



NCPA 2019 INNOVATION IN COMMUNITY PRACTICE POSTER SESSION

Abstracts

Sunday, October 27th, 2019
2:30 – 4 P.M.



NCPA[®]
NATIONAL COMMUNITY
PHARMACISTS ASSOCIATION



Innovation in Community Pharmacy Practice

Community Pharmacist Provision of Chronic Care Management Services for Medicare Beneficiaries with Uncontrolled Hypertension

Poster Location: 16

Presenter: Robert Nichols, Director of Clinical Services

Greenwood Drug on Kimball Ave

Objectives: Chronic Care Management (CCM) is a billable patient care service for Medicare patients, but it is not directly billable by pharmacists. Northeast Iowa Family Practice Center (NEIFPC) created a collaborative practice and business agreement with a community pharmacy to provide CCM services to shared Medicare patients.

Methods: Community pharmacists (CPs) documented assessments and interventions directly in the NEIFPC electronic health record. Eligible patients were enrolled in the NEIFPC CCM program, had hypertension with blood pressure >130/80, and received their prescriptions from the partner pharmacy. Outcomes included precise measures of time effort (via Dulcian Health[®]), revenue from CCM services, and changes in blood pressure control over 9 months. CCM revenue was shared according to a formula based on NEIFPC and CP time spent providing care.

Results: There were 26 patients who received at least one CP encounter and were included in the analysis. There were 6411 minutes (NEIFPC 3390, CP 3021) of CCM service provided and 142 CCM claims billed. Total CCM revenue during the study period was \$5842 (NEIFPC \$3057, CP \$2785). Without CP participation NEIFPC would have only been able to bill 57 claims for revenue of \$2535. There were 98 patient care notes recorded by CPs. At baseline, mean blood pressure was 140.4/77.9 mm Hg. At 9 months, mean blood pressure was 133.1/74.9 mm Hg (SBP, P=0.02; DBP, P=0.022).

Conclusion: This collaborative CCM hypertension project between a community pharmacy and primary care physician clinic was successful at improving patient blood pressure in a financially viable way. Community pharmacists demonstrated their ability to modify drug therapy, document patient care notes in the clinic EHR, and receive CCM payments for services. Clinic CCM revenue also increased.

A Stepwise Approach to an Independent Pharmacy Implementing Enhanced Services

Poster Location: 8

Presenters: Holly Adams, PharmD Candidate, Dr. Jeffrey Gray, PharmD, Dr. Karilynn Dowling-McClay, PharmD, Justin Pearson, PharmD Candidate
East Tennessee State University Bill Gatton College of Pharmacy

Increased cost of drugs and evaporating margins have put a damper on community pharmacy over the last few years, with independent pharmacies feeling especially vulnerable. Owners around the country are looking for new and innovative ways to diversify revenue. An emerging idea is to align with value-based programs, whose mutual patients benefit from enhanced pharmacy services. Out in front of the initiative is CPESN-USA. Enhanced services currently being provided or under consideration include chronic illness screening, treatment and prevention of common illnesses such as strep and the flu, travel health, and smoking cessation, oral contraceptive provision, etc. As an example, Tennessee is one of seven states that allows pharmacists to prescribe oral contraceptives and one of 12 states where pharmacists can perform point-of-care testing through a collaborative practice agreement. The purpose of this poster is to highlight the initial steps chosen by an influential community pharmacy in a rural setting.

- I. 2015: Medication Therapy Management
- II. January 2019: Free delivery services
- III. March 2019: Introduction of adherence packaging
- IV. May 2019: Implementation of medication synchronization
- V. May 2019: CPESN membership activated
- VI. September 2019: Collaborative practice signed
- VII. October 2019 (Future): Pharmacist prescribed birth control
- VIII. October 2019 (Future): Flu and Strep testing with pharmacist prescribed antibiotics and prophylactic prescriptions for family members

NCPA Student Chapter Update

NCPA Student Chapter Annual Update

Poster Location: 20

Presenters: Jasper Westbrook, Student Pharmacist, Liddy Cronan, Student Pharmacist,
Johnathan Hamrick, PharmD
Mercer University College of Pharmacy

