



## Assisting Rural Community Pharmacies in Transforming their Practice through the Development of a High-Quality Pharmacy Technicians and Future Pharmacists

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### **Final Report – May 2023**

Cultivate was a program designed to assist rural community pharmacies in transforming their practice through the development of a high-quality program for pharmacy technicians and future pharmacists. By providing high school students an opportunity for a positive experience in community pharmacy we hoped to pique their interest in the career as either a future pharmacist or pharmacy technician, while supplying rural independent community pharmacies additional quality staffing support. An additional benefit of the program was introducing other future health care professionals (nursing, PA, medicine, etc.) to the pharmacy profession for their consideration and/or for them to gain a better understanding of the community pharmacy environment.

#### Objectives:

1. High-quality pharmacy support personnel and technicians will be trained to assist with activities that support pharmacy practice transformation. The training will focus on non-dispensing, non-patient care tasks.
2. Interest will be sparked in high school students for the pharmacy profession as they experience the “behind-the-scenes” work of a community pharmacy and see a different aspect of the community pharmacy business. More importantly, they will be able to see the future of community pharmacy as being critical to patient care and overall individual and community health improvement.
3. This program can easily be replicated by other pharmacy programs that are equally committed to supporting the growth of community pharmacies and exposing young, bright high school and community college students to the pharmacy profession.

#### Activities:

1. Worked with Lindsey Ludwig, Executive Director of CPESN-Iowa to communicate to rural CPESN-Iowa pharmacies to see who would like to participate (need an additional support person or tech-in-training)
2. Went to the high schools that are near the interested CPESN-Iowa Pharmacies to recruit.
  - a. We stated that this isn't just for those interested in pharmacy - but working in a pharmacy would allow for the gaining of skills for those: interested in going into any health care profession, and those who are interested in staying in their hometown and build a career.
3. Brought students to Drake campus for a 2-day training session.

- a. This is NOT a technician certification/training course.
  - b. Described the overall pharmacy professions and setting the tone that the pharmacy profession is changing so quickly that they are going to be in the pharmacy to make the pharmacists' and existing technicians' lives easy.
  - c. Professionalism (talking on the phone, interacting with costumers, counting change, what to expect in pharmacy, dress, etc.)
4. There were often many students who came to campus for each site. Sites interviewed and selected the student(s) that they wanted to hire.
  5. High school students were placed in the community pharmacies for 6 months
    - a. Monthly check-in surveys were sent out to the sites and students to collect which ways these new hires were being utilized in the pharmacy

#### Results from Year 1:

1. 10 rural CPESN-Iowa pharmacies said they were interested
2. 5 rural CPESN pharmacies completed final enrollment
3. 19 students that came to cultivate
4. 10 students hired and placed (all sites took at least two students to fill in gaps in their schedules)
5. Every pharmacy wanted to participate again
  - a. They all liked the job training approach instead of technician certification curriculum
6. Most pharmacies used students has support persons in the evenings (4:00-7:00 M-F)
7. Many students plan on going to college of a health care profession
8. Two students became tech-in-training and will be taking the certification exam in the Spring
9. One pharmacy student enrolled in Drake's Pre-Pharmacy Program

#### Results from Year 2:

1. The 5 rural CPESN pharmacists continued into year 2.
2. 5 students were selected to be their student hires.
3. Like year 1, Most pharmacies used students has support persons in the evenings (4:00-7:00 M-F)
4. Of the five students, they all plan to attend college to become a health care professional (2 nursing, 2 PA, 1 PT).

In addition to the quarterly reports included in this final report, additional activities included sharing the Cultivate concept and results with the ACT group (power point materials are uploaded as an additional file) as well as a pharmacy technician working group from Illinois. Cultivate program materials were also shared with Texas A&M for their use to run a similar program focusing on inner city pharmacies instead of rural locations. Plans are currently underway to also submit an extension grant that will further the programming to include options for pharmacy technician as well as Community Health Worker content. This will allow pharmacies and their mentees to select from the options that would work best for the pharmacy's needs as well as the mentees' interests. The developed materials for Cultivate are available for other programs to download.

A summary of the overarching results follows with more details from the quarterly reports included below.

Overall metrics:

- Cohort #1
  - Went to science classes in 5 high schools in rural Iowa to present on the pharmacy profession and the Cultivate opportunity.
  - Recruited 23 students
  - 19 attended Cultivate
  - 9 were hired by their local rural community pharmacy.
  - All students worked in their pharmacy through the 6-month requirement stated in the grant. All but one continues to work in their community pharmacy (as support person or tech-in-trainee).
  - Two hired, Cultivate students applied and have been accepted to Drake University CPHS
    - 1 pre-pharmacy
    - 1 health sciences (for pre-nursing)
  - Every pharmacy stated they wanted to participate again.
- Cohort #2
  - There are five participating rural CPESN community pharmacies who are participating in this round. One student was assigned to each store. All but one site started in August and will be finished at the end of January 2023. One site started in October and will keep their Cultivate student until April 2023.
  - All five students who attended the summer Cultivate program began working in the community pharmacy in August or early September (depending on the stores' preference).
  - Every pharmacy stated they wanted to participate again.

