Technician Tutorial: Mastering Medication Lists and Histories

There's a big focus on keeping track of the meds that patients are supposed to be taking. Typically, a patient's medication list is a record they maintain for their own use, and for communication with their health care providers. A medication history refers to a compilation of the patient's current meds used by health care professionals. However, some people may use the terms interchangeably, which is okay. The main point is that these lists and histories can help prevent problems like dosing or scheduling errors (i.e., taking a med twice a day that was prescribed to be taken once daily), duplications of therapy (i.e., not stopping a med that was supposed to be discontinued when a new med was started), and continuing unneeded drug therapies (i.e., not stopping a med that was originally prescribed for treatment of a temporary condition). In fact, acquiring accurate medication lists and histories is necessary for medication reconciliation, which includes reviewing a patient's meds at transitions of care (e.g., into and out of the hospital, from one hospital unit to another). It is known that medication reconciliation can help reduce problems with medications and ultimately reduce hospital admissions. This *Technician Tutorial* will provide information about creating medication lists and histories for pharmacy technicians.

What are some other differences between medication lists and medication histories?

In addition to the slight differences mentioned above, medication list is a term that may be used more frequently in the outpatient setting, while the term medication history may be used more frequently in the inpatient setting. We'll stick with that convention in this *Technician Tutorial*, although you may interchange the terms according to what's used in your practice setting.

What benefits do med lists and histories offer over the info already available in providers' computer systems?

It may seem unnecessary for a patient to keep a comprehensive and up-to-date list of the medications they're taking since pharmacies and prescribers generally have lists in the form of patient profiles and such. But in reality, health care providers' lists are not always complete, correct, or current, and they don't necessarily include all of the nonprescription products a patient is taking.

Likewise, a medication history, such as on admission to a hospital, helps pull all the patient's medication information together into one place. This can help ensure that treatments for chronic problems such as diabetes or high blood pressure are appropriate and are adjusted if needed through a patient's hospitalization for an acute problem such as an infection. As an added benefit, problems with a patient's medication regimen may come to light during a hospitalization and can be addressed at that time.

And in the outpatient setting, med lists can help patients get the most out of a comprehensive medication review (CMR). For more information about CMRs, go to our *PL Toolbox*, *Medication Therapy Management*.

What are some helpful tips for communicating with patients when gathering med info?

It is worth noting that pharmacy technicians in the hospital setting may be less accustomed to talking with patients in comparison to pharmacy technicians in the retail setting where communicating with patients is commonplace. Keep in mind that you may encounter patients in different settings when taking admission medication histories, including the emergency department, general medicine floors, etc. Here are some important rules of thumb to keep in mind for communicating with patients in any practice setting:

- Always introduce yourself, state your purpose, and let the patient/caregiver know what to expect. Here is an example: "Hi, my name is Lindsey. I work in the pharmacy, and I'm here to get a list of

the medications that you take at home. I'll need to ask you some questions, and it will take about 15 minutes."

- Make eye contact as appropriate, and speak clearly and not too fast. Many older patients may have some degree of hearing loss and may be hesitant to ask you to repeat what you've already said.
- Look for info about whether a patient is hearing-impaired or does not speak English (or French, in Canada) before meeting with them. That way you can have necessary resources such as an interpreter at the ready.
- Access any available information about the patient's medications, such as their profile or a list of discharge meds from their last admission, if possible. You can use this list as a starting point to identify any potential issues, such as unclear directions, that will need to be clarified during the interview. If you identify any discrepancies during the patient interview, be sure to note these as well.
- Refer to meds by brand or generic name, whichever the patient recognizes most easily.
- Ask open-ended questions as appropriate to get the best information. Patients will be able to answer "yes" or "no" questions, even if they don't understand the question. For example, ask "What over-the-counter medications do you use?" rather than "Do you use any over-the-counter medications?" Or ask "How do you take this medication?" rather than "Do you take this medication twice daily?"
- If you don't understand a patient's response, ask questions to clarify rather than documenting unclear information.
- Avoid the use of medical jargon, since it may confuse patients. For example, say "as-needed" or "as necessary" instead of "PRN," "blood pressure" instead of "hypertension," and "twice a day" instead of "BID."
- When you are finished, let the patient know, ask if they have any questions, and thank them for their time.

