



Empowering Patients, Partnering in Pain Management Using Medication on Demand “MOD”

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Introduction

Purpose: To provide high quality and efficient nursing care in a safe environment using a Medication on Demand device. This device is ordered by the physician, programmed and loaded with oral narcotic analgesic by the RN; and used by the patient to facilitate postop pain relief.

Background: Penn State Hershey Medical Center Nursing Department committed a task force to improve our overall response rate to the Press Ganey survey item, “How well was your pain controlled?” The task force standardized pain scales throughout the institution, educated staff on pharmacological/non-pharmacological treatments for pain, and developed a program for nursing staff to achieve pain certification. Another opportunity that was brought to the task force was the Medication on Demand device. They gave a presentation about the device and showed the patient has control to take their medication when they need it. We next identified patient populations that were candidates for this medication administration. We engaged a multidisciplinary team that included pharmacy, physicians, nursing staff, IT, and MOD device representatives.

Nursing Survey - Medication on Demand (MOD®)

Please answer the following to evaluate your experience with the device

	Highly Disagree	Disagree	Agree	Highly Agree
1. It is easy to instruct patients how to use the device.				
3. The device is easy to program for a new patient.				
4. The device is easy to load with a medication tray.				
5. It is easy to sign on using the nurse card and access the different device programs.				
6. The device is easy to query for patient data acquisition.				
7. The device functions reliably.				
8. The patient(s) pain appears to be better controlled since he/she is able to self-medicate with the device.				
9. The patient(s) say that they like to have more control over their oral pain medication delivery using the device.				
10. The device saves me time, since I do not have to take each dose of pain medication to the patient directly.				
11. I would like to use the MOD® device for my patients who are capable of using the device				

I would like to make the following comments and suggestions regarding my experience with the MOD®.

Implementation of the MOD Device

Women’s Health nurses implemented this new method of administering a narcotic analgesic to postop Cesarean section patients. MOD allowed our patients to take acetaminophen-oxycodone every two hours as needed. Nurses reviewed an e-learning about the MOD device prior to attending a live training session. A company representative provided training. Weekly email updates were sent to nurses on feedback from patients and nurses about using MOD. Nurses learned how to screen L & D patients for eligibility, set up the device, teach patients, and document.

- Postpartum Cesarean section patients are selected using the following criteria:
1. Patient must be awake and alert and able to accept device responsibilities, have no swallowing difficulties or trouble taking pills, have no history of drug abuse or drug seeking; and have no physical disability to prevent using the device.
 2. The nurse must continue to assess the patient’s pain relief and document.
 3. The nurse must document the remaining tablets in the kit at shift change.
 4. The nurse must continue to relieve her patient’s pain with non-medication pain relief measures such as splinting her incision and proper positioning.
 5. The device confirmation screen requires an RN to verify that the order is correctly entered; and the nurse must give the patient a secure ID band to keep unauthorized users from accessing the device.



Patients and Nurses Perceptions

- Ten patients evaluated use of the device. Most patients “Agreed” or “Highly Agreed” that:
- Nurse instructions were helpful
 - Reminder card was helpful
 - Machine made it easy to know when to take medication
 - Using the machine was preferable to calling the nurse
 - Would like to use the device for a future hospitalization
- Only 1 patient “Disagreed” that the pain scale was easy to use, the pill was easy to remove, and pain control was better with the device.
- Twelve nurses responded regarding their perceptions on using the device.
- Regarding nurse’s perceptions of the MOD: 83% felt that the patients understood how to use the MOD.
 - Only 20% felt that they would like to use the device for other patients.

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The MOD® Medication on Demand – is a patient-controlled oral drug delivery system

Summary and Nursing Implications

This 8-week pilot study evaluated nurses and patients responses to use of the MOD device. Overall, patient responses were more positive than nurses. Patients liked the convenience and ease of use; while nurses indicated frustration that more time was needed, the device was unreliable, and that there was waste of unused medication. One nurse remarked that the problem was not the MOD device itself, but the cumulative inundation of technology and computer charting that “keeps nurses away from the bedside.” Nurses and patients made comments about mechanical difficulties and malfunctions that occurred when using the device. Both patients and nurses also expressed positive aspects such as being easy to use and “not having to bother staff for meds.”

The device does not replace the nurse’s interaction with the patient. Frequent communication with the patient about postop Cesarean Section pain relief is still necessary and required. Autonomy given to a patient to relieve her postop pain is likely to increase her satisfaction in pain control during her hospitalization.