The Mercer University NCPA Student Chapter supports NCPA's mission year-round. The chapter promotes community pharmacy through valuable membership, community health outreach, advocacy efforts, and pharmacy ownership education. Mercer's chapter hosts biweekly meetings with engaging guest speakers and offers monthly local independent pharmacy tours. The chapter takes pride in sharing its passion for community pharmacy and makes strong efforts to impact the health of the community by providing scheduled blood pressure screenings. Advocacy efforts are a priority of the chapter. By hosting events such as Policy on Tap, attending Georgia's legislative Day at the Dome and NCPA Congressional Pharmacy Fly-In, and initiating legislative "Calls to Action" the chapter is involved in policy both on the state and federal level throughout the year. Mercer's chapter most recently placed 1st runner up for NCPA Student Chapter of the Year and is constantly striving for improvement.

University of Texas at Austin NCPA Chapter Update

Poster Location: 5

Presenters: Johnny Alexander- President, Ashley Cox- Vice President
University of Texas at Austin College of Pharmacy

Our chapter project this year will focus on promoting local independent pharmacy by educating the student body and the public at large on the services provided by community pharmacists, especially in light of the major pharmacy legislative wins in Texas. This project will be coordinated with the efforts of our Entrepreneurship Chair by performing tours of local independents and hosting dinners and forums with pharmacy owners. We will also be spreading the word to our members and supporters about CPESN and how to build a progressive pharmacy model that supports enhanced services.

Our chapter represented our profession during Texas Pharmacy Day at the Capital, informing legislators of key pharmacy priorities. We are also proud to report that our chapter won the Health and Wellness Challenge with our Proper Use of Medical Devices health initiative. Building on that success, our health initiative this year will focus on cultural competency and caring for minority populations. Additionally, we are enhancing our member development by adding a Compounding Education Chair to our leadership team and adding more informational and practical compounding events to our chapter offerings.

This year our chapter is focusing on the pillars of Advocacy, Community Health, Compounding Education, and Entrepreneurship. The spirit of innovation, patient care, and passionate involvement in our profession are ever the driving force behind our efforts.

WSU Yakima Student Chapter Events and Involvement

Poster Location: 15

Presenters: Alan Lang, Chapter President, Yuan Su, Chapter President-Elect, Benjamin Pham, PharmD Candidate 2021

Washington State University College Of Pharmacy Yakima WA

On this poster, we plan to have what our general purpose is, including our very own mission and vision statement. We also plan to have pictures and description of very successful and popular events that have worked in the past and hope to continue this year, as well as new events that haven't been done before. We plan to also incorporate the business plan team and compounding competition team too.

Resident Research/Project

Quality assessment of newly implemented pediatric adherence program in an independent community pharmacy

Poster Location: 12

Presenters: Caitlin Brown, PharmD, Shanna O'Connor, PharmD, Lorri Shaver, PharmD, Branden Skoumal, PharmD

Idaho State University and Shaver Pharmacy and Compounding Center

Background: Antibiotic nonadherence can lead to an increase in resistance rates, treatment failure, and direct and indirect cost to families; pediatric adherence averages around 50% (limited data). Outpatient community pharmacy teams are in a position to directly impact antibiotic adherence.

Activity Description: During pediatric antibiotic counseling at an independent pharmacy, each patient is given a Pediatric Adherence Sheet (PAS) and asked to add a sticker each time they take their medicine, color the picture, and return it for a toy. The patient's caregiver receives a call halfway through the antibiotic course to inquire adverse effects and symptom resolution and address questions. An 8 question, 7-minute, telephone-based patient survey was conducted for quality assessment of the service. Time, cost to deliver the PAS, and value of the service was assessed by asking pharmacy personnel.

Results: Thirty-one PASs have been distributed and 8 returned. Caregivers did not consistently know to return the pediatric adherence sheet for a toy. Sixty-two percent of caregivers reported the phone call to be unhelpful. One-hundred percent of respondents stated the PAS was helpful. Ninety-two percent said that they would return to and refer someone to the pharmacy because of this service. Staff responses were all positive.

Discussion: The program demonstrates a low-cost, low-effort intervention to encourage adherence in a patient population with poor adherence according to literature. Although the negative perception of the call needs to be addressed, the program could potentially be expanded to other pediatric populations or patients on medications with high nonadherence rates.