Deliverables:

- A google drive (Click [HERE](#)) has been constructed with all of the following materials for CPF as well as other schools/colleges of pharmacy:
  - CPESN site recruitment material
  - High school recruitment materials
  - Outline of logistics to host a Cultivate camp
  - Cultivate curriculum
  - Cultivate attendees evaluation
  - Post-training follow-up surveys
- The google drive also includes:
  - Photos from our pilot program
  - Pilot results

Thank you for the opportunity to pilot this program. We look forward to furthering the success of this program and broadening the scope of Cultivate for more pharmacies, student mentees, and schools of pharmacy who may wish to run their own Cultivate program.

Renaes Chesnut, Dean and Professor  
Erin Ulrich, Associate Professor

## Quarterly Reports

July 2021

Students were able to be recruited for 5 CPESN pharmacies. A list of high school students who were interested were sent to these sites. There were between 5-9 students wanting to be trained/hired as a Tech Trainee at each of those sites. Two of these pharmacies interviewed their candidates and sent their finalist. Three of these pharmacies asked to send 2-3 students to Cultivate and interview them afterwards; this way they can ask them pharmacy-specific questions and glean their level of engagement during training. One pharmacy sent a current employee.

To keep grant expenses down, only those students who are/will be hired will be provided free HIPAA Certification and AHA Blood Pressure training.

There was a total of 19 attendees at Cultivate (July 15-17). The curriculum included sessions on the following topics: Professional standards, patient care process, eCare plans, processing prescriptions, insurance/third party payers, pharmaceutical terminology, calculations, how to count change back, pharmacy law, and professionalism.

An exit survey was given to Cultivate attendees on which sessions they found valuable, if they feel better prepared to work in a community pharmacy, and what improvements could be made. Overall, attendees had positive feedback and found all sessions to be valuable.

Stores are given three weeks to interview and provide the names of their finalist. All hires will complete HIPAA Certification and AHA Blood Pressure training by September 1.

By August 15, a kickoff video will be sent to pharmacies clearly outlining the goal of this grant (to transform practice). Baseline eCare plan data was collected for the 5 sites. Number of eCare plans will be collected every month through Feb 1st.

Monthly check-ins have been scheduled with the pharmacies. Once a final list of hires for the sites is complete, a monthly check-in will also be made with each student.

A midpoint survey was created to send out to the pharmacies in October to ask the value of this program and the impact on their practice.

### October 2021

- All Cultivate students were onboarded in their CPESN rural pharmacy sites by August.
- The monthly check-in surveys completed by Cultivate students report that September and October have been spent with typical technician activities.
- Pharmacy managers report their students are helpful in their practice. No pharmacies have reported utilizing the Cultivate students to assist in transforming their workflow. All pharmacies report struggling to find time (flu shots/COVID boosters) or additional support (other technicians are needed) to improve their workflow.
- Erin has created a google drive with all developed materials. From recruitment materials, to Cultivate curriculum, and all surveys.
  - <https://drive.google.com/drive/folders/1XFN9B-ldjbuujNyhbx9Szx9IO6VC19Y?usp=sharing>

## January 2022

Current project status (including an update on the grant agreement status if not already finalized)  
The Cultivate students have been working in their assigned pharmacies since August. Currently, the Drake University faculty are making plans for ending surveys and interviews with the pharmacists and students.

We were significantly affected by COVID with regard to the number of students who were able to participate. While we had 10 pharmacies sign up that were interested in having students be assigned to them, only 5 of them had students from their area who expressed interest. Part of that was due to the timing of us working with the schools as it was late in the school year and they didn't allow us to come in and talk with their students due to COVID, and they thought that they were too busy at the end of the year to plan a virtual event. We were wondering if we could run another group through next year so that the other 5 pharmacies could have a student.

## July 2022

5 CPESN pharmacies were recruited (same 5 that participated in Year 1) We visited the 5 high schools closest to those CPESN pharmacies. 6 students were recruited and enrolled. Faculty organized and prepared for Cultivate and hosted the students from July 14-16, 2022. Clinical faculty and APPE students presented the sessions and all 6 students attended and were very engaged. Cultivate student attendees rated 'Agree' or 'Strongly Agree' to feedback on all the offered sessions. Four (4) out of the 6 Cultivate students stated they wanted more hands-on activities. Because this camp occurs during the Drake CPHS health care camp where those campers do different labs and visit the nearest medical school, it is likely that the direct comparison resulted in these results compared to the previous year. For the future, we will plan a field trip to a local CPESN pharmacy to show and tell the workflow process instead of providing this content via a slide deck. It lends itself to a more hands-on experience than the other topics. Students have all reached out to their pharmacies to schedule their interviews and begin the experiential portion of the program.

