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Greeting

Message and updates from Dean Donna M. Feudo:

Hard to believe we are already in the middle of cycle 5 and cycle 6 will be starting in a few weeks' time.

I wish to take this opportunity to share some news and updates in this quarterly edition. Fall for me is my favorite time of the year, for it's the season of gratitude. It's a time to reflect on the year, appreciate the good things, and express gratitude along with honoring our accomplishments in everyday tasks and the impact we have on others. We are grateful for all of you, our preceptor Pharmaly, who "give of themselves" to support and make our program successful.

Speaking of others, we as pharmacists serve in many different aspects of our lives both professionally and personally. Many of you serve your communities in community outreach or service. It has been shared by Mahatma Gandhi "the best way to find yourself is to lose yourself in the service of others." This is our third academic rotation year for which P4 students have the community service outreach requirement:

Community service is integral to the role of the pharmacy program and enhances students' awareness of the varied cultural, religious, social, and economic aspects of our society along with recognizing and embracing aspects of differences and diversity. P4 students are required to take part in community service during the 4th professional year in the program and complete a minimum of 24 health-related hours by the end of Cycle 9, prior to graduation. Students may participate in health-related programs sponsored by Rutgers RBHS Service Corps, EMSOP, their rotation site or personal/professional association e.g., pharmacy advocacy, community health and are encouraged to select service to enhance both their professional and personal growth.

Greeting (continued)

A Service Award will be presented to a student who demonstrates significant commitment to community service at graduation.

We believe that "Community Service is a Lifelong Responsibility" and these endeavors play pivotal roles for students in the following ways:

- Assists in the development of students' Personal Identity Formation (PIF) while enrolled in our program by supporting and complimenting the experiences with concepts linked to the formal didactic curriculum
- Fulfills and reinforces the university and school's strategic plans that include the mission and commitment of community outreach that address the needs of the citizens of New Jersey and society at large
- Offers a sense of belonging and community while delivering and impacting patient care
- Happy to share that our Class of 2024 completed over 4813 hours of community service. Our current P4 class have already submitted over 1,000 hours of service since cycle 1 commenced with your help and support, so thank you.

If there are any questions or concerns you have for the program or have a story we can print for the next edition, please do not hesitate to reach out to us.

Appreciate your continued support and commitment to the pharmacy profession and to our students.

May this Thanksgiving holiday be bountiful with reasons for gratitude.

Take care.

Donna M. Feudo, BSPharm., RPh.

Ernest Mario School of Pharmacy

Associate Dean for Experiential Education and Clinical Affairs

Adjunct Clinical Professor





We're Always Teaching and Learning

Prepared by Makenzie Brockel, PharmD, RPh
Dr. Brockel is a pharmacist at Jersey Shore University Medical Center, where she completed her PGY-1
residency during the 2023-2024 academic year

As newly licensed pharmacists approaching the end of our residency year, there were many moments to be grateful for learning and self-discovery. One of the most memorable experiences included the chance to serve as the primary preceptors for IPPE students during Cycle 1 of 2024. The experience offered by Rutgers' Teaching and Learning Certificate allowed the residents to further develop our professional skills as preceptors while also serving as mentors to the next generation of emerging pharmacy students. Designing a rotation schedule and syllabus offered new perspectives and insight incorporating both positive and constructive ideas from previous experience to improve our own rotation styles. The four preceptors were able to provide a unique experience by combining our own experiences from pharmacy schools outside Rutgers University, utilizing different approaches and ideas that fostered collaborative discussion about the future of pharmacy.

Amongst the four residents, it was important for us to understand and learn to improve the resourcefulness and flexibility required of many preceptors to adapt rotations for each learner's needs and find creative ways that empowered student success. IPPE students had the chance to learn Jersey Shore Medical Center's daily operations, policies, procedures, and see how the various healthcare teams rely on pharmacist interventions to optimize patient care. Beyond the main pharmacy, students observed and participated during clinical team rounds and learned from our clinical specialists, investigational drug services, as well as residents, APPE students and Knight Scholars. It took each student stepping one foot outside their comfort zones to experience the wide array of opportunities waiting for them and hopefully sparked new areas of interest to pursue in the final years of their didactic education.

