Implementation of E-MAR
Presenters

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Overview

I. Objectives
II. Implementation Process
III. Benefits
IV. Better Outcomes for Residents
V. Reports
VI. Lessons Learned
I. Objectives

- To minimize errors in administering medication for safe care.
- To improve documentation electronically.
- To enhance communication with pharmacy and interdisciplinary team members.
Background

- Tullamore is a one-story brick nursing home
- Located in Brampton, Ontario
- 4 home areas
- 2 nursing stations
Rationale:

- Tullamore was interested in being an early adopter of an electronic MAR system.
- Prior to EMAR: there were documentation lapses such as missing signatures despite education and reminder tools.
- ISMP – MMSA (Medication Safety Self-Assessment) for Long Term Care suggests the use of EMAR to increase the accuracy of medication administration.
What is *EMAR*?

- Refers to “electronic medication administration record”
- Indicates that the record and medication administration documentation are kept electronically or on-line
II. Implementation Process

- The whole process starts 90 days before EMAR implemented

- Pre-implementation meeting

- Pharmacy and Home Operation

- Training of Registered Staff

- Refresher Training and On-going support

- Home goes live

- Discussion:
  - Implementation schedule
  - Policies and procedure
  - Demo of the Software
  - IT Requirements
  - Secure storage for hardware and electrical outlet

- Communication: Data conversion and clarifications sent out between Pharmacy Operations and facility 60 and 30 days prior to go live date and again 2 weeks prior to go live date

- Home also designated super users to attend several sessions.

- Registered staff trained for 4 hours and was scheduled Monday and Tuesday (2 sessions per day for 2 days).
  *Multiple sessions to ensure all staff trained*

- The Home goes live on Wednesday.
  - Pharmacy provided onsite support for the staff on the Wednesday, Thursday and Friday of the go live week.

- Home and Pharmacy offers another refresher training session 2 months after to review any questions they may have.
  - Pharmacy also offers on-going 24 hours x 7 days support for software and hardware.
III. Benefits

A. User Friendly
B. Easier Information Access
C. Complete Documentation
D. Enhanced Communication
E. Error Prevention and Safe Care
F. Potential Time Savings
Tools to help complete the nursing “8 rights” for administering medication:

- Right RESIDENT
- Right MEDICATION
- Right DOSE
- Right ROUTE
- Right TIME
- Right DOCUMENTATION
- Right REASON
- Right RESPONSE
A. USER FRIENDLY cont’d

Prompts for administration times

- **Green** → **Done**
- **Yellow** → **Due**
- **Red** → **Overdue**
- **White** → **Not Due Yet**
B. Easier Information Access

- With paper MAR, only the nurse administrating medication would have access to documentation during a medication pass.
- With EMAR: All health professions can have access.
- Nurses, physicians, dieticians, physiotherapists, pharmacists, and others can all simultaneously access documentation to provide better resident care.
- Meets MSSA Self-Assessment Item # 41.
The greatest asset of having an EMAR product is “Live Documentation”. The ability to document as you go improves:

- **EFFICIENCY**
- **COMPLIANCE**
- **ERROR REDUCTION**
- **SUPPORTS SAFE RESIDENT CARE**
C. Complete Documentation cont’d

- Easier documentation
- Med’s documentation is complete and readily seen.
- Tablets/ laptops on carts allows immediate entry of progress note, assessment, vitals and other documentation.
- Information is clear and concise
- Privacy– lock button can be selected and the screen is locked so no one can see EMAR
D. Enhanced Communication with Pharmacy

- Pharmacy Driven
- Pharmacy Integration
- Pharmacy Check
Photos on Med cart bins match up to photo on EMAR (right resident)

After selecting time of med pass, you only see meds for that med pass (right medication)

After selecting time of med pass, only residents due for their medication are seen on EMAR (right resident, right medication & right time)
E. Error Prevention/Safe Care cont’d

- Resident allergies and other alerts are highlighted on the screen as medications administration is documented

- Real time information at your fingertips
IV. Better Outcomes for Residents

- Administration/documentation of all medication mandatory – through reminders
- PRN effectiveness must be documented
- Allergies are red & bolded
IV. Better Outcomes for Residents cont’d

- Alerts triggered in last 24 hours (eg. BM & Pain) can be easily seen

- Glucometer readings and vitals are linked and flows to the weights and vitals module automatically once updated
IV. Better Outcomes for Residents cont’d

- Sites of Administration (injection site and treatment creams) are tracked and user is alerted of last 3 sites when administering next dose
- INRs can be added and easily accessed
- Physician can review resident’s medication history detail quickly with a couple clicks of a mouse or have detailed report printed
V. Reports

- Missed or late documentation signature reports can be generated at any time and tracked by nurse/unit/facility
- Location of administration report will show whether patch, injection is applied in different areas
- Type of Medication (e.g. anti-psychotic can be tracked in the system showing number of doses, strength taken)
V. Reports cont’d

- PRN medication can be tracked for usage, reason for the use and out comes

- Reports can be generated quickly for resident going to hospital, dental visits and doctor’s appointments

- Many other reports can be generated to audit nursing efficiency and accuracy
Nursing staff quotes:

- “Quick and easy to use”
- “User friendly”
- “I was afraid to use EMAR, but my computer and typing skills actually improved”
- “More efficient”
- “I have more confidence. It’s harder to make mistakes”
- “It’s easier to identify residents. This is good for new nurses”
VI. Lesson Learned.

- Planning is Key (training, internet stability, hardware selection)
- Go back and review after using E-MAR
- Before implementation is the best time to review and strengthen processes
- Clean up and eliminate unneeded information in your MARS/TARS.