Are patients willing to dispose of their opioid medications following an acute pain episode?

Poster Location: 3

Presenters: Andrew Tarasidis, PharmD Community Pharmacy Resident

Carilion Clinic

Opioid prescriptions written upon discharge from an acute care center are often given to those that are opioid naive and unsure how to properly dispose of the medication. As a part of Carilion Clinic's Opioid Stewardship initiative this study aims to examine the patient's willingness to dispose of their acute opioid prescriptions by providing medication disposal bags and opioid education upon dispensing of the medication. After dispensing the prescription, a short survey will be given to ascertain the patient's willingness to dispose of their opioid medication when it is no longer needed for acute pain management. This study is designed to increase the patient's health literacy towards safe opioid medication use and increase disposal of a high-risk medication especially in a rural community environment.

Student Research/Project

Educating Pharmacists on Supply Chain Fidelity: Track and Trace

Poster Location: 19

Presenters: Holly Adams, PharmD Candidate, Dr. Karilynn Dowling-McClay, PharmD, Dr. Jeffrey Gray, PharmD

East Tennessee State University Bill Gatton College of Pharmacy

Rising drug costs, shortages, and backordered products are only a few reasons why independent pharmacies shop thousands of online wholesalers to find the drugs they need. However, drugs that freely enter or reenter the market unmonitored have the potential to be counterfeit. Illegally imported medications from outside the U.S. may appeal to pharmacists seeking lower-cost and difficult-to-find medications for their patients, but in turn increase the risks of patient harm and pharmacy liability. The FDA has acknowledged these market issues and has implemented the Drug Supply Chain and Security Act (DSCSA) in phases since 2015 to prevent movement of unverified from manufacturer to end user. The DSCSA mandates that all wholesalers and pharmacies trade only with authorized individuals beginning in November 2019. An electronic tracking platform will be mandated for all purchases and returns—the backbone of the “Track and Trace” legislation. Verified purchases mean consumers can place full confidence in the medications they receive being the medications they were prescribed. Through this project, student pharmacists will educate local pharmacies on this legislation changes their practice and prepare them to further protect consumer confidence.

The effects of a diabetes education program on A1c outcomes in a Federally Qualified Health Center (FQHC) translated to an innovative community service

Poster Location: 17

Presenter: Jasmine Corn PharmD Candidate 2021

UGA College of Pharmacy

A collaborative diabetes education service was implemented in a FQHC to improve diabetes control. Referred patients received four individual diabetes self-care modules: Introduction to Diabetes, Nutrition and Exercise, Heart Disease, and Complications of Diabetes. After completion, follow-up appointments reviewed modules and evaluated metrics. Pharmacists and second year pharmacy students provided medication reconciliation, education sessions, and recommendations. Patients’ A1c, blood pressure, weight and cholesterol levels were evaluated and documented.

A retrospective review was conducted on patients completing at least one session and having a follow-up A1c. Minors were excluded. Patients were evaluated in two groups based on A1c at baseline: Poor diabetes control, defined by HEDIS as A1c >9%, and A1c <9%.

48 patients met inclusion criteria and were evaluated from 9/1/18-8/30/19. Patients completed four modules on average. In patients with A1c $\geq 9\%$, the average A1c decreased from 11.2% to 7.6% ($p < 0.0001$). In patients with A1c $< 9\%$, the average A1c decreased from 7.27% to 6.7%. Improvements in blood pressure, weight and lipids were shown.

Studies indicate a savings of 20-30 percent of patient costs per year for each A1c percent decreased, correlating with a savings of \$3,784 for patients with A1c $\geq 9\%$, and \$988 for patients with A1c $< 9\%$.

Data has not been collected in financial start up costs or value from provider perspective. Reimbursement is available through the US Centers for Medicare and Medicaid Services after accreditation through the American Association of Diabetes Educators or American Diabetes Association.

The Effect of a Dedicated APPE Student on Increasing Community Pharmacy Clinical Documentation

Poster Location: 14

Presenter: Cody Turner, Student Pharmacist

University of Arkansas for Medical Sciences College of Pharmacy

Background: Community pharmacies are able to document clinical interventions using the Pharmacist eCare Plan. Community pharmacies belonging to Community Pharmacy Enhanced Services Network (CPESN) were required to submit eCare plan documentation by July 31st 2019. To assist with implementation of eCare plan documentation, an Advanced Pharmacy Practice Experience (APPE) Elective rotation was implemented in four Arkansas CPESN pharmacies during the summer 2019.