What is a "best possible" med list or history?

In your practice setting you will probably have guidance in the form of policies or procedures about what info you need to collect. You may have forms, or even a computer template, to use. The following are general guidelines about the information that should be included in a patient's med list or history.

A complete med list or history includes **all of the medications a patient is taking**. This includes medications that are taken or used by any route: orally (capsules, liquids/suspensions, tablets, etc); topically (creams, ointments, transdermal patches, etc); in the eyes or ears (drops, ointments, etc); injected (heparin, insulin, etc); inhaled (inhalers, nebulizers), and so on. It also includes products that don't require a prescription: supplements (e.g., glucosamine, fish oil, etc), vitamins (e.g., multivitamin products, vitamin C, etc), and over-the-counter (OTC) medications (e.g., acetaminophen, ibuprofen, cough and cold preps, etc).

Plenty of folks don't consider supplements, vitamins, and OTCs as "real" drugs. But they are. These products can cause drug interactions with each other and with Rx drugs. They can also cause side effects, which are sometimes serious. With this in mind, it's easy to see why it's important for health care providers to know what nonprescription products their patients are taking.

If you're taking an admission medication history, a patient probably won't be continued on their OTCs, such as supplements, during their hospital stay. But it's important to know about these meds because they might actually contribute to the cause of an admission such as ginkgo biloba, which can increase the risk of bleeding with blood thinners.

Don't forget to ask about immunization history. Patients who need vaccines, such as influenza or pneumococcal vaccine, can get these while they're in the hospital. Asking about immunization can also flag patients who need to receive vaccines in the outpatient setting.

You may need to ask if the patient uses any recreational drugs such as alcohol or marijuana. Similar to Rx and nonprescription drugs, record how much the patient uses and how often. For example, two beers per day or weekly use of marijuana. This information may be important due to possible effects on meds and certain medical conditions. Smoking history is useful as well, so smoking cessation strategies can be recommended if appropriate and also because smoking tobacco can interact with some medications. Be sure to ask these questions in a clinical and nonjudgmental manner.

What other details should be included on a med list or history?

For each medication a patient is taking, the **correct strength and regimen** (dose and dosing schedule) should be included. The **indication or reason for use** should also be included. For example: metoprolol 50 mg tablets, one by mouth every 12 hours, for high blood pressure. This is sometimes referred to as a "complete pharmaceutical sentence."

The benefits to having this information include the fact that dosing errors might be caught. Errors can stem from a number of different sources including a prescriber error, a pharmacy error, or a misunderstanding on the patient's part. For example, if a patient's list has metoprolol 50 mg tablets, one by mouth three times a day, a pharmacist or prescriber would be able to question the regimen. (This med is typically given twice a day.)

The **date each medication was started (or stopped)** is helpful as well. This can help clarify whether a therapy is being duplicated. For example, if a patient gets switched from metoprolol 50 mg PO twice a day to metoprolol extended-release PO once a day, the old regimen should be crossed out with the stop date, and the new regimen should be added with the start date. Including both of these meds, with no start or stop dates, could lead a pharmacist or provider to believe that the patient is taking double metoprolol therapy.

If a patient tells you that he or she has recently stopped or started a medication, ask them about the **reason for the change**. This could range from "because I started on a different medication and my doctor told me to stop taking it" to "it gave me stomach upset" to "I couldn't afford it." This information will be very helpful for the pharmacist and prescriber.

For hospital admission med histories, the **last time the patient took a dose of each medication** should also be recorded if possible. This can help prevent late or early doses of meds that are continued in-house. For example, if a patient taking clopidogrel 75 mg PO once a day is admitted to the hospital mid-morning due to a case of community-acquired pneumonia, it will be important to know whether he or she already took a dose of clopidogrel since an admission med order would likely schedule a dose to be given the same day.