### Changes Made to Live Programming for Cohort #2

- Began recruitment in the high schools in March instead of mid-April. This allowed us to schedule visits to all schools within a couple of weeks of emailing them.
- Altered curriculum to align with the request to integrate more soft skills (removed the calculations section and added dress/communication/etc.).
- Not hiring external presenters – using a Drake CPHS clinical faculty
- It was clear during round #1 that there needs to be assigned “Cultivate Camp Mentors” to be with the students while on campus for logistical reasons (directions to campus buildings, key access to buildings that are typically locked during the summer, answering questions about the dorm rooms, etc.). We will be using one health sciences student and one pharmacy student as Cultivate Camp Mentors for Cohort #2.
- Expanded the pitch presentation for the high schools to be more general. We found out that 90% of the Cultivate attendees were interested in a medical profession, but not pharmacy. Not only did one student enroll in the pre-pharmacy program, but another enrolled in Drake CPHS health sciences undergraduate degree. Becoming a support person, tech in trainee, or certified pharmacy technician allows students to gain understanding of the health care system, insurance, patient interaction, communication skills while they are working to get their health

care degree (pharmacy or not). This has been successful during recruitment round #2 and more students are interested in attending.

### October 2022

Current project status (including an update on the grant agreement status if not already finalized)  
There are five participating rural CPESN community pharmacies participating in this round. Pharmacies interviewed and selected five high school students who had completed the summer Cultivate program by August 30, 2022. Students began working in the community pharmacy in August or early September (depending on the stores' preferences). The first check-in survey is scheduled to be sent out to the preceptors and the students in mid-November. This survey includes items about how students are being utilized in the store and preceptors' satisfaction with placed students. The responses to this survey will be included in the next CPF Grant Update.

### January 2023

All participating sites have students still working in them. All but one site started in August and will be finished at the end of January 2023. One site started in October and will keep their Cultivate student until April. At the end of January, an exit survey will be sent to appropriate sites to assess value-gained, how the pharmacies utilized the interns, and if the interns will stay on staff after the official 6-month Cultivate timeline is complete. Exit surveys will also be sent to the students to complete about their gained experience. Results of these exit surveys should be ready by the next CPF update period.

### May 2023 – Final Report

Statements from Pharmacist Exit Interviews:

- Pharmacist #1:
  - Interviewed 4 students
  - Hired 3 students (2 were support persons, 1 was hired as a tech-in-trainee)
  - The student hired as a tech-in-trainee applied and accepted to Drake University CPHS Health Sciences program for her pre-nursing education. She is interested in becoming a nurse practitioner.
  - On average, students worked 3 days a week for about 2-3 hours at a time. Totaling 6-10 hours each week, per Cultivate student.
  - Would be willing to participate again.
  - Comments from pharmacist:
    - On-campus Cultivate training was a great way to “weed out” students who were not that serious about going into health care but just wanted a job. Therefore, all the students interviewed were high motivated to do a great job in the pharmacy.
    - Appreciated that the Cultivate curriculum on what actually happens in a pharmacy so it wasn't such an on-boarding process.
    - Did utilize students above and beyond a cashier role – there were gaps in staffing due to illness and maternity leave – this was very helpful.
    - Ways to improve:

- Move recruitment to capture sophomore students in their spring semester. Then they can work longer in the pharmacy.
  - Integrate Cultivate into the “Work to Learn” statewide work training program so the students can come to the pharmacy during the school day and not just students in the afternoons and weekends.
  
- Pharmacist #2
  - Interviewed 3 Cultivate students
  - Hired 2 students
  - Used both as support persons – which was incredibly helpful because they were short staffed all last year.
  - Would be willing to participate again.
  - Appreciated the Cultivate curriculum
    - Would integrate more soft skills (talking on the phone, professionalism, how to dress, etc.) into curriculum.
    - It was nice to have kids who are interested in pharmacy and not just a kid getting a parttime job.
  
- Pharmacist #3
  - Sent existing tech-in-trainee to Cultivate – kept her on after program.
    - Student wants to go into pharmacy. Currently getting certified as a technician. Enrolled in Drake University CPHS Pre-Pharmacy program for the Fall of 2022.
  - Interviewed and hired on more Cultivate student as a support person.
  - Appreciated the efforts of identifying serious students – they were great in the pharmacy.
  - Would participate again
  
- Pharmacist #4
  - Interviewed 4 students
  - Hired 2 students
  - It was nice that the curriculum explained the pharmacy profession from an overall perspective and it was nice that students came in understanding what we do and the role we have to our patients.
  - It was also appreciated that the program isn’t a technician certification class – focused on classes of meds, calculations, etc...it focused on soft skills and general professionalism – this is what is needed for their pharmacy.
  - Look into integrating the “work to learn” program into Cultivate.