

IV Dilution is no Solution

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ISMP guidelines for IV push medication (10) :

1. Do not dilute IV push medications unless directed by the manufacturer
2. Do not use commercially packaged 10 ml flush medications to dilute IV medications
3. Do not transfer ready to use IV push medications into another syringe to administer or dilute.
4. Once PIV or central line patency is established use an appropriate size syringe to administer IV push medication
5. Appropriately label all IV push medications.



Jan. Feb. Mar. Apr. May. Jun. Jul. Agu. Sap. Oct. Nov. Dec.



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INTRODUCTION

- The dilution of IV medications increases the risk for medication administration error and contamination of IV medication.
- The REBP Council was approached to review evidence due to a concern regarding the current practice of bedside nurses diluting IV push medications at SJH.
- Current IV medication management policy does not state IV push guidelines.

PICO Question

The dilution of IV medications increases the risk for medication administration error and contamination of IV medication.

METHODS

Data Bases	PubMed, Ovid Medline, Ovid Embase, Ovid Ebm, CINAHL, Joanna Briggs, UpToDate, Trip, Clinical Key for Nursing and Google Scholar		
Search Terms	Push, push medication, bolus medication, drug, drug potency dilution, dilut*, medication management, medication error, medication adherence, medication compliance, adverse event, adverse effect, adverse drug reaction, adverse drug event		
Results	10 articles were reviewed by the SJH REBP council members. Three articles were nurse survey results from the ISMP. One article was a literature review, one a best practice guideline, and 5 were opinion statements on the ISMP survey		
Level of Evidence	I	0	
	II	0	
	III	3	good
	IV	1	good
	V	6	good

LITERATURE SYNTHESIS

- The Institute of Safe Medication Practices (ISMP) conducted two nurse surveys regarding safe IV push medication administration in 2014 and 2018 (3,4,6). Results consistently demonstrate bedside nurses are unnecessarily diluting IV push medications (3,4,5,6)
- Dilution of IV push medications increases the risk of medication error (1,2,3,4,5,6,7,8,9,10)
- Mislabeling or not labeling IV push medications after further dilution increases the risk of medication errors (2,3,4,5,6,7,8,9,10)
- Use of IV flush syringes to dilute medications and not labeling the med inside the flush is not an approved method by the FDA or the manufacturer (2,3,4,5,6,7,8,9,10)
- RN do not appear to be following EBP best practice guidelines

RECOMMENDATIONS

- It is the recommendation of the SJH REBP council to perform a gap analysis of current practice vs. recommended practice
- Implement ISMP guidelines
- Develop education to ensure safe IV push medication administration per the ISMP guidelines
- Addition of ISMP IV medication guidelines to intravenous medication management policy

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