MEETING JCAHO MEDICATION MANAGEMENT (MM) STANDARDS IS PROVING to be an ongoing challenge for pharmacies in hospitals nationwide. These new standards have put in motion a rush to adopt technology that vendors claim can and will help institutions comply with the new regulations.

Oneida Healthcare Center (OHC) is a private, not-for-profit 101-bed acute care community hospital and a 160-bed skilled nursing facility (ECF) co-located in upstate New York. The average census for the two facilities is 60% and 100% respectively. Both facilities are JCAHO accredited, and to help prepare for a survey under the new standards, OHC is using QuadraMed Pharmacy, a comprehensive medication management system.

Note that “comprehensive” may be defined in a variety of ways depending upon your situation. But in general, among the important considerations when selecting a system is its ability to meet your current needs, including compliance, and the capacity for growth.

For instance, it must interface seamlessly with existing systems and new applications. Your hospital may not use bar coding today, but when you do, the medication management system must have the functionality to accommodate this technology. You should look at all three critical pharmacy areas—ordering, dispensing, and administering—to determine whether the system you are about to purchase is a long-term investment or a short-term fix. The latter will prove to be very expensive.

Within the context of this article it would be impossible to cover all of the medication management standards we (in pharmacy) are mandated to address. The following is an overview of how we effectively use our system to deal with compliance issues, with an emphasis on five of the JCAHO Standards.

**Access to Patient-Specific Information**

Standard MM.1.10 requires that patient-specific information is readily available to everyone involved in the medication management system. Elements of Performance (EP) 2 of this standard requires that we document the basics, i.e., age, gender, current lab values, and allergies. Our profile page takes care of this and also contains a column for creatinine clearance.

We normally get this information from the laboratory via our lab interface, which then automatically populates this field for us. With the field populated, we can set up certain clinical rules so when we profile a drug, if it’s something that needs adjusting because of creatinine clearance, the system will flag it.

An important point here is that the last time JCAHO visited OHC we received a deficiency because we had some profiles that did not have allergies posted to them. Since we implemented QuadraMed Pharmacy, our system lets us flag a patient who does or does not have allergies.

Nursing enters information about patient allergies into our HIS and pharmacy pulls a report off of the nursing assessment. Next we enter it into Pharmacy Information System because right now the nurses can free text allergies. A single click immediately takes us to a demographic screen where we can access allergies and add them to the profile. We use Source Medi-Span as our knowledge source, and by picking the name we select a corresponding drug item, which assigns an NDC number. That is used for all of our allergy checking. The pharmacy system performs our drug-drug, drug-alcohol and drug-food interaction checking.

The system also allows us to enter notes on allergies. This is an important benefit. For example, a patient may claim to have a penicillin allergy, but really does not remember what the reaction was because it occurred 50 years ago in childhood. Such information can be very helpful since this may have not have been an allergic reaction at all. And clinicians may be able to use this medication if needed by performing a simple test.

Once entered into the profile, allergies are displayed in red in the upper-right-hand corner of the screen, and are accessible to anyone in the hospital who is involved in patient care. We fulfill the requirement for accessibility contained in EP3 by making selected terminals throughout our hospital available to nurses and doctors who can log on in a read-only format and see everything in the pharmacy system.

**The Formulary**

MM.2.10 (medications available for dispensing or administration are selected, listed, and procured based on criteria) is basically having a formulary. We currently print our formulary for distribution to physicians. Our pharmacy software allows us to sort the formulary by different data fields. The alpha sort and American Hospital Formulary Code (AHFS) sort are the most useful in our practice.

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**Accuracy and Clarity**

MM.3.20 addresses the accuracy and clarity of medication orders. At one time or another, we all run into the problem of look-alike and/or sound-alike names. Our system enabled us to set up our formulary to use “tall man” (capital) letters phonetically within the drug name, coupled with what are called therapeutic alerts.

For instance, say we have

Hydroxyzine and Hydralazine. We use the tall man letters in the middle. When the pharmacist profiles an order for Hydralazine 25mg and enters it, the system immediately flags the order. It serves as a reminder to double check that the order is for Hydralazine, not Hydroxyzine. This comes in handy when you have a lot of meds that start with the same letters, or when they have sound-alike names.