Physical characteristics of a medication, such as the **color, shape, and markings** on a tablet, can be very helpful. If there is a question about a dose, identifying the medication from its physical characteristics can solve the mystery. For example, if a patient says that he or she is taking *Synthroid* 250 mcg by mouth once daily (a relatively high dose) and you suspect that the patient is actually taking *Synthroid* 25 mcg by mouth once daily, the tablet can be used to double-check. The *Synthroid* 25 mcg tabs are orange. A *Synthroid* 250 mcg dose would require that the patient take more than one tablet per dose, since *Synthroid* does not come in a strength of 250 mcg. Checking the patient's prescription bottles can be helpful as well.

A complete list of a patient's **allergies** should also be included on a med list or history. This includes drug allergies such as sulfa drugs, aspirin, and opioids; food allergies such as shellfish, eggs, and strawberries; and environmental allergies such as bee stings, medical tape, and latex. The patient's reactions should also be listed. Sometimes patients mistake reactions that are simply side effects, such as nausea or sedation, for actual allergies. These types of reactions aren't unimportant. A patient who throws up when he or she takes codeine doesn't want to keep on taking it. On the other hand, it's important that reactions that aren't true

allergies don't prevent a prescriber or pharmacist from providing the patient with an important therapy, such as a particular antibiotic.

Any **adverse drug reactions** a patient is experiencing should be documented, in addition to any problems a patient is having taking their meds.

Other information that is good to have on the med list or history is the **contact information for the patient's providers**. For example, if a patient sees a family practitioner as well as an ophthalmologist and an orthopedic surgeon, it's good to have info for all of them on the list. This is especially true if all of these providers are prescribing medications for the patient. Contact info for the patient's pharmacy or pharmacies can be included as well. Ideally, a patient would use a single pharmacy for all of his or her meds. But sometimes, this isn't the case.

What other steps are important in creating a med list or history?

As mentioned, policies and procedures in your practice setting will likely provide a framework for the process you will follow in creating med lists and histories. One of the key components is that the information is gathered in a systematic fashion. So it's not a willy-nilly situation, but rather a routine list of questions wherein each necessary piece of information is addressed. In addition, verifying a med history with a second reliable source might also be required in the hospital setting and is a good idea in outpatient settings too, especially to fill in any gaps in information. These sources may include a family member or caregiver (make sure there are no issues with HIPAA) or the patient's community pharmacy. It's also likely that a pharmacist will be required to review the patient's medication history or list for correctness and to follow up on any potential issues.

In the hospital setting, be sure to follow proper procedures for contact with patients, such as washing your hands after you exit the patient's room.

When should a patient's med lists be updated?

Recommend that patients update their med lists at least **after every visit to a prescriber and after being discharged from the hospital**. This way, changes can be incorporated as soon as they happen. When patients bring in new prescriptions, or come in for a CMR appointment or other pharmacy service, help them add new medications, along with the start date, and cross off old ones if necessary, along with the stop date.

How can patients use their med lists?

Recommend that patients keep their med lists handy in case of an emergency. In addition, the med list should be shown at every office visit, when visiting the pharmacy, or on admission to the hospital. This can help prevent errors and keep all the patient's providers on the same page.

What's the best way for a patient to keep their med list?

A med list can be as simple as a **handwritten list** on a piece of paper. We have an easy-to-use form you can print out and offer to patients, *My Medication List*. For patients who are more tech savvy, there are a number of other options. A med list can be stored as a **simple electronic document** (e.g., *Microsoft Word* document, PDF). The FDA has such a form that can be found at http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM095018.pdf. This form provides very detailed instructions for patients. The Institute for Safe Medication Practices (ISMP) also has a form, at www.ismp.org/newsletters/consumer/alerts/ISMP_Med_Form_PDF.pdf. Patients can save medication lists that are stored as electronic documents on their computers to **USB devices**, which are small, lightweight, and easy to carry or wear on a bracelet, necklace, etc. In fact, some USB devices are made and marketed especially for this purpose. There are also **smartphone apps** such as *My Medications* from the

American Medical Association and **electronic health records** such as *HealthVault*. Some of these have handy features, such as the capability of sharing the list with providers electronically.

Regardless of the mechanism or form used for keeping a med list, it's important for patients to make sure their med lists are complete, correct, and current.

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