Objective: To examine the effect of an Advanced Pharmacy Practice Experience (APPE) Elective as an implementation strategy to increase documentation of eCare plans.

Method: We performed a retrospective review of eCare plan documentation from the APPE sites ($n=4$) compared to the non-APPE sites in Arkansas CPESN network pharmacies ($n=92$). The study period for eCare plan documentation was March through August 2019 to capture two months prior to the APPE rotation and two months after the APPE rotation. We also compared pre-post rotation documentation at the APPE sites. Descriptive statistics, independent and paired t-tests were used to analyze the number of eCare plans documented.

Results: The overall mean difference of eCare plans per pharmacy was statistically significant favoring APPE sites (107.8 vs 5.0, $p < 0.001$). One APPE site contributed a large number of submissions ($n=329$). We repeated analysis without this pharmacy and the mean difference per pharmacy still statistically favored the APPE sites (34.0 vs 5.0, $p=0.003$). The paired t-test to examine pre-post the APPE rotation month was not statistically significant ($p=0.082$); however all APPE site pharmacies continued documentation independently after the rotation month

“Making the Most of Media and Marketing - A Comprehensive Review of Independent Pharmacies and their Internet Presence”

Poster Location: 9

Presenter: Anna Brown, PharmD Candidate

UNC Chapel Hill Eshelman School of Pharmacy and The National Community Pharmacists Association

A comprehensive review of 100 independent pharmacy websites across the country was performed. Data collected included whether pharmacies had a website, characteristics of said website, pharmacy services being advertised, and which social media platforms they utilized. The project was broken down into 3 different aims. Aim #1 was to determine what percentage of independent pharmacies have no website, a “poor”, “fair”, “good”, or “great” website. Aim #2 was to determine what social media platforms are being utilized most by independent pharmacies and how often they are engaging customers on these platforms. Aim #3 was to identify the most common services advertised on the “Good” and “Great” independent pharmacy websites. The findings of this project were concerning, as 38% of the entire sample was found to have no website at all. Additionally, less than half of the sample had active social media pages and of those that did utilize social media, only 33% are posting at the industry recommended frequency. Seeing as the average American adult spends 11 hours per day interacting with media, improved marketing and utilization of internet media by independent pharmacies, is a potential avenue to demonstrate our value and commitment to the community.

NCPA Student Chapter: Implementation of Community Outreach Initiatives and Impact on Cardiovascular Health

Poster Location: 11

Presenters: Clare Beebe, Student Pharmacist, Kimberly Barrios, Student Pharmacist, Johnathan Hamrick, PharmD

Mercer University College of Pharmacy

Due to the high prevalence of heart disease and the asymptomatic nature of health conditions (i.e. hypertension), the members of Mercer University’s NCPA Student Chapter developed a goal of providing free screening services to members of the community. The services offered by student members of NCPA allowed for individuals to receive blood pressure screenings and blood pressure education at no cost and included participants of different cultural backgrounds. From September 10th, 2018 to April 26th, 2019 the chapter was able to provide more than 675 blood pressure screenings. In the coming year, Mercer University’s NCPA Student Chapter hopes to expand this blood pressure screening initiative and also begin a naloxone education program.

Pharmacist-Led Discharge Medication Counseling and its Corresponding Impact on Medication Adherence and Hospital Readmission Rates

