



Timely Medication Administration

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- 225 bed community hospital in central KY
- Cartless distribution system using profile driven automated dispensing machines (all but 1 skilled unit)
- Bedside barcode scanning of patient and meds
- Electronic documentation (eMAR, CPOE, nursing notes, progress notes)
- Smart pumps
- Central Pharmacy open 24hrs/7 days week
- Clinical pharmacists on patient care units 10hrs/ weekdays -provide clinical, order entry and distributive services
- Mercedes (Medication Management) team

Top problematic MM standards

per Darryl Rich, The Joint Commission ASHP presentation Dec 2011

- MM 03.01.01 Medication Storage 33%
- MM 04.01.01 Medication Orders 24%
- NPSG 03.04.01 Labeling in Procedures 16%
- MM 05.01.01 Pharmacist review of orders 15%
- MM 05.01.07 Medication preparation 6%
- NPSG 03.06.01 Medication Reconciliation 6%
- MM 01.01.03 High Alert Medications 5%
- MM 05.01.09 Medication Labeling 5%



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The “Missing” problem standard

CMS implemented 30 minute window for med administration in October 2008

The Joint Commission Medication Management Standard 06.01.01 EP 7 states:

Prior to administration, does the individual administering the medication verify the medication is being administered at proper time, in prescribed dose and by correct route.



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Tracers to track success

Timeliness of med administration FY11



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Our “excuses”

- More meds ! More patients!
- Technology is just slowing me down
- Bar code wont scan
- Double documenting- omnicell and on eMAR
- I miss my paper! I didn't know it was due
- Doctors putting in orders for wrong time-missed it!
- No one else is doing this either!
- “Crunch” time every morning
- Need to pull all my patients meds early to avoid getting back in that automated dispensing cabinet (ADC) line
- I can give within 1 hr but 30 min is impossible if you want me to do this right.



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2009-2011 Fixes

- Modified standard medication administration times
- Exempted insulin (to be coordinated with meal deliveries)
- Moved default daily med time to 6am (to divide work between shifts)
- Omnicell restock times changed to avoid peak access time
- Timed antibiotics from time ordered (not default times)
- Evaluated “late” administrations for reason/type of dose
- Built in documentation codes for reasons doses missed
- Bedside scanning auto-documents on eMAR that med is administered-(eliminated double documentation)
- Monthly Tracers of doses given within 30 min or 1 hour
- PI project evaluated Pharmacy to Floor delivery times for meds dispensed from Main (not in Omnicells)

2009-2011 Fixes

- New mobile med carts on TCU to allow bedside delivery
- Obtained additional Omnicell machines on high volume floors
- Respiratory meds pulled into mobile carts (Omni access just for stats/new)
- Scheduled critical meds *to avoid “crunch times”*
- Encouraged communication with floor based pharmacist to alter assigned med administration time if clinically justified
- Resp treatments on night shift discontinued if clinically warranted
- Order sets for physician order entry default to standard times
- Provided eMAR reports to show doses within 1 hr window and those outside the 1 hr window to clinical managers/Directors
- Implemented personal accountability for meeting the 30 min rule
- Staff Education : 30 min rule, MM standard and our progress



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July 2010 ISMP Nurse Survey –Barriers to the 30 minute Rule

- High patient load and # meds per patient
- Unsafe staffing levels
- Meds not available on time for administration
- Interruptions and delays during med pass
- Meeting patient needs during med pass
- Need to review meds and assess patient before administering meds
- Time consuming to gather, prepare and document medications being given
- Administration schedules don't match patient care needs or nursing workflow

Results of ISMP Nurse Survey on Med Administration July 2010

- 70% respondents worked in hospitals where 30 minute rule enforced
- 5% stated able to always comply with 30 minute administration and 59% complied sometimes/infrequently
- 10% stated they always take shortcuts to comply
- 25% stated they sometimes took shortcuts to comply
- 25% had observed 1 or more med errors as a result of trying to comply with 30 min rule
- 90% supported change to 30 min rule
- 75% supported 60 minute window for administration of meds which were scheduled q4hr or less
- 70% under increased pressure to give timely-being tracked and trended via electronic reports which compelled short cuts
- 33% admit falsely documenting admin times to avoid disciplinary action but actually administering med earlier or later

ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

- Issued October 2011
- Based on 2010 extensive survey of 18,000 nurses regarding CMS 30 minute rule
- Supported by 150 large professional organizations and agencies that provided input for change www.ismp.org/docs/updated
- Offered definitions for scheduled meds, time critical scheduled meds and non-time-critical scheduled meds
- Recommended hospitals create a hospital specific list of time critical scheduled meds

ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

Scheduled meds include all maintenance doses administered according to standard, repeating cycles of frequency (q4h, TID, BID, weekly, etc)

Does not include: STAT or NOW doses

One time , first or loading doses

PRN medications

Specifically timed doses (pre-op ABX, on call doses)

Time sequenced or concomitant meds (chemo therapy and rescue agents)



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ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

Time Critical Scheduled medications – those where early or delayed administration of maintenance doses of greater than 30 minutes before or after scheduled dose may cause harm or result in substantial sub-optimal therapy or pharmacologic effect

Non-time Critical Scheduled medications-those where early or delayed administration within a specified range of 1-2 hours should *not* cause harm or result in sub-optimal therapy or pharmacologic effect

ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

Recommend creation of hospital specific list of time critical meds

Examples:

- Medications with dosing schedule more often than q4hr
- Scheduled opioids for chronic pain or palliative care (not prns)
- Immunosuppressive agents to prevent rejection
- Medications that must be administered apart from others to avoid drug –drug or drug-food interactions
- Those meds that require administration within specific time of meals (rapid or ultra short acting insulins, oral antidiabetic)

ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

Recommend medications administered hospital defined time critical medications at the exact time indicated (ex. Rapid acting insulin or timed doses or regimens) or within 30 minutes before or after the scheduled time.

Recommend medications administered more frequently than daily but not more than every 4 hours (BID, TID, q4h, q6h) be administered within 1 hour before or after the scheduled time.

Recommend medications administered daily, weekly, monthly be administered within 2 hours before or after the scheduled dose.

ISMP Acute Care Guidelines for Timely Administration of Scheduled Meds

Supporting Operational Guidelines for timely administration

- Maintain adequate staffing levels
- Consider med administration when making patient assignments
- Use of automated dispensing cabinets- ensure adequate number of cabinets for safe and timely access to meds
- Justification of early or late doses
- MAR documentation reflects actual time given not just initials
- Reference past administration times on MAR when giving dose
- Adhere to standard administration times-but allow staggering
- Report/document when med is early or delayed-inform Dr
- Trend data -use to revise time critical drug list or make changes

CMS revision to Conditions of Participation *Interpretive Guidelines*

- Issued November 18, 2011
- Eliminated the requirement that all scheduled medications must be administered within 30 minutes of their scheduled time.
- Set expectation that each hospital establish their own policies and procedures for timeline medication administration
- Find balance between patient safety and work processes

November- Mercedes

- THREW A PARTY!
- Evaluated and revised current policy
- Defined “time critical”
- Defined new window for administration of time critical and non time critical
- Modified tracer metric for measurement
- Developed education/newsletter
- Communicated change to CAR

December- EMRMC Policy Change

- Medication doses are scheduled on the electronic medication administration record to facilitate proper timing of medications as prescribed.
- Some medications may be administered at alternate times to accommodate patient clinical status (N/V) diagnostic testing schedule (NPO status) or to prevent adverse drug-drug or drug-nutrient interactions.
- With a goal of timely medication administration, time-critical scheduled medication doses are given +/- 30 minutes from scheduled time.
- Medications considered to be time-critical include scheduled pain medications, antibiotics, and any medication with a dosing schedule more frequent than every 4 hours.
- All medications not considered time-critical are given +/- 2 hours from scheduled time
- Transitional care unit medications are to be administered +/- 30 minutes from scheduled administration time due to state and CMS regulations.
- All medications not considered time-critical are given +/- 2 hours from scheduled time.

January -Educating Associates

- Pit Stop newsletter

Type of Scheduled Medication

Time-Critical Medications:**

- Pain medications
- Antibiotics
- Medications with dosing more frequently than every 4 hours

Non-time-critical Medications- all other medications other than those listed above.