Reflecting on the experience, it's clear to see that the underlying theme between the residents was the idea of ushering in a future generation with empathy and compassion well balanced with scholarly pursuits. By the end of four weeks, the resident preceptors could see each student leave with a newfound sense of confidence to find the answers to thought-provoking clinical questions, learn new technology and processes, and think about their future careers in pharmacy. Each preceptor felt a sense of gratitude and appreciation for the IPPE students who not only exceeded expectations, but also inspired us to grow and learn how to improve our own skills each day. The experience truly highlighted the impact pharmacists make in their role supporting students, while never forgetting the idea to keep learning ways to be better mentors, teachers, and pharmacy professionals who can continue to inspire future pharmacists in our healthcare community.

We're Always Teaching and Learning (continued) Prepared by Makenzie Brockel, PharmD, RPh



FROM LEFT TO RIGHT: ALLISON KANG, SONIKA TAHALIANI, SEJUNG KO, TERENCE NATT, MYLES SWARTZ, MAKENZIE BROCKEL, JIMIN YUN, AND NICOLETTE BRUNO





From Donor to Learner: My Experience as a PBSC Transplant Donor By Akua Amoah, PharmD Candidate 2025

During the summer of 2018, I participated in the Summer Health Professions Education Program (SHPEP) at Rutgers New Jersey Medical School in Newark, NJ, with a focus in pharmacy. One day during the program, a representative from Be The Match®, now known as National Marrow Donor Program, NMDP), encouraged all the participants to join their registry to become a stem cell donor. So each willing student, myself included, swabbed our cheeks, packaged our samples, and went about our usual routine.

Fast forward to my P2 year of pharmacy school in August 2023 where I received a notice from Be The Match® to donate stem cells for a female in her 60s diagnosed with myelodysplastic syndrome (MDS). During the call, I was provided with all the necessary information to make a decision, such as the need for additional testing and the donation options, which are either bone marrow or peripheral blood stem cell (PBSC), and their logistics. I was more than willing to continue with the donation, however, before my appointment for a blood draw, the patient withdrew her interest in the allogeneic hematopoietic stem cell transplant (HSCT). I was contacted again in September 2023, this time for a male in his 30s diagnosed with acute myeloid leukemia (AML), to become a backup donor. I immediately agreed again and as the days progressed, I eventually became the primary donor since the original donor hesitated to commit to the donation process. From that point, I was scheduled for a blood draw and physical examination to ensure that our blood types matched and that I was fit for donation. Once a donation day was finalized and I was told that the preferred donation would be PBSC, I was educated about the next steps, which included filgrastim injections. The product I received was Releuko® (filgrastim-ayow), which is a biosimilar of Neupogen® (filgrastim). Filgrastim is a colony-stimulating factor that is mainly used in patients with malignancies receiving chemotherapy as febrile neutropenia prophylaxis. In my case, it was used to stimulate my bone marrow to increase its production of blood-forming cells. I was told that I would receive 4 doses of filgrastim and that I should increase my water intake and avoid strenuous activities. My first dose was given at an urgent care and the subsequent doses were graciously given by my sister, who is a nurse. I certainly felt the side

effects that were expected such as bone pain, headaches, and fatigue.

From Donor to Learner: My Experience as a PBSC Transplant Donor By Akua Amoah, PharmD Candidate 2025 (continued)

My donation occurred on a Thursday in December 2023. My day began bright and early at 7am at the John Theurer Cancer Center (JTCC) at Hackensack University Medical Center (HUMC). The donation itself took approximately 8 hours but with all the other procedures, I ended up not leaving until 6pm. After my donation finished, I was asked to return for an additional session of leukapheresis the following day because my body did not produce the number of progenitor cells they were targeting. However, because I was on the leukapheresis machine for 8 hours, I had been experiencing prolonged tingling, a consequence of low calcium. In addition, I had a final exam the following day, which made returning the following day challenging. So Be The Match® was notified and I was given the option of donating bone marrow in the future instead if they required more stem cells. So, I provided them with my availability and waited for the email or call with an update on the recipient.

The following day after my donation, I attended a lecture in the oncology pharmacotherapy module, and the topics coincidentally happened to be acute leukemias, taught by Dr. Geeny Lee, who would later become my APPE cycle 3 preceptor for my leukemia rotation at HUMC. For my cycle 3 APPE in August, I was on my oncology rotation with Dr. Lee who is a clinical pharmacy specialist for inpatient leukemia service at HUMC. During this rotation, I encountered several acute leukemia patients who are awaiting a match for allogeneic HSCT. With the knowledge of what I went through, I am hopeful that a match will be found for them. Thanks to organizations like NMDP and through the efforts of the hematology/oncology team at HUMC/JTCC and other cancer centers around the world, the process has improved over time with more patients finding unrelated stem cell donors through the registry.