Poster Location: 21

Presenter: Savannah Cunningham, PharmD Candidate 2022

Mercer University College of Pharmacy

Studies have shown that patients who receive counseling and education from a pharmacist at discharge have a significantly decreased rate of hospital readmissions versus patients who do not receive discharge counseling from a pharmacist. Community pharmacists can help to improve adherence rates and lower hospital readmission rates by offering services such as a bedside delivery program. The collected data from this study was analyzed via intervention (community pharmacist or student pharmacist providing counseling at hospital discharge) versus control (community pharmacy technician or clerk delivering medications at discharge with no pharmacist interaction/counseling). Collected patient data (n=81) included patients' disease states, gender, and insurance coverage. Medication adherence was measured at follow-up intervals utilizing the proportion of days covered (PDC) equation, where a score of 80% is required for optimal therapeutic efficacy. Pharmacist-led counseling sessions occurred at the time of discharge and lasted approximately 10-15 minutes. These pharmacist-led discharge counseling sessions made a statistically significant difference in medication adherence rates ($P < 0.001$) as calculated using PDC. The community pharmacist-led discharge counseling sessions did not make a statistically significant difference in hospital readmission rates, though it was a clinically and financially significant endpoint. Thus, community pharmacist involvement in a bedside delivery program helps to improve medication adherence in patients being discharged from a hospital. Although this study's sample size was not sufficient to show a statistically significant difference in reduced hospital readmission rates for patients receiving a community pharmacist-led discharge counseling session, the findings show clinical significance with significant cost savings and improved patient outcomes.

Reversing the Role of APPE Student Pharmacists – The Design of Student-Led Facilitation in Community Pharmacy

Poster Location: 6

Presenters: Samantha Pennington, Megan G. Smith, PharmD, BCACP

University of Arkansas for Medical Sciences College of Pharmacy

Student pharmacists completed an advanced pharmacy practice experience elective at select Community Pharmacy Enhanced Services Network pharmacies focused on care plan documentation and implementation. During this four-week rotation, students spent time with the elective rotation preceptor, the staff at their assigned pharmacy, and implementation researchers at the college of pharmacy. At the beginning of the rotation, students were provided with a syllabus, schedule, and resources regarding implementation science and facilitation, Community Pharmacy Enhanced Services Network, and Pharmacist eCare plans. Students spent time observing and evaluating the pharmacy to identify potential workflow for

documentation of clinical services. After target areas were identified, students developed care plans in the pharmacy's vendor documentation system. Then pharmacy staff was trained and educated by the student on how to build, process, and submit individual care plans. Before the student completed the rotation, they developed resources, workflow plans, and a daily checklist for their pharmacy to implement care plan documentation into their pharmacy. This APPE rotation shifted the traditional role of the student pharmacist and allowed them to act as teachers in the community pharmacy. Both students and practice sites benefitted from this new educational experience as they were able to demonstrate the impact they can have on the profession outside of direct patient care.

Student Business Plan Competition

Cloud 9 Pharmacy

Poster Location: 4

Presenters: Keana Mendoza, PharmD Candidate 2021, Jenny Liu, PharmD Candidate 2021, Krystal Ragat, PharmD Candidate 2021

Western University of Health Sciences College of Pharmacy

Cloud 9 Pharmacy, a remodeled independent establishment focusing on new age medicine. The services provided include all the basic pharmacy needs with an added focus on mental health. Our goal is to optimize and individualize patient care in Eastvale, CA and its surrounding communities by maintaining current and building new relationships with local healthcare providers. Though our goal is to properly treat all patients based on any type of medication need, we emphasize the importance on maintaining our patients' mental health and overall well-being. We strive to be a source for others to learn more about early warning signs, to reach out to those who may be experiencing mental health problems, and to set treatment goals with our patients on their path to recovery. As a pharmacy we also would like to be alongside patients as they consider other options in terms of their medication regimen. We believe that today, alternative medication is commonly sought after not knowing the potential harms. Though we will emphasize that alternative medication is not a replacement for prescription medication, we will offer our clinical knowledge to help patients explore options in the safest and most effective way possible. Of these alternative therapies that can be discussed with our patients are vitamins, dietary supplements, herbal medication as well as CBD products.

Gatecity Pharmacy Business Plan

Poster Location: 13

Presenters: Lily Genta - Student Pharmacist, Dallin Farnes - Student Pharmacist, James Harrington - Student Pharmacist

Idaho State University College of Pharmacy

Rural healthcare is a growing challenge in the United States. As the country becomes more urban, the needs of those in isolated areas are often ignored. Gatecity Pharmacy's vision is to provide pharmaceutical and basic clinical services to communities big and small that are otherwise isolated from these utilities. Gatecity Pharmacy's plan to accomplish these goals will be to purchase two established telepharmacies to support the startup of a central pharmacy which will be located in an isolated area of Pocatello, Idaho. The pharmacy will be based inside of a clinic in a rapidly expanding community with promise for continual growth. This poster demonstrates Gatecity Pharmacy's vision, mission, business description, products and services, and marketing plan that would be used in developing the business.

