

Imagine begin told that the prescription drugs you need will not be available for weeks, maybe months because of a national drug shortage. This is the reality for patients forced to play...

The Waiting Game



NICK MICHAEL/Missourian

Two drug bins in the refrigerator at the pharmacy at Missouri Cancer Associates lie empty due to a nationwide drug shortage on August 24. Doxil is prescribed as treatment for ovarian cancer and multiple myeloma. "This is the worst year ever for drug shortages," said Deb Tesoro, pharmacy manager at Missouri Cancer Associates.

By *Josh Barone* and *Kellie Kotraba*

It's a dilemma no physician should ever have to face: Mosharraf Hossain had two cancer patients scheduled to come in on the same day to receive the same drug treatment. But he only had enough medicine for one person.

The drug Hossain needed, 5-fluorouracil, was one of 180 nationwide that are in short supply. Of those, at least 20 are used in cancer treatment or chemotherapy relief. For some patients, the shortage can force a change in their treatment regimen.

For others, it can lead to a waiting game until more drugs become available.

Finally, Hossain, a physician at Ellis Fischel Cancer Center, picked up the phone to cancel one of his patients' appointments. He knew he'd have to explain that it was a national problem, that he would have to put the treatment on hold and that his office would call back later to reschedule — whenever the drug became available.

But no one wants to receive that phone call. Hossain decided to start with small talk.

"The most important thing is the relationship between the patient and me," he said. "First, you try to bring the positive things so that you keep their spirits up."

He began by going over the patient's most recent scans and mentioning the progress they had made in fighting the colon cancer. Then, he broke the news. He wouldn't be able to give the patient the drug. But it might be available within a week, maybe two.

The truth, Hossain knew, was that two weeks was just an estimate; he had no idea when the drug would be available. But the last thing he wanted was to alarm his patient. He tried to be reassuring: The wait would not make or break the treatment, he repeated.

"For the patient, they think that they are not getting the medicine they're supposed to get," Hossain said. "It creates anxiety. It's frustrating."

And it's not getting any better. In fact, it's only grown worse. As of Aug. 31, there were 180 drugs in short supply, Food and Drug Administration spokeswoman Shelly Burgess said. Last year, the number was 178, nearly triple the number six years ago.

"This is the greatest severity of drug shortages in existence that I've known," said Brad Cook, president of the Missouri Society of Health-System Pharmacists. "For some

reason, it doesn't want to get better. Every time you turn around, there seems to be another drug shortage."

There isn't a single explanation for how things got so bad. At the root of the problem is pharmaceutical manufacturing, insufficient advance notice of dwindling supplies and then hoarding of hard-to-get drugs.

Most of the drugs in short supply are generic sterile injectables, "especially older sterile injectables," Burgess said. The main cause of the shortage, she said, is "quality manufacturing issues," among them, "discontinuation of older, sterile injectables for more profitable products."

Industry consolidation has had a role in the shortage, said Joseph Hill, director of federal legislative affairs for the American Society of Health-System Pharmacists. Manufacturers have been reduced in number and size. Compounding the problem is a quality control issue: Because the drugs are sterile injectables, the process of making them is complex, he said.

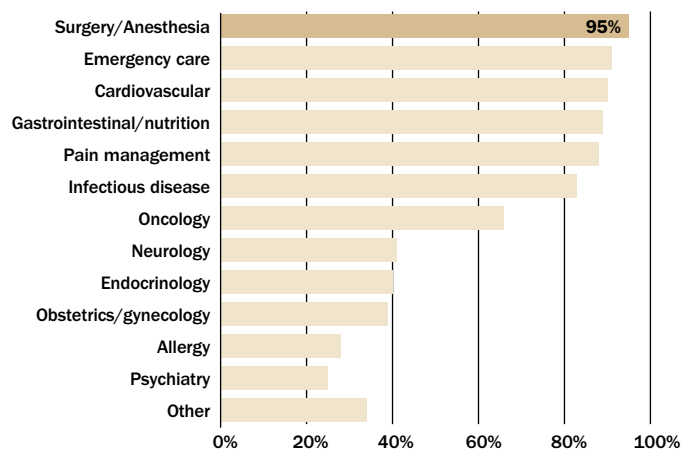
"You look at the industry consolidation, then factor in quality control, and it's all the ingredients for the perfect storm here," he said.

Hill said the most recent count he heard was 200 drugs in short supply. Both the FDA and his association track shortages, he said, but the FDA only tracks drugs it deems

HOSPITALS EXPERIENCE A DRUG SHORTAGE

About 800 hospitals responded to a survey about drug shortages from the American Hospital Association. The results show how drug shortages affect patients and how they are treated.

