



# Development of a Pre-Operative Medication Administration Guideline for RN Callers

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## Purpose

To determine if use of a medication administration guideline would increase the efficiency and autonomy of RN callers at Seattle Children's.

## Synthesis of Evidence

- Caregivers of children going to surgery who take medication need pre-op administration instructions.
- Children should continue taking essential medications unless there are concerns about side effects or interactions with anesthesia.
- A literature search was done looking for existing pediatric pre-op medication administration guidelines.
- Results were very limited and no existing pediatric guidelines were found.

## Proposed Change in Practice

- At Seattle Children's, RN callers contact caregivers 2 days before surgery to give pre-op instructions.
- Medication administration questions were forwarded to an anesthesia clinic ARNP or the charge anesthesiologist.
- This often meant many phone calls and delays for the RN callers and caregivers.
- It was determined that developing a medication administration guideline would enable RN callers to give most of the medication instructions, increasing their efficiency and autonomy.

## Implementing Strategies

- Stakeholders met to discuss guideline development.
- One pre-anesthesia ARNP and the lead RN caller developed the guideline.
- Every effort was made to include the most commonly taken outpatient pediatric medications.
- Medications were categorized as "should not be given", "could be given cautiously" and "may be given".
- Medications were further categorized by body system, generic and trade names.
- A disclaimer was included stating the guideline was not an all inclusive list.
- Guideline approval was obtained from institution representatives (nursing, pharmacy, anesthesia, surgery).
- Guideline education was provided to the RN callers.

## Evaluation

- The RN callers began using the guideline 9-1-16.
- A confidential evaluation was sent to the RN callers 12-7-16 (n = 27).
- The response rate back was 67% (n = 18).

## Evaluation Results

- 94% (n = 17) felt the guideline was clearly written.
- 56% (n = 10) felt that the number of extra phone calls had decreased.
- 94% (n = 17) felt caregivers were receptive to having RN callers give medication instructions.
- 22% (n = 4) expressed concern that not all medications were included in the guideline.
- 11% (n = 2) expressed the need for more training.

## Conclusions

- The use of the medication administration guideline improves RN caller efficiency and autonomy.
- RNs callers are working within the full scope of their licensure.
- Clear and consistent instructions are provided to caregivers.
- Additional training for the RN callers was provided on 2-9-17.

**Table 1 - The following medications should not be given on the day of surgery.**

Any questions about medication administration should be referred to the PASS Clinic NPs (7-2728), the surgeon, and/or the prescribing care provider. \*Note that the following table is not all inclusive.

Body System	Drug Classification	Drug Name generic (Trade)	Special Instructions
		methylxanthine (Elixanor) methylxanthine (Zeromylin, Mykrox) polythiazide (Renese) spironolactone (Aldactone) spironolactone and hydrochlorothiazide (Aldactazide) torsemide (Demadex) trichloroethylene (Nageal) triamterene (Dyrenium)	
Endocrine	Oral hypoglycemic agent	acarbose (Precose) chlorpropamide (Diabinese) glimepiride (Amaryl) glyburide (DiaBeta, Minomoran) metformin (Glucophage) nifedipine (Procardia) nateglinide (Starlix) pioglitazone (Actos) repaglinide (Prandin) rosiglitazone (Avandia)	Hold for 24 hours before surgery.
Immune	Nonsteroidal anti-inflammatory agent	ibuprofen (Advil, Motrin, Pedibrufen) indomethacin (Indocin) celecoxib (Celebrex) diclofenac (Voltaren, Cataflam, Voltaren) diflunisal (Dolobid) etodolac (Lodine) ketoprofen (Oralid, Oronax) ketorolac (Toradol) methenamine acid (Panurin) meloxicam (Mobic) nabumetone (Relafen) naproxen (Anaprox, Naproxen, Naproxyn)	Consult with the surgeon.

## Guideline – "Should Not to be Given"

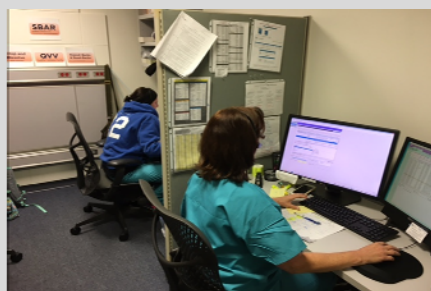
**Table 3 - The following medications may be given on the day of surgery at least 2 hours before the start time with a small sip of water or 5-10 ml water flush if given by NG or G-tube.**

Any questions about medication administration should be referred to the PASS Clinic NPs (7-2728), the surgeon, and/or the prescribing care provider.

\*Note that this list is not all inclusive.

Body System	Drug Classification	Examples of commonly prescribed medications – generic (Trade)	Special Instructions
Cardiovascular	Angiotensin receptor blocker	losartan (Cozaar)	
	Anti-arrhythmic agent, cardioglycoside	digoxin (Lanoxin)	
	Beta-adrenergic blocker	atenolol (Tenormin) metoprolol (Lopressor, Outoprol) propranolol (Inderal)	Encourage caregiver to administer on the day of surgery.
	Calcium channel blocker	amlodipine (Norvasc)	
Pulmonary	Endothelin receptor antagonist	bosentan (Tracleer)	
	Phosphodiesterase-5 inhibitor	sildenafil (Revatio, Viagra)	
	Bronchodilator	albuterol (Proventil, Ventolin, ProAir)	Instruct caregiver to administer usual dosage the night before and morning of surgery.
	Long acting beta agonist	fomoterol (Foradil) salmeterol (Serevent)	

## Guideline – "May be given"



Seattle Children's RN Callers