Incorporating pharmacogenomic services and advancing other pharmacy services at Springfield Pharmacy, PA.

Poster Location: 10

Presenters: Kajal Patel- NCPA President, PharmD Candidate 2021, Shivangi Solanki- NCPA Member, PharmD Candidate 2020

Philadelphia College of Pharmacy- University of the Sciences

Our pharmacy will be incorporating the use of pharmacogenetic testing to ensure a patient-specific and achievable adverse-event-free medication therapy regimen. Genetic testing involves testing the functionality of enzymes also known as drug metabolizers to decipher whether medications are creating sub-therapeutic, super-therapeutic, therapeutic, or adverse reaction responses.

The purpose of incorporating pharmacogenomics (PGx) to the independent pharmacy business is mainly for the reason that independent pharmacies are very feasible when it comes to evolving the way healthcare and technology evolve. The ability of pharmacists to take on this role, using their knowledge in pharmacogenetics and pharmacokinetics, has been investigated more often in the past decade. Studies have shown a tremendous improvement in medication related therapy for patients and the formation of a lasting trust between the patient and pharmacist.

Along with genetic testing services, our pharmacy will be developing existing operations to maximize health in our community. These services include: progressive OTC triage, medication synchronization, medication therapy management (MTM), disease state management (smoking cessation, blood pressure monitoring, and diabetes training), prescription delivery services, and online/social media platforms (including a website and mobile application).

Knights Pharmacy: Protecting Your Health!

Poster Location: 18

Presenters: Brian Ubhaus, Sarah Troast, Christopher Racioppo, Cathi Choi
Rutgers, Ernest Mario School of Pharmacy

Knights Pharmacy aims to be the premier provider for all of a patient's organic and non-organic health needs, from medication to lifestyle changes. Natural and organic products are becoming an important part of a patient's healthcare plan and we want to spread our knowledge to customers. Our goal is to provide personalized care through our team of specialized pharmacists focused on providing the best information to our patients. Knights Pharmacy wants to create an open and honest line of communication to provide optimal care for our patients, so they can be their best selves. Knights Pharmacy will become a champion in the organic healthcare division, bringing independent pharmacy of the area into the modern world. We will become a leader in our community by providing individualized, premium services. Knights Pharmacy will specialize in diabetes and eventually expand to other medical services to better serve our community. In our coming years we will have dietitians, a bedside service with the local hospital, as well as host a farmer's market that will bring our pharmacy closer to the

community and provide a healthy and fun environment for all ages. Knights Pharmacy is an independent pharmacy in an affluent town of New Jersey. We will supply the community with our medical knowledge in both traditional medicine as well as natural and organic products. We will have an assortment of specialized services to ensure that the needs of our patients are met, and we will continue to expand those services throughout the years.

Marketime Drug

Poster Location: 1

Presenters: Megan Baker, Lauren Powell, Candice Boyd, Janet Murphy

Washington State University College of Pharmacy and Pharmaceutical Sciences- Spokane Campus

Marketime Drug is a pillar in the city of Moscow, Idaho. Patients have been seeking care here since 1952. That is over 60 years of dedicated pharmacy services! Marketime has survived so long because it is willing to adapt to change and the new ownership is bringing a new level of patient care to the pharmacy. With new Idaho legislation, collaborative drug therapy agreements, vaccinations and the newly developing Community Pharmacy Enhanced Services Network (CPESN), we are able to vastly impact the community of Moscow and surrounding areas with these new services.

West Valley Pharmacy

Poster Location: 7

Presenters: Minwoo Park, PharmD Candidate 2021, Santos Rivera, PharmD Candidate 2021,

Albert Ngugi, PharmD Candidate 2021, Zhanhuang Huang, PharmD Candidate 2021

Washington State University College of Pharmacy and Pharmaceutical Sciences

A student business plan for the purchase of an existing compounding pharmacy. The plan also includes addition of other clinical services including, initiation of chronic disease state management for providers in the Yakima community. A goal of this business plan is to increase access to providers in a rural community.