PERCENT OF HOSPITALS IN THE U.S. EXPERIENCING DRUG SHORTAGES BY TREATMENT CATEGORY IN THE PAST SIX MONTHS



Source: AMERICAN HOSPITAL ASSOCIATION SURVEY ON DRUG SHORTAGES

SARAH MORRIS/Missourian

medically necessary. The association tracks all drugs.

Individual hospitals aren't helping, either. Some hear about the shortage and hoard what supplies they have, said Linda Bressler, the director of regulatory affairs for Cancer and Leukemia Group B, which is funded by the National Cancer Institute.

In her role at the organization, Bressler sees the consequences of the shortage as they filter down from the source of the shortage itself, she said. "Everyone wants to blame someone else."

When hospitals receive notice that a drug is either in short supply or unavailable, it's often too late to do anything about it. That is why some hoard the drugs they have; it's difficult to anticipate when an emergency supply will be needed. Hossain, for example, said Ellis Fischel usually receives a heads up around one to two weeks before a drug's supply runs out.

Although drug companies aren't required to give early notice of a possible shortage, some of them do. Last year, 38 shortages were prevented because companies voluntarily gave sufficient notice to the FDA about a possible shortage.

According to a recent survey by the American Hospital Association, three out of four hospitals said they "rarely" or "never" received advanced notice of a shortage.

The survey, conducted in June, included analysis from 820 nonfederal, short-term, acute care hospitals nationwide. That's just a slice of the 2,800 urban hospitals, 1,300 critical access hospitals and 1,000 other rural hospitals in the U.S.

Of the surveyed hospitals, 0.5 percent did not have any shortages during the six months leading up to the survey. But 47 percent experienced a drug shortage every day.

For Truman Veterans Hospital, a drug shortage is nothing new. "We've had problems for months, going on years," Chief of Staff Lana Zerrer said.

The veterans hospital is short on paclitaxel, a drug used to treat many solid tumors, such as lung cancer. And there are a lot of patients with lung cancer being treated at the hospital, Zerrer said.

Patients are started on treatment courses that can last for weeks, or even a year. When a drug becomes unavailable, the treatment plan is changed. But the new plan might not be as effective as the original. The drugs might not work as

Waiting for Doxil: one patient's story

Josh Barone and Kellie Kotraba

Among other things, Judith Dougherty is a gardener. Every year, she grows the usual vegetables — squash, potatoes, corn. But she also likes to experiment with something new each season. Right now, she's trying all heritage vegetables.

"It hasn't worked out as well as I thought it would, but it's OK," Dougherty, 66, said. "But my health has not been good enough to take care of my garden as much as I want."

Dougherty, a retired elementary school teacher, has spent the past 14 years in treatment for breast cancer, which in 2006 spread to her bones and liver.

Recently, she has spent a lot of time waiting for Doxil, the drug she needs to keep fighting the cancer.

Doxil is the newest in a series of drugs Dougherty has used in treatment. It's also one of about 180 that are in short supply nationwide. She's one of about 1,000 people on a waiting list to receive the drug.

"The drug she's on seems to be holding the cancer cells at bay," her husband, Ron Dougherty, said. "So, we're quite disappointed, quite alarmed about what are we going to go through next."

One of Judith Dougherty's doses was among the last of what Missouri Cancer Associates had on hand. Three weeks later, when she needed her next dose, she went to Boone Hospital Center, where she received the last of what that hospital had to give. She was supposed to receive her next treatment Sept. 2, but the drug wasn't available. So, she waits.

Both husband and wife have one big question they'd like answered: Why?

Judith Dougherty said she hasn't the slightest clue of what brought on the shortage.

"This is an old medication. It's not a new drug," she said. "We have no idea why it's not available. It's kind of frustrating to all the people, not knowing."

As her husband put it: "You're dealing with life and death."

Despite everything, Judith Dougherty is worried less for herself and more for others. "I've gotten to see a lot of things, but there are so many other people who are not getting" the drugs they need, she said. "This might be a life-threatening catastrophe. My feeling is, oh my gosh, what happens to those people?"

well, or the patient's body might not tolerate the new regimen.

"It's potentially dangerous," she said.

Most physicians, Cook said, have a repertoire of drugs and dosages they normally prescribe. If they have to substitute one medication with another because of a shortage, there is an inherent risk of increased mistakes.

Cook has heard of situations in which substitutes have led to problems — oversedation, cardiac arrest and even death.

The veterans hospital has had to change many treatment courses, Zerrer said. To avoid changes, doctors try to look ahead. If they see a possibility that a drug will run short, they can put patients on a different plan from the start.