Thankfully, I never did have to donate marrow. Instead, I received an email a month after my donation that the stem cells had been engrafted and were creating new marrow in my recipient. I was ecstatic not only for the patient but that I had the privilege to provide a life-saving treatment for someone, albeit a stranger nonetheless. I presume it was a good sign I had not heard anything from that point until I received an email several months later, asking if I would like an update on my recipient, to which, I said yes. Subsequently, I was sad to receive a phone call informing me that the patient had unfortunately, passed away. Too scared and stunned to ask about any details, assuming that the information was most likely confidential, I expressed my condolences to the family. I was also offered the opportunity to send an anonymous letter to the patient's family. Initially, I had avoided doing so, mainly because I did not know what to say. However, I got over my fear, crafted a note for the family, and emailed it to NMDP, who will forward the message to the family to maintain anonymity.

In closing, I would recommend anyone willing and able to join the NMDP registry and potentially offer a life-saving act to join. Even though the entire process is anonymous, knowing the diagnosis and age of the person makes them real and that was enough for me to help in the best way I could. Despite the complexity of oncology, my familiarity with the allogeneic HSCT process made the patient interactions I had on my rotation with Dr. Lee relatable. I could sense the hope that the patients felt knowing that a transplant could potentially cure their cancer and that made my learning experience personally rewarding.

References:

NMDP. Donate blood stem cells. <u>Add a little bit of body text</u> (accessed 2024 Aug 14)
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Implications from Standing Order that Now Allows NJ Pharmacists to Provide Hormonal Contraceptives Without A Prescription By Jasmine Vo, PharmD Candidate 2025

As of May 20th, 2024, the New Jersey legislation that allows NJ pharmacists to provide self-administered hormonal contraceptives (HCs) to patients without a prescription pursuant to a statewide standing order is in effect.[1] This decision was originally signed by Governor Murphy in January 2023, but its implementation had been delayed due to refinements in standardizing the procedures and protocols made by the Board of Pharmacy and Board of Medical Examiners. Such new rules for pharmacists who wish to offer these services include partaking in a four-hour training program of continuing education credit, applying for a standing order from the New Jersey Department of Health (DOH), and providing the patient with a health screening questionnaire made by the DOH.[1,2] The NJ Board of Pharmacy has additional documents for patient screening, algorithms for contraceptive selection, and patient counseling for pharmacists to establish the provision of HCs without a prescription.[2] Once the pharmacist is trained and if the patient is eligible, an initial supply of up to three months, with refills for up to an additional nine months, may be dispensed.[1] With these regulations now in effect, New Jersey joins approximately 30 other states and D.C. that have either implemented or have plans in progress to implement laws to allow pharmacists to prescribe oral HCs.[3]

The purpose of removing the prescription requirement in New Jersey via a statewide standing order is to expand access to contraception as part of reproductive healthcare and in support of public health.[1,4] The standing order only applies to self-administered HCs; it does not cover contraceptives that require placement by a healthcare provider, such as intrauterine devices and birth control implants. Examples of self-administered HCs include pills, patches, rings, and self-administered injectables. By outlining specific criteria for eligibility of patients to receive such HC, a trained pharmacist will be able to dispense directly to patients without the additional step of obtaining a prescription from a doctor. Without the prescription, these contraceptives are almost considered to have an "over-the-counter" (OTC) status. As defined by the Food and Drug Administration (FDA), OTC drugs have a low potential for misuse and abuse, do not need a health practitioner for safe and effective use, and can be used appropriately by consumers for self-care when following the directions on the label.[5] In New Jersey, all three of those requirements were deemed to be satisfied for most self-administered HCs, thus leading to the nonprescription status under a standing order. Alongside the Murphy Administration when the bill was signed to ensure the pharmacy profession is represented includes one of our own-- a Rutgers Pharmacy faculty member, Dr. Rupal Mansukhani, leader as Past President & Chair of the Board of Trustees within the New Jersey

