How the Yale Health Pharmacy deals with medication shortages and recalls

The fact that the number of medication shortages has dramatically decreased the past few years probably doesn’t mean much if it’s your medication that is running low. You can, however, take comfort in knowing that the Yale Health Pharmacy staff is working every day to ensure you leave their counter with the medication you need.

Medication shortages can happen for a number of reasons, but the most common are quality and manufacturing issues. Delays in receiving raw materials from suppliers and manufacturers’ decisions to discontinue a product can also impact supply. A high percentage of shortages are sterile injectables, including chemotherapy, anesthesia, and other acute drugs due to the fact that there is more opportunity for quality or production problems with the added medical device of the actual injector. In 2011, the Food...
\textbf{ONE STEP AHEAD \ CONTINUED FROM PREVIOUS PAGE}

and Drug Administration (FDA) reported 251 medication shortages (183 injectables). In 2017, it reported just 35 (26 injectables).

But before a shortage even arises, inventory management is critical, said Bryan Cretella, PharmD, RPh, the Pharmacy’s assistant director.

“We set inventory levels so when our supply of a medication dips below that level, it automatically re-orders,” he said. “We are always managing those levels by looking at utilization to see if usage of a particular medication has picked up so we can adjust accordingly. We also frequently do manual spot checks to make sure the actual stock we have on hand matches what the system thinks we have.”

If the Pharmacy is alerted to a shortage, staff may have to limit the supply available to each patient based on available inventory and estimated need. For example, a recent shortage of EpiPens required the Pharmacy to limit each patient to one box (two EpiPens) until more became available.

Staff may also reduce a 90-day supply of medication to a 30-day supply, based on the situation, to ensure all patients have their medication available. If there is a cost savings based on purchasing a longer supply, the Pharmacy will honor the benefit.

“We’ll do the appropriate thing to do good by our patients,” Cretella said.

During a shortage, the Pharmacy’s Inventory Specialist manually checks two different wholesaler websites multiple times each day to see if any inventory has been added for the affected medication. If any amount becomes available, the maximum amount allowed is ordered.

And the Pharmacy staff doesn’t stop there.

When a national shortage of Shingrix (shingles vaccine) was announced last year, Pharmacy staff got on the phone with the manufacturer to plead their case. They also brought manufacturer account representatives on site to the Yale Health Center to explain their concerns.

“The result?

“We received a larger supply relative to other comparable health plans,” said Cretella, adding that certain limitations still exist due to the shortage.

If it ever gets to a point where a certain medication is just not available, Pharmacy staff would work with your prescribing clinician to get you moved to a comparable alternative medication.

Cretella said he can’t recall a situation where there was “zero answer” for a shortage.

The same goes for recalls where an alternative medication may be necessary, based on the situation.

Medications may be recalled for impure or improper ingredients, possible contamination, improper dosage, and mislabeling, among other reasons. When a medication is recalled, the Yale Health Pharmacy is notified by its wholesaler that it has purchased the recalled product.

There are three levels of recall (Class I-III) based on the severity and the product manufacturer sets the level. A Class I recall is the most serious and states there is a “reasonable probability that the use of or exposure to a product will cause serious adverse health consequences”. Conversely, a Class III recall involves a medication where there isn’t an immediate concern for a patient’s health.

Regardless of the level, Pharmacy staff immediately collects the product including any in stock in other places at the Yale Health Center, such as Acute Care, and ensures that it is not dispensed.

“Patient safety is our number one concern,” Cretella said. “Everything we do and every initiative we have in this department is based on safety.”

When a recall reaches the level of needing to exchange product, Pharmacy staff gathers information on anyone who was given the medication in the two years prior to the recall date. They also work with Magellan Rx Management, Yale Health’s Pharmacy Benefit Manager, to look for any patients who may have bought the recalled medication at an outside pharmacy.

