



## **Transcript Details**

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www.reachmd.com info@reachmd.com (866) 423-7849

Tracking Medication Errors, Limiting Future Mistakes

#### MEDICATION ERROR REPORTING AND WHAT WE STAND TO LEARN FROM IT

Imperfection may be part of the human condition. When mistakes occur medicine, the after effects can be devastating. While Medicine and Pharmacy have been in practice for thousands of years, the phenomenon of the medication era has persisted and may occur on the watch of even the most conscious and diligent healthcare provider. So, it becomes fair to ask what's changed, how is technology improving our ability to prevent mistakes? As healthcare professionals, how can we become more actively involved in promoting safe medication use and how we stand to benefit? You are listening to ReachMD, The Channel For Medical Professionals. Welcome to Focus on Pharmacy. I am your host, Dr. Charles Turck, PharmD. Our guest is Diane Cousins, Registered Pharmacist and Vice President of the Department of Healthcare Quality & Safety Documentary Standards Division at the United States Pharmacopeia. Ms. Cousins was instrumental in assembling the USP's first Advisory Panel on Medication Errors and creating a National Coordinating Council for Medication Error Reporting and Prevention.

# DR. CHARLES TURCK:

Diane, welcome to the program.

#### **DIANE COUSINS:**

Thank you, good to be here.

# DR. CHARLES TURCK:

To provide a little background, I thought I would start off by asking what is USP, what sort of role does it play, specifically in medication error reporting?

## DIANE COUSINS:

USP is the public standard setting organization and we set standards for prescription over-the-counter medicines, dietary supplements, food ingredients, and other healthcare products manufacturing and sold in United States. The authority to set these standards is actually derived from the food, drug, and cosmetic acts, so that the set of authority is USP, the ability to set standards that are enforceable by the food and drug administration.





#### DR. CHARLES TURCK:

What NCC MERP?

#### **DIANE COUSINS:**

In 1995, USP had been operating a medication errors reporting program for 4 years and we began to learn about circumstances beyond our mission and felt we needed to do something about this medication errors, and when we became involved in medication errors, we did it because we wanted to get involved in areas where our standard setting authority was clear in the areas of drug naming, packaging, labeling, storage, and like, but we began to learn there was much more to this problem than what USP could effect, and so we convened a group of 14 national organizations and agencies that had the means and resources and the membership, the outreach to really help resolve some of these issues and then disseminate the results of the work of this group in a way that could reach out to the masses. We began a group called the National Coordinating Council for medication error reporting and prevention and this council was actually modeled after an earlier national coordinating committee in early 70s that focused on large volume parenteral. There had been around 50 deaths due to problems with large volume parenterals and that group was so successful in addressing the problem at the time that we felt that this could be a model organization for addressing medication errors as well. So, we adapted that model in a way that brought together national organizations and agencies that had an interest in medication error prevention and it actually was a start of a council that still remains today, one that is independent, one that is completely funded by our own contributions of organizations. There are no dues, there is no formal membership as such, just the passion to address issues regarding medication errors.

### DR. CHARLES TURCK:

You mentioned that the organization upon which NCC MERP was modeled is largely successful. What are some of the accomplishments of NCC MERP of which you are most proud?

## **DIANE COUSINS:**

This year the National Coordinating Council was recognized with the John Eisenberg Award from the National Quality Forum and the Joint Commission and that award recognized innovation in quality and patient safety, and the achievements of the National Coordinating Council, I think I can safely say as a founding member and for those other organizations that worked with us in those early days. It has far surpassed the reach that we had ever expected. One of our most difficult challenges in the very beginning was defining what is the medication error. There were so many variations in what an error was being perceived as? For example, there were some research studies that were measuring medication errors beginning at the point of following the physician's order of the drug, and of course what we've learned is that there could be error in the ordering step and so the definition of medication error reached back all the way to the beginning of the medication use process, and it also followed though the process to the point of not just administering, but also monitoring the drugs effects and so this broader definition of medication error was really the first time that we had begun to look at this continuum and assign these points at which things could go wrong. The definition of medication are also included the concept of preventability, one that has been key to the development of patient safety initiatives over the years. After defining a medication error, we created a classification system that ranked the severity of the error based on the outcome to the patient, so this what we call category index, ranks from the A through I. The different stages of medication errors that at the point that which they are identified. So, you have what we call potential errors. These refer to hazardous situations that hasn't quite occurred, but you could imagine that 2 labels of drug products are similar that the 2 products could be mixed one for another. We have errors that are intercepted long way and so one healthcare professionals somehow identifies that the wrong product was dispensed and prevents this from actually reaching the patient. We have errors that reached the patient and have no adverse outcome or require observation or monitoring, but we also have medication errors that reach the patient and cause some level upon or even fatality and all of these are graded in this category index.





