

Outsource Compounding Preparations to Reduce Waste

Q&A

with **Joetta Wade**,
PharmD

Pharmacy Purchasing & Products: How do you determine which compounded products to outsource?

Joetta Wade: Our list is actually quite long—at this point we are outsourcing about 50 products. Our goal is to find a happy medium between meeting our usage needs while avoiding waste generation. We choose to send out drugs that are fast movers, as well as any IV products for which we have established standardized doses. For instance, we have three standardized concentrations of fentanyl on formulary, and with the outsourcer providing extended data, this is an ideal product to send out. Because we have a computerized prescriber order entry system, we can direct physicians to the appropriate order concentrations. Our primary determinant for outsourcing is high product usage coupled with the availability of stability data.

We also look to outsource any products that create challenges for our compounding technicians. Be sure to review compounding practices in the satellite pharmacies when making these determinations. Given how busy compounding areas can be, we want our staff to be able to focus on compounding in a safe manner.

Of course, cost is always a consideration as well. If our technicians can compound the same product in-house at a significantly lower cost, then outsourcing cannot be justified.

PP&P: What is your process for adding a CSP to the list of outsourced products?

Wade: When considering a compounded product for outsourcing, the first step is to run a usage report for the past year to determine average daily use. To get a full picture, review the number of items dispensed versus those credited. Every six months, the usage reports for each outsourced product should be reviewed again

to identify any changes in trends. It is important to request room temperature extended dating when possible, because refrigeration space is often at a premium and those products require additional oversight to manage.

PP&P: What strategies do you use to minimize waste with your compounded products?

Wade: Establishing par levels is key to minimizing overstock and resultant waste. Train staff to maintain minimum par levels, which will ensure the product does not run out, requiring in-house compounding or resulting in wasted product. By setting our par levels at a one-week supply (with holidays and weekends more variable), we were able to significantly reduce our waste. Simultaneously, we emphasize to our staff that running out of a product is not a momentous problem, as we can generally acquire more the next day, and in-house compounding can meet any short-term needs.

Forecasting usage consistency is also important, particularly when the supplier requires a minimum order. For example, outsourcing calcium chloride for use in conjunction with renal replacement therapy can make sense, given how time consuming the

product is to make and the number of bags required when an order is received. Nonetheless, we recently stopped outsourcing these bags as we found some months we went through significant amounts of calcium chloride and the next month we would not have any cases that required it. The resultant waste in the off months offset the efficiency gains in the busy months and we could no longer justify the cost of outsourcing this product.

PP&P: How often do you place orders?

Wade: We order TPNs on a daily basis and orders for other items are placed at least twice a week.



When considering a compounded product for outsourcing, the first step is to run usage reports for the past year to determine average daily use.

PP&P: How do you work with your outsourcer to establish beyond-use dating?

Wade: We provide the list of products we are interested in having extended dating for, along with our estimated usage numbers. Generally, we are looking at this option for high volume items, such as calcium gluconate, fentanyl bags, fentanyl bupivacaine epidural bags, magnesium sulfate, calcium chloride, and some drips—vasopressin drips and epidural drips. Because the outsourcer conducts the stability testing and keeps that data on file, it is easily available to us.

A key benefit of extended dating is that it gives us the ability to stock high-use items in automated dispensing cabinets (ADCs). Once a physician enters an order, it links to the ADC. Then, following pharmacist review, the nurse can retrieve it directly from the ADC, instead of waiting for pharmacy to dispense it to the unit. Nursing appreciates this immediate availability. The second benefit is increased reuse. If a patient is discharged or an order changed, the returned product is credited to the original patient, the label is removed, and the extended dating allows us to reuse the product.

PP&P: How do you approach outsourcing for TPNs?

Wade: In the past we produced our TPNs in-house using a compounder. Now all of our TPNs are outsourced. On a daily basis we use approximately 25 adult and 25 pediatric TPNs, all of which are 2-in-1 products. Our approach is to standardize the ingredients we use, but not the concentrations. In our experience standardized TPN concentrations work well with the initial order, but once the lab results are back, for example, each TPN should be customized.

We worked with our outsourcer to interface our two order entry systems (adult and pediatric) directly with theirs to create a paperless process. Now our physicians log into our system to enter the

required data into the order sets, and once pharmacy accepts the orders, they are transmitted electronically to the outsourcer. Because the system is so user-friendly, the physicians are happy with this approach.

PP&P: How do you manage STAT TPN orders?

Wade: We do not have any STAT TPN orders in our facility. All TPN orders must be entered by the 3:00 PM cutoff time. Should that deadline be missed, fluids are hung until the next day. The orders are delivered by 8:00 PM of the same day and generally hang for twenty-four hours starting at 9:00 PM. Fortunately, our outsourcer is very reliable and we have never had any problems receiving our orders on time.

PP&P: Where do you see the future of outsourcing in your hospital?

Wade: We plan to continue expanding our use of outsourcing. Currently we are looking at outsourcing combination products to avoid any mixing on the units. For example, we recently requested a fentanyl and bupivacaine syringe from our outsourcer. Providing this in a ready-to-use form means our anesthesiologists no longer need to mix this at the bedside, ensuring safer preparations. Because this was not a product our outsourcer offered prior to our request, they had to go through their approval process. Keep in mind that stability data will not be available immediately for newly requested products. Due to the expense involved, the outsourcer may require a significant order before proceeding with the stability testing. ■

Joetta Wade, PharmD is the central production manager at the University of Maryland Medical Center in Baltimore, Maryland. She obtained her PharmD at the University of the Sciences in Philadelphia and a BS in exercise physiology at West Virginia University.



www.capspharmacy.com
phone number here