Pharmacy staff then contacts those patients by phone and asks them to discontinue use and to bring the medication to the Pharmacy for a new lot number of the same drug at no cost. If staff is unable to reach a patient after three phone attempts, they send a letter to their home with instructions on exchange.

The FDA keeps a running list of recalls and shortages on its website. Pharmacy staff checks the list every day just to be sure nothing goes undetected. A member of the Pharmacy team collects pertinent information from the FDA recall notifications and places it in an easily retrievable location for other staff members. When a patient calls to inquire about a recall, the Pharmacy staff has this information readily available and can quickly communicate whether or not the Pharmacy has ever dispensed the product.

“Whatsoever we can do behind the scenes to make sure there is the least amount of impact to patients as possible, that’s what we’ll do,” Cretella said. “If we’re doing our job right, drug shortages will go unnoticed by our patients and drug recalls will be quickly communicated. We want our patients to feel confident that our Pharmacy is doing everything possible to help them achieve their healthcare goals.”
FROM THE DESK OF PAUL GENECIN, MD

The World Health Organization (WHO) has identified weak primary care as one of its “Ten Threats to Global Health in 2019”. Access to primary care is a major challenge in low-income countries, but weak primary care also extends beyond regions with scant resources. Yale Health’s founders deliberately built our model of care on relationships between patients and clinicians—and we may take it for granted that our members enjoy comprehensive primary care. However, the Yale Health system is the exception rather than the rule. I often hear from non-Yale affiliated people how hard it can be to find a primary care provider.

Our primary care goals are to prevent illness and to diagnose conditions at early stages when they are most likely to be treatable. We emphasize age-appropriate screening for hypertension, diabetes, hyperlipidemia, sexually transmitted illnesses, cancer, and other conditions to ensure that our members have the best chance to get well and stay well. Primary care can only fulfill its promise of prevention and early diagnosis if we utilize the recommended services. Even with Yale’s rich clinical resources, roughly 10 percent of Yale Health’s adult members do not seek routine health care. Yale’s unions negotiated the Health Expectations Program to incentivize workers to obtain primary care services starting in fall 2018. As a result, we are finding hypertension, diabetes, and cancer among other conditions that we can treat successfully with early detection.

Vaccines to prevent infection also play a vital role in primary care for people at every age, especially in childhood. Vaccine hesitancy is another of the top ten global threats listed in the WHO report. It describes the attitudes of people who reject vaccines. When we consider that vaccines prevent two to three million deaths worldwide each year, the re-emergence of diseases such as measles is as disturbing as it is avoidable. The measles vaccine is safe and effective, yet we have seen a 30 percent increase in measles since 2016, largely attributable to insufficient vaccinations. In fact, there were more cases of measles in the United States in the first three months of 2019 than in all 12 months of 2018. Measles can be a devastating disease, and infections in unvaccinated people jeopardize children who are too young to receive vaccines as well as immunosuppressed patients and vaccine non-responders. Hesitators credit (and disseminate) misinformation about vaccine safety, encouraging others to refuse vaccines that are demonstrably safe. Yale Health clinicians work hard to share reliable vaccine information and offer relationships of trust to our members to help them overcome their hesitancy.

If you are overdue, please meet with your primary care provider to discuss your own health risks and priorities. Find out about screenings, early detection, and vaccinations. I would love to hear your suggestions about ways that Yale Health can do a better job of increasing awareness about primary care and its role in keeping us healthy.

For more information on the WHO’s report, visit who.int/emergencies/ten-threats-to-global-health-in-2019.

Director

yalehealth.yale.edu
Leading the Way
Dr. Julie Rosenbaum named Chief of Internal Medicine

YALE HEALTH HAS FOUND ITS NEW CHIEF of Internal Medicine. And it just may have Northeast traffic to thank.

Dr. Julie Rosenbaum grew up in Chicago, the youngest of three children and daughter of a stay-at-home mom and a patent attorney. When it came time for college, the diehard Chicago Cubs fan chose Brown University in Providence.

“I came east for college and seem to have gotten stuck on 95 ever since,” she said with a smile.