These really have been the cornerstones of medication error analysis and prevention in years to follow.

#### DR. CHARLES TURCK:

I think it's clear to most listeners that the medication errors represent a direct threat to the credo of doing no harm to patients, but I thought it takes a moment to recognize perhaps some of the other effects of the medication errors can have on institutions. What would you say some of those are?

#### **DIANE COUSINS:**

Well, I think first of all the fact that a patient is harmed by an error is of course something that both a healthcare professional and the institution want to avoid at all costs, I mean people are coming for healthcare and they expected to be safe healthcare and they have that right to expect it. When these errors occur though there are many ways in which they manifest, in fact and even far beyond the patient, I mean there are healthcare professionals, who were involved in these and we see this all the time. These are people who are dedicated professionals, often times they have been in service for many years. They would never think of doing something that could harm the patient, but somehow in the courses of events, something happens. So, you have the individual healthcare professionals who the institution would have concern for. We have the use of resources, I mean when an error occurs, first of all it's not always very evident that it did occur, but once it's determined obviously you are trying to manage this patient and we do track the responses to medication errors, which can often include administering life support, providing antidote by way of drugs, increasing observation, increasing the number of tests involved, all of which cost the healthcare system in the long run, and finally I think one of the effects that's becoming more and more apparent to the public is the reputation of the hospital. Not only are these things something that may get into the press and become detrimental to the reputation of the hospital, but also the idea, the concept of public reporting is becoming one more notion that we feel can help consumer patients choose where they want their care delivered, and so the fact that these adverse events are occurring can, in fact, be reflective of the reputation of the institution, and finally, you know, there is the payment model that goes along with the Centers for Medicare Medicaid Services, recently declined payment for certain adverse events that occur in hospital and of course that will certainly get the attention of the administrators and those who are in a position to really give it the attention that it needs.

# DR. CHARLES TURCK:

If you are just joining us, you are listening to Focus on Pharmacy. I am your host, Dr. Charles Turck. Our guest is Diane Cousins, Vice President at the United States Pharmacopeia Department of Healthcare Quality & Safety Documentary Standards Division. We've been discussing the collection of information to help us learn from medication errors.

And I thought I might resume by asking which health professions are most commonly involved in medication errors and which ones also seem to be the best at reporting them?

## **DIANE COUSINS:**

Well, it's interesting when we look at who is involved in these errors. Most of all, it tends to reflect reporting rates, more so than error rates, so what we have seen is from the earlier days, were numbers higher in the area of pharmacy personnel or nursing personnel. They are usually the one set identified these errors and they are used to, especially in the pharmacy area, documenting these things, nurses are used to documenting incident reports, so what we have seen over the years stands proportions of may be a third, 15% may be a low-end for these 2 disciplines, but again, this is more I think reflectives of reporting rates than it is of actual error rates because we do not really know what we don't know. We only know what's been reported. One of the things we have seen over the years, though is an increase in the documentation of errors, for example involving prescribers and so this is staring to change the mix of proportion of





errors by healthcare professionals involved, but I will say that USP is tracking, I think it's about 30 different individual staff types in these hospitals and health systems, and all of them have been involved in errors in one way or another, so while we think about the most obvious disciplines, the fact is that anyone who is involved with medication administration dispensing, storage, etc., can be involved in medication errors.

## DR. CHARLES TURCK:

You have it at your disposal information about which medications are most commonly implicated in medication errors. Are there any medications in that list that kind of surprise you in terms of again, you know, being involved at such a high rate with medication errors?

### **DIANE COUSINS:**

It's interesting that USP has tracked medication errors since 1991 and we probably had seen very little variation in the medications that are involved in medication errors, granted a lot of this reporting has happened in hospitals and their related facilities and so the medications tend to be reflective of possibly the things that are used in highest volume, but what we have seen is that there are certain things that top the list whether it's the top 5 or the top 10 and those are insulin; morphine; heparin; hydromorphone; warfarin; potassium chloride for many years, you know, we were seeing these errors with undiluted potassium chloride and, in fact, although they are more rare now, they do, in fact, continue exist. So, what you hear then is by mentioning these drugs is the similarity in the drug classes. So, you know the opioid analgesics, the anticoagulants really are what we now call the high-alert drugs, drugs that have the potential to cause harm when an error does occur and these are the drugs that institution should place priority on when they are trying the design safety into their system.

# DR. CHARLES TURCK:

We've been taking with Diane Cousins about medication error reporting and what we stand to learn from it. Diane, thank you so much or joining us.

## DIANE COUSINS:

You're very welcome.

### DR. CHARLES TURCK:

I am Dr. Charles Turck and you have been listening to Focus on Pharmacy on ReachMD, The Channel for Medical Professionals. Would appreciate to visit our website at www.reachmd.com, featuring on-demand podcasts of our entire library. Thanks for listening.