The new plan might not be ideal, but keeping a consis-

tent plan is better than changing plans partway through treatment.

The consequences of changing treatment plans are even larger in cancer research. There are some options in looking for alternatives, Bressler said, but they might alter the clinical trials. So, her organization has been forced to stop a patient's treatment before it even had the opportunity to begin.

There's also the question of who should receive treatment when multiple patients require the same drug, such as with Hossain's patients. It's never an easy decision, Bressler said, and it depends in

part on how advanced the cancer is.

The goal of treatment for patients with advanced cancer, for example, is improvement in quality of life. For patients

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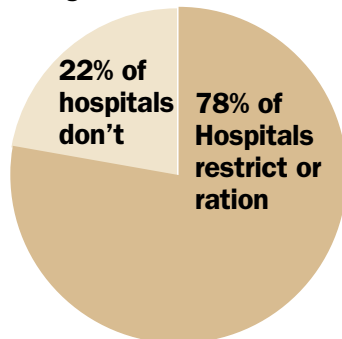


NICK MICHAEL/Missourian

Deb Tesoro manages the pharmacy at Missouri Cancer Associates during a nationwide shortage of cancer pharmaceuticals on August 24. The shortage has forced the pharmacy to waitlist patients who rely on certain drugs. "This is the worst year ever for drug shortages," Tesoro said.

HOSPITALS RESTRICT, RATION DRUGS

Hospitals respond to drug shortages in different ways, but many restrict or ration access to the drugs that they do not have enough of.



Source: AMERICAN HOSPITAL ASSOCIATION SURVEY ON DRUG SHORTAGES

SARAH MORRIS/Missourian

with early-stage cancer, the goal is to save their lives. The decision is made on a case-by-case basis, she said.

In the case of the patient with advanced disease, Bressler said, the consequence of delaying treatment might not have all that great of an impact on its ultimate outcome.

“But that’s hard to tell the patient,” she said. “That’s the decisions that people are faced with, but you can’t make a policy about that so, what do you do?”

The shortages at the veterans hospital, like the shortages across the country, aren’t just with cancer drugs. “It could be a blood pressure drug this week, an antibiotic next week,” Zerrer said.

In mid-August, it was aminocaproic acid, which is used to decrease blood loss in open heart surgery. In April, the company that makes the drug suspended production. It didn’t start up again until May. That caused a shortage.

The hospital only had enough to do six more surgeries — six surgeries for the six states it serves.

Because the local veterans hospital is the regional referral center for cardiothoracic surgery, patients come from Kansas, Missouri and southern Illinois, along with parts of Kentucky, Arkansas and Indiana.

Fortunately, the hospital found a supply. A veterans hospital in Seattle had enough of the drug and made an overnight shipment. The drug’s supply should be back to normal soon, Zerrer said.

The shortage is prompting policymakers to propose steps that could prevent another crisis. Rep. Diana DeGette, D-Colo., has introduced a bill in Congress that would allow the FDA to require that drug manufacturers give a minimum six-month notice of a potential shortage of any drug.

Burgess, the FDA spokeswoman, couldn’t comment on the legislation but said, “Here’s what we know: Early notification is helpful.”

The bill states four evidence-based criteria would be used to identify drugs vulnerable to shortages:

- The number of manufacturers of a drug.
- The sources of raw material or active ingredients.
- The supply-chain characteristics and complexities.

- The availability of alternatives.

But Cook said there’s something missing: a redefinition of what makes a drug “medically necessary” to reflect its prevalence. Neither the bill nor its definition of medically necessary take into account how widespread a drug’s use really is.

“Hopefully the legislation will help with this,” said Cook, who otherwise supports the measure.

However, the bill was introduced and referred to a House subcommittee in June and hasn’t moved since. In a statement through his press office, Rep. Joe Pitts, R-Pa., chairman of the House Subcommittee on Health, said there aren’t any easy solutions to the problem, and “unless legislation is carefully crafted, it could make the problem worse.”

Pitts said the subcommittee staff has been meeting with representatives of the drug industry, as well as members of

National outlook

Here’s a look at how the drug shortage is affecting other doctors, patients, hospitals and communities across the country.

- A Georgia woman had to go to the emergency room after her medication was changed because of the shortage.

- ABC News reported on several hospitals nationwide that were short on Taxol, which is used to treat several kinds of cancer.

- “It’s like going to the store and finding out they’re out of aspirin,” said one Colorado woman whose treatment has been curtailed.

- Two doctors in Massachusetts spoke about the challenges they are facing.

- A man in California called three drug manufacturers when his treatment was delayed. He received vague answers.

