

A Proposed Pro Re Nata (PRN) Psychotropic Medication Workflow in the Electronic Health Record

Linden Wu¹, BSN, RN

¹Department of Health & Community Systems, University of Pittsburgh School of Nursing

Background

- ❖ 80% psychiatric patients are likely to receive PRN psychotropic medications due to agitation¹
- ❖ Side Effects include: ^{2,-4}
 - ❖ Sedation,
 - ❖ Increased confusion,
 - ❖ Falls
 - ❖ Anticholinergic and cardiac side effect
 - ❖ Death
- ❖ Nurses have a lack of clarity, confusion, and poor documentation practices surrounding PRN psychotropic medication workflow⁵

Purpose

- ❖ Enhance upon the current workflow to
 - ❖ Document reasons why the PRN was given
 - ❖ Document alternative ways to re-direct an agitated patient
 - ❖ Evaluate if the PRN was effective or not.

Functional Area of Nursing Informatics

- ❖ **Education and Professional Development**
 - ❖ Apply nursing informatics concepts and theories to building new work flow
 - ❖ Implement and evaluate new workflow
- ❖ **Coordination, Facilitation and Integration**
 - ❖ Serve as bridge between informatics solution users and IT experts
 - ❖ Serve as project coordinator to facilitate workflow changes

Time Frame

Months	Goal
1-2	Informatics team should decide how they want the new work flow to look like
3-6	Informatics team should collaborate with CERNER to build the new workflow
7-8	Test the new workflow
9-10	Training Staff
11	Deployment, Go Live of new workflow
12	Auditing, Re-education as needed

Steps to Implementation

- ❖ Create a committee
- ❖ Make sure the proposed work flow complies with all regulations
- ❖ Build the prototype with the CERNER team
- ❖ Test the prototype using simulations
- ❖ Create teaching tools to educate the staff about new workflow
- ❖ Train the staff

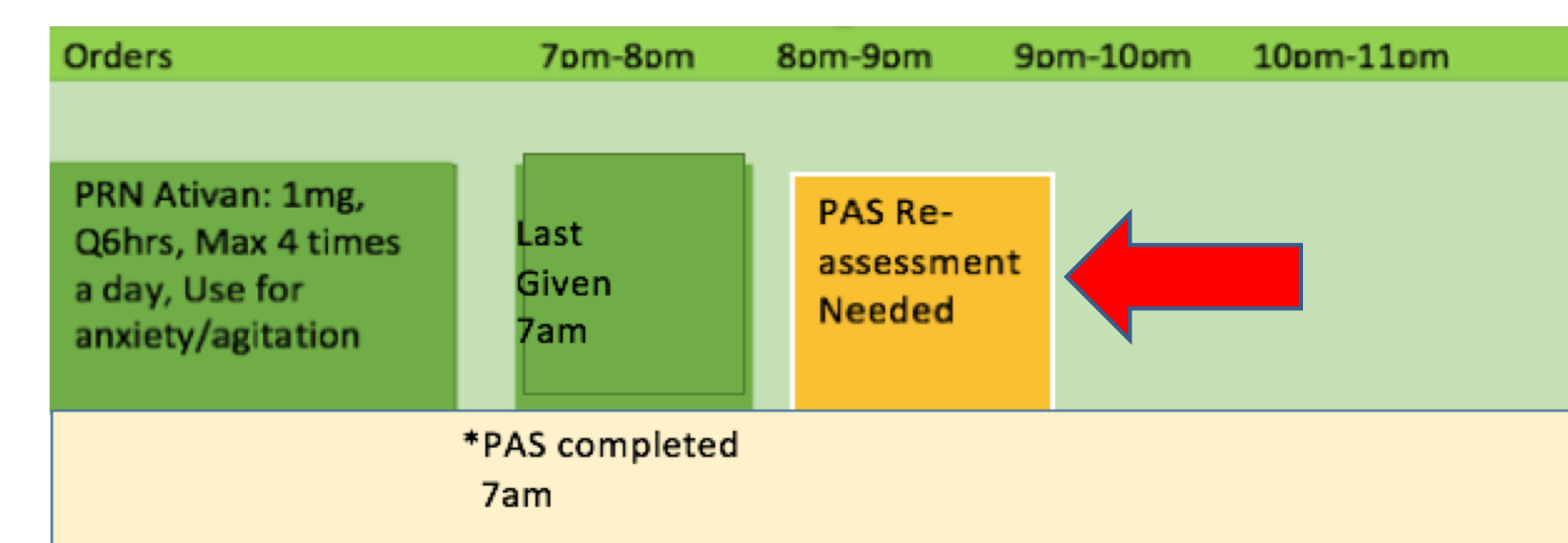
Current Workflow

- ❖ When a nurse scans a PRN medication they must click modify in order to free text the reasons for giving the medication.
- ❖ One hour later the nurse must remember to click modify again to free text if the PRN was effective or not



Proposed Workflow

- ❖ Pop up form for nurses to document the Pittsburgh Agitation Score (PAS)
- ❖ Research has shown the PAS items have good reliability at assessment (interclass correlation coefficients between 0.60 and 0.77. ⁴
- ❖ One hour later there will be a pop up reminder for the nurses to reassess using the (PAS)



Modified Pittsburgh Agitation Scale (PAS)

- ❖ The nurse will collaborate with the CERNER team to create a PAS computer form

Raters Name: _____				
Modified Pittsburgh Agitation Scale (PAS)				
Date: _____				
Agitation Start (Pre) Time	Pre Behavior Group	Agitation Stop (Post) Time	Post Behavior Group	Relaxation Techniques Used
	(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =		(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =	
	(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =		(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =	
	(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =		(V) Vocalization = (MA) Motor Agitation = (A) Aggressiveness = (RC) Resisting Care =	

Stakeholders

- ❖ Patients
- ❖ Nurses
- ❖ Hospital Administrators
- ❖ Companies that create electronic health records (i.e. CERNER)

Nurses Feedback of Proposed Changes

- ❖ 8 psychiatric staff nurses were interviewed
- ❖ 4 of the nurses knew the correct workflow to document at time of administering PRN and re-evaluate 1 hour after
- ❖ All nurses liked the new proposed work flow
- ❖ All nurses were familiar with the PAS

References

1. Curtis, J., & Capp, K. (2003). Administration of 'as needed' psychotropic medication: a retrospective study. *Int J Ment Health Nurs*, 12(3), 229-234.
2. Baker, J. A., Lovell, K., & Harris, N. (2008). A best-evidence synthesis review of the administration of psychotropic pro re nata (PRN) medication in in-patient mental health settings. *Journal of clinical nursing*, 17(9), 1122-1131.
3. Milton, J., Lawton, J., Smith, M., & Buckley, A. (1998). Hidden high-dose antipsychotic prescribing: effects of prn doses. *The Psychiatrist*, 22(11), 675-677.
4. Mitchell, A. M., Chiappetta, L., Boucek, L., Cain, M., Patterson, G., Owens, K., . . . Stark, K. H. (2015). Nonpharmacological therapeutic techniques to decrease agitation in geriatric psychiatric patients with dementia. *J Gerontol Nurs*, 41(2), 53-59. doi:10.3928/00989134-20141014-02
5. Usher, K., Holmes, C., Lindsay, D., & Luck, L. (2003). PRN psychotropic medications: the need for nursing research. *Contemporary Nurse*, 14(3), 248-257.