



Outcomes Innovative Pharmacy Grant Final Report

Applicant Information

Applicant Name	Logan Thomas Murry, PharmD
Project Title	Patient Preferences and Willingness-To-Pay for Medicare Part D Consultations Offered in a Community Pharmacy Setting
Funding Amount	\$10,000

Final Report

- **Please describe the progress made towards meeting the goals and objectives of your project. Include results or outcomes if possible.**

Thus far, IRB approval has been granted for the project. This process included the development of all study materials including qualitative interview guides for both service user and non-user groups, follow-up quantitative survey which was developed with individuals associated with the University of Minnesota College of Pharmacy, recruitment letters, postcards, and a formal recruitment process document for community pharmacies to actively recruit patients for the study. Further, the IRB has approved a quantitative discrete choice experiment and follow-up survey which is to be administered via Qualtrics. All project components have been successfully submitted and approved by The University of Iowa IRB.

Preliminary results from the qualitative and quantitative components of the project have been completed.

Qualitative Phase

In total, five of the six community pharmacies originally contacted for participant recruitment have agreed to participate in qualitative data collection. Materials including recruitment letters and postage are currently being distributed to community pharmacies in Johnson, Linn, Blackhawk, Jackson, and Davis County. All community pharmacies are members of CPESN Iowa, with three pharmacies providing formal Medicare Part D consultation services. Interview guides created by the study team and a finalized version of the quantitative survey have been included as appendices at the end of the document. All five community pharmacies successfully distributed recruitment materials to patients, with 17 patients recruited for formal interviews. All interviews have been completed and data analysis has been performed and finalized using template analysis. All 17 of the interview participants successfully completed and returned follow-up surveys.

Qualitative interview data were analyzed using template analysis informed by the SEREVQUAL framework. Overall, 14 themes were identified that fit into four SERVQUAL domains of: Environmental Quality, Technical Quality, Administrative Quality, and Interpersonal Quality. Further, one additional theme was identified which fit into an inductive theme of Willingness-to-Pay. The themes from the Template analysis associated with SERVQUAL domains is included in Table 1.

Table 1. SERVQUAL Domains and Identified Service Themes

SERVQUAL Domains	Themes
Technical Quality	Pharmacist Expertise, Time, Cost-Outcomes, Service Availability, Appointment-based Model, and Alternative Service Providers
Interpersonal Quality	Pharmacist Characteristics, Familiarity with Relationship, Continuity, and Trust
Environmental Quality	Service Location, Customer Service Across Employees, Private Consultation Space
Administrative Quality	Tailoring Information to Patient, Comparison and Choice, Experience with Other Services facilitates Trust, Information Print Out + Explanation

Quantitative Phase

The discrete choice experiment and supplemental survey were designed in Qualtrics. The discrete choice experiment was pre-tested with a convenience sample of Medicare-enrolled patients in the state of Iowa. After pre-testing, pilot testing and full survey administration was done using a Qualtrics panel. Demographic and patient specific factors were analyzed and are included in Table 2. Most respondents were female (60%), lived in a Suburban area (56%), used one pharmacy in the past 30 days (76%), were currently taking four or more prescription medication (51%), had previously used a pharmacy service outside of traditional medication dispensing (60%), and most frequently used a chain pharmacy (51%).

A mixed logit model was used to determine the part-worth utilities of different service attribute levels. The results of the mixed logit model are included in Table 3. Service attributes with the highest utility were 15-minute services, discussion of services + a follow-up phone call, In person at the pharmacy, a pharmacist the patient knew, and at no cost. All part-worth utilities for service attributes are reported in Table 2.

Table 2. Demographic and patient-specific factors from the Qualtrics DCE survey

Characteristic	N = 540 ¹
Age	71.3 (5.2)
Gender	
Female	324 (60%)
Male	214 (40%)
Non-binary / third gender	1 (0.2%)
Prefer not to say	1 (0.2%)
Education	
Some high school	5 (0.9%)
High school or GED	94 (17%)
Some college	195 (36%)
Bachelor's degree or advanced graduate work	246 (46%)
Residence	
Rural	108 (20%)
Small Town	59 (11%)
Suburban	300 (56%)
Urban	73 (14%)
Income	
Under \$25,000	79 (15%)
\$25,000 to \$49,999	178 (33%)
\$50,000 to \$74,999	109 (20%)
\$75,000 or more	173 (32%)
<missing>	1
Different pharmacies used in last 30 days	
1	408 (76%)
2	114 (21%)
3 or more	18 (3.3%)
Number of prescription medications currently taking	
1	82 (15%)
2	72 (13%)
3	108 (20%)
4 or more	278 (51%)
Used any services provided by pharmacy	325 (60%)
Taking difficult to afford prescription medication	114 (21%)
Chain pharmacy (i.e. CVS)	273 (51%)
Grocery (i.e. Kroger)	102 (19%)

Characteristic	N = 540 ¹
Mail order pharmacy	142 (26%)
Independent pharmacy	66 (12%)
Mass Merchandiser (i.e. Walmart)	116 (21%)
Confidence (1-10 scale) - control and manage most health problems	7.52 (1.92)
Confidence in choosing and comparing health plans	13.9 (4.1)
Likely to inspect different aspects of health plans	13.81 (2.57)

