Pharmacists Provision of Non-Dispensing Services in Health Professional Shortage Areas

Haley L. Kessinger  
*Ohio Northern University*

Emily R. Landis  
*Ohio Northern University*

Follow this and additional works at: https://digitalcommons.onu.edu/student_research_colloquium

Part of the Community Health and Preventive Medicine Commons, Health Policy Commons, Other Pharmacy and Pharmaceutical Sciences Commons, Other Public Health Commons, Pharmacy Administration, Policy and Regulation Commons, and the Public Health Education and Promotion Commons

**Recommended Citation**

https://digitalcommons.onu.edu/student_research_colloquium/2022/papers/18

This Conference Proceedings is brought to you for free and open access by DigitalCommons@ONU. It has been accepted for inclusion in ONU Student Research Colloquium by an authorized administrator of DigitalCommons@ONU. For more information, please contact digitalcommons@onu.edu.
Ohio Pharmacists Provision of Non-Dispensing Services in Health Professional Shortage Areas

Haley Kessinger and Emily Landis
Advisors: Dr. Natalie DiPietro Mager and Dr. Karen L. Kier

Ohio Northern University
ONU Student Research Colloquium
Introduction

- Primary Care Health Professional Shortage Areas (HPSAs)

- Many residents living in HPSAs have social determinants of health markers including
  - Rurality
  - Poverty
  - Population sparsity
  - High proportions of older adults
  - Lower education levels
  - Greater racial/ethnic diversity
  - Higher levels of unemployment
Introduction (cont.)

- Community pharmacists
  - Accessible healthcare professionals
  - 95% of population lives within 5 miles of a community pharmacy

- Non-dispensing services
  - Patient-centered care services
Study Objectives/Purpose

- **Primary objectives:**
  - Characterize non-dispensing services that Ohio community pharmacists currently provide
  - Compare such services among pharmacists practicing in HPSA and non-HPSA counties

- **Secondary objectives:**
  - Determining pharmacists’
    - Interest and barriers in providing such services
    - Opinions regarding the importance of such services
    - Perceptions of impact on public health
Methods

● Study sample obtained from State of Ohio Board of Pharmacy
  ○ Active license in the state of Ohio
  ○ All community pharmacists in counties entirely designated as Primary Care HPSA (11 counties, n=162)
  ○ Comparison group of community pharmacists randomly selected (n=162)
  ○ Total sample size = 324 (4 undeliverable)
● IRB approved, Qualtrics 19-item survey (pilot tested prior to distribution)
  ○ Open 19 days, 7 reminder emails
● Incentive for survey completion
  ○ Fifteen $25 Amazon gift cards, one $100 card
● Statistical analyses using IBM SPSS Statistics 27 (IBM, New York)
## Results

74 total respondents (23% response rate)

### Gender

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female/transgender female</td>
<td>43</td>
<td>61%</td>
</tr>
<tr>
<td>Male/transgender male</td>
<td>21</td>
<td>30%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

### HPSA designation

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full HPSA county</td>
<td>26</td>
<td>36%</td>
</tr>
<tr>
<td>Non-HPSA county</td>
<td>45</td>
<td>62%</td>
</tr>
<tr>
<td>Partial HPSA county</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Results

- Impact on public health
  - 99% of respondents agree
- Pharmacists practicing in HPSAs were less likely to correctly recognize HPSA designation compared to those in non-HPSAs (p=0.008)
- Non-HPSA community pharmacies were more likely to offer 11 or more non-dispensing services than pharmacies in HPSAs (p=0.002)
Results

- Barriers to providing non-dispensing services
  - Top three reported barriers:
    - Workflow
    - Space
    - Reimbursement
  - Similar responses among all pharmacists
    - No statistically significant differences between HPSA vs. non-HPSA
Results

- Pharmacists practicing in HPSAs reported interest in learning more about non-dispensing services:
  - Roles in public health (61%)
  - Infectious disease testing (42%)
  - Smoking cessation (41%)
  - Depression screening (39%)
Discussion

○ Gap in recognition of practicing in an HPSA
  ■ Important to understand community need
○ Public health professionals can advocate for better pharmacist-patient relationships
  ■ Fill health inequity gaps
○ Limitations
  ■ Results may not be generalizable to:
    ● all Ohio community pharmacists
      ○ Small sample size
      ○ Possible participant bias
    ● Community pharmacists in other states
      ○ Pharmacists’ scope of practice varies by state
      ○ May influence the non-dispensing services offered
Future Research

- Examine rural vs. urban care
- Determine other state’s HPSA’s barriers
- Identify ways to overcome barriers
- Identify ways to fill the gaps in health equity in HPSA
Conclusion

- Community pharmacies in HPSAs provided fewer non-dispensing services
- Pharmacists in HPSAs were less likely to recognize they are in designated HPSAs
- Many pharmacists were interested in learning more about non-dispensing services
- Public health professionals can facilitate relationships with local pharmacies and increase collaboration to alleviate gaps in care for individuals residing in HPSAs
Resources

Questions?

Thank you!

Haley Kessinger (h-kessinger@onu.edu)
Emily Landis (e-landis@onu.edu)
<table>
<thead>
<tr>
<th>Counties</th>
<th>HPSAs</th>
<th>Non-HPSAs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brown</td>
<td>Franklin</td>
</tr>
<tr>
<td></td>
<td>Carroll</td>
<td>Delaware</td>
</tr>
<tr>
<td></td>
<td>Champaign</td>
<td>Ashland</td>
</tr>
<tr>
<td></td>
<td>Hardin</td>
<td>Wyandot</td>
</tr>
<tr>
<td></td>
<td>Harrison</td>
<td>Knox</td>
</tr>
<tr>
<td></td>
<td>Holmes</td>
<td>Portage</td>
</tr>
<tr>
<td></td>
<td>Licking</td>
<td>Butler</td>
</tr>
<tr>
<td></td>
<td>Monroe</td>
<td>Lorain</td>
</tr>
<tr>
<td></td>
<td>Morrow</td>
<td>Medina</td>
</tr>
<tr>
<td></td>
<td>Auglaize</td>
<td>Marion</td>
</tr>
<tr>
<td></td>
<td>Pickaway</td>
<td>Jefferson</td>
</tr>
</tbody>
</table>
Results/Discussion - Collaborative Practice agreements

- Collaborative Practice Agreement/provider status.desire for creating CPAs
  - 30% of respondents had an established CPA
  - HPSA pharmacists interest in forming CPA (65% vs. 41%. p=0.104)
  - 66% of respondents indicated interest in provider status