients and the surgical team regarding patients' pre-operative medication instructions prior to elective surgeries.

ACTIONS TAKEN

- Collaborated with Anesthesia and Medicine Internists, Reinventing Patient Care Council, Surgical Program Leadership, Health Education Development and Health Information Services to develop a new standardized form for Anesthetists to use in SPS
- Developed Implementation Plan and new Workflow Process for stakeholders and evaluation measures (i.e., post-implementation surveys)
- Provided education on roles for stakeholders
- Created MEDWISE label to attach to patient’s chart for tracking across the continuum of care

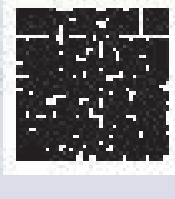
Figure 1. NEW standardized instructions form used by anaesthetist in SPS.

A new standardized form was created in conjunction with the Anaesthesia leads where certain medication classes including Anticoagulants/Anti-platelets, Antihypertension medications, Diabetic medications and GLP1As that often require changes prior to a patient’s surgery to prevent peri-operative complications.

**Changes to Your Medicines Before Your Elective Surgery**

You have received this handout because you are taking a medicine that you need to stop before your surgery. Following these instructions may reduce side effects and complications during and after surgery. Your surgeon or anesthesiologist will let you know when it is safe to restart these medicines after your surgery.

Scan this QR code to read an electronic copy of the **last instructions for Surgical Patients** handout with the full guidelines on how to prepare for your surgery.



Class of Medicine (Why not include all known drugs/handy)	Examples	When to Stop Taking the Medicine Please check <input type="checkbox"/> and click <input type="checkbox"/> all that apply.
Blood Thinning/Anticoagulation Medicines		
Anti-platelets	Acetylsalicylic acid (Aspirin®)	<input type="checkbox"/> STOP taking 3 days / 5 days before surgery. <input type="checkbox"/> TAKE as normal.
	Clopidogrel (Plavix®), ticagrelor (Brilinta®)	<input type="checkbox"/> STOP taking 7 days / ____ days before surgery. <input type="checkbox"/> TAKE as normal.
NSAIDs	Ibuprofen (Advil®), naproxen (Aleve®), celecoxib (Celebrex®)	<input type="checkbox"/> STOP taking 3 days / 5 days before surgery. <input type="checkbox"/> TAKE as normal.
Oral Anti-coagulants	Rivaroxaban (Xarelto®), apixiban (Eliquis®), dabigatran (Pradaxa®)	<input type="checkbox"/> STOP taking 3 days / ____ days before surgery. <input type="checkbox"/> TAKE as normal.
	Warfarin (Coumadin®) <i>If you are at high risk of bleeding, your doctor may prescribe a low-molecular weight heparin (enoxaparin (Lovenox®)) for you to take while you are on warfarin. Follow your doctor's instructions.</i>	<input type="checkbox"/> STOP taking 5 days before surgery. <input type="checkbox"/> TAKE as normal.
Cardiac/Antihypertension Medicines		
ACE/ARBs	Ramapril (Altace®), perindopril (Coversyl®), valsartan (Diovan®), candesartan (Atacand®), lisinartan (Avasin®)	<input type="checkbox"/> Do NOT take on the day of surgery.
Beta Blockers, Calcium Channel Blockers	Bioprolol (Monocor®), labetalol (Trandate®), metoprolol (Lopressor®), propranolol (Inderal®), amlodipine (Norvasc®), diltiazem (Cardizem®), nifedipine XL (Adalat XL®)	<input type="checkbox"/> TAKE as normal.
Weight Loss Medicines		
GLP-1 Agonists	semaglutide injection (Ozempic®), Wegovy®, liraglutide (Saxenda®), tirzepatide (Mounjaro®)	<input type="checkbox"/> SKIP 3 doses before surgery. <input type="checkbox"/> STOP taking your doses starting today.

Form 105279

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Class of Medicine (Why not include all known drugs/handy)	Examples	When to Stop Taking the Medicine Please check <input type="checkbox"/> and click <input type="checkbox"/> all that apply.
Diabetes Medicines		
GLP-1 Agonists	Dulaglutide (Trulicity®), semaglutide injection (Ozempic®), liraglutide (Victoza®), tirzepatide (Mounjaro®), tirzepatide oral (Rybelsus®)	<input type="checkbox"/> SKIP 1 dose before surgery.
SGLT2 Inhibitors	Empagliflozin (Jardiance®), dapagliflozin (Farxiga®), canagliflozin (Invokana®)	<input type="checkbox"/> STOP taking 3 days before surgery.
Night-time (Basal) Insulin	NPH (Humulin N®, Novolin ge NPH®), glargine (Basaglar®, Lantus®, Toujeo®, detemir (Levemir®), degludec (Tresiba®)	<input type="checkbox"/> TAKE ½ the dose / ____ dose, the night before surgery.
Meal-time Insulin	Glitazone, lispro, aspart, regular, premixed	<input type="checkbox"/> Do NOT take on the day of surgery.
Oral Diabetes Medicines	Metformin, sulfonylureas (Glucotrol®), Ananryl (Diabeta®)	<input type="checkbox"/> Do NOT take on the day of surgery. Check your blood sugar before you go to the hospital. You may restart this medicine after surgery, once you have started eating again.
Other Medicines		
Other	Over-the-counter vitamins and supplements	<input type="checkbox"/> STOP taking 7 days before surgery.