¹Mean (SD); n (%)

Table 3. Results from the conditional and mixed logit model for part-worth utilities of Medicare Part D consultation services attributes

	Conditional Logit Model		Mixed Logit model	
Attribute	Utility	SE	Utility	SE
time				
15minutes	0.199	0.026	0.392	0.052
30minutes	0.104	0.027	0.175	0.043
60minutes	-0.302	0.029	-0.567	0.057
info				
discussion	-0.054	0.026	-0.069	0.044
disc_followup_phone	0.054	0.026	0.069	0.044
location				
in_person_at_home	-0.178	0.026	-0.307	0.064
telephone	-0.000	0.025	-0.021	0.053
in_person_at_pharmacy	0.179	0.025	0.328	0.052
provider				
pharmacy_technician_or_intern	-0.248	0.026	-0.438	0.055
any_pharmacist	-0.064	0.025	-0.139	0.044
pharmacist_you_know	0.312	0.026	0.578	0.052
price				
\$0	1.595	0.064	3.382	0.202
\$25	0.029	0.030	0.000	0.054
\$50	-1.624	0.066	-3.382	0.201

- **Which, if any, of your goals and objectives were not achieved as intended? Please explain these and what impact you believe it has on the overall project success.**

While data analysis is not yet complete, all project goals will be completed at the end of the project.

While COVID caused significant delays and challenges in data collection and patient recruitment, it did not significantly alter the ability to complete the goals and objectives of the project.

- **Do you expect this project and its results to be sustainable at your practice and reproducible in other pharmacy settings? Do you anticipate any barriers to sustainability and/or reproducibility? Please explain.**

While the results of this project are not pharmacy specific, they are generalizable to other community pharmacies across the state of Iowa. These results have the potential to inform the specific Medicare Part D consultation services offered by community pharmacies while adapting these services to patient-specific needs. Further, the results can help to inform sustainability of these services, by identifying the time and resources necessary to meet and exceed patient expectations with Medicare Part D consultation services. The barriers to sustainability and reproducibility are largely influenced by the community pharmacies where patients were recruited for interview participation.

- **What impact will the outcomes of this project have on pharmacy practice in Iowa?**

The outcomes of this project have the potential to impact both existing service offerings and how patient-centered service evaluation is performed at Iowa community pharmacies. Community pharmacies across the state can use these results to inform Medicare Part D consultation service offerings that are both patient-centered and sustainable to implement. Further, this study has evaluated the acceptability of Medicare Part D consultation services provided by pharmacy interns or technicians.

Final Budget Report

Based on the funded amount from the IPA Foundation, please complete the grant budget in the table format below. Grant budgets must include all costs as well as any matching funds or in-kind support. Please include items from the entire project interval (pre- and post- interim report)

Budget Line Items	Total Direct Costs	Sources if Outside Grant (e.g. in-kind or other funding)
Qualitative Data Software MAXQDA	\$750	In-Kind: UICOP**
IBM SPSS Student License	\$77	In-Kind: UICOP**
Researcher Salary Support	\$17,158.40	In-Kind: UICOP**
Introductory Mailings of CPESN Pharmacies	\$124	
Postcard Mailing to CPESN Pharmacies	\$93	
Survey Distribution to CPESN Patients	\$6,500	
Patient Incentives	\$1,120	
Travel to Pharmacy for Pharmacist and Patient Interviews (or for equipment to facilitate remote interviews)	\$500	
Patient Recruitment Materials	\$500	
PI Summer Support	\$5,000	
Total Cost	\$31,822.4	Total from IPA: \$10,000

Please provide a summary of your project to be published in the Journal of IPA. (300 word maximum)

The objectives of this study were to 1) identify patient preferences for Medicare Part D consultation service offerings from the perspective of service-naïve and service-experienced patients and (2) quantify patient stated preferences for service attributes using part-worth utilities and willingness-to-pay. The study used a mixed methods design with qualitative interviews of Iowa CPESN patients and a national quantitative discrete choice experiment. Patients at 5 Iowa CPESN community pharmacies were interviewed about their experiences selecting a Medicare Part D plan. Perspectives were collected from 17 patients who both had and had not used a Medicare Part D consultation service offered by a community pharmacy in

the past. After 17 interviews had been completed, qualitative analysis identified themes within the SERVQUAL framework domains of: Technical Quality, Interpersonal Quality, Environmental Quality, and Administrative Quality. Thematic analysis identified five attributes important to Medicare Part D service quality from Iowa CPESN patients: Service Length, Information Provided, Service Location, Service Provider, and Price. The DCE showed that when considering Medicare Part D consultation services, patients associated the highest value with shorter services (15 minutes), a discussion of Medicare Part D plans and a follow-up phone call, offered in person at the pharmacy, and provided by a pharmacist they knew. While patients had the highest preference for a service offered free of charge, a charge of \$25 USD was still associated with positive utility. Community pharmacies currently offering or interested in offering Medicare Part D consultation services may benefit from considering patient preferences for service offerings and the monetary value of these services.