Rosenbaum has always had an interest in the sciences, but wasn’t sure which route she wanted to pursue as a career. At Brown, she majored in biomedical ethics and took courses in biology, neurology, sociology, anthropology, and philosophy, graduating with her undergraduate degree in 1990. During that time, she realized all of those subjects fell under the umbrella of medicine.

“Part of what fascinates me about medicine is it’s a place where there is this amazing intersection of medicine, technology, legal issues, policy issues, philosophical issues, and this hugely important human element,” Rosenbaum said.

Following her time at Brown, she worked for two years at the Hastings Center, a biomedical ethics research center in Briarcliff Manor, NY, where she encountered several people there who trained at the Yale University School of Medicine. She was intrigued by their broad perspectives on health care as well as Yale’s flexibility, the system of medical student education, and emphasis on scholarship, particularly that it had students complete an MD thesis.

Rosenbaum wrote her MD thesis in the area of medical ethics on the importance of trust in the physician-patient relationship and earned her MD from the Yale University School of Medicine in 1996. A short trip south on 95 led her to an internship in Internal Medicine at New York Hospital-Cornell Medical Center, where she eventually became an assistant and senior resident. She then spent one year as the chief resident in Internal Medicine at NYU Downtown Hospital, now New York-Presbyterian/Lower Manhattan Hospital.

At the time, Rosenbaum knew she wanted to continue seeing patients while also teaching and having “some sort of scholarly educational bent.” She found that a fellowship increased those opportunities so she headed north again on 95, back to New Haven, as a Robert Wood Johnson Clinical Scholar at the Yale University School of Medicine from 2000–2002.

She then worked her way from instructor to associate professor in the Yale University School of Medicine’s Department of Medicine, Section of General Internal Medicine. Incorporating her love of seeing patients and teaching, Rosenbaum has been on the core faculty for Primary Care Residency since 2002, where she treated patients, supervised residents in clinics, and helped advise a small group of residents as they trained over a three-year period at Yale New Haven Hospital’s Saint Raphael Campus. She also served there as the assistant director of the Adult Primary Care Clinic.

“I have always enjoyed teaching my patients directly and think it’s important for a patient to know as much as they are able to about their condition to help them manage it,” Rosenbaum said. “There is also something very stimulating about working with younger learners and watching them have that aha moment.”

Throughout her career at Yale, she has been watching Yale Health “from afar” and has worked with several staff members on various councils and committees. She was impressed with Yale Health’s accreditation as a Patient-Centered Medical Home by the National Committee for Quality Assurance in 2011.

“That happened at a time when Yale Health was so much earlier in the process nationally than most others and where folks were looking to make some changes in the way they practice,” Rosenbaum said. “I’ve seen some of that type of innovation from them and it seems like a place that has quietly grown on its own and has been continuing to progress in terms of the quality of care they are providing their patients.”

Rosenbaum began her position in Internal Medicine in May. Her responsibilities include seeing a small group of patients, ensuring educational opportunities for the department clinicians,
finding ways to use the organization’s resources effectively, partnering with other departments to deliver the best possible patient care, and making sure the clinicians have the tools they need to succeed.

Dr. Madeline Wilson was the previous Chief of Internal Medicine prior to her role on Yale Health’s Senior Leadership Team as Medical Director for Population Health and Clinical Informatics and most recently Chief Quality Officer. She has known Rosenbaum for years and has worked with her on a number of committees.

“Her many years of leadership in the Yale primary care residency training program have given her unique skills in mentoring young physicians,” Wilson said. “I’m confident that her personal qualities and commitment to evidence-based medicine will allow her to quickly earn the respect and confidence of our clinical staff. Finally, she brings the leadership qualities that we need to ensure that Yale Health can continue to meet the needs of our adult members in the years to come.”

Rosenbaum was also eager to become part of Yale Health’s commitment to Partnership for Patient-Centered Care, a strategic initiative designed to strengthen the relationships between you and your clinical care team and to ensure that your opinions, choices, values, beliefs, and cultural background guide the care you receive.

