

## BACKGROUND

- Consumers are an important stakeholder group to support the evolution of the pharmacist's role within the community.
- Consumer advocacy organizations (COA) can add the voice of consumer support to expand such services.
- Improving consumer understanding of and appreciation for community pharmacist clinical services will facilitate the expansion of community pharmacists as primary care extenders.

## OBJECTIVES

The objectives of this project were to:

1. Determine factors that contribute to positive and negative consumer perceptions of expanded pharmacist patient care roles.
2. Identify facilitators and barriers that contribute to consumer awareness and perceptions of the value of expanded community pharmacist services using three case-based scenarios.
3. Develop strategies and approaches for increasing consumer advocacy for the value of expanded community pharmacist patient care services.

## METHODS

### CONSUMER ELIGIBILITY CRITERIA

- **Inclusion Criteria:** (1) English speaking adult, (2) 50 years of age or older, (3) presence of 1 or more chronic conditions, and (4) prescribed 1 or more chronic medications daily.
- **Exclusion Criteria:** (1) Unable to individually speak, comprehend, and write in English, (2) cognitively impaired, (3) hearing impairment that inhibits participant's ability to carry out routine conversations, and (4) unable to individually arrange transportation to and from the focus group (FG) facility.

### CONSUMER RECRUITMENT

- Recruitment occurred in April/May 2017 until 8-10 participants were recruited per FG.
- Study announcements and flyers were placed in consumer advocacy organization (CAO) and senior center publications, and community pharmacies.

### FOCUS GROUP STRUCTURE

Two 90-minute FGs were completed, and each were each split into 3 parts. The types of questions asked included:

1. **Part 1:** (a) participants' current interactions with community pharmacists, (b) the role of the community pharmacist in their healthcare, and (c) the types of non-dispensing patient care services that their pharmacist provides.
2. **Part 2:** three scenarios of expanded community pharmacist services (i.e., pharmacist administration of non-immunization injectable medications, pharmacist refills for chronic medications, and pharmacist diabetes medication monitoring/management) (Table 1) followed by individually-completed Likert-scale questionnaires.
3. **Part 3:** (a) major facilitators and barriers that would influence them to use or not use expanded services, and (b) the role of CAOs in increasing the awareness of the value of expanded community pharmacist services.

### FOCUS GROUP ANALYSIS

- Each FG discussion was audio recorded, transcribed verbatim, and analyzed using the constant comparative method (i.e., grounded theory approach) – an iterative process that is used to identify key, emerging themes common to both FGs.

Table 1: Case-Based Scenarios

Scenario 1	Scenario Details
<i>Administration of non-immunization injectable medications</i>	You are a patient who has low vitamin B12 levels. In order to keep your levels normal, you have been visiting your primary care doctor once a month to get an injection of vitamin B12. Your community pharmacist has recently become certified to administer injectable medications (in addition to vaccines) at the pharmacy. Your pharmacist is able to administer your vitamin B12 injection in the pharmacy. Your pharmacist sends a note to your doctor each time a vitamin B12 injection is administered in the pharmacy.
Scenario 2	Scenario Details
<i>Refills for chronic medications</i>	You are a patient who is taking 3 medications daily to treat your chronic conditions. Your primary care doctor's office is very busy, and sometimes you have to wait 5 days for your doctor to send in refills for your medications to your pharmacy. Your community pharmacist has a written agreement with your doctor that allows the pharmacist to automatically authorize refills for your chronic medications without having to call your doctor. Prior to providing refills, your pharmacist will check your labs and will make sure you have been keeping your doctor appointments. Instead of waiting 5 days for a refill, your pharmacist can refill your medication the same day you request it. Your pharmacist would alert your doctor that refills were authorized for 6 months.
Scenario 3	Scenario Details
<i>Pharmacist diabetes management</i>	You are a patient who has diabetes and is otherwise healthy. You have been visiting your primary care doctor once every 3 months to complete lab work to check your blood sugar (i.e., A1C). During your doctor visits, your doctor reviews which diabetes medications you are taking. Sometimes your medications are adjusted, and sometimes you discuss your diet and exercise. Your community pharmacist has a written agreement with your primary care doctor that allows the pharmacist to test your A1C at the pharmacy every 3 months. In addition, the pharmacist meets with you at the pharmacy for 15-30 minute appointments to review and adjust your medications to keep your blood sugar under control. The pharmacist also talks to you about your diet and exercise. The pharmacist has access to your electronic medical record and labs and sends a note to your doctor after each visit. You visit your community pharmacist routinely every 3 months for diabetes management in between your scheduled primary care doctor appointments.