- Doctors caught a Houston man’s lung cancer early, but he was put on a waiting list because the drug he needed wasn’t available.

- A pharmacist and a cancer specialist talked about how the shortage is hitting hospitals in western Montana.

- A pharmacist in Idaho expressed a hopeful view of the shortage. That was in May.

- Anchorage, Alaska, was feeling the strain last November.

the FDA. In the fall, a hearing will be held to “examine the problem in more detail and discuss possible legislative solutions.”

The bill might encounter snags in the legislative process. One, the bill’s provisions effectively would add federal regulation to an otherwise free market, so it might run afoul of “big government” critics.

Two, no one is certain what influence the pharmaceutical industry’s lobby might have. According to the Center for Responsive Politics’ openSecrets.org, for the past five years, pharmaceuticals have been in the top-three list of industry contributors to the campaigns of both Pitts and Rep. Fred Upton, R-Mich., chairman of the House Energy and Commerce Committee, the subcommittee’s parent.

Until a solution comes along, treatment for some Columbia cancer patients involves spending time on a waiting list.

Deb Tesoro, pharmacy manager at Missouri Cancer Associates, said some local patients are on a waiting list for Doxil, which is used to treat ovarian cancer and multiple myeloma, among other cancers. Unlike some of the other drugs on the list, it’s a name-brand drug, and it doesn’t have a generic alternative. So, the patients who need it are either put on a different treatment plan or put on the waiting list.

As of Aug. 18, there was no Doxil left to give. A “modest and limited” supply had been allocated, according to an update on the drug website.

That allocation went to more than 1,000 people in a program called Doxil C.A.R.E.S. Patients are enrolled in the program through their physicians, and those who are in the program and on the list when the drug becomes available get enough of the drug to finish their treatment.

When it’s not available, those on the list keep waiting, and those who are newly enrolled are added to the end of the line.

There are about 1,000 other people on the waiting list to receive the drug.

“It’s better to be on the list than not,” said Monica Neufang, spokeswoman for Janssen Biotech, the company that distributes the drug. That way, she

said, there’s a chance of getting it. Doctors have been told not to write new prescriptions for the drug.

Neufang said the shortage comes from the third-party manufacturer: Ben Venue Laboratories. She said Ben Venue is having “production issues due to capacity constraints.” It’s a complicated drug to make, she said, so there are few places that can manufacture it.

Tesoro said she doesn’t know when more of the drug will be available. The web updates don’t give a date, nor do the people she’s called.

Missouri Cancer Associates only has “a handful” of people on the national list, but Tesoro said the amount could vary depending on the treatment center and what its specialty is.

Tesoro said doctors are telling their patients to contact their congressional representatives with the problem. “Tell them that this is absolutely 100 percent not acceptable,” she said.

Carl Freter, director of hematology and oncology at Ellis Fischel, said the shortage’s effect there hasn’t been severe, and he’s “frankly, quite proud” of the way the hospital has handled it. He couldn’t give an exact count of how many patients had been affected by the shortage but said: “We’re not talking a large number.”

The hospital has had “minor delays” in treatment he said, but that’s not unusual. He noted that people sometimes voluntarily delay their appointments.

However, research hasn’t accounted for the randomness in missed treatments that come from the drug shortage, Bressler said. It’s not uncommon, she noted, for patients take a break from treatment to alleviate toxicity. But this is different.

The delays can take a heavy emotional toll on the patient. If a patient has an advanced disease, she said, the delay might not be “detrimental. It’s unpleasant emotionally, which is not to be minimized.”

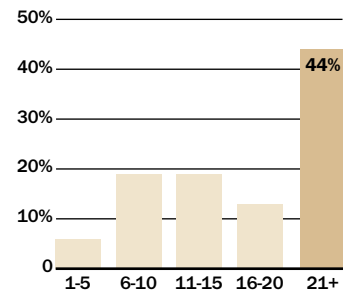
Fortunately, the stress was short-lived for Hossain’s patient, the physician said. Within a week, Ellis Fischel called and asked the patient to come in and receive his treatment, just as Hossain had predicted.

Nothing guarantees that the shortage scare won’t happen again, but treatment has been back on track for about a month now. In fact, the patient has an appointment for Monday.

HOSPITALS SHORT ON MULTIPLE DRUGS

The drug shortage problem reaches a lot of hospitals, with many of them reporting that they are short 21 or more drugs.

PERCENT OF HOSPITALS WITH A GIVEN NUMBER OF DRUGS IN SHORT SUPPLY



Source: AMERICAN HOSPITAL ASSOCIATION SURVEY ON DRUG SHORTAGES

SARAH MORRIS/Missourian