“I think it is at a very different level at Yale Health in how invested the organization is in this as a concept,” she said. “It’s not just that I have my medical expertise that I wish to impart on you, but I need to learn about you as the patient, your context, your interests, and what’s important to you. I look forward to the opportunities to create those partnerships to help the organization reach even higher places in terms of facilitating health care for such an engaged patient population.”

Rosenbaum currently lives in Fairfield with her husband of 21 years, their 17-year-old daughter, and 14-year-old son.

**Become a Storyteller**

*PatientWisdom allows you to share your story via MyChart*

**CLINICIANS SPEND YEARS** in classrooms, offices, and hospitals learning all they can to provide the best medical care to their patients. But when it comes to your life, you become the most knowledgeable person in the room.

MyChart has partnered with PatientWisdom to provide you with an easy and secure way to share that knowledge with your healthcare team through your electronic medical record. PatientWisdom allows you to express your personal preferences in the care you receive as well as your biggest concerns, health goals, and barriers you feel may be preventing you from reaching those goals. The HIPAA-compliant system asks you a series of questions and creates a confidential summary called “inSIGHT” for your healthcare team to better understand your needs. You can use PatientWisdom for yourself or any patient for whom you have MyChart proxy access, including pediatric patients.

The first step is to submit some brief personal information including your preferred name, preferred language for both speech and reading, and how you identify your gender. You also have the ability to upload a photo.

PatientWisdom is then broken down into the following three sections:

**MY SELF**

What you would like your care team to know about you as a person. The people, places, activities, and/or things that make you happy. Life pressures and worries including factors that make it hard for you to stay healthy (financial, transportation, safety issues, etc.).

Your main health priorities and goals.

The biggest barriers to reaching your health priorities and goals.

**MY HEALTH**

Main concerns/questions to discuss at an upcoming visit.

How you would rate your health.

Your main health issue and how it affects your life.

How involved you would like to be in the decision-making process regarding your health care and if there is a person in your life who helps you make these decisions.

**MY CARE**

Your preferred treatment methods for medical issues. Whether or not you have an Advance Directive on file. Suggestions for improvements to your care experience.

Once complete, you see your “inSIGHT” summary that will be available to your healthcare team. You can update your information at any time.

To access PatientWisdom, log into your MyChart account, click on the Health tab, and find it under the Medical Tools section. For more information on MyChart, visit [yalehealth.yale.edu/mychart](http://yalehealth.yale.edu/mychart).
Yale Health Welcomes Primary Care Providers

Ryan Petrowsky, PA-C
INTERNAL MEDICINE/INPATIENT CARE

Ryan Petrowsky earned his undergraduate degree from Quinnipiac University’s School of Health Sciences Athletic Training/Sports Medicine Program with a minor in biology in 2002 and his Masters of Medical Science Degree from the Yale University School of Medicine’s Physician Associate Program in 2012.

He most recently worked in Internal Medicine at Vatica Health, Inc., where he performed health risk assessments and Medicare annual wellness visits for patients in Middlesex Hospital’s Primary Care Department as well as provided patient treatment and education regarding medications and disease management.

He previously worked for The Hospitalist Service at Yale New Haven Hospital for four years.

He is certified by the National Commission on Certification for Physician Assistants and is a member of the Connecticut Academy of Physician Assistants and the American Academy of Physician Assistants.

Evelyn Flaherty, APRN
INTERNAL MEDICINE

Evelyn Flaherty has joined the Department of Internal Medicine after spending the last four years at Mount Carmel Medical Associates in Hamden. Prior to that, she worked for two years as a staff nurse in Yale New Haven Hospital’s Medical Intensive Care Unit and for a year in Griffin Hospital’s Medical-Surgical Intensive Care Unit.

She earned her undergraduate degree in nursing with a minor in biology from the University of Connecticut in 2010 and her MSN-FNP from Southern Connecticut State University in 2014.