Table 2: Comparison of Post-Scenario Questionnaire & Focus Group Discussion Themes (All Scenarios)

Question	Questionnaire Response (median)	Focus Group Discussion Findings	Alignment of Questionnaire Responses and Focus Group Discussion Findings
1. I am aware that community pharmacists are offering this service	Disagree	• Participants were unaware expanded services were being implemented in community pharmacies across the country	STRONGLY ALIGNED
2. Community pharmacists are capable of conducting this service (e.g., education/training)	Agree	• Scenario 1 gained the most support for pharmacist capability (across all scenarios), likely because of the similarity with pharmacist-administered immunizations	DID NOT ALIGN • This discordance could be due to participant misunderstanding of the described scenario or limited prior experience with community pharmacists in direct patient care roles
3. I would feel comfortable if my primary care provider shared relevant electronic medical information with my community pharmacist	Agree	• Participants were more willing to have their pharmacist access their electronic health record for services relating to scenario 1 as compared to scenarios 2 and 3	DID NOT ALIGN • This discordance could be due to a lack of participant understanding (at the time of questionnaire completion) of the type/extent of electronic health record access required by the pharmacist for this expanded service
4. I would utilize this service provided in a pharmacy instead of my primary care practice as long as it was covered by my insurance	Strongly Agree	• Some participants voiced preference in continuing to use their physician for discussed services even if the service was covered at the pharmacy	MOSTLY ALIGNED • Those patients who preferred to use their physician for the expanded services noted they did not have a strong relationship with their community pharmacist
5. I would utilize this service provided in a pharmacy instead of my primary care practice even if I had to pay for it	Disagree	• Lack of insurance coverage was a common hindrance to service uptake across all scenarios	STRONGLY ALIGNED • Participants were resistant to use the expanded service if they had to pay for it

Table 3: Strategies to Shape Consumer Value for Expanded Community Pharmacist Services

Gap in Consumer Perceptions	Approach and Strategies
<i>Pharmacist education, training, and qualifications</i>	<b>Collaborate with adult education organizations and state colleges/universities to:</b> 1. Develop educational material to educate consumers about the curriculum, experiential training, and postgraduate programs that pharmacists have completed. 2. Invite pharmacists to speak or present on relevant topics at local events.
<i>Community pharmacist and primary care provider interactions and collaboration</i>	<b>Work with local primary care providers/organizations to increase patient understanding of pharmacist and physician collaboration:</b> 1. Review working relationships between pharmacists and physicians with examples of collaborative models that delineate specific roles and responsibilities of the pharmacist and provider. 2. Describe the structure and intent of collaborative practice agreements between community pharmacists and community-based providers for comprehensive medication management and medication monitoring services. 3. Discuss the importance of sharing electronic health record access to community pharmacists completing comprehensive medication reviews to increase pharmacists' abilities to develop targeted, actionable clinical recommendations for improving patient care.
<i>Current existence of expanded community pharmacist services</i>	<b>Engage the local public community to increase awareness about available expanded pharmacist services within communities:</b> 1. Advertise the existence of the expanded services to consumers at the level of 1) the community pharmacy (e.g., prescription bag tags, posters, handouts, "meet your pharmacist" biography), or 2) other community centers (e.g., libraries, town halls, etc.). 2. Educate community-based providers about available expanded pharmacist services to champion patient referral to pharmacists that offer expanded services.
<i>Patient-level value and benefits</i>	<b>Collaborate with state-level pharmacy and consumer organizations to:</b> 1. Highlight/disseminate patient success stories involving expanded pharmacist services (e.g., newsletters, video clips, social media, etc.). 2. Promote how pharmacist-provided expanded services can complement (not replace) services provided by primary care providers by focusing on the pharmacist's unique set of skills and training.
<i>Role of consumer advocacy organizations</i>	<b>Partner with state and national healthcare and consumer advocacy organizations to:</b> 1. Disseminate educational commentaries in electronic/printed press about the education, training, and certification of pharmacists. 2. Educate consumers on the availability of expanded pharmacist services within their community (e.g., organizational flyers, news blogs, email listservs, pharmacist presentations at senior centers and organizational meetings, social media, etc.). 3. Serve on committees and participate in organization events/community health fairs. 4. Speak at caregiver support group meetings/events (e.g., hospitals, community outreach groups, faith-based organizations, etc.). 5. Engage consumer advocacy support for health policy changes needed to expand community pharmacist services.

## RESULTS

- **Participant Demographics:** (average): age=67 years; education level=B.S.; use of chain pharmacy=78%; participation in 1 or more CAOs=78%.
- **FG Discussion Key Findings (all scenarios):**
  1. **Positive Reactions:** convenience; timeliness; accessibility.
  2. **Negative Reactions:** uncertainty about pharmacist training/qualifications; privacy; pharmacists' capacity to take on new roles; potential increased patient costs.
  3. **Facilitators:** team approach to care; pharmacist-patient trust.
  4. **Barriers:** possible lack of insurance payment; consumer preference for physician services.
  5. **Role of COA:** participants provided minimal insight into how COA could help increase consumer awareness of expanded community pharmacist services.
- **Comparison of Focus Group and Questionnaire Findings:** see Table 2.

## CONCLUSIONS

- Several gaps in consumer perceptions of expanded community pharmacist services were identified, including: (1) pharmacist education/training/qualifications; (2) community pharmacist/primary care provider interactions/collaborations; (3) current existence/prevalence of services; and (4) patient-level value/benefits.
- Strategies were developed to shape consumer misperceptions (Table 3).
- This study can inform consumers, advocates, community pharmacists, primary care providers, and community-based organizations on methods to shape consumer perceptions on the added value of community pharmacist expanded services.

### FUNDING:

- This project was funded by the Community Pharmacy Foundation (grant# 71365).