We use this flag for items like Terbutaline and Terazosine, Haldol and Stadol, etc. The beauty of it is that it is a very simple process to set up. It is totally menu driven. We go to our first screen and drop down to therapeutic alert messages. Then it’s simply a matter of picking the drug we want to attach it to and free texting whatever we want that alert to read. The whole process takes just a minute or two to complete.

Again in MM.3.20, there is a requirement that medications be clearly and accurately transcribed. In 3.20 EP5, JCAHO wants to know what action will be taken if pharmacy receives an order that is incomplete, illegible, or unclear.

In cases where orders are incomplete or unclear, our system allows us to do an intervention while processing them. We do not have to get out of the order entry process. Instead, we just click on the intervention screen. Without going into too much detail, a simple “Order Clarification/Change Notice” is completed and printed through the system after consultation with the ordering physician.

This notice has all the information we need: the patient’s name, account number, location, who wrote the original order, what the original order was, what we did with it, and the new order. There is a place for the physician to sign and date it as well as a place where nursing can note the order when it is entered into the chart. And for the Joint Commission, we have hard-coded a message that states, “this notice replaces previous orders, and where appropriate, the order was read back to and verified with the ordering practitioner.” JCAHO does not require that you document this action; however we felt it was prudent to do so.

**Prescription and Medication Review**

In general, MM.4.10 directs that all prescriptions or medications be reviewed for appropriateness. This is almost an exact duplication of EP5 in MM.3.20. It lists all the things that the Commission expects us, as pharmacists, to review.

Performing all these steps manually would be time consuming and leave room for error. With our pharmacy system, every time an order is entered it is automatically reviewed for every area covered by 4.10. Within the system, Medi-Span uses a process called Prior Adverse Reactions for allergies, and then the system takes over and performs drug-drug, drug-food, drug-alcohol, therapeutic duplication, drug contraindications, lab drug and clinical rules.

Using the clinical rules as an example, the system can give us an initial recommended dosing and dosing interval for Levaquin based upon the patient’s creatinine clearance. The entire process is automated in real time. The rules are customized by the pharmacy, so we have 100% control.

Here’s another good example that happened recently when we entered an order for warfarin. In this case an interaction was indicated based upon the patient’s personal information. The pharmacist clicked on “Interaction” and obtained a brief explanation of the interaction: onset and severity, documentation, probability, etc. From that point, we then printed any information that is unusual or rarely displayed, made a copy for the doctor, and posted it to the patient’s chart under Progress Notes to ensure the physician would see it. All through the process we never had to leave the order, and followed a very simple procedure—no bouncing around the program—to complete it.

**Contraindication**

The last standard under discussion here is MM.5.10. It requires verifying there are no contraindications for administering the medication. As you may know, the messages we send up to the floor are not always received...
by the nurse who actually administers the medications.

We have been able to customize our MAR by adding special notes that are hard-coded to every drug. We can delete them if we want, but they are added automatically by the system. The nurse reviews the MAR, is aware pharmacy has seen the order, and then if there is a message such as DO NOT ADMINISTER IF… or AWAITING CLARIFICATION, understands there is a potential problem. The nurse gets these messages before attempting to administer the medication and can take the appropriate precautions or actions. We can also display messages such as “DO NOT CRUSH,” “TAKE APICAL PULSE,” etc.

In essence, MM.5.10 directs pharmacy to verify the Five Rights. Our next step is to implement bar coding with our existing system to ensure compliance with this Standard. We have been working for more than a year to prepare for this step and are currently beta testing a product. When it is fully implemented OHC will also move from computer generated to fully electronic MAR.

Conclusion

The JCAHO Standards discussed here are those that are of general interest to hospital pharmacists. Many of the others deal primarily with policy and procedure, rather than real-world actions.

Our system, QuadraMed Pharmacy, has met or exceeded our specifications, and continues to meet or exceed our expectations. Based upon our needs and the experience we have acquired using the system, we are confident we are meeting the JCAHO standards and will continue our track record for compliance.

Tom Lynch is the Director of Pharmacy at Oneida Healthcare Center in Oneida, New York. He is available to answer questions and to provide further input concerning JCAHO Medication Management Standards by emailing him at tlynch@oneidahealthcare.org.

Where to find it:
Source Medi-Span ...............Circle #36 on the reader service card
QuadraMed Pharmacy ...........Circle #30 on the reader service card