Pharmacists Association (NJPhA). These advocacy efforts by NJPhA with the Board of Pharmacy and Board of Medical Examiners helped shape the pharmacists' training and patient education components, among other feedback. These considerations for self-treatment with these HC by patients are built into the pharmacist's provision algorithm. Screening in patients to dispense these medications include a health and history screen, a pregnancy screen, a medications screen for drug interactions, and blood pressure for hypertension status.[2] Patient counseling includes the usual instructions for administration, information sheet and package insert, and statements emphasizing that HCs do not protect against sexually transmitted infections or HIV and the importance of preventative health screenings and follow-up with a primary care provider or clinic.[2] However, there are some exceptions to the standing order due to their need for medical supervision and complexity of administration. These HC include estradiol valerate/dienogestestetrol/drospirenone, mestranol/norethindrone (50mcg/1mg) or any tablet with more than 35 mcg ethinyl estradiol.[4]



Implications from Standing Order that Now Allows NJ Pharmacists to Provide Hormonal Contraceptives Without A Prescription By Jasmine Vo, PharmD Candidate 2025 (continued)

The major warning for safety that limits or prevents patients' use of estrogen-containing HCs without additional monitoring involve an increased risk of venous thromboembolism (VTE) bleeds with increased doses.[6] What about the actual OTC birth control, OPill? This is a progestin-only contraceptive containing 0.075 mg norgestrel per pill.[7] Since it doesn't have estrogen, it does not carry that increased risk of VTE. It is also now available to purchase OTC online or in stores without age restriction.[3]

Although these are great steps to providing community-level access to self-administered HC, there are still potential lingering limitations. First, this service requires pharmacist training, which is voluntary, so pharmacies are not required to implement this if they do not want to. Second, there is the matter of the labor of consultation and insurance coverage differences. Because pharmacists have a "prescribing" authority for this, as seen in states that already have these regulations, they typically would charge a fee for the consult. Not only could this potentially not get covered under insurance for even though the actual contraceptive medication will, the service may not necessarily have a reimbursement program to pay pharmacists to provide this service.[3] With these considerations, this may end up leading to an under-enrollment of pharmacists in under the standing order. On the patient's side, there may be a lack of knowledge that they can pick up or even initiate a self-administered HC through the pharmacist end without having to get a prescription, if their pharmacy has the approved staff and the pharmacy has the appropriate stock.

However, although not all insurers are reimbursing just yet, there are steps being taken in New Jersey to incentivize utilization that are in effect. New Jersey Medicaid (NJ FamilyCare) will reimburse \$20.60 for each initial and 3-month follow-up consultation and education on self-administered HC for patients, provided that the claims have the proper documentation for this pharmacist-provided healthcare service.[8] The value of pharmacists here is not only compensated for their time and clinical knowledge, but is also strengthened by the impact we can make directly with patients and improve access to care as healthcare professionals.

Nevertheless, expanding the pharmacist's ability to prescribe or dispense contraceptives, along with making them available OTC, are two ways to reduce barriers to reproductive health care. In the long run, this could help capture select patients who can benefit from having increased access to family planning care, and contribute to improving public health. In New Jersey, pharmacists who want to utilize this standing order need to undergo four hours of training and continuing education in regards to patient screening, contraceptive selection, and patient counseling before dispensing. The role of the pharmacist is ever-expanding, so further state or federal laws with regard to this avenue of reproductive and women's health that can facilitate more universal compensation from insurers as the standing order starts getting used will prove useful to the pharmacy profession as a whole and pharmacist-patient relationships. Advocacy from practicing pharmacists is also an important use of our time to ensure we can provide the best care for our patients with the resources we have without compromising our other abilities.

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Annual Residency and Fellowship Rutgers Showcase

WE HELD THE ANNUAL RESIDENCY AND FELLOWSHIP SHOWCASE AT RUTGERS, STATE UNIVERSITY OF NEW JERSEY. A LITTLE OVER 60 PROGRAMS FROM THE TRISTATE AREA SHOWCASED THEIR PROGRAMS. OVER A 100 PHARMACY STUDENTS WERE IN ATTENDANCE AND HAD THE OPPORTUNITY TO MEET THE PROGRAMS. PRIOR TO THE SHOWCASE WE HAD RUTGERS FACULTY HOST AN INFORMATION SESSION ABOUT POST GRADUATE TRAINING. WE APPRECIATE ALL OF THE SUPPORT FOR OUR STUDENTS AND HOPE THE PROGRAMS HAD A GREAT TIME MEETING PERSPECTIVE CANDIDATES. WE LOOK FORWARD TO HOSTING ANOTHER SHOWCASE NEXT YEAR!