Goals for Timely Administration

Administer within 30 minutes before or after the scheduled time

For example, if the medication is due at 9 am, you would have between 8:30 am and 9:30 am to administer.

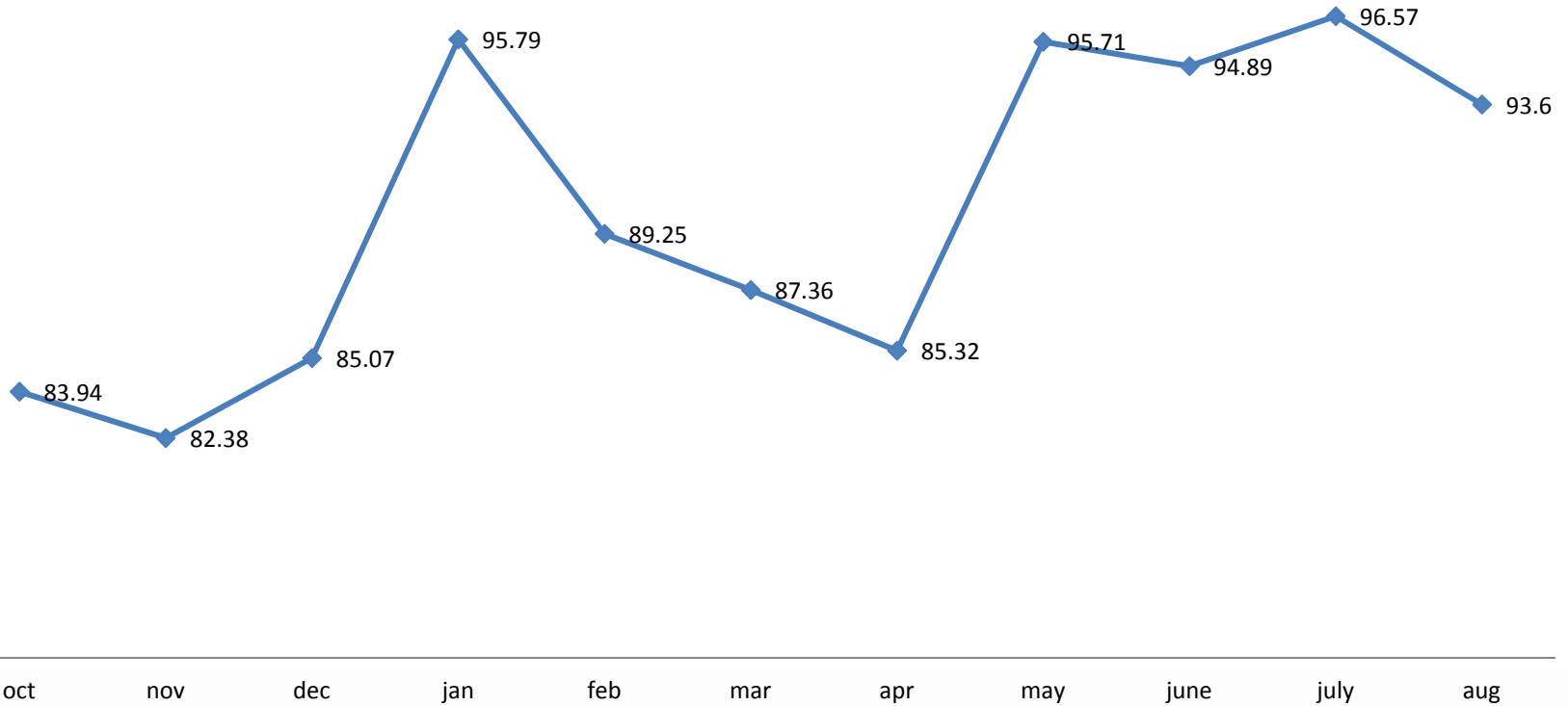
Administer 2 hours before or 2 hours after the scheduled time

For example, if the medication is due at 9 am, you would have between 7 am and 11 am to administer.