My Surgery is on: _____ Day of the Week _____ Month _____ Day _____ Year _____

If the instruction says...	I will take my LAST dose on ...
TAKE as normal	The morning of my surgery, with a small sip of water
STOP taking 3 days before surgery	
STOP taking 5 days before surgery	
STOP taking 7 days before surgery	
SKIP 1 dose before surgery	Daily dose:
	Weekly dose:
SKIP 3 doses before surgery	Daily dose:
	Weekly dose:

Additional Instructions:

Doctor or Name: _____ Signature: _____
Date: _____ Time: _____

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English: This information is important if you have diabetes. Please read this information carefully. If you have diabetes, please read this information carefully. If you have diabetes, please read this information carefully. If you have diabetes, please read this information carefully.

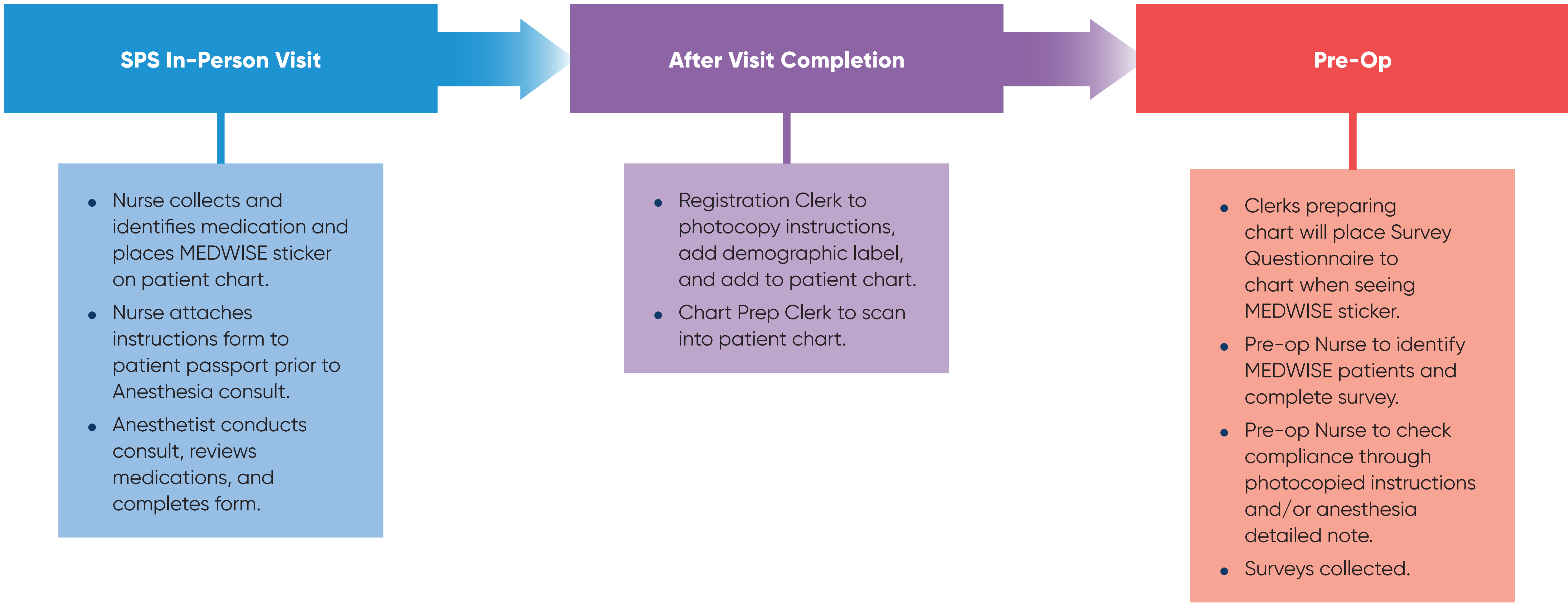


Figure 2. Standardized Workflow Process for Pre-op Medication Instructions.

SUMMARY OF RESULTS

Pilot Implementation started Oct 1st, 2024, and currently gathering evaluation measures:

- Process
 - Medication Instruction sheet compliance rate from Anesthesia
 - Scanned instruction sheet compliance in EMR
- Outcomes
 - Patient satisfaction
 - Anesthesia satisfaction
 - Compliance of instructions
- Balance
 - Cancelled surgeries
 - OR delay events

Next steps:

- Expanding use to surgeons at their community clinics
- Improve accessibility through translated forms
- Digitizing elements to streamline process

LESSONS LEARNED

Standardizing language and processes help improve communication between the surgical team and patient across their peri-operative journey.

This leads to consistency with medication management recommendations; contributing to lower surgical cancellation rates, and improves patient experience, preparedness prior to surgery, and patient outcomes.