Alisha Nappi, PA-C
OBSTETRICS & GYNECOLOGY

After spending the last 13 years providing primary care services at the Southwest Community Health Center in Bridgeport, Alisha Nappi has joined the Department of Obstetrics & Gynecology.

Nappi earned her undergraduate degree in biology and psychology from the University of Pennsylvania in 2000 and her Masters of Medical Science Degree from the Yale University School of Medicine’s Physician Associate Program in 2005.

She is certified by the National Commission on Certification for Physician Assistants and is a member of the Connecticut Academy of Physician Assistants, the American Academy of Physician Assistants, and the Association of Physician Assistants in Obstetrics and Gynecology.

FROM OUR MEMBERS

“My provider seemed extremely knowledgeable about my case, as if he’d read everything thoroughly before we met. I appreciated that.”
NUTRITION

Does an Apple a Day Really Keep the Doctor Away?

I am a big fan of apples. They are a nutrient dense food to consider including in your diet every day. However, it takes more than one food to make up a healthy diet, prevent illness, and optimize your health.

You want balance in your diet and plant-based foods are a good place to start. Focus on including a variety of colors in your meals throughout the day. Vibrant colors are a good sign of a food’s nutritional benefits. Reds can include apples and pomegranates, purples like grapes and red cabbage, oranges and yellows such as sweet potatoes and winter squash, and greens like kale, spinach, broccoli or even green peppers are all loaded with vitamins, minerals, fiber, and health-promoting phytochemicals. Even white vegetables like garlic, onions, parsnips, and potatoes, while lacking color, are rich in nutrients.

Think about variety and try to mix it up. Often times, we get stuck in a rut and choose the same fruits and veggies or nothing at all. Only 10-20 percent of adults meet the recommendations for fruits and vegetables each day. Shop with the goal of trying to include one new fruit or vegetable each week.

Besides plant-based foods, fermented foods like yogurt and kefir are good sources of calcium and protein and can help improve your gut health, which is tied to your immune function.

Alisa Scherban, MPH, RD, CDE
Nutrition

PEDIATRICS

What Should I Know about My Child’s Sugar Intake?

Sugar on its own does not provide any nutritional value to your child’s body. Excess sugar intake can raise blood sugar as well as increase risk of heart disease, high cholesterol, and fatty liver disease.

When it comes to sugar, we are really looking at added sugar in the foods you give your kids. Some foods like bananas and milk naturally contain sugar and that’s okay. Added sugar comes in many forms ranging from agave nectar to honey, all of which we want to limit.

The American Heart Association recommends children ages 2-18 eat no more than six teaspoons, or 25 grams, of added sugar daily.

Many common foods that you may not think contain added sugar often do. Foods such as jarred pasta sauce, bread, yogurt, and granola bars typically have added sugar. Anything processed that comes in a box or a bag with a long label of ingredients is likely to have added sugar. We usually say if nature made it, eat it, if man made it, leave it.

Michelle Brei, APRN, DNP
Pediatrics

For more on these topics, listen to the complete healthcasts on yalehealth.yale.edu/healthcasts.
KEEP IN MIND

Women’s Health and Cancer Rights Act Services

The Women’s Health and Cancer Rights Act (WHCRA) of 1998 provides benefits for mastectomy-related services including all stages of reconstruction and surgery to achieve symmetry between the breasts, prostheses, and complications resulting from a mastectomy, including lymphedemas.

For more information, visit dol.gov and search “WHCRA” or speak to your primary care provider.

Pharmacy Summer Hours

Tuesday, May 28th through Saturday, August 31st.

Monday – Friday 8:00 am–6:00 pm
Saturday 8:30 am–2:30 pm

The pharmacy will be closed on:

- **Monday, May 27th** (Memorial Day)
- **Saturday, June 29th** (annual inventory)
- **Thursday, July 4th** (Independence Day)
- **Monday, September 2nd** (Labor Day)