****Remember that insulin should still be coordinated with meal availability**

Tracers to track success

Timeliness of med administration (Critical meds w/in 30min) FY12



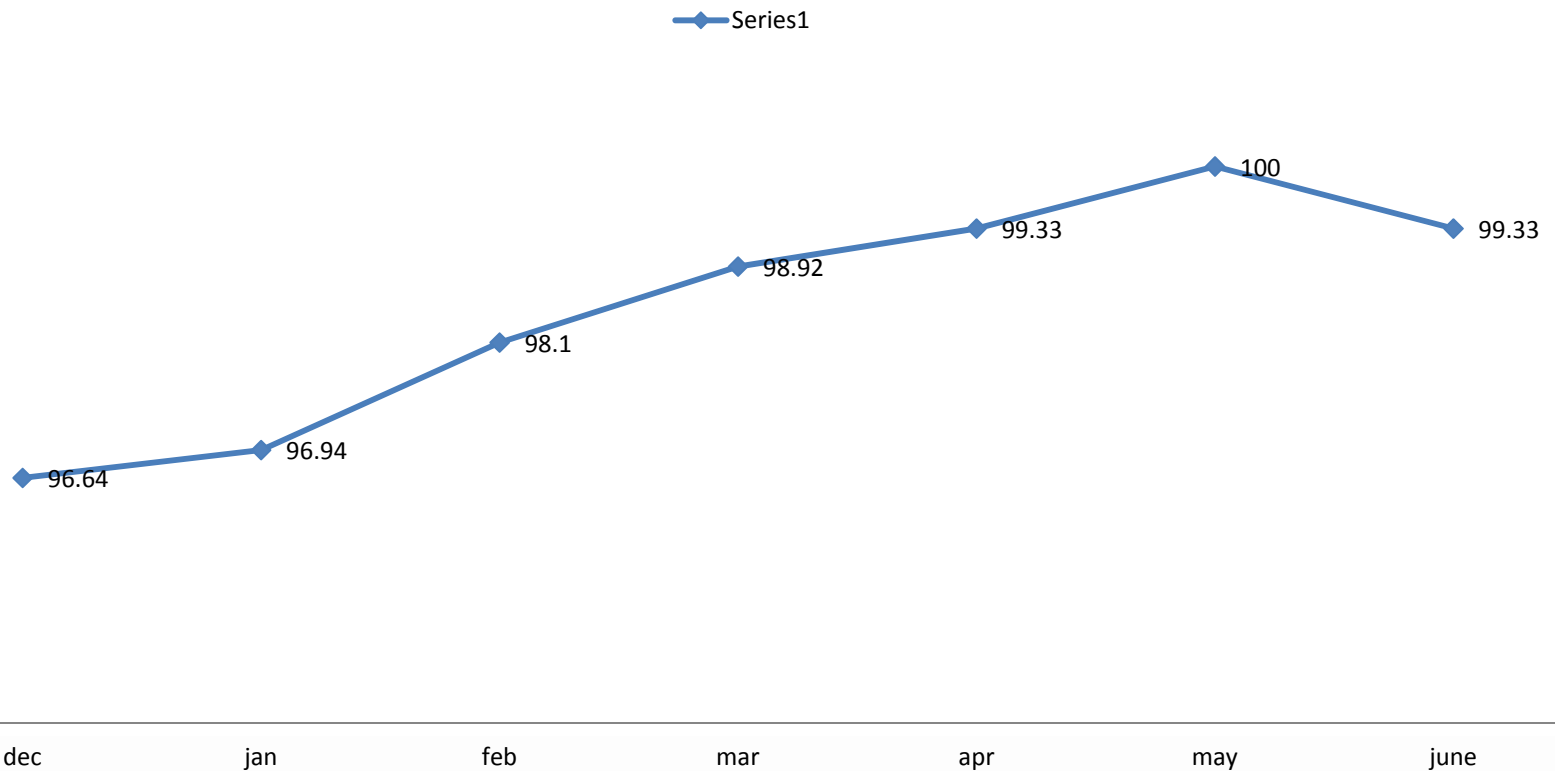
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Timeliness of med administration Noncritical meds w/in 2hr FY12



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Sustaining the change

- We have demonstrated greater than 90% compliance with timely administration of time critical medications 5/8 months since Jan 12
- With increased CPOE saw some dips based on physician assignment of start times
- After exceeding goal x 4 months- could stop tracing, however we left it on our Mercedes tracer to assure the sustainability of the change



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Questions?

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